FOOD AND DIET IN LATE ANTIQUITY: A TRANSLATION OF BOOKS 1 AND 4 OF Oribasius’ MEDICAL COMPILATIONS WITH AN INTRODUCTION AND COMMENTARY

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The opinion of W.H.S. Jones that Oribasius is 'an author that nobody wishes to read through' is probably coincident with the view of most Classicists who have ever read the Medical Compilations to judge from the almost total neglect Oribasius has suffered. Translations of the whole work have appeared only in Latin and French.

This thesis is an attempt to redress this injustice, and the commentary is designed to indicate Oribasius' source for each quotation or paraphrase, assess the accuracy and comprehensibility of the contents, and discover the reasons behind the recommendations and rejections of certain cakes, breads, fruits, and vegetables, the emphasis being on ancient food and diet rather than medicine and philosophy. Books 1 and 4 are linked by their common themes of grains and breads, and thus have been chosen for examination. With the absence of any modern work on ancient Greek cuisine, and with the fullest accounts of Roman cooking often lacking in detail or accuracy, particular care has been taken to supply as full a set of references as possible which will perhaps prove useful for further study.

The text on which the commentary is based is that prepared with great thoroughness and accuracy in 1928 by J. Raeder with
some small changes. The translation, the first into English, offers no claims at elegance, but is there merely to assist with the reading of the Greek text. The thesis ends with both an index listing according to the forms in which they appear all the words in Books 1 and 4, with the exception of some common particles, and also a general index.
He bringeth forth grass for the cattle: the green herb for the service of men; That he may bring food out of the earth, and wine that maketh glad the heart of man: and oil to make him a cheerful countenance, and bread to strengthen man's heart.

Psalm 104.14-15
Food and Diet in Late Antiquity: A Translation of Books 1 and 4 of Oribasius' *Medical Compilations* with an Introduction and Commentary

Mark David Grant
October 1987
Frontispiece: 'Figs and grapes are what one could call the principal fruits of autumn', Orib. 1.41.1 (Chania, Crete: photograph by G.J. Grant).
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PREFACE

'Oribasius, a medical compiler of the fourth century A.D., is an author that nobody wishes to read through, though many may want to consult him about some special point'. This opinion of W.H.S. Jones in *Classical Review*¹ is probably coincident with the view of most Classicists who have ever read the *Medical Compilations* or its two synopses to judge from the almost total neglect Oribasius has suffered. There has, however, been some interest in the Late Latin translations of the higher numbered books of the *Medical Compilations*, most notably with the series of articles in the 1920's and 1930's by H. Mörlan² but also recently with a study by K.D. Fischer³. Yet translations of the whole work have appeared only in Latin and French, and the sole English rendering is of some quotations made by Oribasius in Book 47 (1-8) of the *Medical Compilations* of the work *On Knots* by Heraclas.⁴

This thesis is an attempt to redress this injustice, and the commentary is designed to indicate Oribasius' source for each quotation or paraphrase, assess the accuracy and comprehensibility of the contents, and discover the reasons behind the recommendations and rejections of certain cakes, breads, fruits, and vegetables, the emphasis being on ancient food and diet rather than medicine. Books 1 and 4 are linked by their common themes of grains and breads, and thus have been chosen for examination; Books 1 and 2 could equally well have been chosen because of their common themes of fruit and vegetables, but the complexity of ichthyological identification in the synopsis of the work
on marine creatures by Xenocrates of Aphrodisias singles out Book 2 for individual treatment.

R.G.M. Nisbet and M. Hubbard may have wondered on classical scholars being a strange breed of pedants who cannot accept that life is short without ten parallels to prove it, but with the absence of any modern work on ancient Greek cuisine, and with the fullest accounts of Roman cooking often lacking in detail or accuracy, such references are wholly necessary and will perhaps prove useful for further study.

The text on which the commentary is based is that prepared by J. Raeder with some small changes. At the time of its publication in 1928 reviews praised it for its thoroughness and accuracy, and K. Deichgraber could fault it only pedantically on such points as an excessively elaborate apparatus criticus. The few places where the text seems to be in need of changing are discussed in detail in the commentary.

In identifying the sources followed by Oribasius at each point in his compilation I am much indebted to the pioneering work of Bussemaker and Daremberg, and to J. Raeder himself, who prints these references at the foot of each page of his text above the apparatus criticus. I have, however, expanded this material to provide an analytical account of what Oribasius excerpted and what he rejected, and have thereby tried to furnish a more complete and accurate picture of Oribasius' method of working.

In translating help has been sought both from the Latin version of the Medical Compilations by Rasario and from the French version by Daremberg, and these versions have been quoted either to support the translation or because they seem at certain points to have arrived at a particularly felicitous turn of phrase. The translation offers no claims at elegance, but is there merely to assist with the reading of the Greek text.
INTRODUCTION

1. The date of the Medical Compilations

Oribasius was born in Pergamum according to Eunapius, although Philostorgius and the Suda Lexicon state contrarily that he came from Sardis. Because Eunapius was an acquaintance of Oribasius, who was alive at the time of the composition of the Lives of the Sophists and therefore able to contradict any errors; and because Eunapius himself was a native of Sardis, and undoubtedly would not have let pass the opportunity to claim Oribasius as a fellow citizen, Philostorgius and the Suda Lexicon may be ignored. In his biography Eunapius does not record who Oribasius' parents were nor what they were called, but merely says that they were of a good family. The name Oribasius is unusual, although not unique: a late 1st century A.D. inscription from Ephesus is dedicated by a certain L. Domitius Agrippas to an Oribasius.

Oribasius was a pupil of Zeno of Cyprus, and two of his more famous contemporaries were Magnus of Nisibis and Ionicus of Sardis: the former was in Alexandria between 364 and 388, and died when Palladas was still writing his lampoons; the latter died a little before the composition of the Lives of the Sophists in 396. C.M. Bowra argues for 319 as the approximate date of the birth of Palladas, and for the late 390's as the time of his death. Thus a date in the early 320's can be tentatively ascribed to Oribasius' birth, and so the future Emperor Julian seems to have chosen Oribasius to be his physician when he was still making his reputation rather than standing as an already renowned figure. The two men
perhaps met when Julian came to Pergamum in 351 to continue his studies under Aedesius, the Neoplatonist who died before Julian became Caesar in 355. Oribasius was a pagan, and it was through the guidance of Aedesius' protégé Maximus of Ephesus that Julian was converted from Christianity, hence the later epithet Apostate.

In 355, under the influence of the Empress Eusebia, the Emperor Constantine II appointed Julian as Caesar, giving him Britain, Gaul, and the troubled Rhine frontier to administer. The first version of the Medical Compilations, as Oribasius says in the introduction to Book 1, was completed whilst in Gaul. After commending these abridgements made from the works of Galen, Julian requested a second edition to include extracts not only of Galen, but also of the principal writings of all the best doctors. From the original seventy books only twenty-five survive in their entirety of this compendium of earlier learning, planned as a small part of the endeavour to restore the Roman Empire to the Golden Age of Antonine prosperity and stable government which the economic and military crises of the 3rd century had shattered. Perhaps the Neoplatonist Julian envisaged himself as a counterpart to the Stoic philosopher and emperor Marcus Aurelius, who had also fought a series of brilliant campaigns against the barbarian tribes in central and south eastern Europe north of the Danube; and moreover the personal physicians of the two emperors, Galen and Oribasius, shared the same birthplace of Pergamum, founded by the cultured Attalid dynasty at the height of the Hellenistic period, for Julian another Golden Age. In fact, in a satirical dia-
logue known as the *Caesars* on his predecessors as emperors of the Roman world, Julian's identification of himself with Marcus Aurelius is clearly discernible, and he draws parallels too with Alexander the Great.

However, the relationship between Julian and Oribasius is open to debate. G. Bowersock numbers Oribasius along with the Neoplatonist mystics Maximus and Priscus as Julian's intimates, whilst R. Browning calls him Julian's 'pagan confidant'. Yet as B. Baldwin points out, Julian's extant writings never mention the doctor by name, the sole reference employing a periphrasis, and neither Libanius nor Ammianus Marcellinus recalls Oribasius. This reticence may have been a result of the difficulty of expressing real feelings in the last years of the fourth century, and certainly Eunapius had to purge his original historical narratives of their bitter anti-Christian passages; but more probably Oribasius did not wield as much influence as he would have liked, and what influence he did have was exaggerated in his now lost memoirs. The romantically famous story of Oribasius delivering to Julian the plea from the Daphic Oracle that the temple was in ruins, the sacred laurel had died, and the Castalian Spring had dried up is almost certainly no more than a Christian hoax. Although Constantine the Great had looted some of the chief treasures from Delphi to take to Constantinople, the main buildings were intact, the place was still held in special regard, and rites were conducted in the temple; on the other hand Constantine II had forbade the consultation of all oracles some twenty years before the supposed date of this response in 362.
On 26th June 363, in a dusty engagement during the retreat from Ctesiphon at the end of the disastrous Persian campaign, Julian was struck by a cavalry spear which pierced his ribs and lodged in the lower lobe of his liver. The early 5th century historian Philostorgius adds that excrement and blood spurted forth as Julian pulled out the spear. The wounded emperor was carried to his tent and was there given medical treatment, by whom Ammianus Marcellinus does not specify. Philostorgius, however, has the faithful Oribasius at his emperor's side, trying ineffectually to mend the wound; and Philostorgius was using as his source Eunapius, who in turn had at his disposal Oribasius' own account, now lost, of the campaign. That night, after an internal haemorrhage, the wound opened and pressure of the escaping blood checked the emperor's breath; he died after drinking a cup of cold water for which he had asked.

Oribasius, after a period of exile in Gothic territory, presumably for his support of Julian and being a pagan in a now Christian court, but perhaps for other reasons Eunapius does not care to mention, was recalled by the Emperor Theodosius or possibly by the Emperor Valens, and married a wife from a noble family by whom he had four children. He wrote two more works, the Synopsis to Eustathius and the Synopsis to Eunapius, both abridgements of his great Medical Compilations. He died in the late 390's or in the early 400's; at least when Eunapius wrote his biography in 396 Oribasius and his four children were still alive. An epigram in the Greek Anthology commorates his learning and aptly describes his method of working:
'This is the great doctor of the Emperor Julian, the noble Oribasius, worthy of respect, for he possessed a wise mind not unlike a bee which gathered from this place and that the flowers of doctors long passed'.

2. Dietetics in medical theories.

The subject of ancient dietetics is extremely lengthy and complex, and this section offers only a brief sketch of some of the more salient features which impinge directly on Books 1 and 4 of the Medical Compilations. Medical theories about dietetics did not change radically after the composition of the Hippocratic treatise On Regimen (6.466-662L), and thus Oribasius ranges widely in his gathering of extracts. A selection of passages from Galen has been chosen to illustrate these theories, adapting the apophthegm of Aristarchus concerning Homeric scholarship to explaining Galen by Galen.

In his On Prognosis Galen paints an intriguing vignette of an examination and diagnosis he performed on the Emperor Marcus Aurelius. The latter thought that his stomach, on becoming overloaded, had converted the ingested food into phlegm, and since phlegm was cold and moist his body temperature had been lowered and fever had struck. Galen elaborates elsewhere on the humours:

'Whatever the basic element in the world may be, among living creatures it is the humour, just as in the measurement of time the season. The humours are not altogether of a single identity or likeness, but in active and passive qualities, through which they owe their existence and through which there is constructed too their beginnings in us, they differ amongst each other both in many other respects and even in their names. To begin with the elements from which the world is made are air, fire, water, and earth. The seasons from which the year is composed are spring, summer, autumn, and winter. The humours are bile, blood, phlegm, and black bile from which animals and man are composed'.
Asclepiades of Bithynia, who lived in the first half of the first century B.C., held the atomistic philosophy of Democritus. In his On the Natural Faculties Galen presumed Asclepiades to be either mad or entirely unacquainted with practical medicine, for he erroneously believed that the humours were produced by drugs and were the product of dissolved tissues. Thus scammony, according to the Asclepiadean argument, not only failed to evacuate the bile from the bodies of jaundiced subjects, but actually turned the useful blood into bile, melted the body, and in fact caused even more problems and exacerbated from disease. Galen similarly attacks the third century B.C. physician Erasistratus in his On Black Bile:

'Perhaps those who ignore black bile leave not a small part of the art of medicine without scientific consideration, and this applies still more to those who ignore yellow bile. For in the case of all those who ignore both these things and phlegm it is not possible to enumerate just how many of the most essential theories of the art of medicine they leave to one side.'

Erasistratus had theorised that the biles were produced in the body only when the patient was ill, and this Galen rubbished since the truth was that all the humours were present constantly. What happened when a person fell ill was that an imbalance of the humours had occurred. Galen summarises this in his On Humours:

'It seems that health is characterised by the equality and symmetry of these humours. When they are deficient or increasing contrary to what is necessary either as regards quantity, quality, shifting of position, irregular combination, or putrefaction of things that have been spoilt, diseases occur. Just as it has been said that diseases happen as a result of an excess of the humours, so health returns by the re-
moval and by the addition, and by the thinness and thickness of the humours, and generally through their mildness and symmetry.'

Galen could attempt this symmetry either by drugs, such as scammony and safflower which drew yellow bile from the body; or by food, beef, camel and goat meat, snails, cabbage, and soft cheeses producing black bile; brains, fungi, lamb, and hard apples causing phlegm; and bitter almonds and garlic on the other hand reducing phlegm. The ancient concept of diet, however, not only included the sense of the modern 'diet', but also physical exercise as Hippocrates stresses. Galen, in his commentary on Hippocrates' Regimen in Acute Diseases, explains the necessary diet to restore to health a person who, although unused to lunch, has nevertheless eaten some. First a bath was to be prescribed, then sleep, after which a slow walk for a prolonged period of time. If an evacuation of the bowels subsequently occurred the patient was permitted to have dinner and drink a little unmixed wine; if contrarily the bowels remained unmoved, then the patient's body was to be rubbed down with warm olive-oil, and a glass of watery white or sweet wine was to be drunk before sleep. Exercise had to be carefully supervised in order to avoid adverse bodily reactions as Galen describes in his On the Causes of Diseases:

'After exercising one is exhausted. This is because there is immoderate heat in the limbs and muscles in greater proportion than is natural. For these parts were those that moved first. And if the heat should remain there and disperse before spreading through the whole body, weariness would be the only thing to be produced; but if it should be spread throughout the whole body, the disease is called a fever since it is an immoderate heat of the whole living being.'
Change therefore meant disease, there being four simple and four composite classes of disease. The body was regulated by the four qualities (hot, cold, wet, dry) and the four humours, for as Hippocrates said in his *Nature of Man*:

\[\text{"The body \ldots has in itself blood, phlegm, yellow bile, and black bile; these make up the nature of his body, and through these he feels pain or enjoys good health."}\]

Black bile, which arose in the liver, was sour, sharp, and effervesced, and was in colour like dark olive-oil pressed from both the flesh and stones of olives. It was the cause of cancers, bowel ulceration, black pustules on the skin, and haemorrhoids, the reason being that it was acid and also composed of thick particles, and while moisture consisting of fine particles could pass through the skin either by transpiration unnoticeable to the perception or in a perceptible manner as in sweating, black bile became lodged in the corners of the body and began corroding. Everyone who excreted it either by vomiting or during defecation died, since such bile showed that the blood had undergone extreme coction. Phlegm manifested itself in nasal mucus and in catarrh, and was produced in the stomach and mouth. By itself it had no quality, but could absorb saltiness, bitterness, or sourness. Stemming from phlegmatic foods during the initial stages of digestion in the stomach it was pale in colour. Yellow bile collected in the bladder and coloured the urine, the differing shades of urine being a result of the bile ranging from a deep-yellow to an off-white. It produced the bitter sensation at the back of the throat during vomiting. The best blood was red and thick, but
sometimes it appeared with a yellow or with a black tinge. Unlike the other humours it could coagulate and form a clot. It carried nutriments and water to the different parts of the body, as the moisture which during congealing and the formation of a scar separates and occupies a position above the blood demonstrated. In health blood tasted sweet, whilst salty or bitter blood signified disease.

In his On the Natural Faculties Galen mentions the qualities:

'Of all those known to us who have been both physicians and philosophers, Hippocrates was the first who took in hand to demonstrate that there are, in all, four mutually interacting qualities, and that to the operation of these is due the genesis and destruction of all things that come into and pass out of being. Furthermore, Hippocrates was also the first to recognise that all these qualities undergo an intimate mingling with one another.'

Galen considered that diseases arose sometimes only from an immoderate increase of the hot or of the cold, or from some opposition of one of these things with another such as between the dry and the moist, and sometimes because of some combination of these things which increased excessively so as to become a disease, that is hot at the same time as dry, or cold and dry, or hot and moist, or cold and moist. In his On the Causes of Diseases Galen discusses the nature of cold diseases similar to that which Marcus Aurelius was suffering:

'We have spoken in general of the causes of hot disease, but now we shall turn to what is cold. Of the latter the causes are many in number, for example proximity to what is cold, and the quantity and quality of what is being eaten and drunk, and also stoppage and loosening, and in addition to these things idleness and lack of movement.'
He then appends an analogy:

'These external causes extinguish even a fire. If you add a lot of snow to a little glowing charcoal, or some ice, or if you pour some cold water over it, you will quench it immediately. And if the air should be extremely cold, as especially around the Danube in winter, not only would you observe that a lamp put in the open air is extinguished at once, but also every other small fire.'

Galen does not remark that fire can be extinguished just as well with hot water for that would contradict in part his theory that opposite qualities opposed each other. He continues by saying that fire could be overcome by an excess of those things which have the nature to nurture it, since a small flame could be smothered by heaping too many logs of wood on it. This is presumably what had happened to Marcus Aurelius' stomach: an excess of food had swamped the digestive system, and the heat of the stomach had turned to cold. In his On Humours Galen states that phlegm arose from sleep, water, the eating of sea and all moist foods, and foods composed of thick and viscous particles. If Marcus Aurelius had eaten thick-particled food the subsequent delay in digestion would also have caused problems, indigestion engendering leek-green bile that appeared in defecation. The recommended remedies for the emperor's condition concur with the theory of the qualities: pepper was obviously heating, whilst Sabine wines, which was thin and dry, was particularly good for stomach disorders, the thinness causing no obstructions and the dryness counteracting a moist stomach. The expensive nard remedy -- and doctors had no scruples about preparing drugs according to the wealth of their patients -- had a similar effect.
Dietetics were therefore considered a crucial part of medicine. Scribonius Largus\(^4\) grades the progressive divisions of medicine as diet, then drugs, and finally surgery and cauterisation; Plutarch\(^5\) similarly lists three divisions in the order of drugs, diet, and then surgery; Diogenes Laertius\(^6\) expands medicine to five divisions of drugs, surgery, diet, diagnostics, and preventative treatment. People could seek health through diet, and there are many examples in ancient literature of them doing so.

3. Dietetics in everyday life.

In the *Palatine Anthology*\(^7\) there is a wry epigram by the Hellenistic poet Nicarchus on the possibly lethal effects of suppressing flatus. Trimalchio in Petronius' *Satyricon*\(^8\) advises his guests not to hurt themselves in the interests of modesty or shyness, and the Emperor Claudius even promulgated an edict allowing the privilege of quiet or noisy eructation at table.\(^9\) Galen explains the causation of flatulence in his *On the Causes of Diseases*:\(^50\)

Nature devised many organs straightway from the beginning for the sake of purging excretions, and these organs suffice for the preservation of health, since neither does any harm come to the being from the surrounding air, nor does the whole body produce immoderately that which is excrementitious when the diet is satisfactory. But when a mistake occurs, then the natural properties alone of the organs are not sufficient to void the bulk of the excretion, and the fluxes rush into the skin after being driven to the weaker parts from the stronger; sometimes it happens that when these passages for voiding are blocked, these fluxes flow into other places. These are the initial stages of the diseases. The badness then grows in the limbs themselves, as when the excretions are plugged up and putrefy, and when in this way they
have become worse they also corrupt at
the same time as the humour which flows
afterwards, even if this humour is good.'

Any stoppage in the body was bad: the heat in the heart
was linked with the outside air through the passage of
the windpipe, and if this were blocked then immediately
the heat would be smothered and death would occur.

Sometimes in a closed body where smoky excretions were
nourished either fever was kindled, or the innate bodily
heat was choked. Such excretions were normally evacuated
through the skin, or by breathing or by defecation. The
pores of the skin could be closed by cold or by bathing
in astringent water impregnated with sodium carbonate,
sulphur, or asphalt; the bowels could naturally be stopped
by constipating foods such as white bread, lentils with
their husks removed, fried eggs, and sweet wine. Accord-
ing to Galen's explanation in On the Natural Faculties, 
Trimalchio's rumbling stomach was a symptom of weakness
of the stomach. Sometimes even when the stomach was full
gurglings could be heard; this was when the stomach had
not contracted accurately on the food and constricted it
at every point because of being weak, and thus there was
a certain amount of vacant space which allowed the liquid
contents to flow about in different directions in accord-
ance with changes in the shape of the stomach. Certain
foods could be prescribed to strengthen the stomach, such
as quinces, olives in brine, harsh flavoured raisins,
mustard, radishes, and the rind of the citron. Trimalchio
is correct in connecting constipation with rumbling, for
Galen states that proper digestion cannot take place in a
weak stomach. The mass of food remained an abnormally
long time in the stomach, as did fluids. These fluids
accumulated undigested and produced gurglings. As has already been noted, any stoppage meant that excretions were directed away from their usual outlets, and bad digestion caused raw humours and severe belching. The sooty, smoky, or vaporous matter that was dissipated through exhalation could ascend to the head, and dizziness or sudden but temporary darkness of sight resulted.\textsuperscript{52}

Flatulence could and did prevent the stomach from contracting effectively around the food. In this instance things to avoid were chickpeas, broad beans, millet, lupines, barley cake, beer, fresh dates and figs, and sweet new wine. However, this did not mean that Galen forbade the consumption of chickpeas or broad beans, but rather that these foods had to be balanced by other foods that caused no flatulence such as peas, cummin, lovage root and seed, and honey and vinegar mixture. Sometimes it was the order in which foods were eaten that mattered: peaches and apricots, because they were moist in composition, happened to corrupt in the stomach whenever they did not pass through the body quickly, and Galen urges people to eat these fruits before other foods, since in this way they could be passed quickly as excrement and lead the way for subsequent foods.

Simplicity was also stressed. The cook in Plautus' \textit{Pseudolus}\textsuperscript{53} mocks the spicy food that features in Apicius and all the fragments of ancient cookery books. Galen used to have a simple lunch of just bread alone after visiting his patients or attending to some civic duties, and this he ate around the fourth hour or about half-past ten,\textsuperscript{54} earlier than most people, although Horace had lunch
at this time on his journey from Rome to Brundisium. On the other hand the doctor Antiochus used to have breakfast around the third hour, or at the latest at the fourth, which consisted of bread with boiled Attic honey. His lunch was at the seventh hour, and his great age of over eighty was proof of the balance and symmetry of his diet. Telephus the grammar teacher was, at the time of Galen writing his *On the Preservation of Health*, almost a hundred: he ate porridge mixed with honey for breakfast at the third hour, and had lunch at the seventh or a little earlier consisting of vegetables as a first course, and fish or fowl as a second course, this lavish spread being balanced by a frugal evening meal of bread soaked in mixed wine. It was not the time of eating that mattered, but the adherence to a precise pattern, change engendering disorder and disease. Nevertheless Celsus allowed some variation provided it was but occasional. He stated that no harm would come if one attended a banquet, or ate more than was sufficient, or took food twice rather than once a day, if one did not do these things regularly.

Ancient medical theories about diet can only have been aimed at the upper classes of society: the majority of the population -- the slaves, country peasants, and urban *plebs* -- would have been too preoccupied with actually having enough and a reasonable variety of food to have bothered with elaborate theorising on humours and qualities. L. Edelstein sums this up in his article 'The Dietetics of Antiquity':

>'But the man who wishes to live in accordance with the physician's requirements must have time at his disposal and be rich, in order to do everything he should. For only one who is not completely absorbed in any
activity and can afford to do as he wishes can avoid every excessive exertion, always eat what is good for him at the proper time, stay quietly at home when it is hot, or be more active in sport when it is cold. Only the rich and independent, therefore, can live in a completely healthy manner.'

4. Ancient cuisine

Throughout the commentary recipes and cooking techniques parallel with modern Mediterranean, Middle Eastern, and African cultures have been noted.\(^6\) Meat and poultry was eaten, but consumption was on a limited scale, and most of the population under the Roman Empire would have survived on a mainly vegetarian diet as illustrated by the stories of Similus, the *exigui cultor ... agrī* in the *Moretum*,\(^6\) and Philemon and Baucis in Ovid's *Metamorphoses*;\(^6\) this is much the same situation as exists today in Afghanistan,\(^6\) Turkey,\(^6\) and the poorer parts of Greece\(^6\) and Italy. The flavours too of ancient cookery are reminiscent of spicy Arab stews and Indian pickles.\(^6\) What has changed is the number of ingredients available, for the tomato, potato, chilli, lemon, orange, lime, maize, sugar, and chocolate have all been assimilated much later into these cuisines. In a traditional Middle Eastern house the cooking utensils and stoves would not be alien to a *coquus* or ὀψωπολός from Oribasius' time: charcoal, wood, and earthenware pots are still used, and the flavours are built up with a multiplicity of diverse herbs and spices. Perhaps the overwhelming characteristic of ancient cooking in its sweet and sour taste, occurring from the juxtaposition of honey and savoury ingredients, but it is not the sweet and sour taste of modern Chinese
cooking with its soy sauce and monosodium glutamate.

Reading L. van der Post's *First Catch Your Eland* about the food of Africa one is brought face to face with a cuisine that is like a distant echo of that of the classical Mediterranean basin, and yet this echo is not so strange considering the ancient Roman economy was, and the modern African economy is, basically agricultural with a considerable proportion of the population farming at subsistence level. In Ethiopia -- during happier times without the spectre of famine -- round millet bread resembling a thick pancake is eaten, and *kinche* or wheat porridge, "eggs sucked raw, and marinaded chicken. The perfume of wood smoke must have been an important flavour in ancient cooking as it is in African.

Whether the food of antiquity was generally heavily spiced because of the difficulty of keeping food fresh or through preference is perhaps impossible to say; perhaps it is safer to consider a combination of these two options since not all dishes were blended with so many flavourings. It is interesting to note that in modern Afghanistan milk is scarce and expensive in the cities owing to the lack of refrigeration, and even in the countryside milk is converted into such products as yoghurt, butter, and cheese. Like Galen's *ευγαλάκτινος* brought to Pergamum by the Mysian farmers to be eaten fresh with hot bread a white, uncured round cheese called *kishmish panair* is manufactured in the Afghan villages and brought into the cities for sale, although it is with red raisins rather than bread that this cheese is eaten.
5. Methods of composition

Extracts from the works of Galen form the backbone of the Medical Compilations, Oribasius uncritically taking his predecessor at his word as J. Scarborough says. Galen was born around A.D. 129 in Pergamum, and was taught literature, philosophy, and sciences by his father Aelius Nicon, an architect, before studying medicine at Smyrna, Corinth, and Alexandria. He returned to Pergamum in 157 to work as a doctor for the gladiators. In 162 he travelled to Rome where his establishing of an excellent reputation brought him to the notice of the Emperor Marcus Aurelius. Until his death in about 200 Galen wrote a prodigious quantity of texts relating to anatomy, physiology, psychology, pathology, dietetics, logic, and philosophy; these works and their influence have been discussed in detail elsewhere.

Despite his preoccupation with and reverence for Galen, Oribasius does not seem to have followed his master's advice that a physician should be devoted to inquiry, or at least not in the practical sense, but he was certainly industrious in his search for earlier literature and in the scale of his medical encyclopedia. Like Galen he was well travelled, thus following the Hippocratic precept that the ideal physician should experience a diversity of countries and climates.

How were the excepts made? As J.E. Skydsgaard observed, if a person excerpts all that seems of interest to him, and gradually makes his notes directly on a papyrus roll, the collection of notes will soon become as unwieldy for practical reference as the original books.
Pliny the Elder had a notarius who carried both the book and some small tablets called pugillares on which the excerpts were written. The slave read aloud to Pliny, who either made notes himself during the reading or dictated passages he wanted excerpted. Excerpts were concurrently transferred, and so can have been sorted only along extremely broad lines. It is possible that the pugillares, after being sorted, were transferred to special rolls, one roll dedicated to each subject, which were then gradually filled with excerpts on the separate subjects. Aulus Gellius, on the other hand, made no attempt at systematising his notes, and the order he used for his individual essays of the *Attic Nights* is the order of the original notes.

Oribasius probably used a mixture of techniques. Book 1 of the *Medical Compilations* is generally a résumé of Galen's *On the Powers in Foods*, for the most part keeping to the original order of the chapters. From this framework have been hung, where appropriate, extracts from Athenaeus and Rufus. Oribasius must have had Galen's work in front of him when he worked on his first edition, and then perhaps used pugillares filled with excerpts culled from his wider reading in compiling his second edition. As can be seen from the commentary, Oribasius appears to have been in some haste to complete his task since mistakes, misinterpretations, and misalignments of extracts are not uncommon. Book 4 relies on Galen solely for its opening section, but deprived of any structural skeleton the rest of the work is somewhat amorphous. As this is the last book devoted entirely to foodstuffs, Book 5 being a series of disquisitions on drinks, Oribasius
may have wanted to make use of all the extracts collected from other authors besides Galen, and thus ranged them after the opening section derived piecemeal from Galen; the latter is written almost in note form in contrast with the extracts of considerable size taken from Galen in Book 1. Livy does much the same when confronted with surviving notes that he wishes to use but has not managed to insert into the main body of the text. 

Book 2 of the Medical Compilations deals with the properties of vegetables, offal, eggs, cheese, and fish according to Galen, of milk and honey according to Galen and Rufus, and of the powers inherent in foods in general according to Mnesitheus of Athens and Philotimus. A considerable portion of the book is taken up by a synopsis of the work on sea-food by Xenocrates of Aphrodisias, a physician whose floruit was during the reigns of Nero and the Flavians. Book 3 consists solely of extracts from Galen, arranged not according to types of food as is the case in Books 1, 2, and 4, but as to the effects certain categories of food impart on the body: for example there are listed ingredients that cause phlegm, yellow bile, excrementitious matter, headache, flatulence, heat, dryness, and attenuation.

Whether Oribasius had access to complete editions of Dieuches, Athenaeus, Philotimus, Antyllus, Rufus, and his other sources when travelling through Gaul and Germany with Julian is impossible to say. It is not unlikely that he consulted other compilations rather than turning to the original sources every time, but only in the case of Galen can we assess and examine the accuracy and methods
of composition, the other works having been lost. J. Mejer, in his study of Diogenes Laertius, warns against any exaggerated desire to find a 'main source' for an excerptor, but does allow for some consultation of compendia. It is necessary merely to view the long list of authors Oribasius used to have grave doubts as to whether all of them could have been either available to him or reviewed by him when travelling in Julian's entourage. An analogy can be drawn with Oribasius' contemporary Ammianus Marcellinus: although he cites names such as Thucydides, the historian displays little active knowledge of Greek writers, and even the citation from Cicero does not necessarily mean Ammianus quoted from source. However, notwithstanding the scale of the task, the problems of reading and writing when often on the move, and the apparently brief length of time allotted to the endeavour, the Medical Compilations are a fitting monument to Julian's attempted pagan revival.

6. The manuscripts

When Raeder drew up his list of Mss. he did not devise a stemma, but instead divided the Mss. into two groups, the three most useful (A, C, and N) in the one, and the five 'inferior' (M, G, L, H, and D) in the other. The basis for this favouritism lies with the conclusions of Bussemaker and Daremberg in their edition, although they included five more manuscripts in their apparatus. However, a stemma would not necessarily help elucidate corrupt readings, and there is a tendency now to distrust theories of purely 'vertical' transmission and to entertain rather the possibility of 'horizontal' transmission.
The details of the Mss. can be sought in the respective editions, and what follows provides only the barest of outlines necessary for the textual references in the commentary.

Group 1: A, housed in the Paris Bibliothèque Nationale (Parisimus Gr.2189), dates from the 16th century and includes several corrections in a second hand.

C, another 16th century manuscript, can be found in the library of St. John's College in Cambridge (Cantabrigiensis collegii S. Ioannis A6), and it too contains numerous corrections in the margins. It was presented to the library by John Collins, M.D., Regius Professor of Physic and formerly Fellow in 1634, but otherwise its origin appears uncertain.

N, a 14th century manuscript in the Biblioteca Nazionale of Naples (Neapolitanus III D20/304 Cyrillo), is apparently more carefully written than the previous two manuscripts and features corrections in two hands.

Group 2: M lies in Moscow, probably in the Gosudarstvennyi Istoriceskij Musej, and because of its inaccessibility Raeder made use of von Matthaei's edition to ascertain its readings, but he vitiates it for its carelessness.

G, a 14th century manuscript in the
Paris Bibliothèque National (Parisinus Gr. 1883) containing among other works Alex. Trall., Gal. Sect. (1.64-105K), Hp. Prog. (2.110-190L), and Aët., intermingles sections of Oribasius.\(^9\)

\(D\) is a 15th century manuscript in the Paris Bibliothèque Nationale (Parisinus Gr. 2290); of Book 1 of the Medical Compilations only the first page survives, but Books 2-10 are wholly extant.\(^96\)

\(V\) is a 16th century manuscript in the Vatican Library (Vaticanus 288, formerly 225) featuring conjectures in the margins in the hand of Fabio Calvi.\(^97\)

\(L\), a 17th century manuscript in Leyden (Voss. misc. 22), holds only Xenocr. (ap. Orib. 2.58) and thus is of no use in this thesis.\(^98\)

The text is, as it stands, generally free from severe corruptions, and many difficulties can be ascribed to carelessness on the part of Oribasius rather than by later scribes. K. Deichgräber\(^99\) even goes as far as to assert that any conjectural criticism hardly has a place in such a rich tradition as that of Oribasius, the main difficulty lying with evaluating the worth of the various textual deviations. This is perhaps somewhat surprising in view of what V. Nutton\(^10\) says about Galen:

'...The reconstruction of the original text of a medical author, even of one as careful in his legacy to posterity as Galen, is beset by many difficulties. Prose is corrupted more easily and with less chance of detection than is poetry, and a technical treatise in
which matter was more important than style was always open to alteration in a way in which one whose merit and survival depended upon the beauty and rhythms of its language was not.'

But the reader will notice the clarity of the text vindicating the above statement, despite Nutton's warning, and it must have been the simplicity of what Oribasius wrote (at least in Books 1 and 4) that ensured a relatively smooth transmission.

7. Abbreviations

The abbreviations used in the introduction and commentary are those employed in L' Année Philologique, Lewis and Short's Latin Dictionary, the Oxford Latin Dictionary, the Thesaurus Linguae Latinae, Liddell and Scott's Greek-English Lexicon, G.W.H. Lampe's A Patristic Greek Lexicon, and E.A. Sophocles' Greek Lexicon of the Roman and Byzantine Periods from B.C. 146 to A.D. 1100 (Boston (Little, Brown and Company) 1870). The few departures from the standard abbreviations are for the sake of clarity, for example Plaut. (not Pl.) for Plautus, and Theophyl. Simoc. (not Simoc.) for Theophylactus Simocatta. The following abbreviations refer to editions of authors who are either cited frequently in the commentary or for whose works there is no standard division into chapters and sections for case of reference.

a) The editions and translations of Oribasius

Daremberg

Charles Daremberg & U. Cats Bussemaker,
Oeuvres d' Oribase: texte grec en grande partie inédit, collationné sur les manuscrits, traduit pour la première fois en français, avec une introduction, des


b) Editions of other authors


<table>
<thead>
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<th>Author</th>
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<tr>
<td>Littre or L</td>
<td>Édouard Littré, <em>Oeuvres complètes d'Hippocrate</em>, traduction nouvelle avec le texte grec en regard, collationé sur les manuscrits et toutes les éditions; accompagnée d'une introduction de commentaires médicaux, de variantes et de notes philologiques: suivie d'une table générale des matières, 10 vols., Paris (Baille) 1839-1861.</td>
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<tr>
<td>Nachmanson</td>
<td>Erotani, <em>Vocum Hippocraticarum Collectio cum fragmentis</em>, recensuit Ernst Nachmanson, Collectio Scriptorum Veterum Vpsalienis, Göteborg (Eranos' Förlag) 1918.</td>
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and Humanities Proceedings VI.3, Jerusalem (The Israel Academy of Sciences and Humanities) 1982.
NOTES TO THE PREFACE AND INTRODUCTION

1 CR 45 (1931), p.198; as G. Sarton (Galen of Pergamum, Kansas 1954, pp.80-81) says, Galen also suffers from his 'prolix and repetitive' language, and thus he too is generally ignored as a writer; 'The twenty-two volumes of the last edition of the collected works of Galen occupy a smaller place in the affections of classical scholars than on the library shelf', V. Nutton, 'Galen and Medical Autobiography', Proceedings of the Cambridge Philological Society, n.s. 18 (1972), p.50.


3 'Kritische und exegetische Bemerkungen zu Lateinischen Medizinischen Texten' in G. Sabbah (ed.), Textes médicaux latins antiques, Université de Saint-Étienne 1984, pp.41-47.


8 J.P., JHS 50 (1930), p.376; J. Mewaldt, DLZ 50 (1929), pp.336-338; C. Cessi, BFC 35 (1928), pp.139-140; cf.,

9 Gnomon 5 (1929), pp. 129-134.


11 HE 7.15

12 s.v. Ὀρειβασίος


15 Cf. Eun. VS 7.3.8.

16 'Palladas and Christianity', PBA 45 (1959), pp. 266-267.

17 Eun. VS 7.3.6.

18 Julian the Apostate, London 1978, p. 19; cf. p. 64: '... the loyal and powerful trio of Oribasius, Maximus, and Priscus'.

19 The Emperor Julian, London 1975, p. 97; cf. B. Baldwin, 'Beyond the House Call: Doctors in Early Byzantine History and Politics', Dumbarton Oaks Papers 38 (1984), p. 17: 'As far as we can see, Oribasius stood uniquely close to an emperor in the fourth century'.

20 ad Ath. 277c.

called a 'systematic reticence' concerning them: a tendency to evade the unpleasant or excessively dramatic, an unwillingness to allow the surface of his correspondence to be clouded by mention of disturbing events.'.


25 W. R. Chalmers ('Eunapius, Ammianus Marcellinus, and Zosimus on Julian's Persian Expedition', *CQ* n.s. 10 (1960), pp.155-156) stresses that Zosimus based his work very closely on Eunapius, who in turn followed the memoirs of Oribasius. He adds (*ibid.*, p.158) that the apparent accuracy of the medical details given in *Amm.Marc.* (25. 3.6-7) suggest that these particulars came from the pen of Oribasius through the medium of Eunapius.


27 *AP* 16.274.

infer from the range of people whom Galen cites as dietetic authorities that there was little change in manner or substance of writings about diet after Regimen was written. Perusal of the kinds of things quoted in Athenaeus' Deipnosophistae on the subject of foods and their effects tends to confirm that inference. There is striking unity of tone and substance in the seven centuries whence Athenaeus draws his material.'

29 Prog. 11.1-9 = 14. 658-660K.
31 Nat. Fac. 1.13 = 2.41K.
32 Nat. Fac. 1.13 = 2.43K.
33 Atr. Bil. 5 = 5.123K; see also W. D. Smith, 'Erasistratus' Dietetic Medicine', BMH 56 (1982), pp. 398-409.
34 Hum. 19.491K.
35 Vict. 2.61-66 = 6.574-588L.
36 Hp. Acut. comm. 4.79 = 15.868K.
37 Caus. Morb. 2 = 7.4K.
38 Nat. Hom. 4 = 6.40L.
Nat. Fac. 1.2 = 2.5K; see also G.E.R. Lloyd, 'The Hot and the Cold, the Dry and the Wet in Greek Philosophy', JHS 84 (1964), pp.92-106.

Caus. Morb. 3 = 7.11K, cf. Us. Resp. 3.7 = 4.489-490K.


intr. 6.

Mor. 974b.

3.85.

AP 11.395.

Petr. 47.1-7.

Suet. Claud. 32.

Caus. Morb. 6 = 7.25-26K.

Nat. Fac. 3.4 = 2.152-153K.


Plaut. Pseud. 810-825.

San. Tuend. 6.7.10-11 = 6.412K.

S. 1.5.23, cf. Sidon. carm. 23.487sq.

San. Tuend. 5.4.9 = 6.332K.

San. Tuend. 5.4.15-17 = 6.333-334K; J. Mesk ('Galens Schriften über Nutzen und Schaden der Nahrungsmittel', WS 52 (1934), pp.57-66) argues for a date in 170's for the composition of this work.

Cels. 1.1.2; see Cels. 1.2.1. on special diets for inactive people and Paul Aeg. 1.23 on special diets for old people.

e.g. 1.3.4n., 1.7.1-2n., 1.13.2n., 1.18.3-4n., 4.2.19n., etc..

Moret. 3.


H. Saberi, Noshe Djan: Afghan Food and Cookery, London 1986, p.115: 'Pulses are important in the Afghan diet as they often replace meat:'.


J.M. Stubbs, The Home Book of Greek Cookery, London 1963, pp.79-80: ' ... Greece is not a great meat-raising country. Apart from a comparatively few areas of good grazing land in the north of Greece, the rest of the country provides poor fodder for cattle and much has to be imported.'.

Compare the taste of oxyporium (Apic. 3.18.3) with, say, Prawn Balichow.

E. David, *Spices, Salt and Aromatics in the English Kitchen*, vol.1, Harmondsworth 1973, p.7: 'It is often believed that the lavish use of spices in old English cooking can be explained by the necessity to mask half-decayed food and to give zest to a monotonous diet of salt meat and boiled fish ... . Surely, though, there are some other reasons, one of them being quite simply that the English have a natural taste for highly seasoned food ... .'


*Hp.Aer* 1 = 2.12L; cf. E.M. Craik, *The Dorian Aegean*, London 1980, p.129: 'Doctors formed one of the most mobile groups in the population, and were one of the most respected'

Plin. Ep. 3.5.10.

Gel. praef.2: 'nam proinde ut librum quemque in manus ceperam seu Graecum seu Latinum uel quid memoratu dignum audieram, ita quae libitum erat, cuius generis cumque erat,'indistincte atque promisce annotabam ...'.

e.g. 1.8.6n., 1.13.1n., 1.50.2n., 4.2.9n., 4.10.1-2n., etc.

e.g. 33.30.1-11, the sources being Polybius (1-5), an anonymous Roman (6), Polybius (7), Antias and Quadrigarius (8), Quadrigarius (9), anonymous but possibly Quadrigarius again (10), and Antias (11); see P.G. Walsh, Livy: His Historical Aims and Methods, Cambridge 1961, pp.141-142.

See Orib. 4.4.1-5n.

'Diogenes Laertius and His Hellenistic Background', Hermes Einzelschriften 40 (1978), pp.16-29.

See Orib.1.intr.2n..

e.g. 23.6.73: 'quem Graecorum ueterum morem abiecisse primos Athenienses, Thucydides est auctor amplissimus.' (cf. Thuc. 1.6.1-3).

e.g. Harpalus, praefectus of King Cyrus, erroneously for Harpagus (cf. Hdt. 1.176.1, but the mistake is repeated by Hyg. gramm. ap. Gel. 10.16.4, so there may be a common source).

26.9.11: I owe these notes on Amm. Marc. to a seminar given by Prof. C.W. Fornara in the History Department of Manchester University on 17th March 1987.

Daremberg, pp.lvii-lviii and Raeder, pp.v-viii. The origins of the Mss. of Oribasius seem not to have been properly researched: some Mss. appear to have arrived in the West before the middle of the 14th century and before the Great Schism of the West and the hunting down of Greek Mss. by Italian humanists (see H. Silvestre, *Scriptorium* 19 (1965), pp.187-188 and L. Thorndike, 'Relation between Byzantine and Western Science and Pseudo-Science before 1350', *Janus* 51 (1964), pp.1-48).


See M. Richard, *Répertoire des bibliothèques et des catalogues de manuscrits grecs*, 2nd edn., Paris 1958, p.165; I have been unable to trace this manuscript in any catalogue, but this is perhaps not surprising considering the paucity of information concerning Mss. in the Soviet Union (cf. P.K. Grimsted, *Archives and Manuscripts Repositories in the USSR: Moscow and Leningrad*, Princeton 1972, p.68: 'Unfortunately ... most Soviet repositories lack adequate published guides'; and p.69: '... many manuscript collections in Soviet repositories still have to rely on early prerevolutionary catalogues, despite their often outmoded technical and substantive descriptions').

ibid., p. 212.


K.A. De Meyier (Un nouveau catalogue des manuscrits grecs d'Antoine Éparque, *Scriptorum* 9 (1955), p. 105) mentions Jean Baptiste Rasario (1517-1578) who, after studying at Milan and Pavia, and training as a doctor at Padua, taught rhetoric and Greek at Venice. He edited and translated several other medical writers besides Oribasius, and possessed a large collection of Greek manuscripts, the great majority of which are now housed in Moscow.
ΟΡΙΒΑΣΙΟΤ ΙΑΤΡΙΚΩΝ ΣΥΝΑΣΟΓΩΝ

ΒΙΒΛΙΟΝ Α'

1. Τάς προστασθείσας επιτομάς παρά τῆς εἰς Θειότητος, αὐτόκρατος
Ιουλιανέ, πρότερον, ἡνίκα διετρίβομεν ἐν Γαλατία τῇ πρὸς ἑπέραν,
εἰς τέλος ἦγατον, καθώς θβουλήθησε, ἀετίνας ἐκ μόνων τῶν ὑπὸ Γαλη-
2νοῦ γραφέντων ἐποιησάμην. ἐπεὶ δ' ἐπαινέσας ταύτας δευτέραν ἐπέ-
ταξας πράξειν, πάντως τῶν ἄριστων ἱατρῶν ἀναζητήσατά με τὰ και-
ριστήτα ευναγατένι καὶ πάντα δεκα χρησιμεύει πρὸς αὐτὸ τὸ τέλος
τῆς ἤατρικῆς, καὶ τούτῳ πράττειν, ὡς οἶδα τῆς εἰμὶ, προθύμως διέγνυκα,
χρησιμοποιήσας ἡπολαμβάνου ξεεσσαὶ τὴν τοιαύτην ευναγάτην, τῶν ἐν-
τυχερᾶντων ἐποίμος ἕξερνωκότως τὸ ἐκάστοτε τοῖς δεσμῶις ψφέ-
λιμον. Περιττὸν δὲ νομισάς εἶναι καὶ παντελῶς εὐθῆς τὸ ἐγγράφειν
τὰ αὐτὰ πολλάκις, καὶ τῶν ἄριστων εὐγραφάντων καὶ τῶν μη ὑμώς
τὸ ἀκριβές ἕξερνομεμένων, μόνα τὰ τῶν ἀμείνον εὐπόντων εὐνάξι
τά, πάλαι Γαληνῆς μόνην ἡρήντα, μηδὲν παραλπίων τάξεως, καθὼς
τῶν εὐγραφάντων ἀπὸ τῶν εἰς τὰς αὐτὰς ὑποθέσεις αὐτοῦ κρατεῖ,
μεθὸδους καὶ διορισμοὺς τοῖς ἀκριβεστάτοις χρήμανος, τοῖς Ἰπποκρα-
τείοις ἀρχαῖς καὶ δόξαις ἐξακολουθοῦν. χρήσημαι δὲ κάντιοδα τοιαύτη
tiν τάξει· καὶ πρῶτον μὲν οὖν εὐνάξι τὰ τοῦ ὑλικοῦ μέρους, εἴθ'
δεκα περί φύσεως καὶ κατακεκυθῆς εὑρίσκα τάνθρωπον, μὲθ' ἀ τὰς
tῆς ὕπτεινης καὶ ἀναληπτικῆς πραγμάτειας, καὶ μετὰ ταύτα δεκά τῆς δια-

1 τὰ add. Darenberg.
I earlier brought to completion, just as you commanded, when we were residing among the Gauls in the West, the abridgements requested by your Divinity, Emperor Julian, which I made from the works of Galen alone. When you had commended these abridgements, you ordered a second endeavour, that I should search for and collect the principal writings of all the best physicians and everything that is useful for the completeness of the art of medicine, and I am zealously determined to carry out this task, to the best of my ability, believing that such a compilation will be extremely useful, when people who are reading it readily discover that which in each case is efficacious for those who are in need. Thinking that it is superfluous and altogether absurd to include in the work the same things many times over, both of the authors of the best treatises and of those who treated the subject without a similar degree of accuracy, I will gather together only the works of the better writers, but as for what was derived by me in the past from Galen alone, I will omit nothing of this arrangement, seeing as this author surpasses all the other writers in the same suggestions, since he makes use of the most exact methods and definitions, following Hippocratic principles and opinions. I will use in this work the following arrangement: I will assemble first that which pertains to the material side of things, then everything that concerns the nature and constitution of man, and after that the writings which deal with the treatment of health and restoration, then everything which has to
γνωστικής καὶ προγνωστικής ἔχει τα θεωρίας, ἕφ' οἷς τὰ περὶ τῆς τῶν νοσημάτων καὶ εὐπτωμάτων καὶ διός τῆς τῶν παρὰ φύσεως ἐπανορθώσεως ἄρεσομαι δ' ἀπὸ τῶν περὶ τῶν ἐγ γαῖς τροφαίας δυνάμεων.

"Σὲ τῶν Γαληνοῦ περὶ ἀρετῆς καὶ κακίας τῶν Δημητριακῶν επερμάτων.

Οὐ μόνον διὰ τὸν ἄφικόμενον χώραν ἐσθίειν τι μέλλον ἄφθος, ἀλλὰ καὶ παρὰ ἡμῖν αὐτοῖς προπειράθει δυνήματι τῆς ἐκάστου φύσεως ἐν τῷ διαβρέχειν ὅτι μόνῃ χωρίς ἐφθασεν ἡ εὐν ἐφθασε τοι καὶ ὑπέτηδε τὰ μὲν γὰρ δόκων ἐξαρόμενα τῶν επερμάτων ἀποβάλλοντα τε ταχέως τὴν ἀρχαῖαν εἰκοτάπτητα καὶ γλυκράντης μεταβάλλοντα τε πρὸς τῷ μαλακώτερον ἀμείνῳ πάντα ἐστὶ πῦρ, τὰ δὲ φυλάττοντα τὸν ἐμπροσθεν δόκων ὧν τῇ εἰκοτάπτῃ χεῖρώ δύσπεπτα τὰν καὶ γεωντα ταῖς οὐσίαις ἐστὶν ὡς μόλις αἰσθανόμεναι καὶ ἀμυθόλασι δὴ δοκιμάσεις οὕτως καὶ κάρυα τὰ μεγάλα καὶ τὰ μικρὰ καὶ τὰ κάτω περὶ δὲ τῆς πτικῆς τὶ δεῖ καὶ λέγεις; ἢ ἢ τὰ τούτο καὶ οἱ παιδεῖς ἱερείς, ὡς ἢ μὲν δικουμενὴ ταχέως ἀρίστη, μονοθάλλῳ δ' ἢ εἰ χρόνῳ πολλῷ βραχύν δόκων ἐξοεια. τινὰ δὲ τῶν Δημητριακῶν επερμάτων ἀϊδεὶς ὡς ὑγκοῦσθαι πέφυκεν ἐφώμενα, καὶ κεκλησιαίς ἀπήρμενα τὰ τοιαύτα τῶν παλαιῶν Ἑλλήνων ἔννοι. τὰ δ' ἐν δὲ βραχχαί πλεῖς τὸν οὖς ἐσχόντα καὶ ταύτην παχεΐαν τε καὶ γλύκων εὐχρήσια τε καὶ τροφιμωτάτα πάντα ἐστὶν, οὐ μὴν ὑποχωρεῖται κατὰ βρόχους· δεκα δ' ἐμπαλιν χαῦνῃ μὲν ἔχει καὶ μαλακῆς οὐσίαις, καὶ χρόνος δ' αὐτῶν πολλὰ πιτυρώδη, διαχωρεῖται μὲν ἀμείνων, ἄρτων δὲ τρέφει τούτων.

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do with diagnostic and prognostic theories, after which the works concerning the treatment of illnesses and symptoms and generally whatever is contrary to nature; I will begin with the powers inherent in foods.

1. From the works of Galen concerning the good and bad qualities of cereals.

1 Not only when on arrival in a foreign country one is obliged to eat something unusual, but also in one's own country one can test beforehand the nature of each food by soaking just in water without boiling or by soaking along with boiling and baking: for all the grains which, on swelling in size, quickly get rid of their former hardness and stickiness and change to a softer consistency are better, whilst those grains which retain their previous size together with their hardness are worse; this is because they are difficult to digest and are earthy in substance and so are scarcely converted into blood. And in fact you can test almonds in this way as well as walnuts, hazelnuts, and chestnuts. What need one say about barley soup? For of course even children know that the type which swells quickly is best, but that the one which gains little bulk over a long period of time is bad. Some of the ancient Greeks called certain grains which do not swell at all when boiled 'obdurate'. All those grains which contain in a small mass such substance, provided that the latter is thick and sticky, are wholesome and nutritious, but they do not pass down through the bowels easily; on the other hand all those grains which have a spongy and soft composition, and also many branny parts, pass through the bowels better, but nourish less; it is quite clear that, of the grains already men-
δ' αυτών δει δυσώδη τε ἐστὶ καὶ ἀπίδιν ἔχοντα κατὰ τὴν γεύσιν, ἐδηλον ὡς κακόχυμα τε καὶ δύσπεπτα πάντως ἐστίν. τοῦ δ' ἐν ὅτι οἱ μικρὶ πλείστην οὐσίαν εἶναι τὸ τε βάρος, ἱσταμένων αὐτῶν ἐπὶ Ιεροῦ, ἐπιμεῖν ἔστω εἰ καὶ τὸ τῶν ἀλεύρων πλῆθος ἐξ ὁλίγου τάρ ὅτι πολὺ γίνεται τοῖς πεπειραμένην ἔχουσι τὴν οὐσίαν επερματίν. τῶν θ' ἐν τοῖς πυρών δεοι μέν πυκνὴν καὶ πεπειραμένην ἔχουσιν δὴν ἐστὶν τὴν οὐσίαν, ὡς μόλις ὑπὸ τῶν ὀξύτων διαπερίστατο (ἢ χρόνος δ' ἔλειν οὗτοι Εανθῶς), πλείστην τροφὴν διδάσκετο τῷς κύμασιν ἐξ ὅτι βραχέος δεοι δ' ἐναντίοι τοῦτοι βραχίως μὲν ὑπὸ τῶν ὀξύτων προειρήμενοι, μετὰ δὲ τὴν βραχίων ἀραιοὶ καὶ χαῦνοι φαινόμενοι, βραχεῖαν παρέχουσι τροφὴν ἐξ ὅτι δικού πολλοῦ. τῶν δὲ κρίθων κάλλισται τυχόν 7 νουσιν ἂι λευκαὶ μετὰ τὸ πτεσθῆναι φαινόμεναι καὶ τὰ πυκνόττως ἔχουσιν καὶ βάρους, δεον οἵον τα κριθὰς ἔχειν ἄμελναις δὲ δηλονότι καὶ τῶν ἱερῶν τε καὶ βυζῶν ἂι πλήρεις διαὶ καὶ τεταμένην ξιωθὲν ἔχουσι τὴν περίτροφην. οὐ μόνον δὲ ταύτας ἀλλὰ καὶ πάντα τὰ 8 πλῆρα καὶ τεταμένην ξιωθὲν ἔχον τὴν περίτροφην ἀριστα επερμάτων εἶναι σωμβεβείκε, πλήν ἐι πάνω εφόδια ποτὲ πλεύσοι τοῦ κατὰ φύσιν ὅτι οἴκιοι ἄμα τῷ μαλακύτερῷ τα καὶ χαύνοτερα γενέσθαι· περιττωματικὴν τόρ ὑπρόττητα ταύτα ἔχειν ἐζόδι καὶ χείρι τῶν προ- ειρήμενων εἶναι, καὶ διὰ τοῦτο μέν τὴν ἐυτικομίδοις οὐ προσέχειν αὐτοῖς χρήσην, καταβιβάζειν. δ' ἐν τόποις ἐποίεσ ἐκεῖς χρόνων πλεύσοι τὸ μέν τι διαπεδεύει τῆς περιτής ὑπρόττητος, τὸ δὲ τι περιβάλλει, μέχρι-
tioned, all those that are malodorous and possess an unpleasantness to the taste are altogether unwholesome and difficult to digest. Let the proof that a cereal has much substance contained in a small volume come to you both from its weight, when the grains are weighed in the balance, and from the quantity of flour it produces; for from a small volume much flour is produced with grains that possess a compressed substance. Certainly of the hulled wheats all those that have their whole substance dense and compressed, so that they can scarcely be broken in half by the teeth (these wheats are yellow in colour), furnish for the body the most nourishment from a small volume; all the hulled wheats opposite to these which can easily be broken up by the teeth, and which after comminution appear loose in texture and spongy, provide little nourishment from a large volume. The best sorts of barley appear white after winnowing and have some solidity and weight, as much as is possible for barley to have; clearly the barley that is completely full and has an exterior surface which is taut is better than barley that is thin and shrivelled. This is an attribute not just of barley, but also all the grains that are full and have an exterior surface which is taut are best, unless they have at any time a volume which is very much greater than is natural as well as being rather soft and spongy; for one should know that these grains contain an excrementitious moistness and are worse than those grains already mentioned, and because of this it is not suitable to use them after harvesting, but they must be stored away in a dry place for a considerable length of time to remove some of the excess moisture firstly by
9 περ ὑπερανόμενα προστατεύει μετρίως. τά δ' ἐπὶ πλείστον κείμενα
χείρι μοι γίνεται ταίς δυνάμεις· δρος δὲ καὶ τούτων, διὰν διαφορούμενα
καθάπερ λεπτὴν τινα κόνιν ἐκπίπτουσαν ἔχον. γίνονται δὲ πολλάκις
ἐν μὲν τοῖς πυρικοῖς αἴρατι πολλαί, κατὰ δὲ τὰς κρηδίας αὐταὶ μὲν ὄληται,
pολὺ δ' ὧν ἀλτίκησε· καὶ τοῖς φακοῖς δ' ἐκ μεταβολῆς αὐτῶν ἄρακοι
καὶ πελεκυνοὶ, εἰπερά καὶ στρογγύλα καὶ ἄρρωτα επερμάτια, καθάπερ
καθ' ἀπαρίνη καὶ ἐροβάκχη κατὰ τοὺς ὀρῶς. ταῦτα μὲν οὖν πάνω
μοχθέαν επέρματα, τὸ δὲ μελάμπυρον καλούμενον ἐκ μεταβολῆς μὲν
γενναῖοι καὶ αὐτὸ τῶν πυρῶν, ἄλλ' ἀπολείπεται πάμπολυ τῆς ἐν ταῖς
ἀφρας κακίας. εὐθές τοίοτοι δὲ καὶ κατ' ἄλλα επέρματα τοιαῦτα τῖνες
τυχόμεναι μεταβολαί· διόπερ ἀμελεῖν δὲ προσκεκαί τοῦ καθαρᾶ ποιεῖν
ἀπαντά τά πρὸς ἐκεῖνην παρακεφαλαζόμενα επέρματα, τυνύκοσκοτας ώς,
ei καὶ τῆς καθ' ἡμέραν βλάβης οὐκ ἀλεθανόμεθα διὰ βραχύτητα, τὸ
γοῦν ἀδροιζόμενον ἐξ αὐτῆς χρόνου πλεονὶ φανερῶν γενήσεται ποτε.
12 τῶν καρπῶν δ' εἰς ἀπόθεσιν ἐπιτηρεῖται ἄντας ἤθει τοὺς πρὶν σεῖει
tαύτα εἰπανομένους. πιθανοῦ δ' ἐν τὶς ὀνομάζοι μικρῶν πυρῶν τὴν τίρην,
καὶ τῇ χρόνῳ καὶ τῇ πυκνότητα καὶ τῇ θερμότητι τῆς δύναμιν ἑκούσαν
15 αὐτῶν. πολλὰ δὲ καὶ ἄλλα επέρματα παραπλήσια μὲν, οὐκ ἀειμβόρ
ταῦτα ἐνδοκ ἔχοντα τοῖς εἰρήμενοις ἔστιν, τὰ μὲν ἐν τῷ μεταξὺ
κριθῆς τε καὶ τίφης καὶ μεταξὺ πυροῦ τε καὶ τίφης, ἐνα δ' ἐξετάτω
τῆς φύσεως τά μὲν ἀλώρητα ἔστι, τά δ' κριθῆς καὶ τίφης καὶ πυροῦ, καθάπερ

1 δὲ add. Daremb erg.
evaporation, and secondly by coction, until such time as they are dried and compacted to a reasonable degree. The grains that are stored for an extremely long period of time become worse in power; the boundary of this state is when they let fall some fine dust on being broken in half. There is often much darnel in wheat, while although there is little darnel in barley there is much havergrass; and among lentils there is produced from a transformation of the plant itself wild chickling and axeweed, small seeds that are hard, round, and uneatable, just as there is produced clivers and dodder among bitter vetch. So these seeds are completely bad, and yet although the so-called ball-mustard also grows from a transformation of wheat, it is far removed from the badness in darnel. Several other similar transformations are found in other grains; hence it is right not to forget the procedure of making clear of admixture all the grains that are prepared for use as food, realizing that, even if we do not notice the harm these grains cause daily because of its negligibility, the accumulation of this harm over a longer period will of course become more noticeable later. One ought to know that the fruits suitable for storage are those that are dried before they go rotten. One can quite credibly call einkorn 'small wheat', because its strength is similar to the latter as regards both colour and density and heat. There are also many other similar grains which, however, do not belong precisely to the same species as those already mentioned, some being in appearance between barley and einkorn or between naked-wheat and einkorn, others being closer to the nature of emmer, yet others to the nature of barley or einkorn or naked-wheat,
όλα τὰ μὲν ἐλύμου, τὰ δὲ κέτχρου προσηποιής ἔχοντα, τινὰ μὲν ἀπλὰς, ὡσεὶν ἐν Ἰταλίᾳ τὸ εἰτάνον· ἕνια δὲ συνήθεις, ὡς ὑπὲρ Καππαδοκίας μὲν τὸ καλοῦμενον τυμνὴ κριθή, κατὰ δὲ Βιθυνίαν τὸ Ζεόπυρον.

π. Ἐκ τῶν Ἀθηναίων περὶ πυρῶν, ἐκ τοῦ Α λόγου.
Τῶν εἰτῶν κράτιστοι πρὸς εὐθυροφίαν εἶσιν οἱ πυροὶ· διαφέρουσι 1 δ' ἄλληλαν τῷ μᾶλλον καὶ ἧς ἰσομείνειν τε καὶ ὑπραίνειν παρὰ τὰ γένη καὶ παρὰ τοὺς τόπους, ἐν οἷς φύονται, καὶ παρὰ τὰς κατα-
στάσεις τῶν ὑδῶν καὶ τῶν ἀέρων καὶ παρὰ τὸν χρόνον. παρὰ μὲν 2 ὁὐν τὰ γένη διαφέρουσιν οἱ πυροὶ, ὡς οἱ μὲν αὐτῶν εἰτάνοι καὶ ἀληθεύτωσι, οἱ δὲ εὐμῖδαλίται εἰσιν· οἱ μὲν οὖν εἰτάνοι καῦσοι τέ εἰς καὶ χαῦνοι τῇ εὐστάει καὶ λευκοὶ· κατειρτασάμενοι γὰρ εἰς, τῆς γεώ-
δους οὐσίας ἐν αὐτοῖς ἐπὶ πλέον κεχυμένης καὶ διαλειμμένης ὑπὸ τῆς
οἰκείας εὐμῖδαλίως· διόπερ ἐτοιμὴν καὶ εὐπεπτὸν καὶ καθόλου εὐμῖδα-
βολον τὴν τροφὴν προσφέροντα, ὡς ἐνδιάπεσετος καὶ εὐεκποίητος, ἐλάσσονα δὲ καὶ οὐκ ἦσαν τοῖς εὐμῖδαλίταις καὶ πρὸς ὑγείαν μᾶλλον ἢ βάρμην ἄρμόζουσιν. οἱ δὲ εὐμῖδαλίται ἐφορὺς τέ εἰς καὶ πυκνοὶ ἢ καὶ ἔπνοι καὶ διαφανεῖς, καὶ δύσπεπτοι μὲν εἰσιν, ἀνάδοκοι δ' ἔχομεν
βασιλικὴν καὶ διεισόπενυκτὸς καὶ καθόλου πρὸς βάρμην μᾶλλον ἢ πρὸς
ὑγείαν εἴλαν ἐπιτήδειον παρὰ δὲ τοὺς τόπους διαφέρουσιν οἱ πυροὶ 4
οἱ ἐν Ἕπαρι καὶ ἀλίπες ἐν χύραι τινῶν τῶν ἐν εὐτείοις καὶ πιεράς
φυμένων· οἱ μὲν γὰρ ἤπ' ἐλάσσονος ὀλιγὸς καὶ κουφοτέρας καὶ λεπτο-
τέρας συνεπτῶτες εὐκατέργατοι μὲν εἰς καὶ εὐμῖδαβολοὶ, ἐλάσσονα

1 μὲν post. σιτανιον del. Daremberg.
2 σιτανιοι : σητανιοι c.
just as some to panic and others to millet, whilst some have simple names, for example *sitanius* in Italy, others compound, for example in Cappadocia the so-called naked-barley, and in Bithynia naked-wheat emmer.

2. From the works of Athenaeus on wheats, from the first book.

1 Of the cereals the best for good nourishment are the wheats; they differ from one another in that they are heating and moistening to a greater or lesser degree according to their species and according to the localities in which they are grown, the state of the seasons and the climates, and according to their age. So the wheats differ according to their species, because there are spring wheats, *aleuritai* wheats, and durum wheats: the spring wheats are light, spongy in consistency, and white; they are well worked up for use, the earthy elements in them still further being shed and dispersed by their own concoction; hence they furnish a ready, easily digested and in general easily changed food, which moreover is freely perspired and easily assimilated, yet it is inferior and not equal to the durum wheats, since it is more suitable for the health than the strength.

2 The durum wheats are heavier and dense and yellow and translucent, and although difficult to digest they contain an abundant nutritive quality which is not perspired freely and they are on the whole more suitable for the strength than the health. The wheats differ according to locality, those which grow in dry and poor lands differing from those which flourish in good rich soils; for the former being composed of an inferior, lighter and thinner material are easily worked up for food and are
δὲ τροφὴν προσφέρονται, διὰ τρόπον ὦτος καῦσις λεπτόμενοι ἐπιπειράμενοι τῆς γὰρ ὦτος τόποις ὦτις ἐμπρησθείς, διὰ τὸ ἀλλιτές καὶ ἄτροφος τῆς τέφρας λευκὸς τε τίνος καὶ χαῖνοι καὶ εἰτάνιοι. οἱ δ’ ἐν εὐγείοις καὶ λιπαροίς τόποις φυόμενοι, ἀπὸ δαφνίους ἐκ καὶ εὐτερεῖς ὦτις τρεφόμενοι, πυκνοὶ τέ εἰς καὶ βαρεῖς καὶ πολύτροφοι. καὶ οἱ ἀναπτηταμένοι δὲ τῶν τόπων καὶ εὐτυποι καὶ εὐηλιοὶ βελτίως πυρὸς φέρουσι καὶ πολύ τροφιμωτέρους. διαφέροντες δὲ τοῖς τόποις καὶ οἱ ἐν ψυχρώδεις ἄγαν καὶ χιονοβαλουμένοι φυόμενοι τῶν ὀξείματι χύραις επιπειρόμενοι οἱ μὲν τὰρ ἐν ψυχρῷ τόποις φυόμενοι κατεργασμένοι μᾶλλον εἰς καὶ λεπτομερεῖς, οἷοί περε οὐκ οἱ εἰτάνιοι μῆπος τὰρ σῶν φυλευσάζεις ἐν αὐτοῖς τῆς δυνάμεως καὶ θλήσεως ὅτι τρόφιμα ἀναλαμβάνοντες, ταύτην δ’ ἐκ τοῦ καὶ θλήσεως ἐπὶ πολὺ δὲ πετούσης, πλείονα κατεργασίαν τε καὶ χύσει ἐν αὐτοῖς τὸ γεώδες λαμβάνειν διὰ καὶ κοῦροι τε εἰςαίνει οἱ πυροί καὶ εἰς λεπτὸν ἀλευρὸν ἀναλαμβάνον. καὶ τοὺς τριμινιαίοις δὲ πυροίς κουφοτέρους ἄντας 7 καὶ μάλιστα τοὺς ἐν τοῖς χιονοβαλουμένοις τόποις γενομένους δρόμους ἄντας παρειλήφαμεν. οἱ δ’ ἐν θερμοῖς τόποις γενομένοι τῶν πυρῶν 8 ἀφθονον μὲν τροφὴν παραλαμβάνουσι καὶ πολλὴν πυκνωτέραν τε καὶ ἡκεν κεχυμένην τε καὶ διακεκριμένην. οἱ δ’ ἐλώδεις τῶν πυρῶν 9 ἀτροφοί τε εἰς καὶ κουφότεροι καὶ τὸ αἷμα φαιλόν ποιοῦσι καὶ ἡκεν θερμωτότερον τὰ εὕματα. καὶ οἱ κάθυσι τοὺς τῶν τόπων ἀτροφωτέρους 10 φέρουσι καὶ ἄτωνυτέρους τοὺς πυροὺς, δοκοῦσι δὲ καὶ τῷ ὑλῆ γενεῖ μεταβάλλειν εἰς αἵρας διὰ πλεονεκίμον ὑδάτων. οἱ δ’ ἐν εἰκεροῖς καὶ 11
easy of digestion, but they afford less nourishment, as do those wheats sown in what are called 'burnt fields'; this is because when stuff is burnt in these fields, the wheats become white and spongy and like spring wheats because of the meagreness of the ash which is without nutritives. The cereals grown on rich land with good soil, because they are fed by plentiful and solid material, are dense, heavy, and very nutritious; and those localities that are open, airy, and sunny bear better wheats which are much more nutritious. The wheats differ as to place and those which are grown in areas that are too cold and covered in snow differ from those sown in warm places; and those that are grown in cold places are more worked up for use and are composed of fine particles, just as are the spring wheats; the reason for this is that since, in this sort of wheat, the assimilative force is secretly hidden, and since they derive little nutriment, and even this only gradually, and since they undergo a prolonged coction, the earthy element in them takes more working up and also more dispersion; hence these sorts of wheats are light and are reduced to fine flour. We also include three-months wheat as being quite light and particularly that which grows in snow-covered places since it is similar. The wheats sown in hot places receive a plentiful and very solid nourishment which is also less dissipated and divided. The wheat grown in marshy soils is not nutritious, is lighter, produces bad blood, and heats the body less. Very wet places too bear insipid wheats that are not at all nutritious, and they seem to change totally in kind into darenel because of the superabundance of water. Wheats grown
κυβερνώντος τόποις γεννώμενοι πλέον ἔχουσι τὸ εὐκόμαλον τοῦ χρησῆ.

12 μου. παρὰ δὲ τὰς καταστάσεις τῶν ὑμῶν καὶ τῶν δέρων οἱ πυρολ διαφέρουσιν παρὰ μὲν τὰς ὑμᾶς, διὰ τὸ ἐπάρκοσ τοῖς εὔμετροις άυτῶν ἡ μεταβολὴ γέννηται· ὑπὲρεῖ καὶ θερμαίνει καὶ ὁμοίως καὶ πάλιν ἀνοχαίτον ὑδάτων (συμβαίνει τὰς εὐτροφεῖν ταῖς καὶ πληροῦσαι τοῖς θέκοις τοὺς πυροὺς), καὶ τοῦτος, ὃς ἐκ τοῦ ἀκαίρους, ἀκαίρως, ἀκαίρως ὃς ἐκ τῶν ἐφημένων ἐπιτελήται (ἐκαχοῖ τὰ καὶ ἄτροφοι γίνονται). παρὰ δὲ τοὺς ἄμαχοι τοῖς κατὰ τοὺς προσέκοιτοι καὶ πράξεις εὐδείοις γέννηται καὶ εὐήλαιοι καὶ εὐήνεμοι ἡ τοῦτον ἐπικεφαλεῖ καὶ δυσήλαιοι πολλάκις δὲ καὶ θυσαίας σφέντωσι, ἢ δὴ θερμῆς τῆς ἄμαχος ὑδάτες καὶ πρὸς τελείωσι τῶν πυρῶν ὄντων· φθίνουσι δὲ ἀρχεῖα—

18 μενοι. παραπλησίως δὲ καὶ ὃς ταῖς βαρεῖς καὶ ἑπάρ καὶ θερμώς γέννηται πνεύματα τὰ ὑπὸ τῶν καιρῶν τῆς τῶν σταχὺς πληρώσεως, καὶ ἐκμυροὶ καὶ πολύν χρόνον φυκεύμενης οἱ λεγόμενοι καύσωνες, ἐπικεφαλεῖ τοὺς εὐδείους καὶ ἑπάρ οἱ πολλὰς καὶ ἑπάρ 

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†. Περὶ τῶν κατὰ τὰς ὑμᾶς κρεών.
1 Κύριες μὲν μετὰ τὴν ἐνοπτὴν ὑμᾶς εἰς κάκτους μέχρι Πλεῖάδος 2 δύσεως φθινοπωρινῆς, τὸ δὲ ἑπειδὴ δέν ἔμενεν μέχρι ἥπας κάλλιστος. αἵτις δὲ

1 μετὰ add. Daremb erg e C2.
in shady and thickly wooded areas produce more excrement than useful matter. The wheats differ according to the state of the seasons and of the climates: as regards the seasons, when their succession is mild and moderate in coldness, heat, and rains, just as too in the cessation of wet weather (for then it happens that the wheats flourish and are brought to their full size), and conversely when each of the aforementioned things comes about unseasonably, intemperately, and disproportionately (for then the wheats are thin and not nutritious); as regards the climates, when the wheats are sheltered, in a sunny position, and well-aired at the proper times, or contrarily when they are in cloudy and sunless positions, and frequently bear drops of rain, when the season is already hot and the wheats are approaching maturity; because then they die being affected with rust. Equally when the winds are oppressive, dry, and hot towards the time when the ears are fattening, and the strong winds called 'sirocco' blow for a long time, they scorch and parch the ears, and hence render wheats without nourishment.

As regards the length of storage new wheats and old wheats and those inbetween these differ: for recently harvested wheats are very juicy, windy and nutritious, whilst in contrast old wheat contains no juice and is drier and rather poor in nourishment, whilst those in-between these as regards storage occupy a central position as far as the facts mentioned are concerned.

3. On meats according to the seasons.

Pigs after spring-time are extremely bad until the autumnal setting of the Pleiads, but they are excellent from then until spring. Nanny-goats are worst in winter,
τὸν μὲν χειμῶνα· κάκιστα, τοῦ δ' ἡρος ἄρχονται κρείσσους τίνεσθαι μέχρι Ἀρκτοῦρος δύσευς. πρὸβατα δὲ καὶ ταῦτα τὸν μὲν χειμῶνα κάκιστα, μετὰ δὲ τὴν Ἱπποφανίαν πιαίνεται μέχρι τροπῶν θερινῶν· αἱ δὲ βόες, οὗτος ἡ πόλη ἐκκαρπὴ ἢρός τε παυμοῦν καὶ τῷ θέρει παντὶ.

τῶν δ' ὀρνίθων οἱ μὲν κατὰ χειμῶνα κάλλιστα ἔχουσιν, δοσι τε ἐπι- φαίνονται χειμῶνος, δ' ἀκάμψις τε καὶ κῆπα καὶ πάσας· οἱ δ' ἀπατητές κατὰ τὸ φθινόπωρον καὶ μελαλόφυροι εὐκαλῆς· τε καὶ κλω- ρίς καὶ ὀργίσας πηνικαίτα πιὸς τοι. ἀλεκτορίδες τὸν μὲν χειμῶνα οὗ δ' πάνω εὐσωματοῦσι καὶ μάλιστα ἐν νοτίοις· ἡ δὲ· τρυπῖν ἐν φθινο- πώρῳ καλλίστην. τῶν δ' ἱεράν ναὶ μὲν ἐν τῇ κυρίει κάλλιστοι, καρίς, ἐκαρδος καὶ τὰ μαλακεία, τευχίς, εὔπαξ, τὰ δ' ἔδρας ἐρχοῦται ἐπισθενείς, ὥσπερ οἱ κέφαλοι, ὑπερπληθεῖστες δ' οὗτοι τῶν κυμάτων λεψι καὶ ἀποροφοί καὶ ἐτὶ μᾶλλον τεκόντες. ὁ δὲ θύλλος πιὸς τοι. μὲ· Ἀρκτοῦ· ῥον, θέρους δὲ χεῖρων.

Γ. Ἐκ τῶν Γαληνοῦ περὶ πυρῶν ἐφθού· Ἐφθοι πυροί θέεσθαι βαρύ καὶ δύσευστον ἐχθεῖ· δύσευς δ' ἔχουσι μεγάλην, εἰ περιτεία, ὡς τιμωθεῖται πυροί, καὶ τρέφοντες ἴχθυρος τὸ εὐμα καὶ δύμην ἐπίσημον παρεχόμενοι τοῖς προσενεκτικόνοις αὐτοῦς.

Ε. Περὶ χάνδρου.

Τὸ δὲ τῶν πυρῶν ἔχθει· τὸ χάνδρον, ἱκανὸς τρόφημα πτωποῦ τε καὶ θλίψηρον ἐχθεῖ· χαρῳ, ἐὰν τε ἐν θάλασσῃ κρίνει καὶ ἐφθασέι λαμβάνεται ἀπὸ οἰνομείτος· οἵ οὖν ἰχθυκός ἢ εὐφραντός (Ἰδιὸς πάντως ἔκαστος καὶ ἄλλως· ἐμβάλλεται

1 συκαλίς c2 Ἱατρακί : συκαλλός σοδ. 
but in spring they begin to get better until the setting
3 of Arcturus. Sheep too are worst in winter, but after
the equinox they grow fat until the summer solstice;
cows grow fat when the grass seeds as spring is ending
and for the whole summer. As for birds, those that appear
in winter, such as the blackbird, thrush, the wood-pigeon,
are best during this season; francolins are fattest in
autumn as are the black-headed titmice, the fig-pecker,
greenfinch, and quails. Chickens are not altogether in
peak condition in winter and particularly during souther-
ly winds; the turtle-dove is best in autumn. Of the fish
the best are those during breeding such as the small
crustaceans, langouste, and the cephalopod molluscs, for
example squid and cuttlefish, and those that are beginning
to incubate their eggs, such as grey-mullets, but when
these fish are overfull with eggs, they are thin and not
nutritious, and this is even more the case during spawning.
7 The tunny is fattest after Arcturus, but is worse in
summer.
4. From the works of Galen on boiled wheats.
Boiled wheats are a heavy food that is difficult to
digest; wheats when boiled and thus eaten have great
power, and strongly nourish the body and furnish a notice-
able strength for those who take them as a food.
5. On groats
1 Groats are made from a species of wheat, and they are
fairly nourishing and also contain a sticky juice, whether
after being boiled in just water they are eaten with honey
and wine mixture, or with sweet wine, or with astringent
wine (for there is a particular time for the use of each),
or whether they are eaten after being stirred with olive-
δὲ ποτὲ καὶ δέους αὐτῷ, καὶ καλοῦσιν οἶνον ἔτοιμὸν τοῦ παρακευασθέντος
οὗτος χόνδρου πτικανίτι γεγονέναι τὴν ἀρτοῦ. εἰσὶ δὲ καὶ οἱ ἄρτοι ἐ
οὐ τοῦ χόνδρου τροφιμώτατοι μὲν, διαχωριῶντες δὲ ἢπτον.

6. Περὶ ἀμύλου.

'Εκ πυρὸς εκεναζέται τοῦτο δύναμιν έχον όμωστηλήν τῶν τετρα- 1
χυμενών· οὕτε γὰρ ετώσιν τινα έχει οὕτε άφηντη περιφανή. παρα- 2
πλήσιον δ' ἐστὶ τῇ δύναμει τοῖς πλοῦσι άρτοις τοῦ ἀμύλου, ἐλάσσονα
dη τροφὴν διδόν τῷ εὐματί καὶ μὴ θερμαίνον.

7. Περὶ τῶν ἐξ ἀλεύρου πεμμάτων.

Οἱ τατηνίται εκεναζέται δι' έλαιοῦ μόνου· βάλλεται δὲ τὸ μὲν 1
Ελαιον εἰς τῇ τῶν ἐπικέμενος ακάπνη πυρὶ, καταχεῖται δ' αὐτῷ θερ-
μανθέντο τοῦ πυρῶν ἀλευρὸν διατε τεσσερεύον πολλῷ· διὰ ταχέων
οὗν ἐν τῷ έλαίῳ έφόμενον εὐνίκεται καὶ παχύνεται παραπλησίους
ἀπαλῷ πυρῷ· τηνικάστα δ' ἢ καὶ στρέφουσιν οἱ εκεναζόμενες αὐτό,
tὴν μὲν ἄνωθεν ἐπιφανίει ἐργαλεῖον κατωθεν ώς ὑμείν τῷ
tατηνί, τὸ δ' αὐτάρκεια έφόμενον, δ' κάτωθεν ἢν πρότερον, εἰς ὑψος
ἀνάγοντες ώς ἐπιπολῆς εἶναι· καπεδών ἢ καὶ τὸ κάτω παθῆ, στρέ-
μονείς αὐτῷ αὐτὸ δίς εἰς τοὺς καὶ τρίς, ἄχριπερ ώς ὑμαίως αὐτοθῇ
ἐγνήσει βάσῃ. εἴθηλαν οὖν δι' ἐπιχυμοῦν τε τούτῳ ἐστὶ καὶ στατικὸν 2
ταστρὸς καὶ χυμοῦν όμοίων γεννητικῶν· διὸ καὶ τινὲς αὐτῷ μιγνώουσι
μελίτος, εἰσὶ δ' οἱ καὶ τῶν θαλαττῶν ἄλων· εἴε δ' ἢ ἢ καὶ τούτῳ τε
πλακοῦντες τι γένος, ὅπερ γε καὶ ἄλλα τοιοῦτα πλακοῦντων εἴδη
συντιθέασιν ἀποσχίδα οἱ τε κατ' ἀτρόλ ἄνθρωποι καὶ τῶν κατά
oil and salt; sometimes there is added to them some vinegar, and physicians call the seasoning of groats prepared in this way 'barley-soup-like'. There are breads made from groats which are extremely nourishing, but they pass through the body less easily.

6. On starch.

This is prepared from wheats and has a power that is emollient of harsh things; this is because it has neither astringency nor a pronounced hardness. Starch is similar in power to 'washed' breads, although giving less nourishment to the body and not heating.

7. On cakes made from meal.

Pancakes are prepared with just olive-oil; the olive-oil is put into a frying-pan which is placed over a smokeless fire, and onto the heated olive-oil is poured the meal mixed with a lot of water; then as it is briskly fried in the olive-oil it sets and thickens like fresh cheese; at which point those who are preparing it turn it over at once, causing the upper surface to be bottom so that it is in contact with the frying-pan, and what was formerly at the bottom, when it is sufficiently cooked, they raise up so that it is at the top; and when the part that is underneath has set, they turn the pancake over again perhaps two or three times, until it seems to them to be cooked evenly. It is quite clear that this food has thick juices and is costive of the stomach and is productive of raw juices; hence some people mix with it some honey, and there are those who mix in some sea-salt too; this is in fact a sort of torte, just like the other such sorts of torte which people in the country and the poor in the city make in a rough and ready fashion.
8 πάλιν οἱ πένθες, καὶ γὰρ οὖν καὶ δει ἀνάμεσα δούλων τῶν ἀξίματων
· πειμάτων ὁπτῶ εἰς, εἶτα ἄφελόν τε ἐμβάλλουσιν ἐς μέλι θερμὸν εὐθέως, ὦς δὲ ἔζακεν δι', ὅπω ἔατον αὐτὸ, καὶ ταῦτα πλακούντος τι γένος ἔστι, καὶ τά διὰ τῶν ἱερίων εκευαζόμενα μετὰ μέλιτος πάντα, ὑπότον δὲ τῶν ἱερίων τὸ εἶδος· ἄμεινον μὲν δε καλοὺς ὅμηματα φαυλότερον
· ὄντος. γάρ τοῦ ὅτι ταῦτα καὶ σειρίδες ευλίβηται παχύχωμα τέ ἔστι καὶ δραπάπορα καὶ τῶν καθ' ἦπαρ διεξόδων τῆς τροφῆς εὐφρακτικὰ καὶ σπληνὸς ἁθενοῦσι αὐδητικῶς καὶ λίθων ἐν νεφροῖς γεννητικὰ, τρόφιμα δ' Ικανος, εἴ περθείη τε καὶ καλῷς ἀματωθεὶς. 5 τὰ δὲ εὖν μέλιτε εκευαζόμενα μικτῆς γίνεται δυνάμεως, ὡς ἐν τοῦ ἀυτοῦ μέλιτος αὐτοῦ τε λεπτὸν ἔχωτος χυμὸν, δεος τε ἐν ὁμολήσῃ, καὶ ταῦτα λεπτύνοντος· εἰκότως οὖν δε μελιτός τε πλείουν ἐν τῇ εὐφρακτική προείσθη τε καὶ τὴν θυσίαν έχθηκε μακρότεραν, ἢττόν τέ ἔστι βραδύπορα, καὶ χυμὸν γεννητικὸ μικτόν ἐκ λεπτοῦ τε καὶ παχέος, ἡπατί τε καὶ νεφροῖς καὶ σπληνῷ τοῖς μὲν ύπερινοῖς ἀμείνῳ τῶν χυμῶν μελιτός εκευαζόντων, εὐφράξως δ' ἀρχὴν έχουσιν ἡ φλεγμαίνουσιν ἡ εκφρουριών οὐδὲν ἔτον ἐκείνων, ἂλλ' ἔστιν ὅτε καὶ μάλλον βλαβερά, καὶ πολὺ μάλιστα πάντων ἄν χλέχρον Ικανος ἐστι τὸ θλούρον· θύρακα
· τε μὴν οὖς δὲ οὐδὲ πενυμόμονα βλάπτει τῶν οὕτως εκευαζόντων. ἐφώνων δὲ παρ' ἡμῖν πολλῶν ἄλευρον ὑποῖου μετὰ γάλακτος, ἦστεν καὶ

1 ὅμηματα: ὅμηματα Raeder haud dubie per errorem.
And all these unleavened cakes are baked under an earthen-
ware dome, and then on being taken out they are put at
once into hot honey, so that it might be absorbed com-
pletely through them, and these are a type of torte, as are
all the cakes prepared with honey in the same way as
itría. There are two sorts of itría: the better variety
is called rhyemata, the inferior lagana. All the dishes
in fact that are composed of itría and the finest wheaten
flour have thick juices, are slow-passing and liable to
obstruct the passages for food in the liver, are promotive
of a weak spleen, produce stones in the kidneys, are
fairly nourishing, and are properly transformed into blood
if they are digested well. Those prepared with honey are
of a mixed strength, since the honey itself has a fine
juice and comminutes everything with which it comes in
contact; therefore it is reasonable that those cakes
which have absorbed a greater quantity of honey during
their preparation and which have undergone a longer bak-
ing are less slow to pass and produce a juice mixed
from whatever is thin and whatever is thick, and are
better for the liver, kidneys, and spleen, provided these
are healthy, than those cakes prepared without honey,
but if these organs have the initial stage of a blockage
either because of inflammation or induration, then cakes
made with honey are no less harmful than those without
honey, yet there are occasions when they are even more
harmful, and especially those whose flour is rather
sticky: but of course these cakes harm neither the chest
nor the lungs when they have been prepared in this way.
Since there are many people amongst us who boil the wheat
meal with milk, one should know that this food is of the
τούτο ἡθεμα τῶν ἐμπλαττομένων ὑπάρχον. Ὄσερ γὰρ εὐχεία τε ἦν καὶ ἐδῶραμα πάντα ἐέτι εἰς τοῦτο τῶν ἐνεμάτων, οὕτως ἐβλάπτει τοὺς δικηνεῖς αὐτοὺς χρωμένους, ἐμφράζει τε ποιοὕμενα καὶ ἡ ἡπαρ καὶ λίθους ἐν νεφροῖς γενώμενα.

Περὶ ἄρτων πυρίνων.

"Ἀριστος ὅρτος εἰς ὦτεν ἔστιν ἀνθρώπῳ μήτε νέῳ μήτε γυμνὰ-1 ἵσμεν· ὅ πλεύστον μὲν ζῶμης ἐχοι, πλεύστον δ' ἄλλων, ἐπὶ πλεύστον δὲ τετριμμένος καὶ κατειρχαμένος, ὑποτιμόμενος δ' ἐν κριβάνις εὐμέτρως θερμή· κρίσις δὲ τοῦ πλεύστου κατὰ τὴν ζωμὴν καὶ τοὺς ἄλλας γὰρ τρόπες ἐστίν εἰς τὸ γὰρ ἡνυπάρκειαν ἐκείνην, ἁπροφσυρόμενον μὲν ἐνδόν ἑθεμών, περιστὼς δὲ, ὡς οἷον τε μάλιστα, τὴν ἐκ τῆς ἐμφράζεσις βλασθήναι ἢ ικίστα τὰρ ὅ ὅρτος οὕτως ἔχει τὸ παχὺ καὶ γλύχρον, ἀπερωδέστερος ἀντὶ γεωδεστέρου τετευτόν· ὅποτε δ' ἐκουφότις αὐτοῦ διὰ τοῦτο εὐρυῶς καὶ τοῦ μὴ δύσχεις καὶ ὅδοτος, ἅλλ' ἐποχεῖθαι τρόπον φελλοῦ. καλλιτείον δὲ τῶν ἄρτων εἰςίν ὁ λυμόμενος, ἐφεξῆς τ' ὅς ἐνίτιναι, τὴν αὐτῆς ἐξηκτέτας δηλονίτι παρασκεύα· ἐπεὶ γὰρ συχνῶς ὑπάρκοντα διὰ βάθους τοῖς κριβάναις, διὰ τοῦτο ἀπολείπονται αὐτῶν. ὃ δ' ἐπὶ τῆς ἑγχώρας ὑπηρετήθητε καὶ τα βαθύτατα τέρασιν πᾶντες εἰςίν, ἀνωμάλους διακάλλεμον· τὰ μὲν γὰρ ἐκτὸς αὐτῶν ὑπερύπνηται, τὰ δὲ διὰ βάθους ἐκεῖν ἡμᾶ. μετὰ δὲ ἐζ τοὺς πυρίνους ἄρτους οὓς ὀπί τῆς ὄλυρης εἴ εἰ καλλιτείον, ὅταν εὐγενεῖς ὦσιν αἱ δύλαι, δεύτεροι δ' αὐτῶν εἰςίν οἱ τίρινοι.
type which adheres like plaster to the alimentary channels.

7 For although all such foods contain good juices and are nourishing, they harm those who use them constantly, causing blockages in the liver and producing stones in the kidneys.

8. On wheaten breads.

1 The bread that is best for someone who is neither young nor does physical exercise contains a lot of yeast, and a lot of salt too, and has been kneaded and worked for a long time, and baked in a moderately hot earthenware dome. Let the flavour act as a test for you as to an excess of yeast and salt: for it is bad should the taste be unpleasantly affected by the excessive mixing of these ingredients. All those who have contrived to prepare 'washed' bread have discovered a food that is not very nourishing, but it avoids, as far as possible, the harm arising from blockaging: for this bread is the least thick and sticky, being more airy in texture than earthy: its lightness is seen from its weight and because it does not sink to the bottom of water, but floats on the surface like cork-oak. The best breads are those baked in an earthenware dome, then next in order of merit come those baked in an oven, provided of course they have had the same method of preparation; and since these breads are not baked as deeply as breads baked in an earthenware dome, they are consequently inferior to them. The breads cooked on a brazier or in hot ashes are all bad, being in a state of unevenness; for their crust is overbaked whilst their crumb is raw. After breads made from wheats those made from emmer are best, when the emmer is of good quality, whilst second in place to these are einkorn breads.
6. Περὶ δρτων, εκ των Ἀθηναίου, εκ τοῦ Ἰ λόγου.

Οἱ λεπτοὶ τῶν ἄρτων ἀχυλότεροι τέ εἰς καὶ ἀπροφάτεροι, τῆς ἡ ὀπτήσεως μᾶλλον καθικουμένης καὶ ἐξαιτίως τῆς τροφῶδες διὸ καὶ τῶν ἱτρῶν καὶ τῶν λατάνων γένους ἑκτὸν ἀχυλότερον. κατὰ δὲ τὸν αὐτὸν λόγον οἱ κάτοπτοι τῶν ἔχυλων ἰεσουν τρέφοντες καὶ οἱ δίπυροι ἐπὶ ποικὼν τὰ ὀπτήσεις ἀνατριβόντας πάλιν, ἐπειτα δ' έκ δευτέρου τῆς τρίψεως καὶ τῆς ὀπτήσεως τυπχάνουσιν εὐμβαίνει τάρ διατερμαμεμένους αὐτοὺς καὶ ἐπὶ ποικὸν κεχυμένους πολὺ μάλλον ύπὸ τῆς τρίψεως χείσθαι καὶ διαλύεσθαι, τοιούτων δὲ τεθωράκων, ὑπὸ τῆς δευτέρας ὀπτήσεως Ικανὸν μὲν ξέ αὐτῶν ἀπαναλύεσθαι, τὸ δ' ὑπολειπόμενον κούφων τε γίγνεσθαι καὶ χαύνον καὶ λεπτομερές καὶ εὐδιοικητόν. διτ' οἱ θερμοὶ καὶ πρόσφατοι τροφίμωτεροι τῶν ψυχρῶν 8 εἰς καὶ τῶν παλαιῶν, δήλον· ἢ γάρ θερμότης αὐτῶν ἐκλαμβάνεται τῇ πέψει.

7. Περὶ κριθῶν, εκ τῶν Γαληνοῦ.

Οἱ μὲν πυρὸι θερμαίνουσι φανερῶς, οἱ δὲ κριθαὶ ψυχικῶν έχουσι τι κατὰ πάντα τούς τρόπους τῆς χρήσεως, ἐὰν τε ἄρτους τις τὰχ ἐξ αὐτῶν εκεύσας, ἐὰν τε πτισάνην ἔψης, ἐὰν τε ἄλλα εις ποιήσασθαι χυμὸν δὲ γεννοῦσι ρυπτικῶν· οἱ δ' ἄρτοι οἱ ξέ αὐτῶν ού μόνον τῶν 2 πυρίνων· ἀλλὰ καὶ τῶν ὄλυρίνων καὶ πολὺ μάλλον τῶν τιρφύνων ψυχικῶτεροι, μηδὲν ἐν έαυτοῖς ἐχοντες γάλαχρον· εὐβίολοι δὲν ὅτι τροφὴν ἀλλὶ τοίς αὐτοῖς καὶ ἀλλὰ καὶ ἀλλάζουσιν εἰς εὐμακινάν.

10. Περὶ κριθῶν, εκ τῶν Αθηναίου, εκ τοῦ Ἰ λόγου.

Τῶν κριθῶν αἱ μὲν γεμιᾶς καὶ ἄφλοιοι πολὺχυλοι τέ εἰς καὶ ἔξω ἀναλύονται.

Thin breads are insipid and without nourishment, since the baking affects them more and draws out what is nutritious as vapour; hence the class of itria and lagana is insipid. According to the same reasoning overbaked breads are less nourishing than succulent breads as are twice-baked breads: this is because after they have been baked for a certain time they are reduced to flour once again by grinding, and then they undergo a second kneading and baking; for it happens that when they have been heated through and broken up for a certain time, a sufficient part of them is utterly consumed by the second baking after they have been reduced to this state, and what is left behind is light, porous, consists of fine particles, and is easy to assimilate. That hot and fresh breads are more nutritious than cold and old breads is clear; for their heat assists with the digestion.

10. On barley, from the works of Galen.

Wheats are conspicuously heating, whilst barleys possess a certain cooling element in every manner of use, whether one prepares breads from them or boils them to make soup, or makes groats; they produce a purgative juice. Breads made from them are more friable not only than breads made from wheats, but also breads made from emmer, and above all breads made from einkorn, since they do not have anything glutinous in them; so it is quite clear that they afford little nourishment to the body.

11. On barley, from the works of Athenaeus, from the 30th book.

Of the barleys those that are 'naked' and without any
2 πολύτροποι, ευνεγίζοντας τοις πυροίς μάλλον τῶν ἄλλων. ἔχομεναι
dὲ τούτων εἰκὼν αἱ δίστηκοι, ἐλάττων ἐχουσι τῶν πυρρῶν1 ἀποκαθέμεν
τῶν μονοστίχων.

Ἤ. Περὶ ἀλφώτων καὶ μάζης, ἐκ τῶν Γαληνοῦ.
1 Τροφὴν μὲν ὀλίγην διδώσι τοῖς εὔμασι καὶ τοῖς τρυπναζομέγοις
2 ἔλαττονα, τοῖς δὲ ἀτυμνάστοις ἱκανήν. ἢ δὲ μᾶζα τοσοῦτον ἀπο-
λείπεται εἰς τροφὴν εὔματος ἄρτου κριθίνου, δεόν ὁδὸς πυρίνου
pέπτεται δὲ καὶ ἡπτον τῶν κριθίνων ἄρτων. ἢ μᾶζα καὶ φώσης μᾶλλον
ἐμπίπτης τῆς ταυτέρα, καὶ εἶ ἐπὶ πλέον ἐν αὐτῇ μένοι, ταραχὴν ἐρ-
γάζεται μᾶλλον τε διαχωρεῖ κἀτῳ φυσαθεῖς καὶ τριπθεῖς μέχρι

3 πλεόνον· εἶ δὲ καὶ μελί προσλάβοι, δάπτον ἐπὶ καὶ διὰ τοῦτο παρ-
ορμῆσει τῆς ταυτέρα πρὸς ἐκείνην.

Π. Περὶ τιρών καὶ ὄλυρών.
1 Οἱ μὲν οὖν ὄλυροι καλλίστοι μετὰ τούς πυρίνους εἰκὼν, ὅταν
2 τε εὐγενεῖς ὑπὸν αἱ ὄλυραι, δεύτεροι δὲ αὐτῶν οἱ τιφῖνοι· μοχθήρων

2' οὐδεν τῶν ὄλυρών, οὐδὲν ἑκένων ἀπολείπονται. βελτίστως δὲ τῶν
tιφῶν ὀδόν, οἱ θερμοὶ τιφοί πολὺ κρείστους ἐκλ τῶν ὄλυρῶν·

ἐνυλιούντως δὲ χείρως αὐτῶν γίνονται, ὡστε μετὰ μίαν ἡμέραν ἢ δύο
καὶ πολὺ μάλλον ἐν ταῖς ἐφεξῆς ὁ φατὼν ἄρτον τοιοῦτον οἴεται πλὴν
ἔγχειδαι τῇ κολίᾳ· θερμής δὲ ἂν ἐπὶ καὶ τοῖς ἐκ τῶν πόλεων εκει-

husk contain a lot of juice and are very nutritious, approximating as they do to wheats more than any of the other varieties. Following closely on these are the barley with two rows, which contain less dross than yellowish-red barleys with a single row.

12. On barley groats and barley cake, from the works of Galen.

1 These foods give little nourishment to the body, and even less to those who do physical exercise, but sufficient to those who do no exercise. Barley cake falls short of bread made from barley in respect to the nourishment of the body to the same degree as bread made from barley falls short of that made from wheat; barley cake is digested less than bread made from barley and it fills the stomach more with flatulence, and if it remains in the stomach for a long time it causes disorder, and it passes down through the bowels more easily if it has been ground and kneaded strongly; if one also adds honey it encourages the stomach to evacuation still faster.


1 Therefore the breads made from emmer are the best after those made from naked wheats, when of course emmer is of good quality, and in second place after these come breads made from einkorn; but when the emmer is of bad quality, then breads made from einkorn are not inferior to breads made from emmer. When the einkorn is extremely good, the bread made from it is far better than that made from emmer provided that it is hot; when kept until the next day it becomes worse than these, so that after one day or two and even more in succession the person who eats such bread thinks that there is clay lying in his bowels;
Δέχεται μετά τουρό τινος ἐπιχωρίου προσφερομένου αὐτόν, ὅνομάζουσι τ' ἐνυγμαλκτίνων. ὁ μὲν οὖν θερμὸς ἐχθαίμενος οὐ μόνον τοῖς κατ' ἀτρόν, ἀλλὰ καὶ τοῖς ἐν ταῖς πόλεις περιπούθαστος ἔστιν. ὁ δὲ τριῶν ἢ τεττάρων ἡμερῶν, καὶ τοῖς ἁγροίκοις αὐτοῖς ἁγδέστερος μὲν ἦν βρωκήναι, δυσχέρεστος δὲ περθῆναι, βραδυπορώτερος δὲ κατὰ τακτέρα, τοῦ θερμοῦ μηδὲ τοῦτο ἐχοντο τὸ εὐμπτωμα· καὶ μέντοι καὶ τρέφει τὸ εὕμα θερμός ὄν λικανός, ὡς ἀπολείπεσθαι μη ἔστω τοῦ πυρήνου τευχομιστοῦ. τὸ δὲ σπέρμα τὸ τῆς τύρφης ἡκεὶ μὲν ἐξεβέθη λέμμα, καθάπερ ὅλυρα τε καὶ κριθή, πλείθην δ' ἀρτοποιεῖται καὶ ὅλως εἰς χρῆν ἄρτεται· καὶ ἐξ ἑδατος ἐφηθὲν ἐσθίεται κατὰ τὸν ὑπὸ τῶν ἁγροίκων ὄνομαζόμενον ὑπόθερμον, ἐμβαλλομένου εὐραίου· καὶ ποτὲ καὶ μεθ' ἄλλων ἐσθίεται. τὴν δ' ἐνεγκεκατὼν ὅλυραν, ὅταν ὡς χρὴ πτέσεως, τὸν ὄνομαζόμενον τράτων ποιοῦσιν, ὃς πολλοὶ χρῶνται δι' ἑδατος ἐφωντες, εἶτα τὸ μὲν ὤν ἀποχέοντες ἐπιχεῖον εὐραίον ὁ ὁλυκᾶς ἢ ὁλυκέλις· παρεμβάλλοντες δὲ καὶ κάμοις ἐν ὑδατι διαμεινενοὺς, ὡς ἐπὶ πλείτον ἐξοικηκέναι.

1. Περὶ βρόμου.

1. Τοῦτο τὸ σπέρμα τροφὴ τῶν ὑποζητοῦν ἔστιν, οὐκ ἀνθρώπων, εἰ μὴ ποτὲ ἀργυμένη τα άνθρακαςδοὺς ἐκ τούτου τοῦ σπερματος άρτοκοιμασθεῖτο χωρὶς βε λιμοῦ βι' ἑδατος ἐφηθὲν ἐσθίεται μετ' εἰπον
2. γλυκέος ἡ ἐφηματος ἢ ὁλομελίτως ὁμοίως τῇ τύρφῃ. θερμότητος δ'
while it is still hot it is prepared for those from the cities who eat it with a certain locally produced cheese, and they call this 'sour-milk cheese'. Therefore this bread which is eaten while still hot is much sought after not only among those from the country but also among those in the cities. Bread of three of four days standing is already rather unpleasant to be eaten even for the peasants, and it is more difficult to digest and passes slowly down through the stomach, whilst when it is hot this disagreeable property does not exist; moreover, when it is hot it provides sufficient nourishment for the body, so that it does not fall too short of bread made of un-bolted wheat-meal. The seed of einkorn has an exterior husk, just like emmer and barley, which after being washed is made into bread and generally brought into use; and after being boiled in water it is eaten with what is called hypothermon by those in the country, after some reduced wine is added; and on occasion it is also eaten with salt. Whenever people winnow as one ought the best emmer they make what is called tragos, which many use after boiling in water, and then, after pouring away the water, they pour on reduced wine, or sweet wine, or honeyed wine; they also add pine nuts soaked in water, so that they swell up to their fullest extent.


1 This grain is food for beasts of burden, and not for men, unless, on being reduced to famine at some time or other, they are compelled to make bread for themselves from this grain; apart from during famine it is boiled in water and eaten with sweet wine or reduced wine or honeyed wine as with einkorn. It has in common a considerable heat
Ικανής μετέχει παραπλησίως ἐκεῖνη, καίτοι τε οὕς ὁμοίως αὐτὴ ἐκλή-
ρόν ὅπαρχον· διό καὶ τροφὴ ἔλαττονα παρέχει τῷ εὕματι· ἄλλως ἢ ἔτιν ἀμής ὃ ἐκ αὐτοῦ τινὸς ἀρτοῦ, οὐ μὴν ἐπισχετικὸς ταυτός ἢ προτρεπτικός.

τῇ. Περὶ κέτχρου καὶ ἐλύμοι, δν καὶ μελίνην ὄνομάζουσιν.

Γίνεται μὲν ἄρτος ποτὲ καὶ ἐκ τούτων, δηλαδή τῶν προτετραμέμνων κτητῶν ἑδεμάτων, ὁλιγότροφος ἢ ἔτι καὶ
ψυχρός καὶ δήλον ὅτι κραφρός τε καὶ ψαυρός· εἰκότως οὖν ὑπαινο-
μένην ταυτόν ἐποίησε. τό δὲ ἀλευρόν ἐμψύχησε αὐτῶν ἐν τοῖς ἄρτοις· ἢ ἔτι πεθερὰν καὶ ἐκλάθην ἡ θλαῖν ἀναμιτιμένης ἐξείλουσιν. κρεῖττον δὲ ἔτιν ἐλύμον κέτχρος εἰς πάντα· καὶ γάρ ᾧδε εἰς ἐκδοχήν καὶ
δύσκεπτον ἤττον ἔτι καὶ ἤττον ἐμψύχησε ταυτόν καὶ μᾶλλον τρέφει,
καὶ μετὰ τάλακτος δὲ ἔνιστε τὸ ἀλευρόν αὐτῶν ἐμψύχησεν ἐξείλουσιν· ἢ ἄσπερ τὸ τῶν πυρῶν οἷον ἄταρκτοι· καὶ δήλον διό τὸ ἐδέσμα τοῦτο τοιοῦτον κρεῖττον ἔτιν εὐθαμενον, δει καὶ τὸ τάλα εἰς εὐχύμαν τε
πολλῆν καὶ τάλα πάντα διενήνοχεν.

τῇ. Περὶ ὀρύζης.

Τοῦτον τῷ εὐρώπατε εἰς ἐπίσκευσιν ταυτός χρώνται, δυσκεπτότερον
δὲ ἔτι χόνδρου καὶ τρέφον ἤττον.

τῇ. Περὶ φακῶν.

Στυπτικῶν μὲν ἔχουσι τὸ λέμα, τὴν δὲ οἷον εὔρικα παχύχωμον τε καὶ γεώδη καὶ ὑβριστὴ ταυτόποιος ποιήτης, ἢς τὸ λέμα
πολλῆς μετέχει· χυμὸς δὲ ἐν αὐτοὶς ἐναντίος τῷ στυπτικῷ· διό καὶ καὶ
ἐφέσως τις αὐτοὐς ἐν· δει προκενέτησαι τὸ ἔθωρ, ἦδονας ἄλλην ἡ
roughly equal to the latter, although it is not hard like that grain; hence it provides less nourishment for the body; otherwise the bread made from it is unpleasant, but it does not in fact check or excite the stomach.

15. On millet and panic, which they also call Italian millet.

1 On occasion bread is made from these, whenever there occurs a shortage of those grains useful for food which have already been written about, but it provides little nourishment and is cold, and it is clear that it is friable and crumbling; so naturally it dries a moist stomach. In the countryside people boil meal made from millet and then eat it after mixing in lard or olive-oil.

2 Millet is better than panic in every respect: for it is more pleasant in taste, not so difficult to digest, constipates the stomach less, and is more nutritious.

3 The people in the country sometimes eat millet meal after boiling it with milk just like wheat-meal; and it is clear that this food is better to eat, insofar as milk is intended for an excellent healthy state of the humours and all the other things.


1 People use this grain for checking the stomach, but it is more difficult to digest than groats and is less nourishing.

17. On lentils.

1 Lentils have an astringent husk, and their so-called 'flesh' has thick juices and is earthy and they have a share somewhat of a harsh quality which the husk shares to a great extent: the juice in lentils is the opposite to astringent; hence if someone after boiling them in
καὶ μετ’ αὐτῶν ἔλαιόν τε καὶ ἤπειροι διαχωρισμένοι τίνεται τὸ πόμα. διε δ’ ἐγιθείτω, ὡς εἰρήται, τῶν φακῶν, ἐξ αὐτῶν σκευασμένη φακή ὑπὲρ τὴν ἐναντίαν ἐξει δύναμιν τῷ χυμῷ. Ἐπραινοῦσα τὰ κατὰ ταστέρα δεύματα καὶ τὸν ἐντόθεκα τῷ ετομάχῳ καὶ τοῖς ἐντέροις καὶ εὐμπάχῳ

3 τῇ ἀστρ. ἢ δ’ ἀφημενή τὸ λέμμα φακή τὸ μὲν ἔχουσ' τῆς στοιχείως ἀπόλλυσι, τροφιμωτῆρα δὲ τίνεται τῆς ἀπτίκτου, παχύσαμος τε σῶσα καὶ βραδύπορος, οὐ μὴν ἔηρραγική τε τῶν κατ’ αὐτὴν βευμάτων, ὡσπερ ἢ ἀπτίκτος. ἔτι δὲ καὶ κακόχυμον τοῦτο τὸ ἐθεμα καὶ τὸν μελατχολικὸν χυμὸν ἐργαζόμενον. τὴν δ’ ὄψιν ἀμβλύνει μὲν τὴν ὑγιεινῶς διακειμένην ὑπερηπραίνουσα, τὴν δ’ ἐναντίον ἐξουσι ὄνησιν.

ἡ. Περὶ κυάμων.

1 Σκευασμένη μὲν καὶ καθ’ ἑαυτὸ τὸ ἔτος τῶν κυάμων καὶ μετὰ πτισάνης, διερ παρ’ αὐτὴ τῆς ἐνίαυ οὐκ ἐφημενειια εἰρηκτική, καθάπερ τὸ χοίρον κρέας, ἀλλὰ χαρονοτεροὶ πως μᾶλλον· φυσώδες δ’ ἔτιν ἐθεμα, δ’ ὡς δὲ σκευασθῇ. τὴν δ’ οὔσιαν οὐ πυκνὴν καὶ βαρείαν, ἀλλὰ χαύνην τε καὶ κούρην ἐξουσιοι οἱ κύσμοι, καὶ τι καὶ δυσπιστῶν ἐξουσιοι ὁμοίως

2 πτισάνῃ. δυνατὸς δὲ τοῦ τῶν. κυάμων ἐνούς φυσώδους, ἐτι καὶ μᾶλλον, δ’ ὡς ἀδικόλλυτες τις αὐτούς ἐφήσας χρητία, φυσώδες γίνονται. φυσώδες τε καὶ κούρης ταῦτα τὸ μὲν φυσώδες ἀποτίθενται, δυσπιστῶτεροι δὲ καὶ κατ’ ἐραθάντος χυμὸν οἰκεί τῷ τροφῆν ἀναδιδοι τῷ ἔως

3 μάτι. χλωρίδ’ ἐκειόμενοι πρὸν σαπουνῆνα τε καὶ Ἐπραινοῦσα τὸ

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1 φακὴ Daremberg σκακὴ oodd.et Raeder.
2 τὸν ante τὸν del. Daremberg et Raeder.
water gives this water to drink, having seasoned it with salt or fish-sauce and with these things olive-oil,

2 the drink is laxative. When lentils have been boiled twice, as has been described, the lentil dish prepared from them has the opposite power to the juice, since it dries the fluxes from the bowels and provides tension for the stomach and intestines and for all the bowels.

3 The lentil when deprived of its husk loses the force of its astringency, and becomes more nourishing than what has not been hulled, since it is thick-juiced and slow-passing, but it does not in fact dry fluxes from the stomach as does the unhulled lentil; as a food this contains bad juices and produces melancholy humour. It harms the sight when it is in a healthy condition by drying excessively, but it is of benefit when the sight is in the opposite state.

18. On broad beans.

1 There is prepared the thick soup of broad beans on its own and together with pearl barley, and it makes fleshy the condition for flesh that is not firm, as does pork, yet perhaps more for flesh that is rather spongy; as a food it is flatulent whatever way it prepared. Broad beans have a substance that is not compact and heavy, but spongy and light, and they possess a certain purgative quality like pearl barley. Although the thick soup made of broad beans is flatulent, it becomes still more flatulent when one uses them after boiling them whole. Toasted, however, they lose their flatulent quality, but they become harder to digest and more slow to pass, and distribute with their nourishment a thick juice to the body.

5 Eaten green before they have ripened and been dried they
κοινόν ἀπάντων ἡχοὺς τῶν καρπῶν, δέους πρὸ τοῦ τελειωθῆναι προσ-
φερόμεθα, τροφήν ὑγροτέραν διδόντες τῇ εἴσῳ.

§. Περὶ πιεσῶν.

Οἱ πιεσοὶ παραπληξίων τι κατὰ τὴν ὀδὴν οὐδὲν ἡχοῦντες κυάμισιν
ἐξαιδεύοντι τῇ κατὰ τοὺς αὐτοὺς τρόπους αὐτοῖς, ἐν δύο τοῖς παρ-
αλλάττουσιν, ὅτι τὰ φυσικὰ δόμισιν τόις κυάμισις ὄντες εἰς, καὶ ὅτι
τὴν ῥυπτικὴν δύναμιν ὄντα ἡχοὺς, καὶ διὰ τοῦτο βραδυπορώτεροι κατὰ
γαστέρα τῶν κυάμισιν εἰς ὑπὸ τῆς τροφῆς ἐκφύει.

ζ. Περὶ ἑρεβίνθων.

1 Ὅχι ἢ τον κυάμιν ἑρεβίνθων φυσικῶς ἐλαίο, τρέψους δ' ὃς ἢ τον
ἐκείνων, ἐπετείρους δὲ καί τὰς ἑς εὐνοεῖσιν ὀρμᾶς ἀμα τῷ καὶ
ἐπερματος εἶναι γεννητικοῖ. ὑπάρχει δὲ καὶ βυτικὴ δύναμις αὐτοῖς
ἐπὶ πλέον ἢ τοῖς κυάμισις, ὡστε τινὲς ἐκ αὐτῶν καὶ τοὺς ἐν νεφρῷς
εὐνικτημένους λίθους ἐναρτῶς ἐρυπτοῦσιν: μέλανες δ' ἐλείν ὅστις καὶ
μικρὸι καὶ καλοῦνται κροῖν. βέλτιον δὲ τὸν χυλόν αὐτῶν μόνον πίνειν
ἐκωντάς ἐν ὅλοις. οἱ δὲ χλωρὶς ὄμοις πάσι περιπτωματικοὶ τυγ-
χάνοις, καθάπερ καὶ ὁ φρυγέττες τὸ μὲν φυσικὲς ἀποτίθενται, δυκ-
πετοτέροι δὲ τίνος καὶ καταλικύτεροι καὶ τροφὴν ἑλάττωσα διδόσι
τοῖς εἴσῳν.

κα. Περὶ θέρμων.

1 Θέρμως σκέλρος ἐστὶ καὶ γεώδης τὴν οὕσιαν, ὡστε ἄνατη ὄξ-
πετοτόν αὐτόν εἶναι καὶ παχύν γεννᾶχ χυμόν, ὥς ὅμελος ἐν τοῖς
2 φλεψι κατεργασθῆντος ὁ καλοῦμενος άλλως ὡμὸς ὁ ἀθροίζεται χυμός. ἐστὶ δ'
possess the common attribute of all fruits which are taken as food before they have reached maturity, namely giving to the body a rather moist nourishment.


Peas have something in common with broad beans as regards their substance taken as a whole, and they are eaten in the same way as broad beans, but they differ in two respects, that is firstly they are not flatulent like broad beans, and secondly they do not possess the purgative quality, and because of this they pass through the stomach at a slower rate than broad beans.

20. On chickpeas.

1 Chickpeas are no less flatulent than broad beans and they are no less nourishing than the same, but they arouse the urges for sexual intercourse and at the same time are productive of sperm. There is also a purgative power in them to a greater degree than that in broad beans, so that some varieties of chickpeas even clearly break up the stones condensed in the kidneys; these are black and small and are called 'rams'; it is better to drink the juice alone of them after boiling in water. Green chickpeas happen to be extremely excrementitious like all green pulse, just as chickpeas that are toasted lose their flatulent quality, but become harder to digest and more astringent and give less nourishment to the body.


1 The lupine is hard and earthy in substance, so that it is necessarily difficult to digest and produces thick juice, from which when not properly worked up in the veins there is collected the humour that is specifically called 'raw'. When prepared for eating it belongs to the class
ὁ ἐδώδιμος τῶν ἀπολύματι ὡς πρὸς σεβηκαί τει καὶ διὰ τοῦτο ὦτε εἰς δια-
χώρησιν ἐπιτήδειος ὄφτε ἐστεκτικὸς τυχάνων.

ἐβ. Περὶ τῆλεως τῆς καὶ δουκέρως.
1 Ὡπάτει γαστέρα διὰ τάρου προεκθειμένη ἐκέβιεται δὲ δια δίος καὶ τάρου, καὶ δι’ ὅλον δὲ καὶ τάρου καὶ ἐλαίον καὶ τινες καὶ ἀρτί λαμβάνουσιν αὐτήν, οὕτως κεφαλαλτή γινομένη, ὅσπερ ἡ διὰ τάρου. ἐκέβιεται δὲ τήλες καὶ πρὶν ἐκκαρπήσαι εἰς δίος καὶ τάρου, ἔναρκτο δὲ καὶ ἐλαίον βάλλουσι μετ’ ἀρτίου κεφαλαλτής δ’ ἐστὶν ἡ τοι-
2 αὐτή. χωλὸς δ’ ἐγκειδεῖ τῆλεως καὶ μετὰ μέλιτος λαμβανόμενος ἐπι-
tήδειος ἐστὶν ὑπάτει ἁπαντάς τούς ἐν τοῖς ἐντεροῖς μοχθόροις χυμοῦς·
ὅτα δὲ καὶ ψυπτικῆς μετέχει δυνάμεως, ἀπὶ τήν ἐκκρισιν παρομφή τὸ ἐντεροῖν.

ἐγ. Περὶ φασίλων καὶ ψχρών.
1 Καὶ ταῦτα τὰ επιματα, καθάπερ καὶ τὴν τήλην, ὅστις διαβρέ-
χοντες οἱ ἄνθρωποι μέχρι τοῦ χῦτος βίζαν ἐκέσουσι πρὸ τῆς ἄλλης
τροφῆς ὑπιστητεὶς ἔνεκα γαστρός, ἑναποθανόντες τάρου· τρόφιμον δ’
2 ἐχει τὸν χῦμαν, ὅταν ἀναδοθῇ περιπλῆστα, μάλλος τῆλεως. ἔστι δὲ πῶς
ταῦτα μέσᾳ τῶν εὐχόμενα τε καὶ κακοχόμενα, ἑυπέττων τε καὶ δυσ-
πέπτων, βραδυπόρεν τε καὶ ταχυπόρεν, ἀφύεσιν τε καὶ φυσιδών,
ἀλητοτρόφων τε καὶ πολυτρόφων· οὐδὲ τὰρ οὐδὲ ποιότητα τινα δρα-
ετηρίου ἐχει.
of foods that are without attribute as regards the sensations and for this reason it happens to be fit neither for evacuation nor constipating.

22. On fenugreek, which is also called 'bull's horn'.

1 It loosens the bowels if it is eaten at the beginning of a meal with fish-sauce; it is eaten too with vinegar and fish-sauce, and also with wine, fish-sauce, and olive-oil; and some people eat it with bread, for then it does not cause headaches, as it does when eaten with fish-sauce. Fenugreek is eaten too before it has grown to seed in vinegar and fish-sauce, whilst some people pour on olive-oil and eat it with bread; such a preparation causes headaches. The juice of fenugreek when boiled and taken with honey is suitable for purging every harmful juice in the intestines; because it shares in the purgative power, it incites the bowels to evacuation.

23. On calavances and birds' pease.

1 Men eat these seeds too, in the same way as fenugreek, before other food for the sake of purging the stomach, after soaking them as far as the point where they put out their root and dipping them in fish sauce; they have a nutritious juice, more so than fenugreek, when they are distributed through the body after being digested.

2 These seeds are in some way intermediate between things with good juices and things with bad juices, between things that are easy to digest and things that are difficult to digest, between things that are slow-passing and things that pass quickly, between things that cause no flatulence and things that do, and between things which provide little nourishment and things that provide much, for they are not without a certain active property.
κ. Περί λαθύρων.

1. 'Εκείνοι ταύτης τῇ φακοπτειάνη παραπληκήσω. χυλόν δ', έχουσιν τῇ μὲν δυνάμει παραπληκήσις πυνίς ψυχροί τε καὶ φασίδες, παχύτερον δὲ τῇ ευπτάσει, καὶ διὰ τούτῳ τε οὕτω κροσιμέτεροί πυνίς ἐκείνων εἴδεν.

κ. Περί ἀράκων.

1. Παραπληκὴς τούτῳ τῷ ἐπιρμα λαθύρων ἐκεῖν' καὶ τάρ ἡ χρῆεις ἀπαλα ὁ διόνυμος αὐτοῦ παραπληκὴς τῇ τῶν λαθύρων ἑκέ, πλῆν ὑπὸν εἰκληρότεροι τε καὶ δυσεπιτήτεροι καὶ διὰ τούτῳ καὶ δυσεπιτήτεροι τούτων λαθύρων εἴδεν οἱ ἀράκων. παρ' ἤμιν δ' ἐγριφὸν τι καὶ εἰκληρῶν καὶ εὑρητόλουν, ὀρθῶν μικρότερον ἐν τοῖς Δημητριακοῖς καρποῖς εὑρίσκομεν, δὴ όνομάξως ἀράχον διὰ τοῦ χώρον καὶ ρίπτοσιν αὐτὸν ἐκλεγοντες ὑπερ τε καὶ τὸν πελεκίνον.

κ. Περί δολίχων ἢτοι φασίδονων.

1. Τούτως ἐνοι λοβοῖ τὸν ὀνομάζοντες, ἐνοι φασίδοντες. διαχωρητικοί δ' εἴδοι μᾶλλον τῶν πιςεδῶν καὶ ἑκάσον φυκίωδες καὶ τρόφιμοι.

κ. Περί ὀρόβων.

1. Ἔν λιμῷ ποτε μεγάλῳ κατ' ἀνάτηκην ἐκείνοις δ' εἴδοι φαρμακίδες ἐν αὐτοῖς τὰς λεύκους τῶν πρὸς τοὺς ἀνθρώπον καὶ ψυχρὸν ἀφίστως μένων. δ' τοῦ ἄρειπτες δὲς, ἀπογυμνάuloτερες δὲ δ' ὡς τοὺς πολλὰς ἀποτίθενται μὲν τὴν ἀράχην, ἀποτίθενται δὲ καὶ τὴν ῥυπτίκην τε καὶ μητρίκην δυνάμην, ἣτε ὑπολείπεσθαι τὸ γεώδες αὐτῶν τῆς οὐδείς, δ' χωρὶς παρότιτος ἐπιφανοῦς ἐθέματο Εὐράκων γίνεται.
24. On marrowfat peas.

These are eaten in much the same way as lentil and barley soup. They have a juice that is very similar in some ways in terms of power to birds' pease and calavances, but thicker in consistency, and for this reason they are perhaps more nutritious than the latter.

25. On wild chickling.

This seed is very similar to marrowfat peas; for its whole use and power resembles that of marrowfat peas, except insofar as wild chickling is harder and more difficult to cook and because of this is also harder to digest than marrowfat peas. Around us we find among the cereals a wild grain, hard and round, smaller than bitter vetch, which people call *arachos* with the letter *chi*, and they discard it after sorting it out as indeed they also do with axeweed.

26. On black-eyed or mongette beans.

Some people call these 'pods', other 'mongettes'.

They are more laxative than peas and less flatulent and nourishing.

27. On bitter vetch.

Sometimes in a great famine people eat bitter vetch out of necessity; the white ones are less medicinal in themselves than those which tend towards yellow or cream.

Boiled twice, and sweetened several times with water, they lose their unpleasantness, but they also lose with their unpleasantness their purgative and cutting power, so that of their substance there is left behind the earthy part, which constitutes a dehydrating food without any noticeable bitterness.
πη. Περί επεάμου καὶ ἐρυσίμου.

Ἀπαράν ἐστὶ τὸ τῶν ἐπαύων εἰπέρμα· διὸ καὶ τάχιστα ἔλαιρον 1
tίνεται· διὰ τούτο οὖν ἐμπίπτει τοὺς ἑξίστων ἀνατρέπει
tε τὸν ἐπίμαχον καὶ βραδείως πέπτεται καὶ τροφὴν διδωκε τῷ εὐματι
ἀπαράν· ἐπεὶ δὲ παχύσυμον ἔστιν, οὐδὲ διεξάχεται ταχέως. τὸ δ' ἐρώτημα
ἐπαύων κατὰ τὴν τοῦ εὐματος οὐκισαν ὁμοίνενες πως δὴν
ἀπρόστερον τέ ἐστι βρωθῆναι καὶ τροφὴν ἠττονα διδωκε τῷ εὐματι
καὶ παντὶ χεῖρον ὑπάρχει· θερμά δ' ἐστὶ ταῖς κράσεσιν ἁμφοῦ καὶ διὰ
τοῦτο καὶ διψῶδη.

κθ. Περί μῆκωνος επερματος.

Τῆς ἡμέρου μῆκωνος χρήσιμον ἐστὶ τὸ εἰπέρμα ἐπιπαττόμενον 1
ἀρτοῖς ως ἑθήμαι· βέλτιον δ' ἐστὶ τὸ λευκότερον εἰπέρμα τοῦ μελανω-
tέρου, δύναμιν δ' ἔχει πυκτικήν· διὰ τοῦτο καὶ ὑπνώτηκόν ἔστιν· εἰ
dὲ πλέον ληφθεῖ, καὶ καταφροκεῖν καὶ δύσπεπτον· ἐτί δὲ τῶν ἐκ
πνεύμονος τε καὶ θάραξκος ἀναβιβασμένων ἐπικεκτικοῖν. ὕψελεῖ μέντοι 2
tοὺς ἐκ κεφαλῆς καταρροίπομένους λεπτῷ βεύματι· τροφὴν δ' οὖκ
ἀπείδιλτον παρέχει τῷ εὐματι.

Σ. Περί λινοσπέρμου.

Κακοτόμαχον ἐστὶ καὶ δύσπεπτον τὸ λινόσπερμον καὶ τροφὴν
ἀλίτην παρέχει τῷ εὐματι, τῆς ταστρός δ' οὖ 1· τι κυνητικὸν ἔχει,
βραχύ δὲ τι τῆς οὐρητικῆς δυνάμεως μετέχει, καὶ μᾶλιστα φρυγῆν.

Ἀπ. Περί ὀρμίνου.

Χρῶνται μὲν αὐτῷ φρύγοντες καὶ λειούντες, μεγάλως μέλιτας·
ἀλίτον δ' ἔχει τρόφιμον.

1 οὐ Raeder : οὗτο codd.

The seed of sesame is fatty; hence it quickly becomes oily; so for this reason it quickly fills those who eat it and upsets the stomach and is slowly digested and gives a fatty nourishment to the body; since it contains thick juices it does not pass through the body quickly.

Hedge-mustard being in some way akin as regards the substance of its whole body to sesame is more unpleasant to eat and gives less nourishment to the body and is worse in every respect; both seeds are hot in temperament and because of this also excite thirst.

29. On poppy seeds.

The seeds of the cultivated poppy is useful for sprinkling on breads as a seasoning; the whiter seed is better than the blacker seed, and it possesses a cooling power; for this reason it also causes drowsiness; if too much is taken, it causes lethargy and is hard to digest; besides it is checking of matter that is expectorated from the lungs and from the chest. It helps those who are subject to a thin catarrh from the head; it does not provide any nourishment worth mentioning for the body.

30. On linseed.

Linseed is bad for the stomach and hard to digest and provides little nourishment for the body, and it possesses nothing to move the bowels, but it contains a little diuretic power, especially when toasted.

31. On red-topped sage.

People use it after toasting and finely pounding it, and mixing it with some honey, it possesses little that is of nutritive value.
Λ. Περί καννάβεως.

Τής καννάβεως τό επέρμα δύσπεπτόν ἔτη καὶ κακοκόμαχον κεφαλαλτές τε καὶ κακόχυμον θερμαίνει δ’ ικανώς.

Α. Περί ἄγνου επέρματος.

'Αφροδιείοις ὄρμας ἐπέχειν πεπίστευται τό τοῦ ἄγνου επέρμα· τροφὴν δ’ ἀλήθην διδωσε τῷ εὔματι, καὶ ταύτῃ Ἐπραίνουσαν μὲν καὶ ψύχουσαν, ἄφυσον δ’ ικανῶς· κατὰ πάντα οὖν ταύτα τοῖς ἀγνεύειν ἀφροδιείων βουλομένοις ἐπιτήδειον ἔτειν.

ΑΔ. Περὶ βίκου.

1 Τὸ σχῆμα τούτων ἔσικε τοῖς φακοῖς· ἐν λιμῷ δ’ ἔβιοισαν αὐτοῖς οἱ ἄνθρωποι, καὶ μάλιστα τοῦ ἱροῦ, ἔτι χλωρῶν δύτων, ὦσπερ ἐφεβίνθων τε καὶ κυμάων. ἔστε δ’ οὐκ ἀνήθη μόνον, ἄλλα καὶ δύσπεπτα καὶ εστικατά γαστρός καὶ κακόχυμα τυχάνοντα καὶ τοῦ μελαχολικοῦ χυμοῦ τεννητικά.

ΑΔ. Περὶ κολοκύντης.

1 Ἔσυμβείεια καλῶς ἡ κολοκύντη ἐαρῆ ποιότητα χυμῶν οὐδεμίαν ἔχει καὶ ἐκότως πολλοὺς ἐπιδέχεται τρόπους εκεναίας, ὡς ἐν ἐν τῷ μέσῳ καθεστῶσα παέων τῶν ὑπερβολῶν· αὕτη μὲν οὖν, δεόν ἐφ’ ἐαυτή, τροφὴν τῷ εὔματι διδωσεν ὑπάν καὶ ψυχράν καὶ διὰ τοῦτο καὶ βραχεῖν ὑβίδως δ’ ὑπέρχεται κατὰ γαστέρα τῷ τῆς οὕτως ὀλιγοποιεῖται καὶ ταχυτερῶς καὶ ταχύνειεία τῆς μὲν οὐκείας ὑπερτύπτης ἀποτείθεται πάμπολν, τὸ δ’ ὑπάνων αὐτὴς οὐδεμίαν ἰσχυρὰν ἐπικτάται δύναμιν, ὦσπερ οὖν δ’ ὑπὸ ὑμβόλου εκεναίη· χαίρει δ’ εἰκότως ὅριζεν.
32. On hemp.

The seed of hemp is difficult to digest and bad for the stomach, causes headaches, and is unwholesome; it is somewhat heating.

33. On the seed of the chaste-tree.

The seed of the chaste-tree is believed to check sexual urges; it provides little nourishment for the body, and that which it gives is drying and cooling, and is almost completely free from causing flatulence; so as regards all these things it is useful for those who wish to keep themselves pure from sex.

34. On vetch.

The shape of these is similar to lentils; people eat them during famine, and particularly in spring, when they are still green, just like chickpeas and broad beans. They are not only unpleasant, but also difficult to digest, costive of the bowels, are unwholesome and productive of melancholy humour.

35. On large gourd.

Boiled well the large gourd has no distinct quality of flavours, and it reasonably admits of many ways of preparation, as it is positioned in the middle of all extremes; thus, considered on its own, it furnishes nourishment to the body that is moist, cold, and hence also meagre; it passes easily down through the stomach because of the slipperiness of its substance, and it is not badly digested, whenever of course it is not corrupted before it is digested. Baked or fried in a pan it loses a large part of its special moistness, and what remains of it possesses no strong power, just as when it is prepared with simple sauce; naturally it goes well with marjoram on account
διὰ τὴν ὑδατώδη ποιότητα. ἦσοι δὲ κενοῦντες αὐτὴς τὸ ἐπέρμα -ο ἴνα ἴνα τὴν ὀλον σάρκα ἐξαράναντες ἀποτελέσθαι μὲν εἰς τὸν χειμῶνα, χρώνναι δὲ πάντα μάλλον ἢ ὡς κολοκύνταις αὐταῖς· δχολοὶ τε γὰρ γίνονται καὶ ἕλραι, καταφοίρας παραπλήκτηι.

Ἀρ. Περὶ πεπόνων.

Ἡ μὲν δὲ φύσει αὐτῶν ψυχροτέρα ἔστι εἰς ὑπὸτητί δαψιλεί, Πυπτικὸν δὲ ἔχουσι τις διὸ καὶ κινοῦσιν οὐρὰ καὶ ἔξερχονται κάτω τῶν κολοκυντῶν καὶ τῶν μηλοπεπόνων μᾶλλον. Τῆς δ' οὖν εἰρήκεις αὐτῶν τὸ ἐπέρμα ῥύπτει μᾶλλον, μοχθηρὸν δὲ ἐρτᾶται χυμὸν ἐν τῷ εὐματί, καὶ μᾶλλον διὰ τὴν καλὸς περφή· τηγκαύτα δὲ χολερικὸς ἀποτελεῖν εὑσθεν· καὶ τὰρ καὶ πρὸς διαφθορᾶς πρὸς ἔμετον ἐπι-πήδειον ἔστι, καὶ πλεῖόν γε βρωβίν, εἶν μὴ τὰ αὐτῶ τι τῶν εὐχύμων ἔδειματος ἐπιφάτη, κινήσει πάντως ἔμετον.

Ἀρ. Περὶ μηλοπεπόνων.

Οἱ μηλοπέπονες ἔστιν τῶν πεπόνων εἰς ὑπότητι καὶ ἔτην κακό- χυμοι καὶ ἔτην οὐρητικοὶ καὶ ἔτην υπέρχονται κάτω, τὸ δ' εἰς ἐμετόν ἔξωρμα ὅμως τοῖς πέπονεσιν οὖς ἔχουσι. πολὺ δ' ἀπολειτόμενοι τῶν 2 εὐστομίχων ὑπωρῶν οὖς ἔχουσι τὸ τῶν πεπόνων κακοτόμαχον.

Ἠ. Περὶ εἰκῶν.

Οὐρητικὸν μὲν ἔχουσι τις καὶ αὐτοὶ καθαπερ καὶ οἱ πέπονες, ἀλλ' ἔτην ἐκείνων. τοῖς δὲ καλὼς πέτουσιν αὐτοὺς, διὰ τῶν αὐτῶν εἶν ζυμορηθοῦσι, χρώνων πολλῷ καὶ ἀμέτρως παχῶν χυμῶν ἀναθρόουσιν.

1 τῆς δ' add. C2 Daremberg.
2 τι add. Daremberg.
of its watery quality. Some people after emptying it of its seed and then drying the so-called 'flesh' store it away for the winter, but they use for all purposes large gourds as they are rather than gourds prepared like this; for they become without juice and dry, and almost resemble shoe-leather.

36. On watermelons.

1 The whole nature of watermelons is rather chilling with an abundant moistness, and they possess a certain purgative quality; hence they are also diuretic and pass down through the bowels more easily than large gourds and melons. Their seed is more purgative than their so-called 'flesh', but they produce bad juice in the body especially when they are not well digested; in which case they are liable to cause people to suffer from cholera; for even before they have been digested they are prone to produce vomiting, and if one eats too much of them, unless one eats them with some foods containing good juices, they certainly arouse vomiting.

37. On melons.

1 Melons are less moist than watermelons and contain less bad juices and are less diuretic and pass down through the bowels less easily, and they do not possess the power to induce vomiting like watermelons. Although they fall far short of summer fruits that are good for the stomach, they do not possess the quality of being bad for the stomach which belongs to melons.

38. On cucumbers.

1 They possess a certain diuretic quality too just like large gourds, but less pronounced. For those people who digest them well, when they have had their fill of them,
όυς εὕπετος ἐπιδείκασεν δυνάμενον τὴν εἰς αἷμα χρητὸν ἀλλοιωσεν ἐν τῇ κατὰ τὰς φλέβας πέμει.

ἐβ. Περὶ εὐκηνών.

Τὸ μὲν κοινὸν οὐ μόνον ὁπώρας πάσας ἀλλὰ καὶ τοῖς ύφαισι 1 ὄνομαζομένοις καρποίς ἔχει καὶ τὰ εὐκα, φυτεῖν οὐ δυνηθέντα τὴν κακοχυμίαν οὖθεν αὐτὰ, καίτοι τῶν ἄλλων ἀπάντων ύφαιν μὴν αὐτὴς μετέχοντα. πρόσεχε δ' αὐτοίς ἀγαθά τὸ κατὰ ταστέρα πορίμοις εἶναι 2 καὶ τὸ διεξερχεῖσθαι ῥοδίως διὸν τὸ εὕμα· καὶ τῷ τι καὶ βυτικὸν δείδοντον ἔχει· τροφὴν δ' ἀπασών τῶν ὀπωρῶν ὄλην τῷ εὕμαι 3 διδοῦσι, ἥττον ἀπασών τὸν τὰ εὔκα πέπονθεν, οὐ μὴν ἐξερεύνησεν τῇ καὶ ἵσχυρᾷ ἐργάζεται τὴν εάρκα, ἀλλ' ὑπόκομμον, ἠστερὸ τὸ κύονος' ἐμπιπλησέ γι' μὴν φύσει καὶ αὐτὰ τὴν ταστέρα, τῷ τάχει δὲ τῆς διεξοδίας τὴν φύσαν ὀλιγοχρόνον ἐργάζεται. τὸ δ' ἀκριβῶς πέπεινον 4 εὐκον ἐγγὺς τοῦ μη' ὀλίους βλάπτειν ἰσαί παραπλησίως τοῖς ἱσχάς, πολλὰ μὲν ἑχούσαις τὰ χρησίμα, μοιχηρὸν δ' ἑχούσαις τι τοῖς πλεοναζοῦσιν ἐν αὐταῖς· οὐ πάντων τάρ αἷμα γεννώσι χρηστόν, δὲν αὐταῖς καὶ τὸ τῶν φθειρῶν πλῆκτος ἑπέται. δύναιν δ' ἑκουσί λεπτυνθῆν 5 τῇ καὶ τιμητικῆ, δι' ἢν καὶ τὴν ταστέρα πρὸς ἐκκρειέν ἐξορμῶς καὶ νεφροὺς ἐκκαθαίρουσιν, ἡπατι δὲ καὶ ἐπιηλινοὶ πλεγμαίνουσι μὲν εἰς δὲ βλαβεραί, καθάπερ καὶ τὰ εὐκα, τῷ κοινῷ λόγῳ τῶν γλυκῶν ἀπάντων· ἐνδεικτῶς τῇ καὶ οἰκούσι, οὐ κατ' ἴδιαν τίνα δύναιν ἐξαφέτον. ἐμπερφατμένοις δὲ καὶ εκφρομένοις αὐτὰ μὲν καθ' ἑαυτᾶς οὐδὲν οὐτε
they accumulate over a length of time and in immoderate quantities a thick juice which cannot easily admit of the transformation into good blood during coction in the veins.

39. On figs.

1 Figs possess what is common not only to all the autumn fruits, but also to the fruits that are called summer fruits, yet not even they can escape from the state of unwholesomeness, although they have less of a share of it than all the other summer fruits. There belongs to them the advantages of passing rapidly through the stomach and of going through the whole body easily; for they possess a certain important purgative power. Although all autumn fruits give little nourishment to the body, figs suffer this least of all, and they do not make the flesh firm and strong, but instead rather spongy, as do broad beans; in fact they also fill the stomach with flatulence, but the rapidity of their passage through the body renders the flatulence short-lived. Completely ripe figs come near to not being harmful at all almost like dried figs, which on the one hand possess many useful attributes, but on the other hand have a certain element of badness for people who eat their fill of them; for they produce blood which is not altogether good, and hence there also follows from them a mass of parasites. They possess an attenuating and cutting power, by means of which they both excite the stomach to evacuation and also purify the kidneys, but they are harmful to the liver and spleen when these organs are inflamed, as are fresh figs, not for any particular reason, but because of a common affinity with all sweet foods and drinks. On their
εἰς ωφέλειαν οὔτε εἰς βλάβην ἐργάζονται, μιτνύμεναι δὲ τοῖς τέμνουσι. 8 τε καὶ ρύπουσι φαρμάκωσι οὐ μικρὸν δειφλός εἰσίν. δέοι δὲ μετὰ τινὸς τῶν παχυνόντων 1 ἔδειματων ἐδείχουσι τὰ τε εὐκα καὶ τὰς ἱεράς, οὐ μικρὰ βλάπτονται.

μ. Ἐκ τῶν Ροῦφοι, περὶ εὐκών.

1 Σῦκα τῆς μέν ἄλλης ὀπώρας ἐκεῖ κρείσσω, βλάβην δὲ καὶ ταύτα 2 ἔχει τινα. αὐτῷ δὲ ἱεράδεκι ικανῶς τρέφειν εὕμα δύνανται τοῖς γονίων 3 παιδεῖ τοῖς ἀθληταῖς ἱεράς ἐδείχειν παρεῖχον. Πυθαγόρας δὲ πρῶτος ὑπῆλαξε τὴν προσφορὰν, κρέα δοῦς Εὔρωμεν τῷ Σαμίῳ καὶ οὕτως μετετέθησεν ἢ διατε.

μὰ. Περὶ εὐφυλῆς, ἐκ τῶν Γαληνοῦ.

1 Σῦκα καὶ εὐφυλαὶ τῆς ὀπώρας δτιπέρ κεφάλαιον εἰσίν καὶ γὰρ τρέφει μᾶλλον ἀπάντων τῶν ὑφαίσθων ταύτα καὶ ξειστὰ ἐκεῖ κακόχυμα, καὶ μᾶλιστα ὅταν ἀκριβῶς ἢ πέπειρον οὐ μὴν ἱεράρᾳ τε καὶ πυκνῇ εὔρε ἐκεῖν ἢ ἐξ αὐτῶν γεννωμένη, ἀλλὰ χαύνη καὶ πλαδαρὰ διὸ καὶ 2 ταξέως προστελλέται. ἤτοιν δὲ τῶν εὐκών αὐτὰ εὐφυλαὶ τρέφονται, μεγίστον δ' αὐταῖς ἀγαθὸν ὑπάρχει τὰ ταξείς ὑπέρχεσθαι διὸ καὶ ἐπιμεθεῖσθα ρος, βλάπτουσιν ικανῶς, οὐκ ἔχοντων τούτο τῶν εὐκών εὖ γὰρ καὶ μὴ διαχωρίσων αἰειόλογος, ἀβλαβὴ τροφὴν δἰδὼ τῷ 3 εὐματὶ. ταῖς εὐφυλαῖς δ' οὐδέτερον ὑπάρχει τούτων οὔτε γὰρ πέτ- τονται καλῶς, δὲν ἐπιμεθεῖσθαι, καὶ κατὰ τὴν τε καὶ τὰς φλέβας ἀνάδοσιν ψυμον γεννωτὶς χυμὸν, οὐ βρύσως εἰς αἶμα μεταβαλλό-

1 παχυνόντων add. c² Daremberg.
own figs achieve nothing useful or harmful for these organs when they are blocked and afflicted with induration, but mixed with cutting and purgative medicines they are no small help. Everyone who eats fresh and dried figs with one of the fattening foods suffers no small harm.

40. From the works of Rufus, on figs.

1 Figs are better than other autumn fruits, although they also contain some harm. Dried figs can nourish the body to an acceptable degree; in fact the ancients gave dried figs for athletes to eat. Pythagoras was the first to change this food when he gave Euramenes of Samos pieces of meat; and in this way the regimen of diet has been modified.

41. On grapes, from the works of Galen.

1 Figs and grapes are what one could call the principal fruits of autumn; for they provide more nourishment than all the summer fruits and contain less bad juice, especially when they are completely ripe; the flesh which results from them is not strong and dense, but spongy and flacid; hence it is quickly reduced. Grapes nourish less than figs, and the greatest good in them is that of passing through swiftly; hence if on occasion they are held in the body, they cause considerable harm, whilst figs do not possess this property: for even though they do not pass through the body in a manner worthy of mention, they provide a harmless nourishment for the body. Neither of these properties is held by grapes; for they are not well digested when they are held in the body, and they produce a raw juice from the distribution in the liver and the veins, while they are not easily converted into blood.
μενον. μάλλον δ' ὑπέρχεται διά ταστρός, εἰ ἄνευ τῶν γατάρτων αἱ ἄρατες καταπίνονται: τὰ γάρ γιγαρτα εὑρίσκει, ἀπεπτα καὶ ἀμετάβλητα τυτχάνοντα. τῶν δ' ἀποπιθεμένων τονωτικῆς μέν ἔστιν ἢ ἐν τοῖς στεμ- δ' φύλων ευστιθεμένη καὶ τοὺς ἀνορέκτους ἐπετείρει πρὸς ἐδωδήν τ' ὅμ. μήν ὑπέρχεται γε κατά ταστέρα καὶ, εἰ πλεύσων βρυθείη, κεφαλῆς ἐπιτε- ται. δ' ἐν τῷ τήλευκει ευστιθεμένη ταύτης ἔστι μᾶλλον κεφαλαλτής. ἢ δὲ κρεμασθή ὀστε κεφαλῆς πλήττει ὀστε ἐπέχει ταστέρα ὀστε προ- τρέπει, εὐπεπτοτέρα δ' ἔστι τῶν ἄλλων τῶν εὐστιθεντιν. αἱ μὲν οὖν ἥ τυλικεῖαι τῶν καταφυλῶν θερμότερον ἔχουσι τῶν χυμῶν (ὅδε καὶ διπύ- δεις εἰς). αἱ δ' αὐτήσατε ἐν καὶ δέξαται ψυχρότερον, αἱ δ' οἷαν νύκει σὲ μέσαι ψυχρῷ τε καὶ θερμῷ τῆς ταστέρας δ' ὑπάτους αἱ τυλικεῖαι, καὶ μάλιστα εἰς ὅσιν ὑπαί. ὦσθηται δ' οὐκ ἐν ταύτα μόνον, ἀλλὰ καὶ πρὸς τὴν ἐν ταστρί πέφυν αἱ τα δέξαι καὶ αὐτήσαται καταφυλῆ. πασῶν δ' δεφαλεστάτη χρῆις ἐστιν, ὅταν εἰρχείδεις τε ὅσιν αἱ κατ- φυλῆς φύει κεπειροτάτων τε αὐτῶν τις ἔστιν συμμέτρως, εἰς οὖν ἐπὶ τῶν ἄμπελων ἐπὶ πλεύσων πεπανθείων, εἰς καὶ τὸ λείπον ἐν τῷ κρεμασθῆναι περσεβουσίν ἐφέξετε δὲ τῶν ὑπό τῶν ἄνω σοις δέξαται καὶ αὐτήσατα, ὡς ἦν καὶ ὑπατικῇ ταστρῷ ἐτχωρεῖ δαιμόνεσ σὲ δέξαειν. ἦνοι δὲ καὶ τῇδεκος πίνουσι τῆς αὐτῆς χρείας ἦν καὶ καὶ ὑπατικῇ τῶν ἄμπελων πεπανθείων πάντα τα. δ' ἄποβρεται καὶ τῶν στεμ- θυλών σοφητικῶν ἔστιν.

1 τὸ γλυκύ (τῶν ὑπατικώτερων γάρ) Raeder: fortasse τὸ

γλυκύ; ὑπατικώτερον γάρ Grant: γλυκύτατον ὑπατικώτατον
gάρ C Daremberg: γάρ om. AC: post γάρ add. τούτο c2
Daremberg.
If grapes are eaten without their pips, then they pass through the stomach more easily; this is because the pips are astringent, and indigestible, and unchangeable.

Of the grapes that are stored away, those which are preserved in a pressed mass are strengthening and arouse in those who have no appetite a desire for food; but they do not pass through the stomach and, if too many are eaten, they affect the head; those that are preserved in grape juice are more causative of headaches than the latter; those that are preserved by hanging neither affect the head nor check nor stimulate the stomach, but they are digested more easily than grapes preserved by other means. Therefore sweet grapes contain a hotter juice (hence they cause thirst), whilst harsh and sharp grapes contain a cooler juice, and grapes that have the flavour of wine occupy a middle place between cold and hot; sweet grapes purge the bowels, especially when they are watery; sharp and harsh grapes are bad not only in this respect, but also as regards the digestion in the stomach.

The safest use of all is when the grapes are fleshy in nature, and one eats them in moderation when they are ripened, either brought to maturity for the most part on the vine or deriving the rest from hanging; next come watery grapes without a sharp or harsh quality, which one can eat in large quantities for purging the bowels. Some people also drink some grape juice for the same purpose, especially sweet grape juice (for it is made from grapes of a more aperient nature); grape juice made from harsh or sharp grapes is the worst in every respect. The infusion of grapes is diuretic.
μ. Περὶ ἀεταφίδων.

Αἱ μὲν αὐστήραι τῶν ἀεταφίδων ψυχρότεραι τὴν κράσιν εἶσιν, ἐς τὸν μὲν στόμαχον ψυχρόν τοιοῦτον καὶ τὴν γαστέρα ετεγνοῦσίν αἰ αὐστήραι, καὶ δὴλον ὁτι μᾶλλον αὐτῶν αἱ στροφὴι. μέσην δὲ πως κατασταίσαι αἱ γλυκεῖαι ποιοῦσι, μήτε ἐκλύομεν καὶ εἰσαῦται καὶ τὸν στόμαχον μήτε ὑπάγουσιν τὴν γαστέρα· τὸ γὰρ τὸν ἐπικρατικὸν ὑπάρχει ταῖς γλυκείαις ἕνε, καθὼς περὶ τὸ καὶ τὸ μετρών ὑποκλίτος, ὡς τε ἁμορφότερων τῶν δυνάμεων τὰς μικρὰς κατὰ τὸ στῶμα τῆς κοιλᾶς ἀμβλύνουσιν ἄλλοις, ὡς αἱ τὰ μείζον τῶν ἄλλων ἐσθῆσθαι ὅτι γενναίοτέρων χρήσασθαι βοηθήματιν. ἀμείνουσι δ' ἐν ταῖς ἐκαστείν εἰς τοῖς ἐπιρωμένοι τε καὶ τῶν ὅλων ζυλίνον ἔχουσι λεπτὸν. ἐνεῖδεν δὲ καλῶς ποιοῦσθαι εἰς τῶν γλυκείων τῶν μετάλων, οἰαίπερ εἰς εἰς εἰς ἐκφύλες ἐκφύλες ἐκφύλες, 2 πρὶν ἔσθειν ἔσθειν ἔσθειν ἔσθειν τὰ γήγατα· χρονικὸτεῖς δ' ὑπόν καὶ αὐτοὶ εκληροῖν ἔχουσι καὶ παχὺ τὸ δέρμα, καὶ ἐχθρὴ προδιαβρέζεων αὐτὰς ἐν ὑδαίνει καὶ γὰρ τὸ γήγατον ἐτοιμότερον ὑπός ἔσθε οἰαίπερ ιν. ἐμπαλίν δὲ ταὐτάς ἐτεραῖς τινές εἰς εἰς ἐκαστείν ἀετήραι καὶ βραχεῖαι, 3 γήγατων δ' ὅλως ὑπόν ἔχουσιν. τροφῆς δ' ἐκ τῶν ἀεταφίδων ἀναβίωσιν 7 ὑποται τῷ εὔματι παραπληξία κατὰ τὴν ποικίλτης ταῖς ἐπικρατεῖς αὐταῖς· κατὰ δὲ τὴν ποικίλτης πλείων, μὲν ἐκ τῶν λιπαρῶν τε 3 καὶ γλυκείων, ἑλάτων δ' ἐκ τῶν αὐστήρων τε καὶ ἀλίπων. εἰς δὲ καὶ τὰς ἐπικρατεῖς τοῖς ἑσχέδων.

μ. Περὶ εὐκακίνων, δὴ καὶ μόρα καλεῖται.

Τὰ εὐκάκινα καθαρὰ μὲν ἐμπέσοντα γαστρὶ καὶ πρώτα ληφθέντα 1

1 ἐπικρατικὸν ὁ ἐπικρατητικὸν c2.
2 καὶ ante πρὶν del. Raeder.
3 ὑπὲρ ἄκτιν τοῖς add. Darmemberg.
42. On raisins.

1 Harsh raisins are colder in their temperament, just as sweet raisins are hotter. Harsh raisins both strengthen the stomach and make the bowels costive, and it is clear that astringent raisins have the same properties to a greater degree. Sweet raisins create as it were a middle state, neither clearly relaxing the stomach nor purging the bowels; the property of tempering the humours always exists in sweet raisins, just as indeed the property of moderately purging too, so that as a result of both these powers they blunt the little pangs around the mouth of the stomach, but as regards stronger pangs it is quite clear that they have need of stronger remedies. Among the raisins those that are oilier and have a thin so-called 'skin' are better. Some people do well to remove before eating the pips from sweet large raisins, such as those from Scybela; these raisins also have a hard and thick skin if they are kept for a long time, and it is necessary to soak them beforehand in water; the reason for this is that the pips are removed more readily in this way. In contrast to these raisins there is one sort of harsh and sharp raisin which has no pips at all. The nourishment derived from raisins is distributed through the body in nearly the same way as with the grapes themselves as regards quality; as regards quantity there is more nourishment from oily sweet raisins, and less from harsh raisins without oily substance. They are more wholesome than dried figs.

43. On mulberries, which are also called mora.

1 Mulberries, on coming into contact with an empty stomach, and having been taken first before other foods,
διεξάρτεται τάχιστα καὶ τοῖς εστίοις ὑφηγεῖται· δεύτερα δ’ ἐφ’ ἑτέροις, ἥ καὶ χρύσον εὑρόντα μοχθηρόν ἐν αὐτῇ διαφθείρεται τάχιστα, διαφθοράς ἀλλοκότον τίνα καὶ ὀρθητικὴν ἱςχύντα ταῖς κολοκύνταις ὁμοίως· αὐθανάστατα τὰ όντα τῶν ἱεραίων ἱερεμάτων, ἢ τόπος διὰ τοῖς ὑποχωρήσῃς, μοχθηράς δὲ ἵςχει διαφθοράς ὁμοίως τοῖς πέποσι, καίτοι 2 κακεῖνοι ταχεῖς ὑπελθόντες υδέην μέγα βλάπτουσιν. καυρὸς δὲ τῆς ἡρίεως, ύπερ τοῖς πέποσιν, οὕτω καὶ τοῖς μόροις, ἢ τὸν ἀψιμπόν καὶ θερμὸν γένηται τὸ τῆς γαστρός εὕμαρ· τοιοῦτο τάρ πως ἀναγκαῖον ἢ εἶτι τηνίκαύτα καὶ τὸ ἕπαρ ἑΙναι. πρόσεχε δὲ τοῖς εὐκαμίνοις καὶ εὐφυεῖς τι, καὶ ὀγδόεις μὲν πάντως, ψύχει δ’ οὐ πάντως, εἴ μὴ ψυχρὰ ληφθείη τροφὴν δ’ ἐλαχίστην δίδωσι τοῖς εὕμαις παραπλησίως τοῖς πέποσιν.  

μὲ. Περὶ τοῦ τῆς βάτου καρποῦ.  

Τὰ βάτινα στυπτικώτερα τῶν μόρων ἔστι, καὶ πολλάκις αὐτὰ προσενέγκαται τις, κεφαλαλτεί, τινὲς δὲ καὶ τὸν εὐθαμχὸν ἀνίώνται· διὸ χρὴ καλῶς ἀκαλλόνειν πρὶν ἔπειρεῖν προσφέρεσθαι τὸν καρπὸν τοῦτον, ὅπερ οὖξ ἠκιστά κάπις τῶν εὐκαμίνων ἔστι ποιητέον· οὐ μὴν ὑπάτει τὰ βάτινα τὴν κοιλιάν, ἄλλα καὶ μᾶλλον ἔπεξεί.  

μὲ. Περὶ τοῦ τῶν κυνοβάτων καρποῦ.  

"Ο τῶν κυνοβάτων καρποῦ μικρῷ στυπτικώτερος ἔστι τοῦ τῶν βάτων καὶ διὰ τοῦτο καὶ τῆς γαστρὸς ἐφεκτικώτερος, ὀλίτην δὲ τροφὴν, δίδωσι τῇ εὕμαι.
pass through extremely quickly and lead the way for other foods; but when taken second after the other foods, or also on coming upon a bad juice in the stomach, they are corrupted very quickly, since they have a certain unusual and diuretic corruption similar to large gourds; for although they are the most harmless of the summer fruits, when they are not quickly evacuated, they possess bad corruption like watermelons, and yet if they are evacuated quickly they cause no great harm. The right time for use is the same for watermelons as it is for mulberries, namely when the body of the stomach is parched and hot; for then the liver too must have somehow the same state. There also belongs to mulberries a certain quality of astringency, and they at any rate moisten, but by no means chill, unless they are eaten cold; they furnish the least nourishment to the body just like watermelons.

44. On the fruit of the bramble.

Blackberries are more astringent than mulberries, and if one eats them often they cause headaches, and some people also find their stomachs relaxed; hence it is necessary to wash the fruit well before attempting to eat it, something which must be done no less in the case of mulberries; blackberries do not in fact relax the bowels, but rather check them.

45. On the fruit of the wild rose.

The fruit of the wild rose is a little more astringent than that of the bramble and for this reason is able to check the stomach, but it provides small nourishment for the body.
μ. Περί τοῦ τῶν ἄρκευθων καρπῶν.

'Αρκευθίδες βραχείαν ἔχουσι γλυκύτητα καὶ ἐτὶ βραχυτέραν στώφιν, ἱ
ἀρματίζουσι δὲ, καὶ δῆλον ὅτι θερμαίνουσι δὲ ἐν ἔχουσι δριμύτητα. τροφὴν δὲ ὀλίγην διδασά τῷ εὐματι καὶ, εἰ τὶς πολλὰς προσενέγκαιτο 2 
δάκνουσι τῇ τὸν εὐμαχον καὶ τὴν κεφαλῆν θερμαίνουσι καὶ ὀδυνώσι οὖρα δὲ μετρίως κινοῦσιν.

μ. Περί περεικῶν.

Καὶ τούτων ὁ χυμὸς καὶ ἡ ὁλον ἑαρὲ εὐφαρτός ἐστὶ καὶ πάντη μυχθηρός, ὃ
ἐστε οὐ χρή, καθάπερ ἔννοι εἰλώθαι, τελευταίᾳ τῆς ἄλλης τροφῆς αὐτὰ προσφέρεισθαί διαφθείρεται τὰ ἐπιπολάζοντα, καὶ τᾶλα εὐνυδιαφθείρει.

μ. Περί ἀρμενιακῶν καὶ πραικοκκίων.

'Ἐν τῷ τῶν περεικῶν γένει καὶ ταῦτά ἐστι, διαφοράν τινα ἀυτῶν 1 
ἔχοντα πρὸς τὸ βέλτιον' οὔτε τὰρ ὄμοιως τοῦτι διαφθείρεται κατὰ 
τὴν κολλάν οὔτε δύνεται· φαίνεται δὲ τοίς πολλοῖς ἡδίω καὶ διὰ 
τοῦτο ἑὔστομοικῆτε. τροφὴ δ' ὧτι βραχεία· τοῖς τοιούτοις καρποῖς 2 
ὕπαρχει, λέλεκται πρόσεθεν. ἐστί δ' ἀμείνω τὰ πραικόκκια τῶν ἀρμε-

μ. Περί μῆλων.

'Osē μὲν ετώφει τῶν μῆλων, ψυχρὸν ἔσχει καὶ γεώθη χυμόν, δεκα 1 
δ' ὀδέα φαίνεται, ψυχρὸν μὲν, ἄλλα λεπτομερῆ· μέση δ' ὑπάρχει 
κράσεως τὰ γλυκέα πρὸς τὸ θερμότερον βέποντα, καθάπερ τὰ τελέως 
ἀποικ καὶ ὁλον ὑδατώδη πρὸς τὸ ψυχρότερον κεκλιμένα. δῆλον δ' ὡς 2 
τὰ μὲν ετώφοντα τὰς κατῷ διαχωρήσεις ἔπέχει, τὰ δ' ὀδέα, παχῦν
46. On the fruit of the juniper tree.

1 Juniper berries possess a little sweetness and also a little astringency, and they have a spicy flavour, and it is clear that they are heating because of what harshness they have. They give small nourishment to the body and, if someone eats many juniper berries, they bite the stomach and heat the head and cause pain; they are moderately diuretic.

47. On peaches.

Both the juice of these and the so-called 'flesh' are perishable and bad in every way, so that one must not, as some people are accustomed to do, eat them after other food: for they are corrupted as they float undigested in the stomach and they corrupt other foods at the same time.

48. On apricots and 'early ripeners'.

1 These are also in the peach family, but they have some difference for the better: for they are not corrupted in the bowels like the peach nor do they acidify; they seem to the majority of people to be sweeter and because of this better for the stomach. It has been stated before that little nourishment is derived from these fruits.

3 'Early ripeners' are better than apricots.

49. On apples.

1 All apples that are astringent have a cold and earthy juice, whilst all apples that appear sharp have a juice that is cold but composed of fine particles; sweet apples belong to a middle temperament that inclines to what is hotter, just as those that are completely without attribute and which are, so to speak, watery incline towards what is cooler. It is clear that astringent apples check evacuation, whilst sharp apples, on
εύρόντα χυμόν ἐν τῇ γαστρὶ, τέμνοντα τοῦτον ὑπάγει τε κάτω καὶ διὰ τοῦτο ὑπαίνει τὰ διαχωρήματα, καθαρὰν δ’ εύρόντα τὴν κοιλίαν
2 ἔπεξει μᾶλλον αὐτὴν· τὰ δὲ γλυκᾶ ἀναδίδοται μᾶλλον. τὰ δ’ ἀποικ, μὴτε ἡδέα τυπχάνοντα μὴτε βύμην ἐντιθέντα τῇ γαστρὶ μὴτε ἵσχοντα
4 αὐτὴν εἰκάτως ἀτιμάζεται καὶ τοῖς ὑπὶ βάλλεται. δει δὲ καλῶς πε-
pανθέντα ἐπὶ τῶν δένδρων φυλάττοντι, ὥστε ἄνθοι τίνος πολ-
lάκις ἐν νόσιμοι, ἦτοι περιπλακαίνεσται εὐτίκεια καὶ κατὰ θερμήν εποδίαν ἀποθεόντα εὐμετέρως ἢ ἐν ὑδατος Ζώντως ἀτμῷ καλῶς ἐψηθέντα.
5 διδόναι δ’ αὐτὰ χρὴ μετὰ τὴν τροφὴν εὐθέως, ἐνίοτε δὲ καὶ μετ’ ἀρτοῦ, μύρης τε γαστρὸς ἐνεκα καὶ εὐμετέρως εὐμετέρως καὶ ἀνορέκτοις καὶ

6 ἔπειθεν να· δ’ εἰς τοιάνδε χρείαν ἐῤτὶ τὰ εὐμετέρως εὐμετέρως ἄρ πέχει τῆς ἐτύφεως, ως εἰπὼν ἄρτο παρακευασθέντα, τῶν μετρίως αὐτηρῶν ἀπασαν ἀποτεθεμένων τῆς ἐτύφεως ἐν τῇ τοιαύτῃ παρακευῇ καὶ διὰ τοῦτο παραπλησίως τινομένων τοῖς ἐξ ἀρχῆς ὑδατωδεσίν.

ἑ. Περί κυδωνίων καὶ ετρουβίων μήλων.

1 Ἐξαίρετον τι παρὰ τάλα μῆλα τοῦτοι ὑπάρχει ετύφει τρέλων κατεμβένως καὶ τὸν χυλὸν ἐχούσι μόνιμον, εἰ τις ἔψησε αὐτὸν εὖν

6 μελίτη φυλάττειν ἔθελοι· τῶν δ’ ἄλλων μήλων ὁ χυλὸς ἐξύνεται κεί-
coming across a thick juice in the stomach, after cutting through it purge it and for this reason they moisten the excrement, but if they come across an empty stomach they instead check it; sweet apples are distributed better. Apples without attribute that are neither agreeable to the taste nor give strength to the stomach nor check it are, as is reasonable, not held in esteem and are thrown to the pigs. All apples which have been well ripened whilst on the trees, and which people store away, are often extremely useful in cases of illness, whether they are plastered in spelt flour mixed and made into a dough and moderately baked under hot ashes, or whether they are cooked well in the steam of boiling water. One should serve them immediately after a meal, sometimes also with bread, for the sake of the strength of the stomach and the orifice of the stomach for those who lack any appetite, those who digest their food slowly, those who are inclined to vomit, those who suffer from diarrhoea, and those who are afflicted with dysentery. Sour apples are suitable for such use, for they possess a modicum of astringency, when prepared as I have just described, provided that the apples that are moderately harsh lose all their astringency through such a method of preparation and as a result become very similar to apples that are from the start watery.

On quinces ('apples from Cydonia') and 'sparrow apples'.

Compared with other apples there belongs to these fruits something special, because they possess a greater astringency and have a juice that will keep, if someone should wish to store it after boiling it with honey;
2 μενος, ὑπρότητα πολλὴν ἔχων ψυχρᾶν. ὃ δὲ ἀπὸ τῶν ετροχίων χυλὸς μονιμωτέρος γίνεται, ὡστε καὶ εἰς πλείονας διαμένειν ἐναυτοῦ, ὅταν κατὰ τὸ στόμα τοῦ ἄντεκεος κυκλοὺ ἐπίπατον, δὲ καὶ μέλιτι πολλάκις ἐπιμίτηται καὶ ἄλλοις τιεῖν· καὶ χρὴ φυλάττειν αὐτὸν ἐπικείμενον, ὅταν ἐθέληξα ἀμετάβλητον ἔπι πλείονον διαμεῖναι τὸ φυλαττόμενον. ὃ δὲ τῶν κυδωνίων χυλὸς ἦτον ἦδος ὑπάρχει καὶ μᾶλλον εὐφόρων, ὡστε εἰς δὲ ποτὲ καὶ τούδε χρέα πρὸς ὑπὸ τὸ ποσὸ ἱκανὸς ἐκλύτω ταξιρός.

να. Περὶ ἀπὶνων καὶ ῥοιῳν.
1 Περὶ μὴν ἢ ἐπὶν ὑπάντα μεταφέρων ἐπὶ τὰς ἀπίους τε καὶ ῥοιας, οὐδενὸς ἢ ἐς νεωτέρου περὶ αὐτῶν ἑτέρου δεήσει λόγοι. τροφὴν δὲ τῷ εὐματι παρέχουσιν αἱ μὲν ῥωι αὐτά παντάπασιν ἑλάσσθην, αἱ δὲ ἀποι, καὶ μᾶλλα αἱ μετάλλαι (εκαλοῦε δὲ αὐτὰς μναίασ οἱ παρ' ἡμῖν), ἤκουε τι καὶ τρόφιμον.

νβ. Περὶ μεσπίλων καὶ ὀοων.
1 Στύφει μὲν ἀμφιν, πολὺ δὲ μᾶλλον ὀοων τὰ μέσπιλα· διὸ καὶ βοεύς ταστρὶ εὐμορφώσατον ἔστιν· ἢδι δὲ αὐτῶν εἰς ἑωθὴν τὰ σῶν. 2 πρὸβληθήν δὲ ὅτι τῶν τοιούτων ἀπάντων ὀλίτον ἐξείδειν προσήκεν, οὐχ ὡς εὐκών ἢ εταφυλῶν διαφλῶς.

νγ. Περὶ τοῦ τῶν φοινικῶν καρποῦ.
1 Τῶν φοινίκων τίνες μὲν ἔρροι τε εἰς καὶ ἑπάντονες, δὲπερ οἱ Ἀλκυτιγιος, τίνες δὲ μαλακοὶ καὶ ύτροι καὶ γλυκεῖς, ὅσπερ οἱ καλοῦμενοι καρποῦ· κάλλιστοι δὲ οὕροι γεννώνται κατὰ τὴν Παλαιστίνην.
2 Συριαν ἐς ἱερισχόντη μεταζὺ δὲ ἀμφοτέρων τῶν εἰρημένων γεννῶν οἱ ἄλλοι πάντες εἰς φοινίκες, οἱ μὲν μᾶλλον, οἱ δὲ ἦτον δὴτες ύτροι τε καὶ ἔρροι καὶ γλυκεῖς καὶ ἑπάντονες· ἅλλα τῶν ἄκρων ἀφορισθέν—
but the juice of other apples when stored acidifies, since it contains a lot of cold moisture. The juice from 'sparrow apples' is more lasting, so that it will keep for many years even, when around the mouth of the storage jar it forms a thick crust, which is often mixed with both honey and other things; and one must leave it positioned there, when one wishes what is being stored to remain unchanged for a long time. The juice of quinces is less pleasant and more astringent, so that there is a use too for it on occasion for strengthening a fairly weak stomach.

51. On pears and pomegranates.

By transferring everything I said about apples to pears and pomegranates there will not be any need for yet another new section concerning them. Pomegranates generally provide the least nourishment for the body, whilst pears, especially the large ones (people around us call them 'pounders'), possess some nutritious element.

52. On medlars and sorb apples.

Both are astringent, but medlars are much more astringent than sorb apples; hence medlars are extremely useful for a stomach suffering from flux; sorb apples are more pleasant than medlars in taste. It is clear that it is advisable to eat a little of all such fruits, and not in abundance like figs and grapes.

53. On dates.

Some dates are dry and astringent, such as Egyptian dates, whilst some are soft and moist, like those called caryotaes; the latter are best grown in Palestinian Syria at Jericho. All the other dates come between the two types already mentioned, some being more, others being less moist and instead dry, sweet, and astringent; but
ςων εὐφορώτατον ἤθη εἰς τὸ μέσον ἔστω πάν· ὁ μὲν γὰρ γλυκὸς χυλὸς ἐδείχθη τρόφιμος, ὁ δὲ αὐτήρος εὐτύμαχος τε καὶ ταστρὸς ἐφεκτικός. ὅπως τε δὲ οἱ φοίνικες δύστεται τέ εἰς καὶ κεφαλαλεῖς καὶ πλείονες βρωθέντες· ἐνιοὶ δὲ καὶ δηξεῖς τινος αἰσθηθεὶς ἐμποιοῦσι τῷ εστώματι τῆς κολλᾶς. ὁ δὲ ἄιτων ἀναιδικόμενος τῷ εὔματι χυμὸς παχὺς μὲν πάντως ἔστιν, ἔχει δὲ τι καὶ τῆςχρον, ὅταν δὲ φοίνικες λιπαρός· ὅταν δὲ τῷ τοιῷτῳ χυμῷ τῷ μικρῷ, τάχυτα μὲν ὑπ’ αὐτοῦ τὸ ἥπαρ ἐμφράττεται· καὶ βλάπτεται δὲ καὶ φλεγμαίνον καὶ εκφυρομένον ἐχάτως ὑπὸ τῆς ἐσωθῆς αὐτῶν· ἐφεξῆς δὲ τῷ ἑπταί καὶ δ’ ἐπλῆν ἐμφράττεται καὶ βλάπτεται.

ὸδ. Περὶ ἑλαίων.

Ὅλητην μὲν πάνυ καὶ αὕται τροφήν διδάσκαι τῷ εὔματι· καὶ κάλλιστα αἱ δρυπεπείς· καὶ άσπερ αὕται τὸν λιπαρόν. οὕτως αἱ ἀλμάδες καὶ κολυμβάδες καλούμεναι τὸν εὔφροντα χυμόν ἔχουσιν· διὸ καὶ μπυρνοῦσι τὸν εστώμαχον ἐπετείρουσι τὴν δρέειν· ἐπετιθεύται δὲ αὐτῶν εἰς καὶ δ’ ἐξοσο εὐντιθέμεναι.

ὠ. Περὶ καρύων.

Κάρυα τὰ τε μετάλα καὶ τὰ λεπτοκάραυα οὗ πολλὴν τροφῆν δίδωσι τῷ εὔματι· πλείους δ’ ὡμως ἔστιν ἡ ἐν τῷ λεπτοκαρύῳ· ἀμφότερα δὲ μετέχει καὶ τῆς εὔφρονες μετρίως ποιότητος· ἡπτε ὁρνηλόν ἔτοις metaπιτεί ἐπὶ τὸ ἓλαιον· τὸ δὲ χλωρὸν κάρυον όστε τῆς εὔφροσυς· ταῖς ἐφεξῆς· καὶ τὸν λιπαρὸν αὐτοῖς όστε τῆς ἓλαιοῦ· καὶ τὴν ἑλαίωδος· πέτεται δὲ τὸ κάρυον μᾶλλον τοῦ λεπτοκαρύου καὶ δ’ μᾶλλον εὐτύμαχον ἔστιν· καὶ πολὺ μᾶλλον εὖν ἑξαίτι ἐσθιομένον.
when the two extremes have been determined then every-
things that lies in the middle is extremely easy to dis-
tinguish; for sweet juice has been shown to be nourishing,
harsh juice to be good for the stomach and able to check
the bowels. All dates are hard to digest and cause head-
aches when eaten to excess; some also create a sensation
of biting in the mouth of the stomach. The juice that is
distributed from them in the stomach is always thick,
and has a certain viscous quality, whenever the dates are
oily; when something sweet is mixed with this juice, the
liver is quickly obstructed by it; and when this organ
is inflamed or indurated it suffers great harm from the
eating of this fruit; following on from the liver the
spleen is blocked and harmed.

54. On olives.

These too give very little nourishment to the body,
especially those that are beginning to turn black, and
just as these have oily juice, so those that are called
'brinies' or 'swimmers' have an astringent juice. Hence
they both strengthen the stomach and arouse the appetite.

2 They are most suited to this purpose when preserved in
vinegar.

55. On nuts.

Both walnuts and hazelnuts give little nourishment to
the body, but nevertheless there is more nourishment in
hazelnuts; both have a share of a moderately astringent
quality, which undergoes a change with the elapse of
time because of the oily element. Green walnuts clearly
have no share either of an astringent or an oily quality,
but are in some ways without attribute and watery. Wal-
nuts are digested better than hazelnuts and are better
εἰδήκον δὲ τι ὑπὲρν μὲν δὲ πρὸς διαχώρησιν ἐπιπεδεῖστερον, τὸ δὲ ἔξω ἤττον ἐμβρεχομένον δὲ καὶ τούτο εἰς ὕδωρ καὶ λεπίζομενον παραπληγίσιον γίνεται τῷ χλωρῷ τῇ δυνάμει.

Τ. Περὶ ἀμυγδάλων.

1 Ἡν τούτους ἐπικρατεῖ ἣ λεπτοντικὴ τε καὶ βυσσικὴ δύναμις· τινὰ δὲ οὕτως ἔχει τὴν τιμητικὴν τῶν παχέων καὶ γλίζχων δύναμιν, ὡς
2 μὴ βρωθήναι δύνασθαι διὰ πικρότητα· τῆς γὲ μὴν ἐλαιώδους τε καὶ λιπαράς μετέχει ποιότητος, ὡσπερ καὶ τά κάρυα· τροφὴν δὲ ὀλίγην δίδωσι τῷ εἴματι.

Τ. Περὶ πιτακίων.

Τροφὴν μὲν ὀλίγοττην παρέχει, χρήσιμα δὲ ἐστὶν εἰς εὐφωτίαν ἢπατος· μετέχει γάρ ὑποπίκρου καὶ ὑποκτύφου ποιότητος.

τῆ. Περὶ κοκκυμίλων.

1 Τροφὴν μὲν ἐλαχέστην παρέχει τοῖς εἰμασὶ, χρήσιμα δὲ εἰς τοῖς ὑπράναι τε καὶ ψόδαμ μετρίως τὴν ταστήρα προσαρομένοις· ὑπάρχει
2 δὲ αὐτοῖς καὶ Ἑρανθείσιν εἶναι χρησίμοις· κάλλιστα δὲ αὐτῶν ἔστι τὰ ἐν Δαμασκῷ γεγέννη.

τὸ. Περὶ ἑρικῶν.

1 "Εδεσμα ἔστι ταῦτα γυναικῶν καὶ παιδῶν ἀνθρώπων, ὀλιγότροφον
2 τε καὶ δύσπεπτα τυχάνοντα μετά τοῦ μηδὲ εὐστήρα ἐναι. τροφὴν
3 δὲ δήλον ὃτι δίδωσιν ὀλίγοττην τῷ εἴματι.

Τ. Περὶ κερατίων.

Κακόχυμα ἔστι καὶ χολώδη καὶ δύσπεπτα, ἀλλ' οὔτε διαχωρεῖται
tαχέως.
for the stomach, particularly when eaten with dried figs.

4 It is clear that when moist they are more suitable for excretion, whilst when dry this is less the case; when soaked in water and peeled the latter almost resembles the green nut in terms of strength.

56. On almonds.

1 The attenuating and purgative power prevails in these; thus some possess a certain power to cut through thick and viscous juices, so that one is not able to eat them because of their bitterness. They have an oily and fatty quality, just like walnuts; they provide little nourishment for the body.

57. On pistachios.

They furnish a very small amount of nourishment, but are useful for the strengthening of the liver; the reason for this is that they have a somewhat bitter and astringent quality.

58. On plums.

1 They provide very little nourishment for the body, but are useful for those choosing to moisten and cool the stomach to a moderate degree; they are useful too when dried. The best are those grown at Damascus.

59. On jujubes.

1 These are food for women and playing children, since they give little nourishment and are hard to digest coupled with the fact that they are not good for the stomach. It is clear that they furnish a very small amount of nourishment for the body.

60. On carobs.

These have bad juices, are bilious, hard to digest, and do not pass quickly.
Ε. Περί καππάρεως.

1. Λεπτομερής ἔστιν ἡ δύναμις αὐτῶν καὶ διὰ τούτο τροφήν. ὡς
2. γοητήν δίδωσι τῷ εὕμορτι. ταριχευθεῖσα δὲ καὶ διαβραχεῖσα μέχρι τοῦ
tελέως ἀποθέθηκα τήν ἐκ τῶν ἄλοχων δύναμιν, ὀλιγότροφον μὴν γίνεται,
ἀπορρύπτει δὲ τὸ ἐν τῇ γαστρὶ φλέγμα καὶ ἐκφάττει τὰ επλάτχα
πρὸ τῶν ἄλλων εἰσίν διὸ δευμέλιτος ἢ δεξαίον.

ΕΦ. Περί ευκομόρων.

"Εν 'Αλέξανδρείᾳ γίνεται τούτῳ τὸ φυτὸν' παραπληκτεῖσιν δὲ καρπὸν
φέρει εὐκή, δριμύτητα δ' οὐδεμίαν ἔχει, βραχείας μετέχων γλυκύτητος,
ὕτρος πως καὶ ψυχικῶτερος ὃν κατὰ τὴν δύναμιν.

ΕΩ. Περὶ περεσίας καρποῦ.

Καὶ τούτῳ τὸ φυτὸν ἔστιν ἐν 'Αλέξανδρείᾳ' ἑτοροῦσα δὲ τὸν καρ-
πὸν αὐτὸν αὐτῷ μοιχὴριων ὑπάρχειν ἐν Πέρσαις, ὡς ἀναφεῖν τοὺς
φατόντας, εἰς Αἰγύπτον δὲ κομιζόντας ἐνδύματον γενέθηκα, παραπληκτεῖ
ἐνδιόμενον ἀπὸ τε καὶ μήλους.

ΕΘ. Περὶ κιτρίου.

1. Τρία μόρια ἔστι τούτου τοῦ καρποῦ, τὸ τε δέου κατὰ μέσον αὐτοῦ
καὶ τὸ περὶ τούτο οὐν ἡ εὔρε ἀυτοῦ καὶ τρίτον τὸ περικείμενον
2. ἐκεῖθεν εκκένσαμα. τούτῳ μὲν οὖν εὐθὺς ἔστι καὶ ἀρωματίζον, δύσ-
κεπτὸν δὲ εὑερτεῖ δ' εἰς πέψιν, εἰ τίς ὡς φαρμάκων χρῶτο αὐτῷ,
3 καὶ ὴνυννει ετόμαχον ὀλίγον ληφθέν. τῷ δ' δὲ καὶ ἀβρώτῳ μέρει
4 χρωνταί εἰς δέος ἐμβαλλοντες χάριν τοῦ ποιεῖν δεύτερον αὐτῷ. τὸ
61. On capers.

1 The power of these is composed of small particles and because of this they give very little nourishment to the body. Pickled capers soaked in water until they lose completely the power derived from the salt give little nourishment, but they cleanse the phlegm in the stomach and open up the intestines before the passage of other foods with honey and vinegar or olive-oil and vinegar mixture.

62. On sycamore-figs.

This plant grows in Alexandria; it bears a fruit which closely resembles a fig, but it contains no harshness, since it has a share of a little sweetness, and it is in some ways moist and rather cold as regards its power.

63. On the persea.

This plant too grows in Alexandria; people say that its fruit is so bad for the Persians that those who eat it die, but that it becomes edible when it has been gathered in Egypt, being eaten in almost the same way as pears and apples.

64. On the citron.

1 There are three parts to this fruit, the acid part in the centre and the so-called 'flesh' around this and thirdly the covering that surrounds the outside. This latter part is sweet-smelling and aromatic, but difficult to digest; it is an aid to the digestion, if one uses it as a medicine, and it strengthens the stomach if taken in small amounts.

2 People use the sharp and uneatable part after putting it in vinegar to make it still sharper. The part which is inbetween the other two, which gives nourishment to the
μέσον δ’ ἀμφοῖν, δὴ καὶ τροφὴν τῷ εὐματι δίδωσι, δύσκεπτόν ἔστιν.

Ἐς. Περὶ τῶν ἀρτίων φυτῶν.

Πρὸς τῷ βραχείᾳ διδόναι τροφὴν κακόχυμα πάντα ἔστι, καὶ
tινά γε αὐτῶν κακοστόμαχα πλὴν τῶν ἀκανθωδῶν τῶν ἄριστης τῆς 1
ἀνισχόντων.

1 ἄριστης Rasario et Raeder : ἄρι Α : ἄρι τῆς Daremberg.
body, is difficult to digest.

65. On wild plants.

Besides giving little nourishment all these plants contain bad juices, and some of them in fact are bad for the stomach except for thorny plants which grow in the best soil.
A Commentary on Book 1 of Oribasius'

Medical Compilations
intr. tit. 'Ομβασίου: Daremberg (p. 553) states that 'dans les autres auteurs, où il est question d' Oribase, on lit tantôt 'Ορειβάςλος, tantôt 'Ορειβάςλος', and adopts the former reading in his text (cf. AP 16.274.2, Phot. Bibl. 216.173b35, 174a16), whilst Raeder (p.4) prefers the latter (cf. Aët. 8.76, Paul. Aeg. 2.1, 4.16, 7.17.27, Jul. Ep. 384a). With [ει] becoming confused with [ι] from the late 4th c.B.C. (e.g. pirata = πειρατής, Aristides = 'Αριστέιδης, W. Sidney Allen, Vox Graeca, Cambridge 1974, pp.66; see also S.-T. Teodorsson, The Phonology of Attic in the Hellenistic Period, Studia Graeca et Latina Gothoburgensia 40, Göteborg 1978, pp.20-24) the question of how the name is spelled is unimportant; the issue is not confined to Greek, as can be witnessed by the variations on Shakespeare (Shakspere, Shakspeare, Shake-speare: H. Spencer, The Art and Life of William Shakespeare, London 1947, p.388, n.4).

A similarly constructed name ('Mountain-Roamer') of 'Ιούλ. 'Ορειβάτης is recorded in a catalogue of c.250 A.D. from a town in Arcadia (SEG 31 (1981), 347.16).

intr.1 Τάς προσταχθείσας ἐπιτομάς: 'Επιτόμας quas tu olim Dix Juliane Caesar, mihi conficiendas mandeveras, iam pridem quum in Gallia citeriore essesmus' (Rasario, p.205).

by K.H. Rengstorf (A Complete Concordance to Flavius Josephus, vol.2, Leiden 1975, p.323) as 'reputation of a man (messenger) of god', Θειότης on its own meaning 'a nature specially endowed by god'. The same phrase τὴς Θεος θεοῦ τοῦ θεοῦ appears in a 2nd c.A.D. religious text (POxy. 1381.165, cf.186) in honour of Imouthes, the Egyptian Imhotep, identified by the Greeks with Asclepius the god of medicine, and in Christian literature (Theophil. Autolyc. 3.29). Whether Orib. intended this title to refer to Julian's religiosity (cf. Lib. Or. 1.121, Jul. Mis. 146b-d, Amm. Marc. 22.12.6-7) or to his actual divinity (as in diuus: '... si deve tuttavia ritenere che l' uso di Θεός o Θεόι nel senso di imperatore ... risponda alla diffusa opinione degli ascoltatori che l' imperatore sia effettivamente un dio', P. Desideri, Dione di Prusa: un intellettuale greco nell' impero romano, Firenze 1978, p.167; see also K.M. Setton, Christian Attitudes towards the Emperor in the Fourth Century, New York 1941, p.59) is uncertain, although it seems unlikely in this context that he regarded it as merely yet another imperial honorific (e.g. SIG 900.23 from Panamara, applied to the Emperor Galerius Maximinus A.D. 305-313; S. Michell ('Requisitioned Transport in the Roman Empire: A New Inscription from Pisidia', JRS 66 (1976), pp.107 and 117) shows that Θειότης was the equivalent of maiestas from a bilingual Latin/Greek inscription of the time of Tiberius, whilst H.J. Mason (Greek Terms for Roman Institutions: A Lexicon and Analysis, Toronto 1974, p.53) equates Θειότης with diuinitat. S.R.F. Price (Rituals and Power: The Roman Imperial Cult in Asia Minor, Cambridge 1984), p.75)
argues that in the Greek world the imperial cult was on the figure of the reigning emperor who could be called Θεός in his lifetime, whereas in Rome the apotheosis of the emperor took place only after his death. Surprisingly Julian is called diuus in a Christian inscription from Rome (No. 164 in I.B. de Rossi (ed.), Inscriptiones Christianae Urbis Romae Septimo Saeculo Antiquiores, vol. 1, Rome 1861, p. 90).

έν Γαλατία τῇ πρὸς ἐσπέραν: The Greeks called the Gauls Γαλάται or sometimes Κέλται (Amm. Marc. 15.9.3, Paus. 1.3.4, Str. 4.1.14, cf. Gal. Antid. 1.14=14.80K), the Asiatic Galatia being named after the Gauls who had overrun the area in the 3rd c. B.C. (Str. 4.1.13, 12.5.1). Rarely do the Roman terms Galli (Aret. CD 2.13.7=24A. 343K, Paul. Aeg. 7.19.17) and Gallicus (Paul. Aeg. 6.9, 7.12.40, Str. 4.4.2, Gp. 14.13.2) occur in Greek literature, and paraphrases such as ἡ ἑκτὸς Κέλτικη for Gallia Transalpina (Str. 4.1.2) and οἱ ἑκτὸς Ἀλπεων Γαλάται for Gallia Cisalpina (Str. 5.1.1) are found instead. Thus Orib.'s at first sight circumlocutory phrase is not at all unusual. In App. (BC 2.49) έν Γαλατίας ... τῆς ἐφος appears, but referring to Eastern Galatia not Galatia in the East (cf. έν δὲ τῇ πρὸς ἐσπέραν Ἰβηρία, Dsc. 3.70.2).

intr. 2 πάντων τῶν ἀρίστων λατρῶν: These are Agathinus (10.7: see M. Wellmann, 'Claudius Agathinus', RE 1 (1894), col. 745), Antyllus (4.11, 5.28-29, 6.1-3, 5-10, 21-24, 7.7, 9-12, 14.16-17, 21, 8.5-6, 10, 12-17, 9.3-4, 9, 11, 13-14, 22-24, 10.2-3, 12-13, 19-36, 44.5, 19-20, 45.2-4, 10, 15-18, 24-26, 46.28, 50.2-3, 5-7, 64-66, incert. 34: see Orib. 4.11n.), Apollonius (7.19-20, 44.
30: see M. Wellmann, 'Apollonios (104)', RE 2 (1896), col.150), Archigenes (8.1-2, 23, 43.42, 44.23, 46.23-25, 27, 47.13: see M. Wellmann, 'Archigenes aus Apameia', RE (1896), cols.484-486), Aristotle (încert.12-14), Asclepiades of Bithynia (47.12: see M. Wellmann, 'Asclepiades (43)', RE 2 (1896), cols.1633-1634), Athenaeus of Attaleia (1.2-3, 9, 11, 5.5, 9.5, 12, încert.11, 16-17, 21, 23, 39, 41-42: see Orib. 1.2n), Dieuches 4.5-9: see Orib. 4.5n), Diocles (4.3, 5.4, 26, 8.22, 44.16, 48-25, încert.40: see Orib. 4.3n), Dioscorides (5.13, 25, 11.Λ-M, 12N-Ψ, 13Α-Ω), Heliodorus (44.5-11, 20, 45.5-7, 9, 14, 19, 46.7-20, 22, 26, 29-30, 47.14-17, 48.20-69, 49.1-5, 8-26, 50.3-4, 8.62, 67.70: see H. Gossen, 'Heliodorus (18)', RE 8 (1913), cols. 41-42), Heraclas (48.1-18: see H. Gossen, 'Heraclas (1)', RE 8 (1912), col.423), Herodotus (5.27, 30-31, 6.20, 25, 7.8, 8.3-4, 7-8, 10.4-5, 8-11, 17-18, 37-40: see H. Gossen, 'Herodotus (12)', RE 8 (1913), cols.990-991), Lycus (8.25-37, 9.25-55, 24.32: see Kind, 'Lykos (51)', RE 13 (1927), cols.2407-2408), Meges (44.21: see J. Raeder, 'Meges (4)', RE 15 (1931), col.328), Menemachus (7.22, 10.14-16: see J. Raeder, 'Menemachus (6)', RE 15 (1932), col. 838), Mnesiteus of Athens (2.67, 8.9, 38, încert. 7, 37: see Orib. 4.4n.), Mnesiteus of Cyzicus (4.4, încert. 32: see Orib. 4.4n.), Philagrius (5.17, 19.23: see E. Bernert, 'Philagrius (2)', RE 19 (1938), cols.2103-2105), Philotimus (2.69, 4.10, 5.32-33: see Orib. 2.69n.), Philumenus (45.29: see H. Diller, 'Philumenos (7)', RE 20 (1941), cols.209-211), Rufus of Ephesus (1.40, 2.61, 63, 4.2, 5.3, 7, 9, 11-12, 6.38, 7.26, 8.21, 24, 39-41, 25.1, 43.41, 44.14-15, 17.18, 25, 45.8, 11-13, 28, 30,
intr. 3: A similar apologia can be found
in Gal. (Hp. Epid. 3 comm. 2. prooem. = 17A. 557K), who takes
his assertion that he had always explained Hp.'s views
in all his other works as justification for his subse-
quent statement: ΠΕΡΙΤΤΟΝ ΗΓΟΥΜΗΝ ΕΙΝΑΙ ΝΟΔΦΕΙΝ ΕΞΗΝΗΣΕΙΣ
ΕΝ ΥΠΟΜΝΗΜΑΣΙ ΚΑΘ' ΕΚΑΣΤΗΝ ΛΕΞΙΝ ΑΠ' ΆΡΧΗΣ ΕΩΣ ΤΕΛΟΥΣ ΑΠΑΝΤΩΝ
ΑΥΤΟΥ ΤΩΝ ΒΙΒΛΙΩΝ. The echo is certainly coincidental.

1) Daremberg (p. 2), in an attempt at salvage, inserted
<τά> to read ΣΥΝΔΕΩ, <τά> πάλαι Γαλήνη μόνω ρηθέντα, μη-
δέν παραλιπών, τάξας, καθότι and translated: '... je
prendrai uniquement dans les meilleurs écrivains, n'
ommanant rien des matériaux qui m' étaient fournis autre-
fois par Galien seul, coordonnant mon ouvrage d' après
la considération que ...'.

2) Daremberg also quotes (p. 553) another proposed
emendation which runs ΣΥΝΔΕΩ, πάλιν <τά> Γαλήνη μόνω
ρηθέντα, μηδέν παραλιπών, τάξας καθότι to give 'ayant
de nouveau arrangé, sans en rien omettre, les dires de
Galen, d'après cette considération ...'.

3) Another possibility which requires solely the addition of τά to the reading of the MSS, but in a different position to 1), is συνάξω, πάλαι <τά> Γαληνῷ μόνῳ δηθέντα μηδὲν παραλιπών τάξας, καθότι, where it is no longer τάξας but συνάξω which refers to καθότι, πάλαι ... τάξας becoming a sort of parenthesis, thus: 'Je ré-unirai uniquement les textes de ceux qui ont le mieux écrit (ayant déjà autrefois arrangé les dires de Galien, n'oubliant rien), d'après la considération que Galien l'emporte ...'. Here μηδὲν παραλιπών holds two senses, that of leaving out nothing and that of forgetting nothing which is πρὸς αὐτὸ τὸ τέλος τῆς λατρικῆς. Yet by taking into consideration the paraphrase by Phot. (συνάξω, μηδὲν ὁ Γαληνὸς εἶπε παραλιπών, καθότι: Bibli. 217.174a39-40) the first sense disappears and another takes its place: 'n' omettant rien de ce que contenait la première Collection'.

4) Daremberg therefore suggests, following Phot., an alternative reading to that printed in his text: συνάξω, πάλαι <τά> Γαληνῷ μόνῳ δηθέντα ὁ μηδὲν παραλιπών, τάξας καθότι ...

5) Raeder (p.4) inserts <τά> before πάλαι following Daremberg, but emends τάξας (ACN²) to τάξεως. The omission of τά either before πάλαι or before Γαληνῷ can be put down to haplography, and its restoration is certainly required. Raeder's emendation is economical and his text progresses reasonably smoothly, which perhaps makes it preferable to any of Daremberg's versions that are either more disruptive of the MSS (i.e. 4) or produce no better or smoother sense (i.e. 1,2,3).
It was one of Gal.'s claims that he understood Hp. better than any of his contemporaries and that he based his own writings on what Hp. had revealed (cf. Ven.Sect. 4 = 11.159K, Med.Phil. 1 = 1.53K, San.Tuend. 2.4.59 = 6.119K, Meth.Med. 9.8 = 10.632K, Ad.Pis. 4 = 14.228K, and W.D. Smith, The Hippocratic Tradition, New York 1979, pp. 61-176, 'Galen's Hippocratism'); naturally Orib. follows him in this (cf. Orib. 1.40n.).

intr.4 ΤΟΙΩΤΗ ΤΙΝΙ ΤΑΞΕΙ: Bks. 1-5 are concerned with 'materials' (i.e. food and drink), 6-9 with the nature and constitution of man, 9 to a point somewhere among the lost books with the treatment of health and 'restoration', from this point to another indeterminable point including 21-25 deals with diagnostic and prognostic theories, and from here until the end (70) including 44-51 there is set out the treatment of illnesses and symptoms. The purpose of a brief schema was of course to aid the reader in his search for whatever he wanted to read: e.g. 'Capita rerum quae cuique commentario insunt, exposuimus hic universa, ut iam statim declaretur quid quo in libro quaerenda inveniri possit' (Gel. praef. 25); 'Omnium librorum meorum argumenta subieci, ut cum res exegisset, facile reperiri possit, quid in quoque quaerendum sit (Col. 11.3.65, cf. also Cels. prooem. 75).

ἄναληπτικῆς: ἡ ὑγιεινῆ πραγματεία appears side by side with ἡ ἄναληπτικὴ πραγματεία in Gal. (Praenot. =19.509K), the former being set between the latter, which consisted of feeding up those who were convalescing, and ἡ εὔεκτικὴ πραγματεία or keeping a person in the same
state who was already completely healthy (Gal. Thras. 30=5.862-863K, cf. San. Tuend. 5.4.1=6.330K). Convalescence or ἄναληψις (Hp. Aph. 4.27=4.512L; Pl. Ti. 83e7, Luc. Par. 40, Gp. 12.2.1, Aret. CD 2.13.4=24A.342K) was encouraged by walks, baths, vocal exercises, wine in moderation, and varied food (Sor. 3.38.3).

1.1. τῶν Δημητριακῶν σπερμάτων: Orib uses this term here very loosely to include wheats, almonds, walnuts, hazelnuts, chestnuts, barley, lentils, millet, and panic. For narrower limits of this term see Orib. 1.25.2n.

1.1-3 οὗ μόνον ὄταν ... Ἐλλήνων ἔννοι: Orib. paraphrases Gal. (Bon. Mal. Suc. 5.5-10=6.782-784K) for his information here, omitting amongst other things that it was not only seeds but also καρποί that were better if moist and soft, that the veins and liver converted into blood (cf. Orib. 1.1.1n.) hard foods with difficulty, and that it was Gal.'s father Nicon who recommended the testing of quality by soaking.

1.1 εἰς Ἐξένυν ἄφικόμενος χώραν: cf. Anthim. intr.: 'nam si quis dicat, "homo in expeditione positus uel iter agens longum quomodo potest se taliter observare?" et ego suggero ...'. Medical advice to travellers included the eating of garlic πρὸς τοὺς ἕξισμους τοὺς ὑδάτων (Dsc. 2.152.2, Plin. Nat. 20.50, Ps. Garg. Mart. med. 18, Anthim. 61).

thren ὄρχαιναν σκληρότητα καὶ γλυκυρότητα: 'la dureté et la sécheresse qu' ils avaient auparavant' (Daremberg, p.2).

γεώδη: As an element earth was cold and dry (Gal. Hum. =19.486K, Hp. Nat. Hom. comm. 13=15.51-52K), and coldness would be contrary to the heat of digestion (cf. Orib.)
1.9.3n.). The harder a substance was the more earthy it was supposed to be (Gal. *Simpl. Med.* 9.1.1=12.166K).

αἶματοοὐδὲν: Food was altered in the veins and liver by the innate heat of the body, blood being produced when this heat was in moderation, and the other humours, when it was not in proper proportion (Gal. *Nat. Fac.* 2. 8=2.117K, *Hp. Vict. comm.* 3.1=−5.252K, 4.5=15.387K, *Def. Med.* 100=19.373K, cf. *Orib.* 1.53.4n.). Harder and 'earthier' foods afforded more nourishment than moister foods, but were digested with difficulty (Gal. *Alim. fac.* 3.26.2=6.715-716K, 3.2.1=6.669K).

1.2 κάρυα: 'κάρυουν et le mot latin nux s' emploient dans deux sens, l' un très-étendu, l' autre très-restreint' (Daremberg, p.553). In its general sense the word was applied to all fruits with a shell or κέλυψις/corium (Sch. *Nic. Alex.* 99, *Isid. orig.* 17.7.22, cf. *Theoc.* 9.21, *Ar. V.* 58, *Macr. sat.* 3.19.1), whilst in its particular sense it meant 'walnut' (see *Orib.* 1.55n. on walnuts and hazelnuts; 1.56n. on almonds; 4.7.17n. on chestnuts).

περὶ δὲ τῆς πτισάνης: On πτισάνη see *Orib.* 1.10.1n..

1.3 ἀτέραμα: A term for foods that were difficult to boil (Gal. *Hp. Epid.* 6 comm. 4.10=17B.157K, *Poll.* 1.223) applied usually to pulses, and especially broad beans and lentils, but also to cereals (Thphr. *HP* 2.4.2, 8.8.6, *CP* 4.12.1). Exposure to the open air on the threshing floor for any length of time brought about this condition (Plu. *Mor.* 701c) as did a cold climate (Thphr. *CP* 4.12.8).

1.4-5 τὰ δ' ἐν δυσκ. ... τὴν οὐσίαν σπέρμασιν: *Orib.* quotes Gal. (*Alim. fac.* 1.13.23-24=6.520-521K), but substitutes in the first sentence the neutral τὰ δ' for Gal.'s connective δοκα μὲν γάρ, and omits τοιοῦτοι after δοκα δ'
presumably as being superfluous, and τὰ before μόρια. There are two textual points: Raeder (p. 5) prints αὐτῶν after μόρια δ' for αὐτῶν read by the Mss, and πάντως after δόσπεπτα. The first emendation seems hard to justify since the Mss make good sense, and αὐτῶν is what is read unanimously by the Mss of Gal. (Helmreich, p. 240); the second is justifiable since A reads πάντως, and CN corruptly read πάντων, although Daremberg follows C² and the Mss of Gal. and reads πάντα. On flour yields from various types of wheat see Plin. Nat. 18.85-90; L.A. Moritz, Grain-Mills and Flour in Classical Antiquity, Oxford 1958, pp. 184-209; T. Reekmans, La sitométrie dans les archives de Zénon, Bruxelles 1966, pp. 13-17.

1.4 πυτυρόδη: Bran possessed a purgative power and hence any food containing it was passed more easily (Gal. Alim. fac. 1.2.2=6.482K, Hp. Epid. 7.62=5.428L, Cels. 2.29.1, Petr. 66.2). Bran when sifted out of flour was sold off by the miller (PCair. Zen. 59355.87 and, ad loc., T. Reekmans, La sitométrie dans les archives de Zénon, Bruxelles 1966, pp. 11-12) since it was employed on the farm as animal food (Gp. 14.11.1, 14.18.8, Plaut. Capt. 807) and in medicine as a cataplasm (Dsc. 2.85.2, Lyc. Med. ap. Orib. 9.27).

1.6 τῶν γούν πυρῶν ... ἐξ ὁμοιοῦ πολλοῦ: With changes in the order of the sentences and some alterations in phraseology Orib. draws here from Gal. (Alim. fac. 1.2.1-2=6.481K). In Gal. the description of the colour of the grains comes after the passage Orib. quotes, and refers immediately to a passed-over reference to the comparative weights of compact and spongy grains, the former
being heavier and ἔκπληκτερόν than the latter. N. Jasny
89) identifies this hard, yellow wheat with σκυμβαλίτης
or durum wheat (Triticum durum), a subspecies of naked
wheat (see Orib.4.1.3n.).

1.7-9 τῶν δὲ κρυθῶν ... ἐκπληκτουσαν ἔχο: Orib. lifts this
passage substantially unaltered from Gal. (Alim.fac.
1.10.2-4=6.504-505K), omitting only a statement regard-
ing the loss of moisture during storage not just in
seeds, but also in plants and fruit.

1.7 ἀμείνους: The preferability of plump, taut grains of
barley over shrivelled, slow-to-swell grains is stressed
elsewhere by Gal. (Hp.Acut.comm. 1.27=15.482K).

1.9 κείμενα: Grain was stored in granaries (Cato Agr. 92,
Var.R. 1.57.1) and, in Cappadocia, Thrace, and some
parts of Spain, in caves or pits (Var.R. 1.57.2, 5.Afr.
65.1, cf. perhaps Tac.Ger. 16.4 and F. Stark, The Valleys
of the Assassins and Other Persian Travels, London 1982,
p.182, who speaks of the Lurs of Pusht-i-Kuh digging
holes, lining them with chopped straw before filling
with grain, and then sealing with straw and on top
earth; this practice kept the grain safe over winter).
Gal. demarks elsewhere (Ptis. 3.3=6.820K) the same ὥρος
for barley, namely that when stored for a long time the
grains grew wrinkled, became diminished in size and
power, and emitted what looked like dust when pounded.
On storage see Plin.Nat. 18.301-303, Col. 1.6.10-17,
Pall. 1.19, Thphr.CP 4.16, HP 8.11.1-7, and G.E. Rickman,

1.10- γίνονται δὲ πολλακις ... γενήσεται ποτε: Orib. here
uses Gal. (Alim.fac. 1.37=6.551-553K) as his source
of information. Gal. mentions that it was his father Nicon who investigated weeds growing amongst cultivated plants.

1.10 αἱρεῖ πολλαί: Darnel (Lošium temulentum L.) was renowned for springing up in wheat fields (Dsc. 2.100, Plin. Nat. 18.153, 22.160, Ov. Met. 485-486, Gp. 2.43, 10. 87.1, CGL 2.220.46, cf. Verg. G. 1.154, Calp. Ecol. 4.115-116, Ov. Fast. 691), sometimes as a result of degeneration and change in the wheat (Thphr. HP 2.4.1, 8.8.3) brought about by heavy rains particularly in well-watered and rainy districts (Thphr. HP 8.7.1, Ath. Med. ap. Orib. 1.2.10). Wheat from Pontus, Egypt, and Sicily, especially that from Agrigentum, was almost completely free from darnel (Thphr. HP 8.4.6). Darnel was used in medicine for its drying and heating properties (Gal. Simpl. Med. 5.9=11.730K, 6.1.10=11.816K, Orib. Syn. 2.15, cf. Plin. Nat. 18.153, Lyc. Med. ap. Orib. 9.42.1), and was boiled to feed hens (Herod. 6.100-101, Gp. 14.7.3, Col. 8.4.1, Var. R. 3.9.20). It appears to have been eaten as a food (Ar. ap. Gal. Alim. fac. 1.27.1=6.541K) since its alleged deleterious nature is due to an ergotised condition, healthy darnel seeds having been shown through experiments to have no injurious effects (M. Grieve, A Modern Herbal, Harmondsworth 1976, pp.372-373).

αἰγίλωψ: Haver-grass (Aegilops ovata L.), which resembled wheat in appearance (Dsc. 4.137, Thphr. HP 8.9.2), grew mainly amongst barley (Thphr. HP 8.8.3, CP 5.15.5, Plin. Nat. 18.155, 25.146). In medicine the discutient power of haver-grass was utilised to cure swellings and lachrymal fistulas (Gal. Simpl. Med. 6.1.9=11.815K).

ἐκ μεταβαλῆς: The idea that one sort of plant could
change or degenerate into another was common in the ancient world. Barley turned into oats (Plin. *Nat.* 18.149), naked wheat (πυροί) into einkorn (τύφη) or emmer (Ξειά, Thphr. *CP* 5.6.12), cabbage into turnips and vice-versa (Plin. *Nat.* 19.176), pimpinell (Pimpinella tragiurn L.) into bergamot-mint (mentha aquatica, Ps. Arist. *Plant.* 821a30-31), and basil (Ocimum Basilicum L.) into tufted thyme (Thymus Sibthorpii L., Pall. 5.3.4, Thphr. *CP* 5.7.2). Thphr. (*HP* 8.8.3) parallels Gal.'s statement here that axeweed (Securigera Coronilla L., see Orib. 1.25.2n.) came from a transformation of lentils.

άραχων: 'Pour mettre d'accord ce passage avec le chapitre 25, il faudrait lire αραχων, mais tous les manuscrits donnent ici αραχων' (Daremberg, p.556). Perhaps it is best to regard αραχων here as merely an alternative spelling for άραχων, for the description of this plant's seed in Thphr. (*HP* 8.8.3, τὸ τραχὺ καὶ σκληρὸν) accords with that given by Gal. (ap. Orib. 1.25.2 and n., ἄγριον τι καὶ σκληρὸν καὶ στρογγύλον).

among bitter vetches; this anomaly is due to faulty excerpting by Orib. (cf. 1.7.6-7n., 1.50.2n.), for as Daremberg says (p.556), 'pour faire accorder cet endroit avec Galien (Alim.fac. 1.37.2=6.552K: τὴν δ' ἀπαρίγνην οὐ μόνον ἀβρωτόν, ἀλλὰ καὶ τῷ φύεσαι περιπλεκομένην τοὺς φυτοῖς τῶν φακῶν ..., ὥσπερ ἢ ὀροβάχχην τοὺς ὀρόβους), il faudrait traduire: "que le gaillet, et, dans l' ers, l' orobanche", mais le texte d' Oribase comporte à peine cette interprétation'. It was used in medicine for the sake of its moderately purgative and drying qualities (Nic.Ther. 850, 953, Gal.Simpl.Med. 6.1.50=11.834K, cf. 6.3.1=11.855-856K; see also M. Grieve, A Modern Herbal, Harmondsworth 1976, pp.206-207 for its use as a diuretic and cure for cancerous growths, and, when dried and lightly roasted, as a coffee substitute).


τοὺς ὀρόβους: See Orib. 1.27n..

1.11 μελάμπυρον: Ball-mustard (Neslia paniculata L.), sometimes called μῦχγρον (Dsc. 4.116), was a particular bane in wheat (Thphr.HP 8.4.6, 8.8.3). Its seed was oily, and from it was extracted an oil with a certain amount of adhesive power for medicinal purposes (Plin.Nat. 27. 106, Gal.Simpl.Med. 7.12.24=11.79K).

1.13 τῶν καρπῶν... Ἐνεργασμούνοντες: With some changes Orib. takes this sentence from Gal. (Bon. Mal. Suc. 5.13=6.785K), δὴ λον ὅτι which opens the latter's argument being substituted by οὖν, and the explanatory λέγω before τοὺς πρὶν εἰσήναι being omitted. Gal. lists some of the καρποί that cannot be stored in his subsequent sentence: mulberries (see Orib. 1.43n.), watermelons (see Orib. 1.36n), melons (see Orib. 1.37n.) and peaches (see Orib. 1.47n.).

1.14 πιθανῶς ... ἐσφυγμέναν αὐτῷ: Orib. takes this sentence from Gal. (Alim. fac. 1.13.26=6.522K), changing οὐκ ἀπυθάνως to πιθανῶς for conciseness, and τῆς δυνάμεως to τὴν δύναμιν. Daremberg (p.9) emends τὴν δύναμιν to τῆς δυνάμεως in accordance with the Mss of Gal. (Helmreich, p.241), the genitive going with τῇ θερμότητι ('son degré de chaleur'), although Kühn omits it altogether in his translation ('... quum ei ... caliditate fit adsimilis'); yet the sense is clear too with the accusative following the Mss of Orib. and Raeder (p.6), and there is no need for emendation.

1.15 πολλὰ δὲ καλ: Here Orib. quotes Gal. verbatim (Alim. fac. 1.13.22=6.520K), but omits the third pair of grains (em-
mer and einkorn) which other grains could resemble, and the fact that χόνδρος was manufactured from σιτάνιον.
μὲν before ἐνια ὑπερ συνθέτους was rightly deleted by Daremberg (p.9) and Raeder (p.6) as arising through dittography, [u] and [v] having a similar appearance in majuscules and even more so in some miniscule scripts.
τα μὲν ἐν τῷ μεταξύ ... 'Atque ea quidem partim inter hordeum et tipham, partim inter triticum et ticham media sunt' (Rasario, p.206).
τὸ σιτάνιον: Daremberg (pp.556-557) believed it necessary to distinguish between πυρὸς σιτάνιας or σιτάνιος, a particular species of wheat, and πυρὸς σητάνιος or τητάνιος (τῆτες εἰς τοῦτον τοῦ ἐνιαυτόν, Sch.Ar.Nu. 624), which signified spring-wheat. To add to the problem the orthography of σιτάνιος and σητάνιος is confused (sitan-
ius, Plin.Nat. 22.139; setania, Plin.Nat. 19.101; σητάνια, Diph.Siph.ap.Ath. 3.80f; σητάνιον/σητανελου/
σιτανιου, Dsc. 1.101.1). Gal. (Alim.fac. 1.6.1=6.496K) said that the word σιτάνιον was rarely found among the ancients because they included σιτάνιον under the general denomination of wheat, but if σητάνιος and σιτάνιος both meant spring-wheat, it seems strange that Gal. should have said that this wheat was rarely mentioned by the ancients, and thus σιτάνιος must have been separate from σητάνιος. N. Jasny (The Wheats of Classical Antiquity, Baltimore 1944, pp.61-62, n.40) concurs with Daremberg in the 'two considerable deviating uses of the form σιτανίας', and suggests that the σητάνιον of Hp. (Art. 36=4.161L, Mul. 2.110=8.236L, Acut.(Sp.) 30=2.518L, 37= 2.524-526L) may have been a hard wheat, particularly in view of the description by Thphr. (HP 8.2.3) which is
applicable to this type of wheat, whilst ἵππος was obviously a synonym of ἱππάνιος or spring-wheat (Gal. Ling.Hp.Expl. = 19.137K, Dsc. 2.85.1, Phot. s.v. ἵππος: see Orib. 1.2.7n.). Gal. mentions elsewhere (Hp. Art.comm. 2.41=18A.469K) that ἵππος grew on Cos and all over the Greek part of Asia, yet this does not contradict what is said here as Daremberg (p.557) argues, but merely provides more information on the growing areas.

ζεόπυρον: As the name implies, a mix between emmer and naked wheat which was grown in the coldest parts of Bithynia (Gal.Agrim.fac. 1.13.9=6.514-515K). N. Jasny (The Wheats of Classical Antiquity, Baltimore 1944, p. 136) tentatively ascribes its intermediacy to it slipping out of the hulls more easily than the kernels of the common emmers.

2. tit. Ἄθηναιός: F. Kudlien ("Poseidonius und die Ärzzeschule der Pneumatiker", Hermes 90 (1962), pp.419-429) placed Ath.Med.'s floruit towards the latter part of the 1st c.B.C. on account of Nicolaus of Rhegium's translation of Gal.'s De Causis Contentivis (ed. K. Kalbfleisch, Marburg 1904, p.8.1-4), the Greek original of which is lost, where it is stated that Ath.Med. was a pupil of Posidonius, but then it is unusual that Cels. does not mention him in the list of doctors in his Prooemium. H. Diels ("Hippokratische Forschungen V", Hermes 53 (1918), p.74, n.1) more realistically dated him to the beginning of the 1st c.A.D., and M. Wellmann ('Athenaios aus Attalia', RE 2 (1896), col.2034) describes him as an 'Ärzte zu Rom, aus der Zeit des Claudius und Nero'. He postulated a fifth quality wind to add to the traditional four comprising hot, wet, dry, and cold (Gal.Introd. 9.14.698K), and set

Cael.Aur. (*acut.* 2.1.6) registers an Athenaeus 'Tarsensis', but with the frequent confusion of topographical epithets in ancient biography (e.g. Εὐκλείδης ἀπὸ Μεγάρων τῶν πρὸς Ἰοσθαφί, ἢ Γελάος κατ’ ἑνίους, D.L. 2. 106; Νικαινέτου τοῦ Σαμίου ἢ Ἀβδηνίτου, Ath. 13.590b; Μάχων ὁ κωμοδιοποίος ὁ Κορίνθιος μὲν ἢ Σικυώνιος γενόμενος, Ath. 6.241f; Παλέμων δὲ ὁ σοφιστὴς οὖθ’, ὡς ἄ πολλοι δοκοῦσιν, ἐμορναῖος, οὖθ’ ὡς τίνες, ἐκ φρυγῶν, ἀλλὰ ἠνεγκεν αὐτὸν λαοδίκεια ἢ ἐν Καρίᾳ, Philostr. *VS* 1.25) this physician is probably one and the same with Ἀθηναῖος ὁ Ἀτταλέὺς (Gal. *Def.* Med. *prooem.* = 19.347K, 31=19.356K, *Puls.* *Diff.* 4.10=8.749K). It is, nonetheless, understandable that Daremberg should act with such caution over where the physician spent his life (see Orib. 1.2.13n.).

*Fig. 1:* 'Sheep too are worst in the winter, but after the equinox they grow fat until the summer solstice', Orib. 1.3.3 (near Olympia, Greece: photograph by M.D. Grant).
2.1 οἱ πυρὸι: πυρὸς can mean 'naked wheat', the Latin *triticum* (N. Jasny, *Wheats of Classical Antiquity*, Baltimore 1944, p.53), but here it is used in a more general sense to include 'hulled wheat' (Jasny, p.54). For a healthy diet the best wheat was fresh, fully-grown, the colour of quinces, and of a dense consistency (Gal. *Hp.Art.comm.* 2.42=18A.473K, Dsc. 2.85.1, Sim.Seth. s.v. ἄρτοι = p.8 Langkavel; on πυρὸι see also Orib. 4.1.2n.).

2.2 σιτάνιαι: See Orib. 1.1.15n.

άλευρίται: '... le pain ἀλευρίτης était fait avec une espèce particulière de farine, beaucoup plus légère que la σεμίδαλις appelée plus spécialement ἀλευρον, et ... le froment ἀλευρίτης était du froment qui donnait beaucoup de cette farine' (Daremberg, p.558; see also Dieuch. ap. Orib. 4.5.1 and n.).

σεμίδαλιται: See Orib. 4.1.3n.

κατεργασμένοι: 'bien élaborés' (Daremberg, p.10).


2.4 παρὰ δὲ τοὺς τόπους: Wheat was popularly believed to grow better in damp conditions since it required more nutriments, whereas barley was best planted in poorer soils because it could not assimilate much, hence the aphorism σιτον ἐν πηλῳ φύτευε, τὴν δὲ κριθὴν ἐν κόνει (Plu. *Mor.* 915ε, cf. Cato *Agr.* 34.2). Gal. (*Simpl.Med.* 9.1.1 = 12.165K), on the other hand, reported that the Greeks sowed cereals in general, including both wheat and barley in moderately watered ground.

ἐν τοῖς καύσοις λεγομένοις: 'Nous ne croyons pas que
le mot καύσος se rencontre ailleurs dans ce sens' (Daremberg, p. 558), which seems to be true. However, the technique of burning off stubble in fields was widely applied in the ancient world, both to incinerate seeds of weeds (Plin. Nat. 18.300; see also M. S. Spurr, Arable Cultivation in Roman Italy, London 1986, p. 69) and to fertilize (Verg. G. 1.84sq., cf. Col. 2.14.5, CIL 6. 2305, Cato Agr. 38.4). Wood ash is best applied as a light surface dressing in advance of sowing; but if the ash is left to lie in heaps for any length of time the leaching of potassium into the soil produces too much alkalinity and inhibits rather than promotes germination, whilst burning in situ can bake the earth and sterilize the soil (K. D. White, Roman Farming, London 1970, p. 142), and perhaps Ath. Med. is referring to this when he says that wheat sown on 'burnt land' afforded ἐλάσσονα ... τροφήν.

2.7 τοῦς τριμηνιαίους: 'Three-months' wheat was thus called because it supposedly was reaped three months after sowing (Thphr. HP 8.1.4, Plin. Nat. 18.69). It was sown in February, or in warmer areas in January (Plin. Nat. 18.240, Col. 11.2.20), and was able to withstand χιονο฿ολού-μενοι τόποι (Plin. Nat. 18.69, cf. Thphr. CP 4.11.3) and poor soils (Plu. Mor. 915d). An alternative name for it was σπτάνιον (Dsc. 2.85.1, Plin. Nat. 18.70, 22.139, Poll. 6.73), and N. Jasny (Wheats of Classical Antiquity, Baltimore 1944) makes an identification with a soft wheat (p. 73) of the spelt group (p. 88) called club wheat (p. 104) or Triticum compactum Host. (p. 19). Its powers included encouraging the production of milk in wet nurses and menstruation (Zopyr. op. Orib. 14.64.1), and
it was used to make milk-white κόλλαβοι which were eaten hot (Philyll. ap. Ath. 3.110f; κόλλαβοι were leavened μικροι ἄρτισκοι (Sch. Ar. Ῥα. 507, Sch. Ar. Pax. 1196, Poll. 1.248, 6.72) eaten as a dessert (Sch. Ar. Pl. 768) or as an accompaniment to pork (Ar. ap. Ath. 3.96c, cf. Apic. 7.9.2)).

2.8 οἱ δὲ ἐν θερμοῖς τόποις: Plu. (Mor. 701b) thought that warm localities produced soft grains.

2.12 ἐρυσιβούμενοι: ἐρυσίβη or robigo ('rust': σῆψις τίς ... τοῦ ἐφισταμένου ύγροῦ, Thphr. CP 4.14.3; there are over seven thousand species of rusts, all of which are obligate parasites, and the scientific name given to wheat rust is Puccinia graminis, H. J. Dittmer, Modern Plant Biology, New York 1972, pp.405-407; see also J. Banks, 'A Short Account of the Cause of the Disease in Corn, called by Farmers the Blight, the Mildew, and the Rust', The Philosophical Magazine 21 (1805), pp.320-327, '... the proportion of flour to bran in blighted corn, is always reduced in the same degree as the corn is made light. Some corn of this year's crop will not yield a store of flour from a sack of wheat; and it is not impossible that in some cases the corn has been so completely robbed of its flour by the fungus, that if the proprietor should choose to incur the expense of thrashing and grinding it, bran would be the produce, with scarce an atom of flour for each grain') was a hazard for all seeds (Thphr. HP 8.10.1), especially when the crops were not on high ground exposed to the wind but on low-lying and sheltered land (Thphr. HP 8.10.2), for warmth and moisture provided the trigger for rust (Pl. Smp. 188b2-3, X. Oec. 5.18, Plin. Nat. 18.279, Thphr.
April was the worst month for rust, hence the festival of Robigalia (Plin. Nat. 18.285, Var. R. 1.1.6; see also H. H. Scullard, Festivals and Ceremonies of the Roman Republic, London 1981, pp.108-110). Cereals were affected more than other crops, and barley more than wheat, although broad beans were also liable to rust because the surface of the plants was conducive to trapping droplets of water. Plants with inclined ears were resistant to rust because rain and dew fell from them easily (Thphr. CP 3.22.1-2).

2.13 οἱ λεγόμενοι καῦσονες: Daremberg (pp.558-559) asserts that the participle shows that Ath. Med. wanted to refer here to a particular wind, peculiar to certain lands or certain seasons (Antyll. ap. Orib. 9.9.1 divided winds into two classes, ἀνεμοὶ καθολικοὶ that were recognised everywhere under the same names, and τοπικοὶ that were strictly local phenomena), but acknowledges that the lack of information on where the physician spent his life (Tarsus, Cael. Aur. acut. 2.1.6; Attalea, Gal. Dign. Puls. 1.3 = 8.787K; see also Orib. 1.2n.) makes it hazardous to attempt to determine which wind he was meaning. If his interpretation of the participle is correct this would explain the absence of καῦσος in other writers in the sense 'burnt land' (Orib. 1.2.4n.). However, καῦσων appears in LXX (Je. 18.17, Ju. 8.3, Ep. Jac. 1.11) and Ptol. (Tetr. 2.85) meaning a sort of sirocco, and Plin. (Nat. 2.122-123) mentions a wind called Subsolanus, opposite to Favonius or the West Wind, which with the rise of the Phæiads ushers in summer. Wheat and barley could be ruined by the wind if caught by it either when in flower or when the flower had just fallen, and barley
was particularly prone to this (Thphr. HP 8.10.3, Plin. Nat. 18.151, cf. Hsch. s.v. ἔξωβατονος).

3.1 άλχες: Anan. (ap.Ath. 7.282b) also considered pork to be best in autumn, presumably after the pigs had been fattened during the summer. Plin. (Nat. 16.25) records that glans fagea fed to pigs (cf. L. Fenaroli, Guida agli alberi d'Italia, Firenze 1984, p.103) made their flesh easy to cook, light, and digestible, and beech-mast is produced in autumn. The cosmical setting of the Pleiads in Orib.'s time at latitude 38°, which runs near Pergamum, was on 9 November (see E. J. Bickerman, Chronology of the Ancient World, London 1980, Table II, p.112).

3.2 άλγες: Hp. (Acut. (Sp.) 18=2.490-492L) supports Ath.Med.'s statement as to the superiority of goat's meat in summer over that in winter, and Gal. (Hp.Acut.comm. 4.88=15.881K, cf. Alim.fac. 3.1.33=6.665-666K) says this was because from the beginning of spring into summer there was an abundance of shoots and buds on the trees, the favourite food of goats. The cosmical setting of Arcturus in Orib.'s time at latitude 38° was on 1 January, but this gives a rather brief period for the enjoyment of goat meat; perhaps the heliacal setting is being referred to here, this occurring on 1 November (see E. J. Bickerman, Chronology of the Ancient World, London 1980, Table II, p.114), although for the sake of consistency with the cosmical setting referred to in Orib. 1.3.1n. the former dating is to be preferred.

3.3 πρόβατα: Other authors also noted that sheep are better in spring and summer than in winter (Anan.ap.Ath. 7.782b, Gal.Alim.Fac. 3.1.13=6.665-666K), a tradition continued both in Greece and also in Spain today where young lambs
known as leóchazos are an Easter speciality and are always roasted, either in the oven or on a spit (A. MacMiadhacháin, Spanish Regional Cookery, Harmondsworth 1976, p.134: on the identification of ancient breeds of sheep, namely the Asiatic mouflon (Ovis orientalis) and the Ovis vignei type see M. Hilzheimer, 'Sheep', Antiquity 10 (1936), pp.195-206; also L. Bodson, 'Le mouton dans l'antiquité gréco-romaine de la civilisation créto-mycénienne au monde gallo-romain' in Les debuts de l'élevage du mouton, Paris 1977, pp.107-115). E.J. Bickerman (Chronology of the Ancient World, London 1980, pp. 51-52) explains the phenomena of equinoxes and solstices: 'The geocentric path of the sun ('ecliptic') is a circle, the plane of which is inclined to the plane of the earth's equator at an angle of about 23°27'. This tilt causes the change of the seasons ... . There are four 'turning-points' (τροπαίοι) of the sun: the two solstices when it reaches its farthest positions from the earth in the ecliptic, and two 'equinoctial' points at the intersection of the ecliptic and the equator of the earth'. The vernal equinox occurs on 21 March, the summer solstice on 21 June: this short period is consistent with the advice concerning goats.

αλ δὲ βόες: Although cows were hardy enough to endure a winter under the open sky (Col. 6.22.2, Pall. 4.11.8), a chill climate made them grow thin (Var.R. 2.5.15). Another debilitating factor was lack of long grass, for in the cow the projection of the lip was thought to be thick and the upper jaw to be thick and blunt, and thus is was supposed not to be able to grasp short herbage (Hp.Art. 8=4.96L, Gal.Hp.Art.comm. 1.26=18A.355-356K).
Hence Ath. Med. recommends cows fattened on long grass in summer.

3.4 ἀκούστως: It is peculiar that Ath. Med. should remark on the blackbird's (*Turdus merula* L.) winter appearance because it was more usually considered a summer bird which went into hiding as the weather turned colder (Arist. *HA* 600allsq., cf. Theoc. *ap. AP* 9.437.9-10), although conversely Plin. describes its singing (*Nat.* 10.80, cf. *Ael. NA* 12.28) and foraging for food in the winter (*Nat.* 10.72). There were supposedly two sorts of blackbird, one possessing the ubiquitous black plumage, the other found only on Cyllene in Arcadia with white feathers (Arist. *HA* 617all-14, Paus. 8.17.3), but D'Arcy Thompson (*A Glossary of Greek Birds*, Oxford 1936, pp.174-175) ascribes the latter to confusion with the Snow-finch (*Montifringilla nivalis* L.) or even 'an ancient boorish joke' about the white *κόσμως* of the mountains of Cyllene. The blackbird was used as a medicine against dysentery (Plin. *Nat.* 30.58, Marc. *med.* 27.28, cf. Cels. 2.30.2) and was to a certain extent enjoyed as a delicacy (Matro *ap. Ath.* 4.136d, Hor. *S.* 2.8.90-91, cf. Orib. *Syn.* 4.1.6), yet the absence of blackbird recipes in *Apic.* and the paucity of other culinary references perhaps suggests that the bird was esteemed more for its song and as a pet (cf. *Ael. NA* 6.19, Plin. *Ep.* 4.2.3).

μίχλα ... φάσσα ... ἀπαγήνες: On these birds in cooking and medicine see Orib. 4.2.7n.

μελαγκόφυοι συκαλίς τε: D'Arcy Thompson (*A Glossary of Greek Birds*, Oxford 1936, p.196) suggests that the former is probably one of the black-headed Titmice, such as the Cole Tit (*Parus ater* L.) or Marsh Tit (*Parus palustris* L.),
although there was confusion between this bird and the Blackcap Warbler (Motacilla atricapilla L.) and fig-pecker or συκαλίς. In fact it was a popular belief in antiquity that the συκαλίς changed its shape and colour in autumn to become a μελαγκόρυφος (Plin. Nat. 10.86, Arist. HA 9.632b31-633a2, Gp. 15.1.23).

Their flavour was best in the autumn when the figs had ripened (Gal. Hp. Acut. comm. 4.88=15.882K, cf. Ath. 2.56b), and they were employed extensively in cooking: for example with asparagus patina (Apic 4.2.5), in a stuffing for sucking-pig (Apic 8.7.14), with peppered yolk enclosed in a pastry egg (Petr. 33.6-8), with meal and honey cakes (Poll. 6.77), and on their own (Favon. ap. Gell. 15.8.2).

χλωρίς: According to Ael. (NA 4.47) the Greenfinch (Fringilla chloris L.) supposedly appeared at the time of the summer solstice and migrated at the rising of Arcturus or late September (see E.J. Bickerman, Chronology of the Ancient World, London 1980, Table II, p.114), which would fit with Ath. Med.'s words here, birds generally being fatter just before their autumn migration (Arist. HA 597a25-26) although D'Arcy Thompson (A Glossary of Greek Birds, Oxford 1936, pp.331-332) argues that Ael. has confused the Greenfinch with the Golden Oriole (Oriolus galbula L.). Like the modern Italians and Spaniards the ancients were inordinately fond of small birds roasted (Ath. 3.101c; E. David, Italian Food, Harmondsworth 1963, p.247; N. Luard, Andalucia: A Portrait of Southern Spain, London 1984, p.261: 'Approaching a little village in any month it is common to see an old woman or child step forward from the roadside and hold up a garland of dead robins.
or larks for sale. Pajarritos, little birds fried and eaten whole, bones and all, are available as a tapa in most country ventas.'

Quails flew yearly across the sea into Italy at the time of the autumnal equinox when they were fattest (Var.R. 3.5.7, Arist.HA 597a23sq.); some breeders fattened quails in specially designed buildings (Var.R. 3.5.2). Quails were a speciality in Egypt (Hdt. 2.77. 5, Hipparch.Com.ap.Ath. 9.393c), and it is surprising that Apic. included no recipes for them, for even in Greece today roast quails are a prized μεζές (P. Leigh Fermor, Mani, Harmondsworth 1984, p.23).

3.5 άλκωτορίδες: 'Galli vero gallinacei hyeme non admodum corpore augmentur, et praesertim in austrinis locis' (Rasario, p.207); 'Les poules ne se portent pas trop bien en hiver surtout quand le vent est au sud' (Daremberg, pp.15-16). Chickens (see Orib. 4.2.9n.) laid eggs all year round except for a two month period in winter (Arist. HA 558b8-11, cf. Col. 8.4.3. and 8.5.1), no doubt when, as Ath.Med. says here, their εύσωματιά was in decline, and chickens were carefully felt for plumpness before being bought (Ar.Av. 530 and Sch.ad loc.). Winds in general could bring about many occurrences from determining the gender of animals (Arist.HA 574a1-2, Gp. 18.3. 6) to ruining wine during decantation (Gp. 7.6.1) and causing rain to vary in sweetness and temperature (Ruf. ap.Orib. 5.3.10), and southerly winds were said to blow after the morning setting of the Pleiads, or in early November (Arist.HA 542b13-14), but these references do not wholly clarify Ath.Med.'s statement.

τρυγὸν: The turtle-dove (see also Orib. 4.2.7n.) was
conspicuous in summer, but hid in the winter (Arist. HA 593al7-18); at the beginning of this hiding time it was extremely plump (Arist. HA 600a22sq., cf. Var. R. 3.8.3), which is the reason for Ath. Med. stating that it was ἐν φθινομένῳ καλλιστη.

3.6 ἐν τῇ κυνηγετῇ: Testaceans, crustaceans, mussels, and fish were best for eating when they began to breed (Arist. HA 607b2sq., Xenocr. ap. Orib. 2.58.5).

κατε: A generic term for small crustaceans such as prawns (Palaemon squilla L.) and shrimps (Crangon vulgaris L.; see D'Arcy Thompson, A Glossary of Greek Fishes, Oxford 1936, pp.103-104), κατετεσταλτόν were enjoyed as a delicacy both fried and boiled (Anaxandr. ap. Ath. 3.106a, Sophr. ap. Ath. 3.106e, Alex. ap. Ath. 3.107c, Matro ap. Ath. 4.136a, Sotad. ap. Ath. 7.293a), although Mnesith. (ap. Ath. 3.106d, cf. Gal. Alim. fac. 3.33.1=6.735-736K), whilst commenting on the difficulty of digesting them, states that they should be baked rather than boiled.

κάστανος: An aphrodisiac (Alex. ap. Ath. 2.63e), the Crawfish or Langouste (Palinurus vulgaris L.; see D'Arcy Thompson, A Glossary of Greek Fishes, Oxford 1936, pp. 102-103) was hard to digest (Mnesith. ap. Ath. 3.106d, Gal. Hp. Aph. comm. 2.18=17B.484K, Orib. Syn. 4.17) and checked the bowels (Cael. Aur. chron. 3.2.35, Orib. Syn. 4.30). Parturition occurred in autumn, after which the Crawfish sometimes sloughed and hid for about five months (Arist. HA 601al0-17). It was an appreciated delicacy (Macho ap. Ath. 6.244b, Lync. ap. Ath. 8.337e).

τευτόν: With its soft skin (Pherecr. ap. Ath. 6.269e, Gal. Alim. fac. 3.34.1=6.736K) squid (Loligo vulgaris L.) was eaten baked (Ar. Ach. 1156-1158, Metag. ap. Ath. 6.269f),
boiled (Dorio ap. Ath. 7.300f), stuffed with finely chopped green vegetables (Alex. ap. Ath. 7.326e, cf. Apic. 9.3.2), made into rissoles (Apic. 2.1.1 and 2), and battered (?Philox. ap. Ath. 4.147b). They were difficult to digest, yet when digested were nourishing (Cels. 2.28.2, Gal. Alim. fac. 3.34.2=6.736K; specifically when boiled, Diph. Siph. ap. Ath. 8.356e).

 científico: Cuttlefish (Sepia officinalis L.) were eaten fried (Nicostr. Com. ap. Ath. 3.108c), baked (Sotad. ap. Ath. 7.293c), stuffed (Apic. 9.4.1 and 2), and with peas (Apic. 5.3.3). Mnesith. (ap. Ath. 8.357c-d) describes them as hard to digest, aphrodisiac, and better when boiled, since the bad juices contained in them were drawn out by boiling, but by baking tended to be dried up.

 Ol νέφαλοι: Grey-mullets (Mugil cephalus L.) were eaten salted with a sauce (Apic. 9.10.6 and 7), baked (Sopat. ap. Ath. 3.119a), and made into a patina with oysters, pepper, liquamen, olive-oil, oenogarum, and eggs (Apic. 4.2.31). The best Grey-mullets were bitter and without fat; those that were oily and watery were worse for eating, difficult to digest, and bad-juiced (Gal. Alim. fac. 3.24.10=6.712-713K).

 3.7 ὁ δὲ ὂυννος: The tunny (see T.H. Corcoran, The Roman Fishing Industry of the Late Republic and Early Empire, diss. Northwestern University 1957, pp.54-56) migrated in autumn to warmer climes, and it was the case that all creatures were fatter in migrating from cold to heat than vice-versa (Arist. HA 597a21sq.). Ael. (NA 9.42), however, states that whenever the beginning of winter overtook the tunny, it remained at rest without stirring until the coming of the equinox. Ath. Med.'s words agree
more with Arist.'s statement. The tunny was served 
baked and seasoned with olive-oil, salt, and brine 
(Archestr. ap. Ath. 7.303e), or in a sauce of pepper, lov-
age, cumin, onion, mint, rue, dates, honey, vinegar, and 
mustard-oil (Apic. 9.11). Diph. Siph. too (ap. Ath. 3. 
120e) comments on the tunny's fatness.

4 ἐνδοὶ πυρολ: Orib. excerpts this from a much longer 
chapter on the same subject by Gal. (Alim. fac. 1.7=6. 
498-500K), who recounts an anecdote concerning a walk he 
took in the company of two boys around the countryside 
of Pergamum. Some farmers offered them boiled wheat 
seasoned with salt, and after they had eaten they felt 
a heavy weight in their stomachs, and on the following 
day they suffered from indigestion, headache, misty 
vision, and constipation. Unless worked up with salt, 
yeast, kneading, and baking, wheat was difficult to di-
gest (Gal. Alim. fac. 1.7.4=6.499K, Paul. Aeg. 1.78), and 
any strong food had the ability to cause hurt (Hp. VM 
6=1.582L). A. Soyer (The Pantropheon or A History of 
Food and its Preparation in Ancient Times, London 1853, 
p.15) commends with great enthusiasm a similar dish: 
'Marshal Vauban proposed eating corn in soup, without 
being ground; it was boiled during two or three hours 
in water, and when the grains had burst, a little salt, 
butter, or milk was added. This food is very nice, not 
unwholesome, and might be employed when flour is scarce, 
heated, or half rotten'. Orib. (Syn. 4.37.1) gives a 
recipe for boiled fine wheat flour (Σεμιδαινη) using ¼ 
pint flour to 5 pints of water with the addition of a 
little olive-oil and dill.

5.1 τὸν γένους ... ὀξύνδορος: This opening clause is repeated
in alternative word order at Orib. 4.1.11 (see n. ad loc.),
the source from which the whole section is taken being
Gal. (Alim.fac, 1.6.1=6.496K). Not only was χόνδρος
eaten, as here, boiled (cf. Men.ap.Ath. 4.172b, Megasth.
ap.Ath. 4.153e) and flavoured with οἶνομέλι (cf. Gal.San.
Tuend. 5.4.14=6.333K) or sweet or astringent wine (cf.
Gal.Vict.Att. 6.44, Bon.Mal.Suc. 13.5=6.812K), and olive-
oil and salt, but also with chopped beet and fowl stock
(Gal.Vict.Att. 6.34), dill, leek, pennyroyal, catmint,
hyssop, and pepper (Gal.Vict.Att. 6.35, 12.115), honey
(Gal.San.Tuend. 5.4.16=6.333K), and milk (Pherecr.ap.
Ath. 6.269a, Cato Agr. 85). It was extremely nourishing
(Hp.Vict. 2.42=6.540L), but at the same time thick-
juiced and viscous (Gal.Hp.Acut.comm. 4.95=15.898K, Simpl.
78, cf. Cels. 2.23) and without purgative power (Gal.Alim.
fac. 1.19.3=6.530K, cf. Cels. 2.30.1), with the result
that it could block the liver and kidneys of those in
whom these organs were naturally endowed with narrow pas-
sages. Eaten boiled with fowl, lamb, or kid stock and
olive-oil with hollow pieces of bread or μύστρα (Nic.ap.
Ath. 3.126c-d; pitta bread is used in the same way today),
as one of the ingredients of Θρίον (Poll. 6.57; Θρίον
was the ancient equivalent of the modern Greek ντολιάς,
but made with fig leaves rather than cabbage or vine
leaves according to recipes in Sch.Ar.Eq. 954, Sch.Ach.
1101, and Sch.Ran. 134), with cabbages (Apic. 3.9.6),
in a stuffing for chicken (Apic. 6.9.14), and as a
sweet with pepper, honey, wine, passum, rue, pine-nuts,
and mixed nuts (Apic. 7.13.4).

οἶνομέλιτος: This preparation was made by mixing
two measures of wine to one of honey, that made with old
wine being nourishing, whilst that with moderate wine
was good for the bowels and diuretic (Dsc. 5.8.1-2,

γλυκός: Daremberg (p.561) decides here 'à traduire
γλυκός par sucré, d'un goût sucré, et non par doux,
comme on le fait habituellement' because Gal. (Simpl.
Med. 1.38=11.451-452K, cf. 4.11=11.654K) remarks that
there is no difference between γλυκό and μελιτωδές; it
seems at first sight a case of splitting hairs in saying
that there is much difference semantically between doux
and d'un goût sucré, and trying to lumber an ancient
author with undeserved precision (see Orib. 1.7.3n.),
although γλυκό as 'doux' may be understood to mean
merely 'pleasant' which is not the same as 'sweet' (cf.
ἀνήδης at Orib. 1.14.2).

έλαιον: έλαιον on its own always means olive-oil, other
oils (e.g. sesame, Orib. 1.28.1n.) needing a qualifying
adjective (Gal. Simpl. Med. 2.7=11.483K, 6.5.4=11.868K; on
olive-oil see Orib. 1.17.1n.).

πτισανιστή: The Mss. of Gal. read πτισάνης. Helmreich
(p.225) keeps this reading, but mentions that he would
prefer to add δίκην or τρόπον before πτισάνης, or even
better Ως (cf. Gal. San. Tuend. 4.10.16=6.298K). Daremberg
(p.17) and Raeder (p.9) adhere as closely as possible to
the Mss. with πτισανιστή, A reading πτισανις τι and C
πτισάνης τε, although this word is a hapax with no men-
tion in LSJ. It is strange but not impossible that Orib.
should choose this expression in view of the inadequacy
of the Mss. of Gal. (for other adverbs in -ιστή see:
557K, Ἑὐριστὶ, Στρ. 11.3.3, γυναῖκιστὶ, Αθ. 12.528f., ἄνδριστι, Αἰγ. Εὐσ. 149, Θεοκ. 18.23, νομιστὶ, Διογ. Οεν.
6, πυγιστὶ, Ηππον. ἀπ. ΨΙ 9.1089.2; on πτισίνη see Orib. 1.10.1n.), and the scribal confusion certainly points to an unusual word.

5.2 εἰς δὲ καὶ οἱ ἄρτοι: In contrast to Orib.'s silence Gal. (Alim. fac.) acknowledges that it was Ἡρ. (VICT. 2.42=6.540k) who said that bread made with χόνδρος was extremely nourishing (cf. Cels. 2.20.1, 2.24.1) but did not pass easily through the bowels (cf. Cels. 2.30.1).

Cato (Agr. 76) gives a recipe for a cake called placenta made with χόνδρος, and Plin. (Nat. 18.106, cf. Macr. sat. 3.13.12) describes a bread fashioned from fermented χόνδρος dough that was invented by the people of Picenum.

6 περὶ ἄμυλου: Orib. extracts this section from Gal. (Alim. fac. 1.8=6.500K), omitting comments on substances such as water that were considered ἄποινοι and the advice not to add starch to boiled wheat. The softer the wheat the better the starch, and three-months wheat was held to be the best material from which to make starch (Plin. Nat. 18.76 and N. Jasny, Wheats of Classical Antiquity, Baltimore 1944, p.88; on three months wheat see Orib. 1.2.7n.). Starch was thick-juiced and devoid of purgative qualities (Gal. Alim. fac. 1.19.3=6.531K, Bon. Mal. Suc. 4.16=6.771K, SimpI. Med. 1.36=11.443K, Orib. Syn. 4.2.2), which was the reason for it being emollient of harsh things (cf. Sim. Seth. s.v. ἄμυλον = p.23 Langkavel). It was made into thin soups with water (Cael. Aur. acut. 2.29.159, 3.8.77, cf. Marc. med. 16.84) or was mixed with milk (Aret. CA 1.9.3=24A.231K, CD 2.2.4=24A.331K, Dsc. 2.101.2, Gal. Bon. Mal. Suc. 4.8=6.768K, Marc. med. 14.42, 27.138)
for various ailments. It was not heating (Gal. *Simpl. Med.* 8.16.42=12.111K). Starch was the standard thickening agent in Roman sauces (Apic. *passim*), and from it were made breads and cakes (Sch. *Theoc.* 9.21, Ar. *Ach.* 1092, *Pax* 1195, Poll. 1.248, Plu. *Mor.* 466d, Telecl. ap. Ath. 14. 648e). On the manufacture of starch see Orib. 4.7.24n..

6.2 τοὺς πλυτοὶς ἄρτοις: Both starch and πλυτοὶ ἄρτοι were centred between foods that were heating and foods that were cooling (Orib. *Syn.* 4.32.13). πλυτοὶ ἄρτοι contained little nourishment since they were composed more of 'airy' than of 'earthy' matter, something which could be demonstrated by their lightness and cork-like buoyancy in water (Gal. *Alim. fac.* 1.5.1=6.494K, Antyll. ap. Orib. 4. 11.1-2 and n.), and because of this delicacy they were esteemed at the table (Pall. v. *Chrys.* p.75.29 Coleman-Norton). They belonged to the category of good-juiced foods (Gal. *Simpl. Med.* 2.14=11.495K). Other edibles also had affixed the epithet πλυτος, presumably meaning 'refined' (e.g. flour, Hp. *Art.* 36=4.160L, cf. Orib. *Syn.* 4.37.1; χόνδρος, Gal. *Alim. fac.* 1.6.3=6.497K, Aret. *CD* 1.8.3=24A.324K; γίγνεται μὲν καὶ διὰ τῶν λεπτῶν κοσμίων, γίγνεται δὲ καὶ τῷ προπεπλύσθαι τοὺς πυροῦς, gal. *Hp. Art.* comm. 2.41=18A.470K).

7 πεσμάτων: A generic term for 'cakes', contrasted with the savoury δίσα of an ancient meal and with the τραγήματα that accompanied the after-dinner drinking (Plu. *Mor.* 123e, 124e, 686d, cf. Antiph. ap. Ath. 14.642a), and thus almost equivalent to 'dessert'. They ranged from the ordinary (Arr. *Ind.* 28.1) to the elaborate (Plu. *Mor.* 180a, Ath. 1.18d, Pl. *R.* 404d8-9, Luc. *Nigr.* 33) to the sacrificial (Hdt. 1.160.5, Paus. 8.2.3), and could be made from
Δλευρόν, as here, or from σεμίδαλις (Gal. San. Tuend. 5.7.1=6.342K), together with olive-oil, honey (Ath. 14.645e), and cheese (Suida s.v. ἄναστατοι and Chrysipp. Tyan. ap. Ath. 14.647d-e), with poppy-seeds either mixed in (Gal. Vict. Att. 5.27) or spread on top (Gal. SimpL Med. 7.12.13=12.73K). Although πέμματα in this passage embrace ταγηνίται, πλακούντες, ἔτρια, and λάγανα, Gal. elsewhere (Simpl. Med. 7.12.13=12.73K) draws a distinction between them and ἔτρια, but bafflement sets in as to what this distinction might be (see also Orib. 1.7.3n.). Daremberg (pp.561-562) confidently suggests that 'la différence entre un pêmwa (friture) et un πλακούς (gâteau) consistait dans l'addition de miel, de lait, de vin, de fromage, de graine de pavot ou de sésame, ou d'autres ingrédients destinés à rehausser le goût', but the available evidence does not seem to support this.

7.1-2 Οἱ ταγηνίται: From here to πόλιν οἱ πενητες (end of sect.2) Orib. draws his information from Gal. (Alim. fac. 1.3.1-2=6.490-492K), omitting little apart from facts irrelevant to dietetics such as that the Athenians called these pancakes ταγηνίται, whereas the Greeks in Asia referred to them as τηγανίται. Ath. (14.646e) too describes it as a πλακούς, and mentions another name ταγηνίας (cf. also yet another name recorded by Hsch., s.v. ἄττανίτας). The instructions to turn the pancake over repeatedly until cooked, and the comparison with the consistency of soft cheese show that it was more akin to a pizza al tegame (recipe in E. David, Italian Food, Harmondsworth 1963, pp.150-151; Mr F. King in a letter from Nyamathumbi in Kenya informs me that the Kikuyu
make a 'chapati' with a flour and water dough moulded into a patty about 25cm. in diameter and 4-5mm. thick, which, after layering with shortening and rolling out, is fried) than a crêpe. Philistion (ap. Ath. 3.115e), in contrast to Orib.'s στατικὸν γαστρός, held that the use of olive oil made the pancake easy to excrete (cf. Orib. 1.17.ln.), but like Orib. voices his doubts concerning its digestibility because of the steam (τὸ κνισόν) arising from the drying of the mixture. Orib.'s use of μυγνώστη shows that he must have envisaged the honey or sea-salt being added to the pancake mixture before frying: other writers describe either honey (Magn. ap. Ath. 14.646e), or sesame-seeds and cheese being spread on the pancakes (Crates Com. ap. Poll. 6.78) in the same way as the topping of the pizza al tegame. The Roman equivalent was luculentus/lucuntulus (CGL 3.88.2, 3.372.26), and as such it is frequently mentioned as a delicacy (Afran. ap. Non. 131.25M, Stat. silu. 1.6.17, Apul. met. 10. 13, Chrysipp. Tyan. ap. Ath. 14.647d).

ἀχάπνω πυρί: Alex. Trall. (9.3=2.429 Puschmann) recommends frying ἐπ' ἀχάπνου πυρὸς things suitable for dysentery and coeliac problems before adding them to milk heated beforehand with red-hot lumps of iron. Gal. (San. Tüend. 4.5.36=6.271K) remarks that it is better to boil on charcoal or wood that is completely dry, otherwise known as ἀχαπνα. Perhaps Orib. was concerned to have a strong and very soft flame (φλόγα μαλακωτάτην) without any troublesome smoke (cf. Thphr. HP 5.9.3-5). Besides being dried, wood that was required to be smokeless could be steeped in olive-lees and exposed to the sun (Cato Agr. 130, Plin. Nat. 15.34). Mart. (13.15) mentions smokeless
wood, and Hor. (S. 1.5.77-81; cf. Sen.Ep. 104.6) describes how he suffered at a villa near Triuicum from smoky green wood burning on the stove that brought tears to his eyes. A smokeless fire is a prerequisite in modern India: '... millions of Indian housewives ... depend upon dried cattle dung for cooking. When employed for this purpose, the dung produces a clean, steady, odorless flame that requires little attention and is well suited for simmering vegetarian dishes' (M. Harris, Good to Eat: Riddles of Food and Culture, London 1986, p.57).

δεδουλέων: This can refer to several cooking operations, from sprinkling (D.H. 7.72.17) to soaking (Pl.Lg. 782c4, Gal.Vict.Att. 6.32; see P. Chantraine, Dictionnaire étymologique, vol.1, Paris 1968, p.267), the root meaning being to add a thing to something else, as here (cf. X.Cyr.6.2.28).

7.2 χυμιῶν ὄμων: See Orib. 1.41.3n..

μέλιτος: On the cutting powers of honey see Orib. 1.12.3n..

τῶν θαλαττίων ἀλῶν: The best sea-salt came from Megara, Salamis in Cyprus, Sicily, and Libya (Dsc. 5.109.1, Plin. Nat. 31.84). The reason for it being mixed into the pancakes was to combat their costive and thick-juiced effect by its purgative, resolvent, cutting, and cleansing power (Dsc. 5.109.2, Plin.Nat. 31.98, Gal.Simpl.Med. 9.3.2=12.210-211K, 11.2.5=12.372-373K, Hp.Hum.comm. 1.12=16.129K, Cels. 2.23, Larg. 136, Orib.Syn. 4.28.11). On salt in general see Orib. 4.2.4n.; on sea-salt in particular see B. Edeine, 'Les techniques de fabrication du sel dans les sauneries pré et protohistoriques ainsi que gallo-romaines',
ABPO 82 (1975), pp.1-18, and in particular pp.7-8
where 'marais salants' and 'sel blanc obtenu par lavage de sablon et le procédé ignifère' are discussed
(the same technique is described by Tac. Ann. 13.57.2),
and pp.9-17 where the manufacture of salt on Papua New Guinea by heating brine in a special furnace is described
with the help of photographs.

πλακοῦντος τι γένος: πλακοῦς was a generic term for a flat cake (cf. Hippoloch. ap. Ath. 4.130c), in shape often like a marrow seed (Phan. Hist. ap. Ath. 2.58d), and regularly containing cheese (Suda s.v. πλακός, Ar. Asth. 1125, Theodorid. ap. AP 6.155.3-4, Epich. ap. Ath. 14.646b).

As with much ancient terminology it is difficult to be more exact, for certain cakes described as πλακοῦντες (e.g. λίβον, Ath. 3.125f; ἁμης, Ath. 14.644f.; ἁμευεῖα, Ath. 14.645a; γλυκίνας, Ath. 14.645d) do not have cheese listed as one of their ingredients, yet this does not categorically rule out the addition of cheese, for Ath. is not giving workable recipes for the most part but short lexicographical definitions, and cheese would be one of the obvious binding ingredients for these cakes in the absence of butter or fat. πλακοῦντες could also be shaped like breasts (Sosib. ap. Ath. 3.115a and 14. 646a; cf. K. Kourouniotes and H.A. Thompson, 'The Pnyx at Athens', Hesperia 1 (1932), p.196 for possible clay representations of these cakes). A πλακοῦς could be eaten with honey for heightened delectation (Archestr. ap. Ath.3.101d), and Parium on the Hellespont was famous for its πλακοῦντες (Ath. 14.644b).

7.3-5 καὶ γάρ οὖν ... μέλιτος πάντα: This constitutes the closing sentence of Gal.'s chapter on πέμματα (Alim.
fac. 1.3.2=6.491-492K), the only change Orib. makes being καὶ γὰρ οὖν for τοῖς ἀρνοῦν. On saturating similar cakes (mustēs Afrī, recipe in Cato Agr. 121) in honey see Apic. 7.13.2; see Orib. 1.8.4n. on the κρίβανον. διττὸν δὲ τῶν ἵπτισσιν ... σκευασθέντων: This section Orib. quotes almost verbatim from Gal. (Alim.fac. 1.4.1-3=6.492-493K), although unsurprisingly he omits a reference to Vict.Att. and the attenuating foods and drinks needed to free the passages of the body blocked by certain glutinous cakes.

δυνάμει: Presumably δύναμει (= 'soaps'?) in Raeder's text (p.10, 1.14) is a misprint (although cf. LSJ s.v.). Why δυνάμει were considered superior to λάγανα (see Orib. 1.9.1n.) is impossible to say, since both sorts of cakes appear to have been made of similar ingredients, and certainly they are usually listed side by side as having shared properties (Gal.Alim.fac. 3.14.13=6.687K, Bon. Mal.Suc. 4.10=6.768K), among which was their causation of blockages in the liver and lithiasis in the kidneys.

This frustration over pinpointing recipes is not confined to the ancient world: '... perché è anche altrove con lo stesso nome ma un altro ricetta o in una zona diversa e distante, senza nessuna sfumatura apparente di collegamento con l'altra? È una domanda che spesso si presenta, poi sfugge e non ci si pensa più' (O.P. Bozzi, La Lombardia in Cucina, Firenze 1982, p.9). The advice should be followed.

φλεγμαίνουσιν: See Orib. 1.53.4n. on inflammations. 
σκιρρουμένως: See Orib. 1.39.5n. on indurations.

7.6-7 ἐφώντων δὲ παρ’ ήμιν ...: Apart from omitting that it was many people in the country who boiled up wheat meal.
with milk, Orib. quotes word for word from Gal.'s chapter on πλυτός ἄρτος (Alim.fac. 1.5.2=6.494-495K; see Orib. 1.8.3n.). The proportions for boiling σκευίδαλις with water were 3oz of σκευίδαλις to 5 pints of water (Orib.Syn. 4.37.1; see also Dieuch.ap.Orib. 4.6.2 and n.). With either milk or water this preparation was hard to digest and bad-juiced (Gal.Vict.Att. 6.32).

8.1-3 ἄρτος ἄρτος ...: 'Optimus panis ac saluberrimus homini neque iuveni neque exercitato fuerit is qui plurimum fermenti, plurimumque salis habeat: quique plurimum sit subactus et elaboratus, et in clibanò moderate calido sit assatus' (Rasario, p.209). Orib. lifts his information here from the final part of Gal.'s chapter on ἱππιλ (Alim.fac. 1.4.4=6.494K; see Orib. 1.7.3-5n.) and the beginning of his chapter on πλυτός ἄρτος (see Orib. 1.7.6-7n.) with a few minor changes and omissions. The type of flour, the quantity of water, and the amount of kneading were all of importance to the final product (Hp. VM 14=1.600L). Bread was strengthening and nourishing (Gal.Hp.Acut.comm. 1.26=15.480K, Hp.Epid.6 comm. 3.2=17B.12K, cf. Gal.Hp.Salubr.comm. 2=15.177K), as well as being heating and drying (Gal.Hp.Salubr.comm. 2=15.179K), hence its external application to bring to a head and disperse boils (Gal.Simpl.Med. 10.2.16=12.289K). For heartburn and headache it was eaten hot dipped in unmixed wine (Hp.Epid. 2.5.18=5.130L, 2.6.30=5.138L). On the possible coarseness of Roman bread and grim comparisons with 1920's Yugoslavian and Indian peasant bread see N. Jasny, 'The Daily Bread of the Ancient Greeks and Romans', Osiris 9 (1950), pp.227-253; on the size of Pompeian loaves --- diameter 22cm., total height 5.8cm. divided
into 3cm. for the upper and 2.8cm. for the lower half

8.1 ἰητε νέψ: All the Mss. (Daremberg, p.22 and Raeder, p.11) read ἰη γεννάω, except for C² which has the reading ἰητε νέψ adopted by the modern editors. The mechanics of the error are interesting for the light they shed on another passage in Orib. (1.41.8 and n.) similarly corrupted by pronunciation. Although even in majuscules the two readings look very different (ΜΗΤΕΝΕΩ/ΜΗΓΕΝΝΑΙΩ), the sound once [T] had been changed to [Γ] through a simple copyist's mistake must have been the same: for by the 2nd and 3rd c. A.D. [au] was modified to its modern pronunciation of [ε] (see L.R. Palmer, The Greek Language, London 1980, p.177 and W.S. Allen, Vox Graeca, Cambridge 1968, pp.75-76), and the second [v] disappeared either through haplography or more probably through sense (γενναῖος or 'noble': a social division of foodstuffs could be possible here but is unlikely in view of Orib. 4.1.24n).

According to X. (Mem. 1.2.35) thirty was the age at which
one ceased being νέος, but Gal. is undoubtedly not being as precise as that. Roman life expectancy at the age of five has been calculated to between thirty-one and thirty-seven depending on the area of habitation (B. Frier, "Roman Life Expectancy: The Pannonian Evidence", Phoenix 37 (1983), pp.328-344).

In modern panification a sack of flour weighing 280lb requires between 4 and 7lb of salt. Salt helps retain the moisture in the baked loaf, too much making for a hard crust, and the shorter the rising time the more yeast and the less salt are needed (E. David, English Bread and Yeast Cookery, Harmondsworth 1979, pp.119-124). Gal. repeats his assertion here that bread containing only a little yeast and salt generated thick and viscous humours in older and poorly exercised bodies elsewhere (San. Tuend. 5.7.6-7=6.34K, Alim. fac. 1.2.7=6.485-486K, 1.7.4=6.499K). On yeast see Orib. 4.11.2n.

8.4-5 κάλλιστοι δὲ τῶν ἀρτων: This is taken by Orib. from Gal. (Alim. fac. 1.2.12=6.489K), omitting only the cross-reference to the making of κρίβανται with a lot of yeast and kneading (Alim. fac. 1.2.6=6.484K). A¹ has κιλβανίται (Raeder, p.11), and the orthography fluctuates in the Mss. between the two variants: κιλτ-, Gal.Simpl. Med. 11.1.26=12.347K, Sophr.ap.Ath. 3.110c, Hdt. 2.95.5, Artem. 2.10; κρι-, Dieuch.ap.Orib. 4.5.2, Poll. 6.88, Ar.Ach. 86, ap. Ath. 3.109f, Gal.Vict.Att. 7.54. Daremberg (p.563) presents a diagram to illustrate the difference between these two methods of cooking: the ἐπνος was a four-legged oven (see Orib. 4.5.2n.) whilst the κρίβανον or testu (cf. Gal.Simpl. Med. 11.1.26=12.347K, Col. 5.10.4, Arb.
19.2) was a dome-shaped cover (see B.A. Sparkes, 'The Greek Kitchen', JHS 82 (1962), p.128 and plate IV.2) which, after it had been heated (cf. Cato Agr. 76.2), was placed over the dough that was laid, sometimes on leaves, on the hot patch of floor from which the coals had been removed (see also J.M. Frayn, 'Home-baking in Roman Italy', Antiquity 52 (1978), pp.29-30). The coals were then heaped over the sides of the cover. A similar method of cooking still finds favour in the Mediterranean world today (A. MacMadhachain, Spanish Regional Cookery, Harmondsworth 1976, p.178 and K. Andrews, The Flight of Ikaros, Harmondsworth 1984, p.203: '... then (we) kneaded some dough and put it on a tile in the coals to bake ...'). 

κρυβανιτα were considered superior to ιπνιτα (Gal.Bon.Mal.Suc. 2.3=6.759K, Vict. Att. 6.32) because they were good for the stomach, easily digested, readily assimilated, and of an excellent savour (Philistion ap.Ath. 3.115e).

ἐπὶ τῆς ἑσχάρας: ἑσχάρα was the term for a brazier (B.A. Sparkes, 'The Greek Kitchen', JHS 82 (1962), p.129 and plate V.3), used either for heating a room (Plu.Mor. 180e) or for general culinary purposes for cooking fish (Gal.Alim.fac. 3.29.14=6.725K) and βολβοί (Gal.Alim.fac. 2.64.3=6.653K) to baking bread as here. Poll. (6.78) places ἑσχαρίτης from Rhodes midway between ἄρτος and πλακοῦς, whilst Hsch. (s.v. ἑσχαρίτης) confuses it with ἄρτος ἐγκρυπτος. The steam from the drying made brazier-bread rather unwholesome (Philistion ap.Ath. 3.115e) and its tendency to get burnt caused it to be held less nourishing than ἱπνιτα (Hp.Vict. 2.42=6.540L). Nevertheless it was enjoyed as a delicacy (cf. Crobyl.ap.Ath. 3.

κατὰ Θερμὴν τέφραν: See *Orib.* 5.4.4n.

8.6 μετὰ δὲ τούς πυρίνους . . . : *Orib* derives this sentence from *Gal.* (*Alím.*fac. 1.13.18=6.518K), but why he appends it to this chapter when he quotes it further on (1.13.1 and n.) with greater accuracy and in its proper place can only be ascribed to carelessness.

9.1 τὸ τῶν ἱππίων: On these cakes see *Orib.* 4.7.33n.

τὸ τῶν λαγάνων γένος: The λάγανον was a light (ἐλαφρός, hence *Ath.*Med.‘s λεπτός) cake or πλακοῦς (*Ath.* 3.110a, cf. *Orib.* 1.7.2n.), perhaps rather crisp (cf. *Diocl.*ap.*Ath.* 3.110b and K. Schneider, *'Laganum‘, *RE* (1924), col. 455; but in contrast *Cels.* 8.7.6 who recommends *lagana* as food for patients who are unable to chew anything hard when their jaw has been fractured, and also *J.* Solomon, *'Tracta: A Versatile Roman Pastry‘, *Hermes* 106 (1978), pp.548-549), made from σεμίδαλις, and fried in olive-oil (*Hsch.* s.v. λάγανα, *CGL* 5.505.21, cf. *J.AJ* 7.86 λάγανον τηγανιστών); the dough was unusually unleavened (but leavened in *Cael.*Aur. *chron.* 2.13.177, who may however be applying the term loosely) and could include milk, cheese, honey (*Gal.*Bon.*Mal.*Suc. 4.10-11=6.768K, *Alím.*fac. 1.4.1=6.492K), pepper and *Liquamen* (*Sch.*Hor.*S.* 1.6.115).

*Chrysipp.* Tyan. (ap.*Ath.* 14.647e) details a similar recipe for *catillus ornatus* made by kneading mashed lettuce, flour, pork fat, wine and pepper together, and frying thin strips of this mixture in olive-oil. The λάγανον was eaten with meat and vegetables, especially in winter (*Gal.*Hp.*Nat.*Hom.comm. 1.35=15.90K), although it caused kidney stones and blockages in the liver (*Gal.**Alím.*fac.
3.14.13=6.687K; on blockages in the liver see Orib. 1.53.4n.).

ἀχυλότεροί: Distinguished from dryness (ἲπρότεροι, Ath. Med. ap. Orib. 1.2.14, Thphr. CP 6.19.4), ἀχυλός means 'without flavour' (cf. Plu. Mor. 668f) rather than 'without juice' (see also Orib. 1.17.1n. on χυμός), and was associated with paucity of nourishment and lack of palatability (Diph. Siph. ap. Ath. 2.69f, Xenocr. ap. Orib. 2.58. 20, Diocl. ap. Orib. 4.3.4).

9.2 οἱ κάτωπτοι: Over-baked (contostum, CGL 2.346.29, cf. Archestr. ap. Ath. 7.320b, Dsc. 5.158) along with twice-baked bread would naturally nourish less as the essential juices would have been driven off by the heat as Ath. Med. says. Instead of κατ-, ἐξ- was sometimes employed as an intensifying prefix for ὀπτός (Hp. Int. 42=7.270L, VM 14=1.600L).

δίπυροι: Twice-baked bread (cf. Hsch. s. v. δίπυροι ἄρτοι; also διπυρίτης, Phryn. Com. ap. Poll. 7.22) was served hot on its own (Eub. ap. Ath. 3.110a) or with sliced egg (Alex. ap. Ath. 12.516e). Hp. (Int. 25=7.230-232L) probably felt the same as Ath. Med. about the nutritional value of twice-baked bread since he prescribed it in cases of dropsy of the spleen, no doubt as a bland food devoid of exacerbating qualities (cf. Dieuch. ap. Orib. 4.7.13-14 and n.), but perhaps too as a drying food. The Suda (s. v. παξαμᾶς) glosses παξαμᾶς as a Latin term for διπυρος ἄρτος, and here there is a clear survival of an ancient recipe transmitted by peasants and monks of the Orthodox Church to modern times (cf. Cassian. Inst. Cen. 4.14 and P. Leigh-Fermor, Roumeli, Harmondsworth 1983, p.
216), for παξιμάδια are still eaten in Greece today:
'Reaching into the hollow of the log, he (Yorgo) extracted three paximadia from the spring and wrapped them in a cloth to draw the water out before they got too soggy. These dark brown pumices of twice-baked bread --- the staple fare of Greek shepherds and of the medieval Basilian hermits --- can be kept for months. Hard as fossils, they are excellent; especially with garlic, when soaked to the right consistency. (The baked oblongs are fluted with deep clefts for easier baking...)


Gal. (Rem. Par. 3=14.554K, cf. 3=14.537K on παξιμάδιων ψάθαρτικά) mentions παξιμάδιον eaten with lamb, bread, and wine as part of a special diet; P. Leigh Fermor (Houmelí, Harmondsworth 1983, p.130-131) describes a meal of beans, lentils, cooked snails and herbs, 'twice-baked herdsman's bread that must be soaked in water or goat's milk before it is eaten', toasted goat's cheese, raki, wine, and walnuts, which with the exception of raki could be a description of an ancient repast (on the preparation of παξιμάδια see also C. Connell, In the Bee-loud Glade, Nafplion 1980, p.58 where small loaves of bread called πιούλοι are broken into five pieces and replaced in the oven until the following morning).

Ath.Med.'s twice-baked bread is unusual in that it is not just baked twice but kneaded twice.

9.3 οἱ θερμοὶ καὶ πρόσωπατοι: Opinion was divided over hot fresh breads, some physicians (e.g. Hp.Acut. lo=2.300L) labelling them the cause of thirst and sudden satiety, others (e.g. Philistion ap.Ath. 3.115d, Anthim. 1, Sim. Seth. s.v. ἄρτος = p.19 Langkavel) singing their digesti-
bility and excellent nourishment. Heat of course was regarded as an essential part of the process of digestion (Hp.Aff. 61=6.268L, Gal.Nat.Fac. 2.4=2.89K).

10.1 οἱ μὲν πυροὶ ... γεννῶσι θυμημὸν: This is an abrupt précis of Gal.Alim.fac. 1.9.1-2=6.501K) with the details concerning wheat in contrast to barley being removed, Orib. obviously regarding what he had already said on the subject (1.1 and 2) adequate. Barley was generally held to be cooling (Hp.Vict. 2.40=6.536L, Gal. Ptis. 3.1=6.819K, Alim.fac. 1.1.37=6.474K, Hp.Epid.6 comm. 5.33=17B.303K, Comp.Med. 3.2=13.569K, Hp.Acut. comm. 1.29=15.484K, Orib.Syn. 4.32.1, [Anthim.] 2) and purgative (Gal.Simp.med. 5.12=11.754K, 7.10.53=12.44K, Bon.Mal.Suc. 7.4=6.790K, Vict.Att. 7.45). Externally barley was used in soothing poultices for such ailments as headache (Marc.med. 1.62, Cael.Aur.acut. 3.3.14), whilst poultices made from wheat were regarded as heating (Gal. Simpl.med. 8.16.42=12.111K).

πτισδύνη: Gal. continues his chapter on barley (Alim. fac. 1.9.3-7=6.501-504K) with a careful disquisition on the different ways of preparing πτισδύνη, some to be praised, others to be execrated, and Orib. elsewhere sums up the information omitted here (4.1.16-21n.).

E. Darmstaedter ('Ptisana: Ein Beitrag zur Kenntnis der Antiken Diätetik', Arch. 15 (1933), pp.181-201) defined ptisana as a Schleimsuppe which could be diluted and drunk cold. In the course of his experiments he found that a proper ptisana could only be made with hulled barley, because in this way alone can an even suspension of the particles in water, or in other words a smooth emulsion, be achieved. Even after boiling for six hours
or more the grains as such are still there, but in a somewhat soft condition, and the *chylos* or emulsion has to be separated from these grains by sieving; without sieving the product equalled *πισκόνη παχεία* (cf. *Hp.Epid.* 2.6.3=5.132L). The medicinal effects of barley have been noted in modern times, *Gerstenzucker* in Germany being administered for hoarseness and light catarrh especially in children, and *tisane d'orge* in France being considered a refreshingly cooling drink (cf. lemon barley water). The cooling properties of *πισκόνη* made the soup an effective weapon in the ancient armoury against fever (*Gal.Ptis.* 5.9=6.825K, *Hp.Acut.*(Sp.) 8=2.428L). P.T. Makler ('New Information on Nutrition in Ancient Greece', *Klio* 62 (1980), pp.317-319) argues from modern evidence that the frequent references to kidney stones in children in the Hippocratic Corpus was a result of *πισκόνη* being administered as a substitute for milk.


10.2 ο̄ δ' ἄρτοι ... τοὺς σῶμαςιν: This brief extract comes from a much longer chapter devoted to barley breads (*Gal. Alim.fac.* 1.10.1=6.504K). Barley grain can prove difficult to free from its husk, and ancient methods of
doing this involving roasting destroyed the gluten (i.e. γλύσχον) needed in making leavened bread (G.E. Rickman, The Corn Supply of Ancient Rome, Oxford 1980, p.5), hence Gal.'s use of the word ψαθυρότερον (cf. Orib. 4.2.8n.) to describe barley breads. Nevertheless bread was baked from barley (X.An.4.5.31, Luc.Macr. 5, Gp. 7.26.4, 9.23.5), although reactions to it were not generally favourable: Sen. (Ep. 18.10) says frustum hordeacei panis was not a uoluptas, and Cels. (2.25.1) numbers it among the foods that were aliena ... stomacho. It contained little nourishment (Dsc. 2.86.1, Orib. Syn. 4.13.5, Gal.Vict.Att. 6.38, Arist.Pr. 927al7-18) and was ranked behind wheat and millet bread as regards nutritional value (Cels. 2.18.4, Diph.Siph.ap.Ath. 3.115c), Plin. (Nat. 18.74) going as far as to state that by his day it had been condemned by experience and that both it and the grain were mostly fed to animals: Var. (R. 2.9.10, cf. Gp. 19.1.5) mentions panis hordeacius as dog food, and there are numerous references to barley as cattle fodder (e.g. Var.R. 2.8.2, 3.17.6, Apul.met. 4.22, Col. 6.3.3, 6.37.8).

1.11 τῶν κρωθῶν: Gal. (Vict.Att. 6.44, cf. ap.Orib. 1.1.15) records a κρωθή γυμνή that was sown in Cappadocia, and Ath.Med.'s assurance that it was of superior value as nourishment compared to other types of barley may be because it did not need to be so heavily processed. Orib. probably included this fragment of Ath.Med. because it is more positive in its approach to barley than the extract from Gal., but not contradictory, and barley was by no means ignored as a food: with pork and figs (Apic. 7.10), and to make polenta with flax-seed, coriander,
and salt (Plin. *Nat.* 18.72-73), and of course μᾶξα (see Orib. 1.12.2n.). The garrison at Vindolanda was issued with barley as part of its rations (A.K. Bowman and J.D. Thomas, *Vindolanda: The Latin Writing Tablets*, Britannia Monograph 4 (1983), tablet 4, line 43 (p.89).

11.2 δίστιχοι ... μονοστίχων: μονόστιχος was usually taken as a term referring to an epigram consisting of a single line of verse (e.g. Lucil. *ap. AP* 11.312.3, Cyril. *ap. AP* 9.369, Plu. *Pomp.* 27.3, Draco s.v. κηρυξ = p.56 Hermann), and its use here to refer to one-rowed barley appears to be unique, whilst δίστιχος was commonly applied to barley with two rows (Plu. *Mor.* 906b, Thphr. *HP* 8.4.2), otherwise known as *Galaticum*, which was excellent as a food when mixed with wheat (Col. 2.9.16). The largest number of rows was six, and this variety of barley was called *hexastichum* or *cantherinum* (Col. 2.9.14, cf. Pall. 10.4; A. Oliva ('I frumenti, le leguminosa de granella e gli altri semi repertati a Belverde', *SE* 13 (1939), p.346 and Plate XIX.3) records the grains of *Hordeum tetrastichum* and *hexastichum* found in some caves inhabited in prehistoric times near the *Lago di Chiusi*). Daremberg (p.565) thought it probable that Ath. Med. counted only the rows found on one side of the axis of the ear, so that μονόστιχος and δίστιχος refer to barley with two and four rows respectively.

τῶν πυρρῶν: The Mss. are unanimous in their reading of τῶν πυρρῶν which Raeder (p.12) deletes from his text. Daremberg (p.565) too states that 'la leçon πυρρῶν ... était complètement inadmissible', considering that Thphr. (*HP* 8.4.2) applies the adjective διστιχος to wheat in contrast to the grains of barley in their regu-
lar rows, and he presents the simple emendation τῶν πυρρῶν: 'On s' étonnera peut-être qu'il soit ici question d'une orge rousse, mais Théophrasie (HP 8.4. 2, cf. also Plin. Nat. 18.78) parle aussi d'une καρδή ἐπιμπορφυρίζουσα'. A case of haplography is an easier explanation than the inclusion of an otherwise -- at least in this context -- nonsensical word.

12.1 περὶ ἀλφίτων: By the 4th c.B.C. ἀλφίτα and ἀλεύρα were firmly associated with barley and naked wheat respectively (L.A. Moritz, Grain-Mills and Flour in Classical Antiquity, Oxford 1958, p.149), and for Gal. ( Hp.Prog. comm. 2.28=18B.151K, Ling.Hp. Expl. =19.76K) and his contemporaries ἀλφίτα were 'barley-groats', that is whole grains with the hulls removed or the relatively large particles which resulted from a rough crushing of these grains (L.A. Moritz, "Ἀφιτα - A Note", CQ 43 (1949), pp.113-117). Orib. paraphrases Gal. (Alim.fac. 1.11.2=6.507K) for this sentence, omitting that it was the Roman army that discovered barley-groats through experience to be deficient in nutriment (cf. Gal.Vict.Att. 6. 38). Barley-groats did not have the same excellence as πτισάνη with respect to εὐχυμία or the preservation of health (Gal.Bon.Mai.Suc. 7.2=6.790K), and they were costive (Dsc. 2.86.3), yet were still found useful as a food (X.Mem. 2.7.5), sometimes sprinkled on wine (Hegesand.ap.Ath. 10.432b). See also Orib. 4.1.7-10n.

12.2 ἢ δὲ μᾶζα: Orib. draws this extract from Gal. (Alim.fac. 1.12.3=6.509K) with some alterations. Gal. takes up the first part of his chapter (Alim.fac. 1.12.1-2=6.508-509K), which Orib. omits as being too general, with a summary of the laxative effect bran has on the stomach,
and prefaces the part Orib. uses for his work by the statement that a person who has absorbed the preceding information will immediately realize that the nourishment in μᾶζα falls short of that in barley bread, and a reason too is offered for μᾶζα being less digestible than barley bread, namely that anything parched is drier and harder to break up (δυσθραστότερον). μᾶζα was carefully distinguished from bread (Hp. VM 8=1.588L, Ar. Ec. 606) as here in Orib., but the difference is not altogether clear: L.A. Moritz (Grain-Mills and Flour in Classical Antiquity, Oxford 1958, p.150) thought that bread was baked and μᾶζα was not, whilst E. Darmstaedter ('Ptisana: Ein Beitrag zur Kenntnis der Antiken Diätetik', Arch. 15 (1933), p.188) believed μᾶζα was baked to produce a kind of unleavened bread or Fladen, fairly thick, dry, and brittle. μᾶζα means a 'lump' (Lat.offa, CGL 2.363.55) and is connected with μᾶσσω, 'knead' (P. Chantraine, Dict. Etym., vol.3, Paris 1974, p.657), usually an essential part of the preparation (Hdt. 1.200, Ath. 14.663d, Ar. Pax. 16, Sch. Theoc. 4.34), but (Hp. (Aff. 52=6.260L) records an unkneaded μᾶζα. The basic ingredients were barley meal (Σίτος) and milk (Sch. Ar. Pax. 1, Suda s.v. μᾶζα), and so μᾶζα is described by Philox. (ap. Ath. 4.147a) as χλοουχόςς. However, μᾶζαι could also be seasoned with oxymel or hydromel (Erot. s.v. μᾶζα =p.60 Langkavel), with Nose-smart (μάρδαμον, Lepidium sativa L., Hsch. s.v. μάρδαμαλή), mixed with honey to produce μελιτόττα (Ar. Nu. 507 and Sch. ad loc., Lys. 601, cf. Hp. Int. 20=7.270L), and kneaded with lettuce for θριάκην (Luc. Lex. 3, cf. Ath. 14.647e) or must (γλεύκον, see Orib. 1.41.8n.) for οίνοττα (Ar. Pl. 1121 and Sch. ad loc.,
these cakes are still eaten in Greece today under the name of μουσταλευρία (A. Karpozelos, 'Realia in Byzantine Epistolography', Byz 77 (1984), p.27); see Poll. 6.76 and Ath. 3.114e for other sorts of μᾶζα. Gal. (Hp.Salubr.comm. 4=15.182X) remarks on a 'soft' μᾶζα which was eaten in summer along with boiled fowls and watery drinks to help keep the body cool. Although there are no references to baking, it would seem unlikely that such a mixture was eaten raw as Moritz suggests, and ancient recipes are not renowned for stating the obvious; rather the difference between μᾶζα and κρῶτινοι ἄρτοι must lie in the former being unleavened and the latter leavened, following Darmstaedter. μᾶζα could cause flatulence (Hp.Acût. 10=2.298-300L) and was of little nourishment (Gal.Hp.Epîd.6 comm. 3.2=17B.12K), while the effect of μᾶζα on the bowels could be varied by light or prolonged kneading of the dough (Hp.Vict. 2. 40=6.536-538L). μᾶζα was eaten with ὅψα such as pickled fish cooked in ὑπότριμμα (see Orib. 4.2.14n.) and young lamb for moistening the bowels (Hp.Aff. 43=6.252L), with olives (Telecl.ap.Ath. 2.56d), with cheese (Harmod. ap.Ath. 4.149a), and with ἐτύνος, chickpeas, dried figs, πόπανα and must at a wedding feast (Theophyl.Simoc.Ep. 44).

12.3 εἰ δέ καὶ μέλι προολάβοι: The best honey was Attic (cf. Larg. 57, 70, Seren. 269), and especially that from Hymettus, after which followed that from Chios, Siphnos, Cythnos and other islands of the Cyclades (e.g. Cos and Calymnos, Str. 10.5.19, Ov.Met. 8.222), and that from Lilybaeum in Sicily and Oechalia in Boeotia (Ruf.ap.Orib. 2.63.3, Dsc. 2.82.1, Gp. 15.7.1, Plin.Nat. 11.32). Its

13.1 οἱ μὲν οὖν ὄλυρινοι: Daremberg (p.556) remarks on this phrase as one of the many proofs of the negligence (cf. 1.8.6n., 1.50.2n.) with which Orib. sometimes made his extracts, since to find ἄρτοι to which the adjective ὄλυρινοι refers one must go all the way to sect. 2 (ὁ φάγων ἄρτοι), whilst in Gal. it is found in the immediately preceding phrase. The fault, if it can be called as much, lies in Orib. copying word for word from Gal. (Alim. fac. 1.13.18-21=6.518-520K) with only a few omissions. ὄλυρα was emmer (Lat. far: N. Jasny, Wheats of Classical Antiquity, Baltimore 1944, pp.112-133; there is a photograph of emmer or Triticum dicoccum Schrk. in E.S. McFadden and E.R. Sears, 'The Origin of Triticum Spelta and its Free-Threshing Hexaploid Relatives', Journal of Heredity 37 (1946), p.83, fig.7), and it was grown in large quantities in Asia (Gal. Alim. fac. 1.14.1=6.552K). Although breads were made from emmer (Dsc. 2.91, Trypho ap. Ath. 3.109c, cf. Hdt. 2.36.2), it was considered an inferior cereal to naked wheat (Gal. Vict. Att. 6.41, Bon. Mal. Suc. 7.8=6.791K, Diocl. ap. Gal. Alim. fac. 1.13.4=6.512K) being relegated to the same class as oats (Thphr. HP 8.4.1).

οἱ τιφυνόντες: 'Bread made from einkorn' (N. Jasny, Wheats of Classical Antiquity, Baltimore 1944, pp.109-111); this cereal was sown alongside emmer (Gp. 3.3.12, Gal.
Alim.fac. 1.14.1=6.552K, cf. Plin.Nat. 18.81). Einkorn was placed after emmer in order of excellence (Gal.Bon. Mal.Suc. 7.8=6.791K), perhaps because it was difficult to digest (Gal.Vict.Att. 6.40; the flour from einkorn is also much darker than the flour from most other wheats, Jasny p.50), although Mnesith (ap.Ath. 3.11f) opined that bread made from einkorn was digested with little trouble and afforded adequate nourishment (cf. Arist.HA 603b25-26 on einkorn as pig food). Besides being made into bread (Trypho-ap.Ath. 3.109c), einkorn was eaten boiled in eaten with sweet wine or ἠψήμα or οἶνομέλι for those coughing up bilious matter (Alex. Trall. 5.6=2.213 Puschmann); it was heating (Orib.Syn. 4.31.1).

13.4 ἐκλισθέντες: See Orib. 4.2.8n..

Θερμός δ' ὅν ἔτι: 'quum vero adhuc calidus est, ab ipsis etiam urbanis expetitur, eumque cum caseo quodam familiari comedunt, quem oxygallactinum vocant. Ergo hic calidus commanducatus non modo arusticis, sed etiam ab ipsis urbanis indeliciis habitur' (Rasario, p.210).

ὀξυγάλακτινον: A fresh cheese, popular in Pergamum and the surrounding area of Mysia, which was pleasant to eat, harmless to the stomach, and less hard to digest and pass than other cheeses (Gal.Alim.fac. 3.16.3=6.697K, Simpl.Med. 10.2.9=12.272K, cf. Orib.Syn. 4.2.4).

It was probably a curd or cottage cheese, similar to Italian ricotta ('... ricotta is another cheese which must be eaten fresh', E. David, Italian Food, Harmondsworth 1963, p.43), which was quickly made by draining the whey from curdled milk using fisci or fiscellae (cf. Longus 3.33.2, Col. 7.8.3), small baskets or frails...
fabricated from withes (J.M. Frayn, *Sheep Rearing and the Wool Trade in Italy during the Roman Period*, Liverpool 1984, p.131). ὀξύγαλα was customarily produced from sheep's milk (cf. Ctes. ap. Phot. Bibl. 72.48a8, Aeschylides ap. Ael. NA 16.32 and J.M. Frayn, *Subsistence Farming in Roman Italy*, London 1979, pp.39-43, although there it is stressed that the question of whether the Romans used chiefly sheep's milk or cow's milk, and which they preferred, is 'somewhat otiose'), sometimes seasoned with marjoram, mint, onion, aniseed, thyme, and coriander, either left in a sealed pot for several days until it had soured, at which point the whey was drained off (Col. 12.8.1-2), or more simply curdled with sharp vinegar (Gp. 18.21). The resulting curds could be stored in olive-oil or wrapped in terebinth leaves to keep soft (Gp. 18.12.3), and because they were a cooling food (Gal. Bon. Mal. Suc. 13.2=6.811K, Meth. Med. 7.4=10.468K, Alex. Trall. 7.3=2.261 Puschmann, Aët. 2.98), the cheese made from them was no doubt cooling too, hence complementing the hotness of the bread. Cheese was a popular accompaniment with bread (Longus 2.18). Oxygala was suitable eaten with honey (Anthim. 78, Philox. ap. Ath. 4.147e). E. Newby (A Short Walk in the Hindu Kush, London 1981, pp.186-187) records that the not dissimilar Afgan quaimac -- the thick yellowish crust that forms on cream -- when mopped up with bread hot from the oven is delicious (on quaimac/qymak see H. Saberi, Noshe Djan: Afgan Food and Cookery, London 1986, p.38).

13.5 ὑπόθερμον: A drink (Hp. Mul. 1.44=8.102L, 2.207=8.402L) and a synonym for starch (Sch. Theoc. 9.21) and a sort of pudding made with alica or χόνδρος, pine-nuts, almonds,
raisins, reduced wine, and pepper (Apic. 2.2.10 and J. André ad loc., Paris 1974, p.148: 'L' apothermum est ... une bouillie ou un gâteau de semoule mélangée de vin de liqueur'); the latter seems to be closest to what Orib. is saying here, particularly in view of the reference to σώραυον (for this reduced wine preparation see Orib. 4.1.21n.).

13.6 τὴν δ' εὐγενεστάτην ... τράγον ποιοῦσιν: This method is repeated elsewhere by Orib. (4.1.1 and n., cf. 1.8.6n.).

The method of cooking something in one liquid which is then poured away and another liquid added can be parallel-ed by a recipe for rice in Anthim. (70) and by a recipe for Ὑρών (Sch.Ar.Eq. 954). Apic. (7.13.4) details a more elaborate concoction than Gal.'s here using pepper, honey, wine, passum, rue, pine-nuts, walnuts, alica or χόνδρος, and hazelnuts, whilst Cael.Aur. (chron. 2.13.178) mentions pine-nuts boiled with ptisana for flavour-ing. On pine-nuts see Orib. 4.7.27n..

14 περὶ βρόμου: Orib. takes his information on oats from Gal. (Alim.fac. 1.14=6.522-523K), ignoring as irrelevant to diet Gal.'s initial statement (Alim.fac. 1.14.1=6.522K) that oats grew abundantly in Asia and especially in the area of Mysia around Pergamum. Oats were often employed as cattle fodder (Gp. 18.2.6, Col. 2.10.24, 2.10.32, Hsch. s.v. βόρμος, Plin.Nat. 18.143, cf. Var. R. 1.31.4), but references to their culinary use are few: in an indigestible bread (Orib.Syn. 4.17.9), to make a sort of wine (Gp. 7.34.1), as one of the offerings in honour of Dionysus (Polem.Hist.ap.Ath. 11.478d), and as the staple food of the inhabitants of the Oeonae islands (Plin.Nat. 4.95, Mela chorogr. 3.56). This
reticency can be ascribed to the lowly position held by oats in the ranks of the cereals (cf. Ed.Dioec. 1.17 and J. André, L' Alimentation, Paris 1981, p.54) rather than their lack of cultivation: Thphr. (HP 8.4.1, 8.9.2, CP 4.6.3) and Plin. (Nat. 18.205) discuss their many-coated seeds, their exhaustion of the soil, and the times of sowing, whilst Serv. (ad Verg.E. 5.37) remarks that oats were 'in Thracia fructuosae', and in fact they generally thrive best and give the highest yields in cool climates (see W.M. Findlay, Oats: Their Cultivation and Use from Ancient Times to the Present Day, Edinburgh 1956, p.1), which may too have meant their being ignored by agricultural writers engrossed by more tasty comestibles. In addition to cultivated oats (Avena sativa L.) barren oats (A. sterilis L.) are also mentioned for the damage they wreaked on wheat and barley (Cic.Fin. 5.91, Verg.G. 1.154, Dirae 15, Calp.ecl. 4.116, Symm.rel. 3.16, Cato Agr. 37.5). Oats were heating (Orib.Syn. 4.31.1) and of the same power as barley (Gal.Simp.Med. 6.7.17=11. 855K: on barley see Orib. 1.10.1n.). See also Orib. 4.7.20n. on oats.

14.1 λιμώττοντες: See P. Garnsey and C.R. Whittaker (edd.), Trade and Famine in Classical Antiquity, Cambridge 1983, esp. pp.6-16 ('Famine in the Greek World') and pp.56-65 ('Famine in Rome'). It was generally the people in the country who starved after a bad harvest whilst city dwellers were cushioned by grain stored in government granaries or in private hands, for the tax collector and landlord during the imperial period extracted their due from peasants with ruthless efficiency (A.H.M. Jones, The Later Roman Empire 284-602: An Economic and Admini-
strategic Survey, Oxford 1964, vol.2, pp.810-811; cf. Lib. Or.18.293, 27.6, Gal.Alim. fac. 2.63.2=6.652K). Famine as a consequence of successive droughts faced the people of 3rd and 4th c.A.D. Palestine, and as early as the 2nd c.A.D. a gradual diminution in rainfall was noted, a climatic fluctuation rather than a permanent condition since there have been no significant climate changes in Palestine over the past 2,000 years (D. Sperber, Roman Palestine 200-400 The Land: Crisis and Change in Agrarian Society as Reflected in Rabbinic Sources, Ramat-Gan. 1978, pp.70-99). Some ancient references to famine are collected in M. Rostovtzeff, The Social and Economic History of the Roman Empire, 2nd edn. (rev. P. M. Fraser), Oxford 1957, p.598, n.9).

15 έλυμοσ: Italian millet or panic (Seteria italicica L.), which as stated here was sometimes called μελάνη (Gal. Bon.Mal.Suc. 7.9=6.791K, Alim. fac. 1.30.2=6.548K, cf. Ar. ap.Poll. 6.61, Orib.Syn. 4.15.8), was extensively sown (X.An. 1.2.22, Str. 12.3.15, Plb. 2.15.2) and eaten both as a food and as a medicine (Alex.Trall. 5.5=2.209 Puschmann, Hp.Mul. 2.110=8.236L, Hsch. s.v. έλυμος), although considered less nourishing than millet (Dsc. 2.98, cf. Gal.Alim. fac. 1.30.2=6.548K).

περί κέγχρου: Orib. takes this passage almost without change from Gal. (Alim. fac. 1.15=6.523-524K), the omission of the fact that there was nothing oily or viscous in millet bread (Gal.Alim. fac. 1.15.1=6.523K) no doubt being considered justified since it is clearly stated that such bread was κραύρος τε καὶ ψάθυρος, whilst the final two sentences of Gal.'s chapter (Alim. fac. 1.15.3=6.524K) are on the subject of milk and thus are of no
immediate interest to Orib. Bread was made from millet (Trypho ap. Ath. 3.109c, Gal. Bon. Mal. Suc. 5.3=6.782K, Porph. VP 34, Plin. Nat. 18.100, cf. Ov. Fast. 4.743 libaque de milío) and to a lesser extent from panic (Plin. Nat. 18.54) which was particularly good eaten hot (Col. 2.9.19). Millet was cooling (Gal. Simpl. Med. 7.10.15=12.16K, Hp. Epid. 6 comm. 5.33=17B.302K, Hp. Acut. comm. 4.96=15.898K) and drying (Gal. Hp. Acut. comm. 2.6=15.525K, Paul. Aeg. 7.3 s.v. Μϋχρος) and hence when prepared as a porridge checked the bowels (Dsc. 2.97, Plin. Nat. 22.130, Cael. Aur. chron. 2.7.104-105, cf. Hp. Vict. 2.45=6.542L, Cael. Aur. chron. 2.13.174), especially when boiled with goat's milk (Plin. med. 2.6, Anthim. 71). Millet soup (βόνιμα, see Orib. 4.7.21n.) was employed in medicine (Hp. Morb. 2.19=7.32L, 2.42=7.60L) and the grain was applied hot in a linen bag for aches and pains (Plin. Nat. 22.130, cf. Alex. Trall. 8.2=2.343 and 361 Puschmann). On the growing of millet, and its use as an emergency crop because of its speed of growth and tolerance of marginal conditions see: M. S. Spurr, 'The Cultivation of Millet in Roman Italy', PBSR 51 (1983), pp. 1-15; on millet in general see Orib. 4.10n..

15.2 το δ' ἄλευρον ἑψωντες: This recipe resembles the plainly boiled polenta or yellow maize flour of northern Italy, on its own a 'dull and rather stodgy' food (E. David, Italian Food, Harmondsworth 1963, p. 137), but when left to go cold and then fried in olive-oil, or baked in the oven with a sauce (cf. 'Polenta al Sugo' in E. Romer, The Tuscan Year, London 1984, p. 143) a quite tasty dish. O. P. Bozzi (La Lombardia in cucina, Firenze 1982, pp. 114-115) details a recipe calling for 'g. 500 di farina di
frainz, g. 500 di farina bianca, litri 1 di latte intero, litre 3 di acqua, g. 300 di burro, sale g. 400 di formaggio fresco di Valtellina a cubetti'.

15.4 μετὰ γάλακτος: Milk has two uses, one as a food and the other as a medicine (Gal. SimpI. Med. 10.2.7=12.263K). It is found frequently in ancient recipes: with chicken (Apic. 6.8.11), puddings (Apic. 7.13.3, 7.13.18), kid (Apic. 8.6.11) and κυκέωνες (Hp.Vict. 2.41=6.538L). It contained good juices (Gal. SimpI. Med. 2.14=11.495K), and was sweet and nourishing (Ath. 2.46e, Dsc. 2.70.1, Plin. Nat. 28.123, Aret.CD 1.8.1-2=24A.323-324K, CA 2.7.4=24A.279K), hence Gal.'s assertion here that millet mixed with milk was beneficial εἰς εὐχυμίαν.

16 περὶ ὁρύζης: Using as his source Gal. (Alim. fac. 1.17=6.525K), Orib. omits that πάντες used this seed for checking the stomach, that they employed a cooking method similar to the one used for χόνδρος, and that it provided less pleasure for the palate than χόνδρος. This reflects his usual disinterest in Gal.'s culinary information. The views represented here are orthodox: rice being of a certain astringency (Cels. 2.24.1, Aret.CA 2.2.17=24A.255K) checked the bowels (Dsc. 2.95, Gal. SimpI. Med. 8.15.16=12.92K, Cael.Aur. Aquit. 1.17.177, Anthim. 70, Alex. Trall. 9.3=2.427 Puschmann; cf. Theod.Prisc. log. 64, Marc.med. 20.25, Aret.CA 1.10.6=24A.234K on rice being dried) was prepared in the same way as χόνδρος (Megasth. ap.Ath. 4.153d, Thphr.HP 4.4.10), was moderately nourishing (Dsc. 2.95), and was difficult to digest (Sim.Seth. s.v. ὁρύζα=p.75 Langkavel; but for an earlier opposing assertion of ease of digestion see Thphr.HP 4.4.10). It was no doubt its blandness (Cels. 4.14.2) that disap-
pointed Gal.'s taste-buds. Nevertheless, it was used to make ὀρίνονης bread (S.ap.Ath. 3.110e, despite Gal. (Alim. fac. 1.16=6.524K) saying that bread cannot be made from certain ὀρινοία including rice) and πλακοῦς (Chrysipp. Tyan. ap. Ath. 14.647d), as a thickening agent in sauces (Apic. 2.2.8 and 9, Vinid. 7), as one of the ingredients for the stuffing of ὄριον (Sch. Ar. Eq. 954), and by the Indians boiled as a sort of ὑπάνα (Plin. Nat. 18.71) and fermented into wine (Ael. NA 13.18).


17 περὶ φακῶν: Orib. copies here from Gal. (Alim. fac. 1.18. 1-4=6.525-526K), the omissions and changes being as follows: there is no reference to Gal.'s opening statement that bread could not be made from lentils because they were ἄλιπες ... καὶ ψαθυροί (but in contrast Sopat. ap. Ath. 4.158e, φακῶν ἀρτοὺν), and Gal.'s mention of lentils being suitable for κολλακωί and δυσευερικωί appendant to the information concerning their drying properties (Alim. fac. 1.18.2=6.525K) is passed over; the section dealing with the qualities of the juices is curtailed (Alim. fac. 1.18.3=6.526K), the allegation that elephantiasis and cancer resulted from an excessive consumption of husked lentils being summed up in the
more optimistic κακόχυμον, Orib. perhaps showing independence here by disbelieving Gal.'s gloomy strictures; and finally the application of lentils in cases of άδατώδης ... καχεξία (Alim. fac. 1.18.4=6.526K) is ignored, Orib. presumably holding the view that he had already said enough on xerantic matters. The rest of Gal.'s chapter (Alim. fac. 1.18.4-9=6.526-529K) is left aside: it studies πτισάνη (see Orib. 1.10.1n.), ωακο-πτισάνη (see Orib. 1.24n.), and ταριχηρά κρέα (see Orib. 4.1.25n.). On the medicinal properties of lentils see Orib. 4.7.2n..

17.1 χυμός: Daremberg (pp.567-568) states that, because the words χυλός and χυμός are continually confused in the Mss, it is permissible to read whichever of the two is required for the sense, whatever the Mss offer, and both he (p.32) and Raeder (p.14) justifiably change the Mss reading here of χυλός to χυμός. The ancient testimony on the differentiation states that χυμός was ή γευστή δύναμις and χυλός the composition (σύστασις) from wet and dry of things being digested by heat (Gal.Simpl.Med. 1.38=11.449-450K). Among the qualities associated with ή γευστή δύναμις was, as here, astringency (Gal.Def.Med. 462=19.457-458K).

άλσιν: On the purgative qualities of salt see Orib. 1.7.2n..

γάρω: Garum was a laxative, both on its own and taken with other foods as here (Cels. 2.29.2, Gp. 12.12.1, cf. Hp.Vict. 2.56=6.564-566L), since salt can act as a cathartic in the intestines (R.I. Curtis, 'Salted Fish Products in Ancient Medicine', JHM 39 (1984), p.439). On garum see Orib. 4.1.26n..

This refers to a passage in Gal. (Alim. fac. 1.1.13=6.461K) on the boiling of cabbages which is not excerpted by Orib., another example of his carelessness in compilation (cf. Orib. 1.13.1n.).

17.2 ἐξ αὐτῶν σκευαζομένη φακὴ: Raeder (p.14) follows the Mss of Orib. and prints φακὴ, whilst Daremberg (p.32) changes the accent to a circumflex in accordance with the Mss of Gal. (see Helmreich, p.243). Because the word exhibits a contraction ([φακὴ ἀπὸ τοῦ φακέα, Sch. Ar. V. 811, cf. Euphro ap. Ath. 11.503a]) a circumflex is expected, and this is what appears elsewhere (e.g. Ar. Eq. 1007, PL.192, D.L. 6.37, Phan. Hist. ap. Ath. 9.406c), but Raeder occasionally shows a perverseness in keeping to the Mss readings (cf. Orib. 1.21.1n.).

καὶ τῶν: All the Mss of Gal. read καὶ τῶν (Helmreich, p.243). Although there is no problem of sense with the retention of τῶν in the Mss of Orib. (καὶ τῶν τῶν), perhaps it is best to delete it as does Daremberg.
(p.32) and Raeder (p.14) as arising through dittography.

18.1 σκευάζεται ... σκευαση: This is a précis of Gal. (Alim. fac. 1.19.1-2=6.529K). For the sake of brevity much information is removed, for example that a 'wet' ἐτυνος was made in a χῦτρα ('the commonest cooking pot of antiquity', B.A. Sparkes, 'The Greek Kitchen', JHS 82 (1962), p.130 and plate VI.1), and a 'thick' ἐτυνος in a λοπάς (on the λοπάς see Orib. 4.1.28n.), and that mixed with pearl barley an ἐτυνος of broad beans was eaten by gladiators (on ἐτυνος see Orib. 4.8.14n.).

18.2 τὴν δ' οὖσαν ... πτισάνῃ: This sentence is lifted straight from Gal. (Alim.fac. 1.19.3=6.530K) with no alterations or omissions. However, Orib. passes over the external use of broad beans to cleanse the skin which Gal. discusses subsequently.

18.3 ἔτυνος δὲ τοῦ ... τῷ σώματι: Orib. ignores Gal.'s aside that some people in the country ate toasted broad beans as τραγήματα, but otherwise quotes verbatim from his source (Gal.Alim.fac. 1.19.4=6.530-531K). The concluding part of Gal.'s chapter (Alim.fac. 1.19.4-5=6.531-532K) is passed over in silence, somewhat surprisingly considering the amount of dietary information concerning broad beans contained in it, but perhaps Orib. felt it to be too lengthy for inclusion in his work, or to be angled too much towards the kitchen, for Gal. talks of boiling broad beans with pork or lamb, and mixing onions with an ἐτυνος, or eating boiled broad beans with raw onions. Broad beans were nourishing, flatulent, and difficult to digest (Dsc. 2.105.1, Hp.Vict. 2.45=6.542L, Henioch.ap.Ath. 9.408b, Diph.Siph.ap.Ath. 3.73a, Gal.Fuer.Epil. 5=11.373K, Simpl.Med. 5.23=11.777K, 7.10.53=12.44K, Hp.
Acut. comm. 1.17=15.465K, Alim. fac. 1.21=6.532K, Orib. Syn. 4.17.9, Cic.Div. 2.119, Ov. Med. 70); they had a purgative power like pearl barley (Gal. Bon. Mal. Suc. 7.4=6.790K, Vict. Att. 7.45, Meth. Med. 8.4=10.569K), when green were moistening (Orib. Syn. 4.34.7, Gal. Simpl. Med. 4.15=11.671-672K), and were a strong food (Cels. 2.18.5) and thick-juiced (Gal. Hp. Aph. comm. 4.76=17B. 768K). There were two sorts of broad bean, black and white (Hom. Il. 13.589, Thphr. HP 8.5.1, Marc. med. 14.42, 36.13, Macr. sat. 7.3.13), both of which were enjoyed as a food (Plin. Nat. 18.118, Col. 2.7.1): boiled (Mart. 13. 7), especially with bacon (Mart. 5.78.10, Hor. S. 2.6. 63-64, cf. recipe for fave al prosciutto in E. Romer, The Tuscan Year, London 1984, pp.66-67 and G. Bassani, The Garden of the Finzi-Continis, (trans.) London 1974, p.89 for the same dish in modern Italy) and cracked to make a soup (Cael. Aur. chron. 2.7.100). P. Levi (The Hill of Kronos, London 1980, p.85) claims that a taverna at Andritsaina in the Peloponnese makes 'the best bean soup in Greece'.

Orib. lifts this section with no omissions and only a few minor changes from Gal. (Alim. fac. 1.21=6.532K). Surprisingly for someone striving for conciseness Orib. feels it necessary to add αὐτοὺς after κατὰ τοὺς αὐτοὺς τρόπους, yet there is no confusion in Gal.'s text as to the fact that it is broad beans that are being boiled in the same way as peas. Orib. prefers to keep δύο indeclinable in contrast to Gal.'s δυοῖ. This is nothing unusual in itself (δυοῖν ἄξοις, Arist. Pol. 1287b27; δύο ζεύγης, Hdt. 3.130.4; δυοῖν disappeared at an early date, at least in Ionic, cf. A. Cuny, Le nom-
bre duel en grec, Paris 1906, p.456), but it is perhaps strange that Orib. should want to change Gal. on such a point. The other alteration involves word order, οὐκ εἶσι appearing in Gal. not, as in Orib., after τοῖς κυδίμοις but after ψυκτοῦς, a displacement due no doubt to copying. Peas and broad beans were very similar: they were surrounded by pods (λοβοί, Gal. Alim. fac. 1. 28.3=6.543K) which had to be removed before boiling (Petr. 28.8), and were classified as διορια (Thphr. HP 8.1.1, Phot. s.v. πύγον). They were preferably sown in well-irrigated soil, for otherwise they died or grew malformed (Gp. 2.13.3, cf. Pall. 10.6). Both were boiled to make a sort of soup or ξυνηρίν ξύπνα (Phaenias ap. Ath. 9.406c). Gal. elsewhere held peas to be less flatulent and free of purgative power, and so better to eat than broad beans (Vict. Att. 7.45, Alim. fac. 1.28.6=6.545K), and he is supported by Hp. (Vict. 2.45=6.542L) and by Cels. (2.18.5) who considered broad beans to be stronger food than peas. The peas grown in Roman times generally belonged to the dwarf variety which is self-supporting, although the climbing variety trained on trellises or canes was not unknown (M.S. Spurr, Arable Cultivation in Roman Italy, London 1986, pp.112-113). For peas employed in cooking see: Apic. 4.4.2, 5.3.1-9, 5.4.2-6.

20 ἡπλ ἐρεβίνων: Orib. derives his information on chickpeas from Gal. (Alim. fac. 1.22.2-3=6.533-534K), omitting the first section (Alim. fac. 1.22.1=6.532-533K) which deals with how to cook this pulse, some people in the country making an ξυνος from chickpeas (see Orib. 4.8.14n.), others an ἐρεβυμός, and it was customary to eat chickpeas boiled in water either unaccompanied or season-
ed with salt or grated dried cheese. Orib. shows a predilection for plurals, Gal.'s ἐρέβεινθος and τὸ σώματι being changed to ἐρέβεινθοι (sect. 1) and τοῦς σώματι (sect. 3) respectively, and he broadly sums up Gal.'s rambling statement about the faecal connection between green chickpeas, broad beans, and οἱ ἀτελεῖς καρποὶ with ὅμοιώς πᾶσιν (presumably sc. χλωροῖς; cf. Gal.Alim.fac. 1.19.4=6.531K on the excrementitious properties of green broad beans). Gal.'s hesitation over the aphrodisiac affects of chickpeas (πεπιστευμένος, '... the chickpea is believed to arouse...') is swept aside by Orib.'s dogmatic assertion which has no need of Gal.'s ὑπερβολήν (cf. Orib. 1.41.1-3n.) that stud horses were given chickpeas as fodder for this purpose. Finally, with the omission of the fact that black chickpeas were grown in Bithynia, the familiar pattern of culinary, topographical, and agricultural descriptions being ignored is clearly established. Chickpeas were flatulent and nourishing (Gal.Simpl.Med. 6.5.17=11.876K, Vict.Att. 7.47, Bon.Mal. Suc.7.1l=6.791K, Dsc. 2.104.1, Hp.Acuit.(Sp.) 18=2.486L), but Gal. elsewhere too (Hp.Acuit.comm. 4.83=15.876K) is cautious about their spermatical properties. As Orib. says, their purgative effect was strong (Hp. Vict. 2.54=6.562L, Morb. 2.38=7.54L, Int. 14=7.202L, Alex.Trall. 9.1=2.395 Puschmann, Theod.Prisc.Log. 77), so strong sometimes that τὰ χολερικά (see Orib. 1.49.5n.) resulted from eating them (Hp.Epid. 7.82=5.436-437L). There were several sorts of chickpeas, the white (sometimes referred to as golden, Sapph.ap.Ath. 2.54f) being sweeter (Thphr.HP 8.5.1, Plin.Nat. 18.124), the black (otherwise called ἄριοι) being more diuretic (Gal.Simpl.
Med. 6. 5. 17 = 11. 876K, Gp. 7. 12. 22) and thus good for the ridding of kidney stones (cf. Anthim. 66, Gal. Simpl. Med. 6. 5. 17 = 11. 877K). Green chickpeas were eaten especially in times of famine (Gal. Alim. fac. 1. 36. 1 = 6. 551K), and were sometimes employed medicinally to moisten (Orib. Syn. 4. 34. 7). Despite Gal.'s disparaging comments, chickpeas were eaten toasted as a dessert (Gal. Alim. fac. 1. 7. 1 = 6. 498K, Ar. Pax. 1136, Plaut. Bac. 767, Pl. R. 2. 372c7-8, Archestr. ap. Ath. 3. 101d, Crobyl. and Xenoph. ap. Ath. 2. 54e, Mart. 5. 78. 21), soaked (madidum) as a snack (Mart. 1. 41. 5), as a vegetable for dinner with Laganum (see Orib. 1. 9. In.) and leeks (Hor. S. 1. 6. 114, cf. Apic. 5. 8. 1 and 2), and as one of the ingredients in a soup made from dried vegetables (Apic. 4. 4. 2).

20. 3 περιττωματικὸν: Daremberg (p. 571) says that 'il faut bien admettre que περιττωματικὸς est ici à peu près synonyme de φλεγματικὸς'. Phlegm by its very nature was 'wet', and the adjective περιττωματικὸς ('excrementitious') was associated with moisture (e.g. Gal. San. Tuend. 4. 4. 10 = 6. 245K, 4. 5. 15 = 6. 266K, Alim. fac. 1. 19. 4 = 6. 531K, 3. 18. 6 = 6. 702K, Plu. Mor. 130c, Arist. Pr. 873a18, GA 766b35, Alex. Aphr. Pr. 1. 2). Περίττωμα was τὸ τῆς τροφῆς υπόλειμμα (Arist. GA 724b26, Gal. San. Tuend. 1. 3. 1-2 = 6. 7-8K), and was closely connected with phlegm (τὸ φλέγμα τῆς χοσίμου τροφῆς περίττωμα ἐστιν, Arist. GA 725a15sq., cf. Gal. Alim. fac. 3. 40. 2 = 6. 745K, Praenot. = 19. 509K ὅλην ... χυμῶν ἢ περίττωματα), yet even Orib. differentiated between the two quite carefully (Orib. 3. 8, 3. 11), and therefore it would be best not to follow Daremberg on this point.

Rather περίττωμα is what remained after the digestion of food and which was to be excreted (cf. Gal. Nat. fac. 1. 10=
2.22-23k, Aff. Ren. 6. = 19.685k), as opposed to the excrement itself (μόρος, σκύβαλος, etc.).

Fig. 2: Olive grove above Assisi, see Orib. 1.54 (photograph by M.D. Grant).

Fig. 3: 'Pomegranates generally provide the least nourishment for the body', Orib. 1.51.2 (photograph by M.D. Grant).
21.1 ἄριστος ... χυμός: This sentence is lifted from Gal. (Alim. fac. 1.23.2=6.535K), the previous section (Alim. fac. 1.23.1=6.534-535K) concerning the boiling of lupines being omitted, presumably because Orib. considered it common knowledge.

ο καλούμενος ἅδιως ὁμός ἀδροίζεται χυμός: χυμός must surely be inserted after ἅδιως following C² and Daremberg (p.36), for χυμός on its own which Raeder (p.15) prints means nothing special. As the Mss of Gal. all read ὁμός (Helmreich, p.249), perhaps Raeder is needlessly adhering to the Mss of Orib. (cf. Orib. 1.17.2n., 1.41.8n.).

21.2 ἔστι δ' ὁ ... τυγχάνων: This is a rather violent paraphrase of Gal.'s following sentence, where it is stated that when soaked and boiled in sweet water lupines became like things devoid of quality. The rest of Gal.'s chapter (Alim. fac. 1.23.3-4=6.536-537K) talks in general terms about the different qualities in foods, and therefore is irrelevant to Orib.'s more specific purpose. Unprepared lupines were bitter (Gal.Simpl.Med. 4.7=11.646K, Alim. fac. 3.31.3=6.731K, Verg.G. 1.75, Pall.Vet. 14.3, Alex.Trall. 9.1=2.395 Puschmann), drying (Gal.Simpl. Med. 5.9=11.730K), and heating (Hp.Vict. 2.45=6.544K, Cels. 2.33.5), but when soaked became sweet and mild (Ath. 2.55f, Gal.Simpl.Med. 6.8.3=11.885K, Plin.Nat. 22.154). In contrast to Orib., Diph.Siph. (ap.Ath. 2.55f, cf. Gal. Simpl.Med. 5.12=11.745K) regarded lupines as purgative, although this apparent anomaly may be explained by saying that they were purgative τῶν πόρων and not ἐν διαχώρησιν (although cf. Gal.Alim.fac. 1.24.1=6.537K). They were difficult to digest (Gal.Vict.Att. 7.50) and thick-juiced (Gal.Bon.Mal.Suc. 7.12=6.791K). Lupines
were eaten (Col. 2.7.1), despite derogatory remarks about them (Col. 2.10.1, Lyc. ap. Ath. 2.55d, Alex. ap. Ath. 2.55a), as a dessert (Mart. 5.78.21, Petr. 66.4) and with bread (Alex. Trall. 4=2.137 Puschmann).

22.1 καὶ βούκερως: Another name for fenugreek, so called because the seeds were shaped like small horns (Plin. Nat. 24.184, Sch. Nic. Al. 424, Dsc. 2.102.1, Hsch. s.v. βούκερας). It appeared also as αἰγόκερας, κέρας αἰγείον, κάρφως, and silicia. Thphr. (e.g. HP 4.4.10, 8.8.5) refers to fenugreek solely as τὸ βούκερας. Here καὶ is disjunctive rather than copulative (cf. 54n., also Gal. Vict. Att. 7.49 and N. Marinone ad loc., Torino 1973, p.75).

περὶ τῆλεως: This section is a very much truncated version of Gal. (Alim. fac. 1.24=6.537-538K). Ὑπάγει... προεσθειομένη is taken from sect. 1 of Gal.'s chapter; ἐσθιεταὶ...διὰ γάρου from sect. 2; ἐσθιεταὶ...τοιάνυθη from sect. 3; χυλὸς...τὸ ἐντερον from sect. 4; sect. 5 concerning a cure for chronic pains in the chest using dates, fenugreek, and honey is omitted as having nothing to do with diet and the digestion. It was generally acknowledged to be laxative, both as a decoction (Dsc. 2.102.2), as a cataplasm with mallow seed and linseed (Theod. Prisc. Eup. 24), and eaten whole with garum (Gal. Vict. Att. 7.49). Gal. (Alim. fac. 1.25.1=6.538K) recommends that the seeds should be soaked in water before being consumed. Since it was heating (Gal. Simpl. Med. 8.19.6=12.141K, Cels. 2.33.5) fenugreek acted as a remedy for cold gout (frigida podagra, Larg. 160) and the dispersal of ἀτμοί (Gal. Simpl. Med. 5.9=11.729K, cf. 4.7.1n.). A poultice of fenugreek seed, flax seed, and
hydromel cured spasm (Cael.Aur.acut. 3.8.78), whilst fenugreek boiled in water or honey-water eased throat swellings (Marc.med. 14.39), and equal quantities of linseed and fenugreek in hydromel cured stomach ache (Plin.Nat. 20.251); the other remedies in Plin. (Nat. 24.184-188) are almost all for external use only. Mentioned by Gal. (Alim.fac. 2.22.2=6.598K) as part of a dinner of a certain rhetorician called Protus which comprised fenugreek, radishes, mallows in olive-oil and garum, followed by fish, pork, and fowl, and concluded with a dessert of pears. In AP (11.413, cf. Nic.Alex. 424) is a poem deriding a vegetarian dinner as suitable only for sheep; the fodder was lettuces, leeks, bulbs, basil, radishes, and endives. Apic. (5.7) details a similar sauce for fenugreek as Orib.: liquamen, oil, wine, Bread, being a neutral food (cf. Hp.VN 14=1. 604L, Dieuch.ap.Orib. 4.7.13-14 where it is used as a base of a remedy for sick people), presumably dampened the headache-causing effects of fenugreek, but this is nowhere explicitly stated. In possible connection with this Gal. (Bon.MaL.Suc. 7.2=6.790K) remarks on fenugreek not comprising of good juices, and thus when eaten to excess could harm εύχυμία.

22.2 μετά μέλιτος: Honey was used to counteract the bitterness of fenugreek (Plin.Nat. 24.188), hence the use of hydromel in the specific for stomach ache (Plin.Nat. 20.251).

23.1 καὶ ταῦτα ... μᾶλλον τῆλεως: Orib. extracts this from Gal. (Alim.fac. 1.25.1=6.538-539K) with but one characteristic change, namely simplifying προσταθρέχοντες to διαθρέχοντες (cf. 1.42.3n.). The subsequent section
\[\text{(Alim. fac. 1.25.2=6.539K)}\] relates an anecdote concerning a young doctor in Alexandria who for four years enjoyed excellent health on a diet of fenugreek, birds' pease \((\xi\chi\rho\omicron\omicron\iota, \text{Lathyrus Ochrus}),\) lupines, and calavances \((\phi\alpha\sigma\eta\lambda\omicron\iota, \text{Vigna sinensis L.})\), eaten with garum, and sometimes olive-oil, vinegar, or salt, but this of course has to be left aside by Orib. because of its length.

23.2 \(\varepsilon\sigma\iota \delta\varepsilon \pi\omicron\omicron\varsigma \ldots \varepsilon\chi\epsilon\iota\): This is taken from Gal. \((\text{Alim. fac. 1.25.3=6.540K})\) with a few changes for smoothness of sense. Although Orib. shows leniency here by saying that calavances and birds' pease were of no pronounced quality, Gal. elsewhere states more harshly that they were worse than broad beans \((\text{Vic\t. Att. 7.45, Bon. Mal. Suc. 7.7=6.791K})\) and were flatulent and hard to digest \((\text{Vic\t. Att. 7.50, cf. Alim. fac. 1.28.6=6.545K})\). Conversely Hp. \((\text{Vic\t. 2.45=6.542L})\) held birds' pease and calavances to be nourishing, easy to excrete, and not particularly flatulent. They possessed a certain degree of sweetness \((\text{Thphr. CP 4.2.2})\), which is perhaps the reason why Arist. \((\text{HA 19.627b16-17})\) advises growing \(\xi\chi\rho\omicron\omicron\iota\) near beehives, and were best eaten when green \((\text{Thphr. CP 6.12.9, cf. Ath. 4.139a})\), although they were served when dried as a dessert either boiled or roasted \((\text{Phan. Hist. ap. Ath. 2.54f, Epich. ap. Ath. 2.56a, Ar. Pax 1144 and Sch. ad loc.})\). They were also eaten in the same way as fenugreek \((\text{Gal. Bon. Mal. Suc. 1.24.2=6.537K and 1.22n.})\).

24 \(\pi\epsilon\rho\iota \lambda\alpha\theta\omicron\omicron\omega\omicron\omega:\) Orib. here quotes almost verbatim the latter part of his source \((\text{Gal. Alim. fac. 1.26=6.540K})\), but omits completely the former part detailing such information as the similarity of the \(\phi\sigma\eta\iota\alpha\ of \lambda\alpha\theta\omicron\omicron\omega\omicron\iota\) to that of
oXpOLXbirds' pease (*Lathyrus ochrus* L.), and the popularity of λάθυροι among the άγροικοι in Asia, as well as among the city dwellers of Alexandria and elsewhere. It is equivalent to the Lat. *cicerula* (CGL 2.358.6, 3.193.42), and J. André in his commentary on Plin. (*Nat.* 22.148, Paris 1970, p.122) identifies it with 'jarousse (lesser chickpea) ou pois carré (marrowfat peas) ou gesse cultivée (cultivated vetch, *Lathyrus sativus* L.) ainsi nommée pour sa graine anguleuse comme celle du pois chiche, mais beaucoup moins grosse ... . Ses noms italiens sont *cicerchia silvatica*, *cicerchia*. H. Le Bonniec in his commentary on Plin. (*Nat.* 18.124, Paris 1972, p.230) considers it to be the *pois carrée*. A plant with an oblong leaf (Thphr.*HP* 8.3.1) and a creeping stem (ἐπιγέιοκοιλία, Thphr.*HP* 8.3.2), it was sown among the other *legumina* either in January/February or November (Col. 2.10.19, cf. Var.*R.* 1.32.1-2). It was used as cattle fodder (Cod. 7.3.22), but was suitable for human use being in taste similar to the chickpeas, distinguished only by its darker colour (Col. 2.10.35, Alex.*ap.Ath.* 2.55a, Anaxandr.*ap.Ath.* 4.131d). Sometimes the outside was coated in a salty dust (Plin.*Nat.* 19.186, cf. 18.154). Flour of marrowfat peas acted as a sort of leaven for barley bread (Plin.*Nat.* 18.103), although such legumes on their own were in general considered to be flatulent and generative of much excrementitious matter (Plu.*Mor.* 286e, Gal.*Alim.fac.* 1.28.6=6.545K; but contrastingly Plin. (*Nat.* 22.148) says 'cicerula ... magis in aluo proficit'.), and incapable of being made into bread (Gal.*Alim.fac.* 1.16=6.524K). That the φίσηλος was confused by some with the λάθυρος accounts for their
alleged similarity in power, but πως perhaps betrays Gal.'s hesitation concerning the superior nourishment derived from λάθυροι, for elsewhere (Bon. Mal. Suc. 7.6-7=6.791K) he regards them as full of bad and melancholic juices. M.D. Grmek (Les Maladies à l' aube de la civilisation occidentale, Paris 1983, pp.326-327) mentions the toxic syndrome of lathyryism, but ancient medicine apparently did not record any maladies following the ingestion of beans and Grmek (pp.332-340) suggests that the Greeks and Romans were able to digest beans without any problems because they were not deficient hereditarily in glucose-6-phosphate dehydrogenase.

τῷ φακοπτισάνη: 'Lentils and barley pottage' (see also Orib. 4.1.22n.). More lentils (ἐλαττῶν ... θῆς πτισάνης, presumably in volume, cf. L. Foxhall and H.A. Forbes, 'Σιτομετρεία: The Role of Grain as a Staple Food in Classical Antiquity', Chiron 12 (1982), p.42: 'in antiquity amounts of grain were normally expressed in units of volume') than barley were needed for this dish, because barley swells considerably during boiling whilst lentils do not so much (Gal. Alim. fac. 1.18.5=6.526-527K). The seasoning was the same as for πτισάνη, namely a little salt, olive-oil, leeks, and dill (Gal. Alim. fac. 1.9.3=6.501-502K), except that when savory or penny-royal were added it became supposedly more pleasant and digestible, unlike πτισάνη (Gal. Alim. fac. 1.18.6=6.527K, Ptis. 4.1-2=6.821K). Pork that was νεκρές (see Orib. 4.1.25n.) could be boiled with φακοπτισάνη for pleasure to the palate and for the digestion (Gal. Alim. fac. 1.18.6=6.527K). Here Gal. must mean that λάθυροι could be cooked with the same seasonings.
25.1 περὶ ἀράχων: Orib. quotes Gal. (Alim. fac. 1.27.1-2= 6.541K) with only a few minor changes and one large omission, that of a citation of a line from Ar.'s Merchant-Ships, listing ἀραχοὶ among various grains such as wheat, barley, and darnel. What makes Orib. lift one section complete, and severely truncate another, if difficult to see. It could be argued that, as with the persea (see Orib. 1.63n.), a more unusual food required fuller treatment, but that would not explain the lifting of the section on common peas (see Orib. 1.19n.) straight from Gal. It seems rather that Orib.'s system of condensing was purely arbitrary. The identification of ἀραχος is uncertain: LSJ (s.v.) suggest wild chickling (Lathyrus annuus L.), whilst J. André (comm. on Plin. Nat. 21.89, Paris 1969, pp.130-131) puts forward two sorts of vetch: Vicia sativa L., var. amphicarpa, and Vicia Sibthorpii L., both of which climb round other plants. One of the pulses (Phot. s.v. ἀράχος, Hsch. s.v. ἀραχοὶ, CGL 2.243.49) from which bread could not be made (Gal. Alim. fac. 1.16=6.524K), ἀραχος was certainly cultivated in the eastern part of the Roman Empire, in Egypt (POxy 3488.22, 2874.12, cf. Clem. Al. Strom. 1.37. 3) and along with barley and wheat in the 7th c.A.D. in Palaestina Tertia, the present Negev of Israel (P. Mayerson, 'Wheat in the Roman World: An Addendum', CQ n.s. 34 (1984), pp.243-245). Elsewhere Orib. (Syn. 4. 21.6) places λάθυροι and ἀραχοὶ together between things that are flatulent and things that are not. The ἀραχος seed was used as a unit of measurement (Gal. Comp. Med. 7.3=13.68K, 7.5=13.96K). Besides Gal. (copied in turn by Orib. here and Sim. Seth. (appendix s.v. ἀραχοὶ =
p.134 Langkavel) there do not appear to be any instruc-
tions on how to use this pulse.

ἐν τοῖς Δημητριακοῖς καρποῖς: Daremberg (pp.573-574)
translates this expression by 'céréales' because of the
etymological link, although caution is expressed over
the extended significance of the Greek term compared
7.4) divides σῖτος and τὰ σιτώδη into two principle
classes, the first including such plants as wheat,
barley, and rice-wheat, the second (τὰ χειροπόδα, cf.
Sch.Nic.Th. 753) embracing broad beans, chickpeas, and
peas; there was also a third class comprising millet,
Italian millet, and generally plants which belong to
the summer seed-time. For D.S. (2.36.3) οἱ Δημητριακοὶ
7=15.454K) extends the sense of Δημήτρια σπέρματα almost
to that applied by Thphr. to σῖτος and τὰ σιτώδη, thus
including lentils, broad beans, lupines, chickling,
common and Italian millet, peas, fenugreek, oats and
chickpeas, and elsewere (Vict.Att. 6.30) equates
Δημήτρια with pulses in general (τὰ δωπια). See Orib.
l.1n.

25.2 ἄραχων: A rough, hard kind of ἀρακος growing among
lentils (Thphr. HP 8.8.3) that was engendered by a
change (μεταβολή) in the lentils (Gal.Alim.fao. 1.37.2=
6.552K).

τὸν πελεκινόν: The seed of axe-weed (Bonaveria Securi-
daca L.; Lat. securicula, CGL 2.400.50) or ἡδύσαρον was
flame-red in colour, and was two-edged like an axe,
hence its name (Gal.Simpl.Med. 6.7.2=11.883K, Thphr.
HP 8.8.3, Plin.Nat. 28.155). It was a wild form of
The axe-weed plant was bushy and had leaves like that of the chickpea (Plin. *Nat.* 22.121). It harmed lentils, and being inedible was discarded (Gal. *Alim.* fac. 1.37.2=6.552K, Gp. 2.43). Although not suitable as a food it was used as a medicine: a pessary of pounded axe-weed, wheat, and myrrh encouraged the womb to receive sperm (Hp. *Mul.* 2.181=8.362L), whilst axe-weed seed mixed with, among other things, fenugreek, pepper, and Bruttian pine was a remedy for those suffering from liver complaints (Marc. *med.* 22.12), and axe-weed seed was good for the stomach when taken in drink, and eaten with honey before intercourse acted as a contraceptive (Dsc. 3.130). However, these applications were outside Gal.'s (and so Orib.'s) purpose, and were therefore ignored.

**περὶ δόλιχων:** Gal.'s discourse (*Alim.* fac. 1.28=6.541-546K) on the nomenclature and dietary properties of δόλιχοι from which Orib. borrows these two brief sentences is contrastingly long and discursive, Orib. paring his information to the bare minimum. A type of pulse (Suda and Hsch., s.v. δόλιχοι, Poll. 1.247), they were grown trained up long stakes (Thphr. *HP* 8.3.2) along with such things as broad beans, peas, and lupines (Gal. *Alim.* fac. 1.28.9=6.546K, Bon. *Mal.* *Succ.* 5.8=6.784K, cf. Thphr. *HP* 8.11.1, Col. 2.12.3). That they were not only more laxative and less flatulent than peas but also nourishing was a commonly held view (Hp. *Vcit.* 2.45=6.542L, Diocl. *ap.* Gal. *Alim.* fac. 1.28.5=6.544K, Sim. Seth. appendix, s.v. δόλιχοι = p.134 Langkavel). They were sold dried (Edict. Diocl. 1.21: φασίλις Ἐνροῦ/fasioli sicci), and the ἄτυχος made from them was thick-juiced
and phlegmatic, less flatulent than that from broad beans, and without any purgative element (Gal. Vict. Att. 7.53). Besides being called λοβοί because the whole κάρπος was eaten, λοβός and all (cf. Plin. Nat. 12.26), they were also called μύλαξ κηπαία and λόβια (Aet. 1. 93, CGL 2.361.52). Lettuce stalks could be salted, dried, and preserved with herbs and faseolī uirides integrī (Col. 12.9.1). For the identification of δόλιχοι see Orib. 4.8.18n.

26.1 λαβόες: λοβός usually refers to the pods of pulses in general (e.g. Nic. Th. 536, Gal. Alim. fac. 1.36.1=6.655K, Jul. Or. 5.175c-d), and when applied specifically to δόλιχος a qualifying statement seems necessary, for instance λοβῶν ..., οἵπερ δὴ καὶ κηπεύονται (Gal. Vict. Att. 7.53).

27 περὶ δρόβων: Taking as his text Gal. (Alim. fac. 1.29=6.546-547K), Orib. leaves aside the opening sentence of his source to the effect that cattle eat δροβοί or bitter vetches that have been sweetened beforehand in water, but that men should avoid them because of their unpleasantness and bad juices. Orib., however, adheres to what follows with some minor changes: that it was Ἡρ. (Epid. 2.4.3=5.126L, cf. 6.4.11=5.310L) as Gal. acknowledges, who said that δροβοί were eaten in times of great famine is ignored, and Gal.'s ἐξ ἀνάγκης βιαλάς ἐπ᾽ αὐτὸ παραγίγνονται is neatly paraphrased as καὶ ἀνάγκην ἔσθιονται, although ὡς ὑπολείπεσθαι is expanded to ὡστε ὑπολείπεσθαι, perhaps for clarity. Bitter vetch was certainly used more for cattle fodder (Cato Agr. 27, Col. 2.7.1, 2.10.24, 2.10.34, Ἡρ. VM 8=1.586L, Verg. E. 3.100, Gal. Alim. fac. 2.6.1=6.567K, Plaut. Mos. 62, Arist.
HA 3.522b26-28, 8.595b6-7, Gp 17.4) and bird food (Var. R. 3.7.8, Pall. 1.24.3) than for human consumption, but famine or siege changed this situation (D. 22.15, Philostr. VA 1.15). Until comparatively modern times vetch was made into bread in the poorer parts of Greece (P. Leigh Fermor, Mani, Harmondsworth 1984, p.74). For the medicinal properties of bitter vetch see Orib. 4.8.

28.1 τὸ τῶν σηκόμων σπέρμα: Orib. lifts this passage from Gal. (Alim. fac. 1.30.1=6.547-548K) with characteristic culinary omissions, namely that sesame-seeds were moulded with boiled honey into cakes called σηκομιλίδες (cf. Ath. 14.646f, Sch. Ar. Praz. 869), and that they were spread on breads (cf. Alcm. ap. Ath. 3.111a, Ath. 14.646b). That it was when the seed was stored (κείμενον) that oiliness developed is apparently forgotten, although C² and Daremberg restore the word from Gal., perhaps the correct move in view of the jerkiness of Raeder's text where no reason is given for the oleaginous progression. Sesame-seeds were in fact pressed to make oil (Gp. 9.18.2, Plin. Nat. 15.30, 18.96, Gal. SimpL Med. 4.8=11.649K, Hdt. 1.193.4). They were considered bad for the stomach (Dsc. 2.98), and engendered thick, viscous, and phlegmatic juices in the body (Gal. Vict. Att. 5.28, Hp. Aff. 55=6.266L). All fatty things made with cheese, honey, and sesame-seeds provoked heartburn and flatulence (Hp. Aff. 47=6.258L), and this coupled with the innate viscosity and adhesiveness in sesame-seeds (Gal. SimpL Med. 8.18.10=12.120K) no doubt rendered them slow to digest, despite Hp.'s (Vict. 2.45=6.544L) assertion that they were laxative especially when unwashed. Plin. (Nat. 22.132) comes
near to saying that sesame-seed ἀνατρέπει ... τὸν στόμαχον when he writes that it was stomacho inutilis. In medicine sesame-seed with 'soft' wine was a specific for catarrh, chronic cough, and light fever (Hp.Epid. 7.68=5.432L), although it was to be avoided in cases of τῦφος, when putrefying bile mixed with the blood in the veins and limbs, and lodging caused swellings and sharp pains (Hp.Int. 41=7.268L, 42=7.270L). They helped to heal the right lobe of the liver if damaged after childbirth, the symptoms being vomiting of blood, pains in the inwards, and spasms of the heart (Hp.Mul. 1.43=8.100-102L). They were plastered on externally for inflamed stomachs having been finely ground with rose-oil (Alex.Trall.Febr. 2=1.323-325 Puschmann, 7.4=2.367 Puschmann).

The seed was sown all over the Mediterranean, from Campania to Cilicia and Syria (Col. 2.10.18, 11.2.50, x.An. 1.2.22), and hence was used extensively in cooking for seasoning (Antiph.ap.Ath. 2.68a, Philem.ap.Ath. 2.64e) and for cakes (Chrysipp.Tyan.ap.Ath. 14.647f-648a, Hp.Morb. 2.50=7.78L, cf. Col. 12.15.3-4). On sesame-seeds see also Orib. 4.7.33n., and D. Bedigian and J.R. Harlan, 'Evidence for Cultivation of Sesame in the Ancient World', Economic Botany 40 (1986), pp.137-154, who relate that sesame as a crop originated probably on the Indian subcontinent.

28.2 τὸ 5ον έρύσιμον: According to LSJ (s.v.) Sisymbrium poly- ceratium L., according to TLL (s.v. ιριο, 72.377.69-70) Sisymbrium irio L. and other species. From έρύσιμον to διψαίὸν Orib. quotes word for word his source (Gal.Alim.fac. 1.30.2=6.548K), although he omits the prior analogy as to the inferiority of Italian millet to common millet.
being of the same degree as the inferiority of hedge-mustard to sesame. It was called by the Romans *iriō* (Ps.Dsc. 2.158RV, Plin.Nat. 22.158). Sesame and hedge-mustard are justifiably juxtaposed, for the two plants had similar leaves (Thphr. HP 8.3.1) the colour of blood (Plin.Nat. 18.58), were sown in summer before the rising of the Pleiads (Thphr. HP 8.1.4, Plin.Nat. 18.49, 96), and were generally considered alike (Thphr. HP 8.7.3). The seed capsules were horn-shaped like those of fennel-greek, and contained small seeds that were fiery to the taste like nose-smart (Dsc. 2.158, Gal.Simplic. Med. 6.5.21=11.877K). It was probably this fieriness that made them more unpleasant to eat than sesame, and Gal. says elsewhere (Alim.fac. 1.33=6.549K) that they provided little nourishment. Their heat made them ideal for fluxes from the chest and coughs (Dsc. 2.158, Gal.Simplic. Med. 6.5.21=11.878K). A strong infusion of the whole of the common hedge-mustard plant (*Sisymbrium officinale* L.) was formerly taken for all diseases of the throat (M. Grieve, *A Modern Herbal*, Harmondsworth 1976, p.570).

τῆς ἡμέρου μῆκος: This is a direct transcription of Gal. (*Alim.fac. 1.31=6.548K*), the only words missing being καθάπερ καὶ τὰ σήματα after ἠθυόμα, no doubt because Orib. considered them an irrelevant culinary aside.

Poppy seeds (see also Orib. 4.6.2n.) were spread on bread (Gal.Simplic. Med. 7.12.13=12.73K, Vict.Att. 5.27, Plin.Nat. 19.168, Cato.Agr. 79, 84, Petr. 1.3, Ath. 3.113c, Dsc. 4.64.1) and were thought to be cooling (Dsc. 4.64.2, Garg.Mart. 19, Hp.Mul. 2.117=8.252L, Gal.San. Tuend. 6.14.15=6.447K, Simpl.Med. 7.12.13=12.74K), hence their soporific and anodyne property (Gal.Meth.

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περί λινοσπέρμου: Orib. culls the basic medical facts concerning linseed (Linum usitatissimum L.) from Gal. (Alim.fac. 1.32=6.549K), leaving aside the culinary remarks about people sprinkling it on bread, mixing it after parching with garum as an ἄνθρο, and pounding it fine with honey. Linseed was used for many cosmetic and medicinal purposes: as a hair restorative (Cleopatra ap. Gal.Comp.Med. 1.2=12.432K), as a poultice to disperse swellings and indurations (Gal.Hp.Acut.comm. 4.42=15.816K, Dsc. 2.103, Ps.Theod.Prisc.Simpl.Med. 81, cf. Cels. 2.33.5), boiled in water to combat fevers (Hp.Morb. 3.17=7.157L, cf. Gal.San.Tuend. 6.14.10=6.446K, Hp.Acut. comm. 4.95=15.898K where it is said to be able both to
dry and cool), and in a remedy for a dry cough (Larg. 96). In contrast to Gal.'s statements here, Hp. (Vïct. 2.45=6.544L) held linseed to be nourishing, although he too considered it to be constipating. Elsewhere Gal. (Sïmpl. Med. 7.11.17=12.62K) explains that it was flatulent and full of excrementitious moisture, which was presumably the reason for it being bad for the stomach and hard to digest. Nevertheless it was used as a food and a medicine (Gal.Sïmpl. Med. 5.23=11.777K), and Plin. (Nat. 18.73) gives a recipe for polenta of barley seasoned with toasted linseed, coriander seed, and salt. There was also a confection made of honey and linseed called χρυσοκόλλα (Alcm.ap.Ath. 3.11le). M. Grieve's remarks (A Modern Herbal, Harmondsworth 1976, pp.317-319) about linseed are surprisingly similar to those contained in Orib.'s précis.
with honey was that it was bitter (Thphr. *HP* 8.7.3). Hsch. (s.v. ὑρμενοῖ) categorises Red-topped sage as a sort of pulse, and Polem. *Hist.* (ap. Ath. 11.478d) lists it among the other grains such as barley, peas, lentils, and white poppy-seeds. In medicine it was used to reduce the spleen (Cael. *Aur. chron.* 3.4.60), and mixed with honey to clear white spots in the eyes (λευκόματα, Gal. *Simpl. Med.* 8.21.7=12.152K, Dsc. 3.129).

τεκνάδεως: Taking his information from Gal. (*Alim. fac.* 1.34.1=6.550K), Orib. follows his customary habit of ignoring any remarks about food. Gal. (*Alim. fac.* 1.34.1-2=6.550K) records that hemp seeds were toasted and eaten as τραγήματα during the after-dinner drinking, but being particularly heating they affected the head taken in excess. Hdt. (4.75.1-2, cf. Hsch. s.v. κάναβις) describes the Scythians sitting under felt cloths and intoxicating themselves to such a degree by putting hemp seeds on red-hot stones and inhaling the fumes that ἀγάμενοι ... ἤφόνται. Sim. Seth. (s.v. κάναβος = pp.60-61 Langkavel) says that the Arabs achieved the same effect by chewing the leaves. Hence Gal.'s statements that hemp seed was κεφαλαλγες (cf. *Alim. fac.* 1.35=6.550K, *Vic*t. *Att.* 5.29), and he no doubt would have preferred it to have been employed solely externally, for example using the extracted juice for earache (Gal. *Simpl. Med.* 7.10.5=12.8K, Marc. *med.* 9.27, Dsc. 3.148) and to kill uermes in the ears (Marc. *med.* 9.77), or mixed with axle-grease to disperse swellings (Ps. Apul. *herb.* 115.1). Rather than being a food or medicine hemp was used mainly for rope (Plin. *Nat.* 19.173-174, Mosch. ap. Ath. 5.206f, Var. *R.* 1.23.6, Dsc. 3.149).
tò τοῦ ἀγνου σπέρμα: Orib. neatly rewords Gal.'s ἐπέχειν τὰς ἐπ' ἁφροδίσια γνωμοκέναι φονίασ (Alim. fac. 1.35=6.550K) for brevity, but otherwise quotes most of his source with only a few omissions, that the seed could be eaten raw or toasted, and that unlike hemp it did not affect the head; clearly he assumed the reader would know whether or not to cook the seeds. The chaste-tree (Vitex agnus castus L.; see O. Polunin, Trees and Bushes of Europe, London 1976, p.169 and figs. c and d) is a tree-like bush (but with cultivation could become a tree, Thphr. HP 1.3.2) which enjoys well-watered places (cf. Pl.Phdr. 230b, Pall. 9.8.4, Gp. 2.4.1), and has branches that are hard to break, and leaves like that of the olive tree, only bigger and softer (cf. Ps.Dsc. 1.103RV). It bears a fruit which was used for snake-bites, problems of the spleen, and dropsy, and a seed resembling pepper which was supposed to have a taste like wine when taken in drink (Dsc. 1.103.1, Thphr. HP 3. 12.1, Plin. Nat. 24.59-60 and J. André ad loc., Paris 1972, p.114). The seed helped indurations and blockages of the liver (Alex. Trall. 9.1=2.395 Puschmann). It derived its name from the power of the seed, leaves, and fruit to repress sexual appetite (Alex. Trall. 11.7=2.497 Puschmann) and it was used for this reason by women celebrating the Thesmophoria (Ael. NA 9.26, Sch. Nic. Ther. 71, Plin. Nat. 24.59). Elsewhere Gal. stresses that the seeds were hot and dry (Simpl. Med. 6.1.2=11.807-810K, also Dsc. 1.103.1), not cooling and dry as here, although in support Plin. (Nat. 24.60) says that they reduced fevers. Gal. develops the unusual argument (Simpl. Med. 6.1.2= 11.808K) that if the seeds were productive of ἀτμώδους
πνεύματος, then they would fill the bowels with flatulence and so, like rocket, sharpen the desire for sex! For the table they were toasted and served with τραγήματα (Gal. Simp. Med. 6.1.2=11.807K), but they were of small value as nourishment (cf. Alimen. fac. 2.39.4=6.623K on the βλαστοί); the shoots were eaten during famine (Alimen. fac. 2.58.2=6.644K) and were suitable for the stomach (Vict. Att. 4.24); otherwise a medicinal plant (Nic. Ther. 528-530, Larg. 2, Dsc. 1.103.1-3).

34 περιβίκου: In Gal.'s chapter from which this section is derived (Alimen. fac. 1.36.1-2=6.550-551K) tares (ἄφάκνη) are mentioned together with vetch, and it is to both of these seeds that ΤΟΥΤΩΝ refers. Orib. omits information superfluous to his theme, such as that farmers stored the whole plant for cattle fodder, and that Attic writers called βίκος equally ἀρακως or λάβυρος. It was supposedly named uicia from uincire, because like the vine it had tendrils that bound themselves to the stalks of lupines and other plants (Var. R. 1.31.5). It was sown for seed at the end of January (Pall. 2.6) in dry soil (Plin. Nat. 18.138, cf. Col. 2.10.30) as clear of weeds as possible (Cato Agr. 35.1). Its power to fertilize the ground was well known (Cato Agr. 37.2, Plin. Nat. 18.137, Col. 11.2.81, Pall. 1.6.14). Since it had an unpleasant taste and was hard to digest it was used mainly for cattle fodder (Col. 2.7.1, 2.13.1, Pall. 1.6.14, 12.13.3, Apul. Met. 7.14.4), it being sown for this purpose in September (Pall. 10.8, Col. 2.10.29) or March (Plin. Nat. 18.137); hence Gal.'s statement that people ate it only in time of famine. The seed was used as a pharmaceutical unit of measurement (Larg. 75, 88, 170) like the
The watermelon seed (cf. Orib. 1.25.ln.), but otherwise does not appear in cooking and medicine.

35-38 On these four sections in general see: A.C. Andrews, 'Melons and Watermelons in the Classical Era', Osiris 12 (1956), pp.368-375. The watermelon was probably well known in Greece at least as early as the 4th c. B.C., although the melon (otherwise known as the cantaloupe or muskmelon, Cucumis melo L., var. chatae Nand.) was not discovered until much later. The watermelon is indigenous in the arid tropical region of southern and eastern Africa, and was first developed into a cultivated form in Egypt, evolving into the improved Citrulus lanatus (Thunb.) Mansf., whilst the melon is a native of tropical Asia and Africa. The χολοκύττης of Ἡρ. seems to have been the gourd, especially the large gourd (Cucurbita maxima Duchesne). Thphr. describes the cucumber (σίκυος, Cucumis sativus L.) and the bottle-gourd (σίκυα, Lagenaria vulgaris Ser.). The cucumber, a native to northern India, was the first of the Cucurbitaceae to be used in the ancient world, and its name was extended to the watermelon with a qualifying epithet (σίκυος πέπων). The melon was naturally held to be a type of watermelon and thus was called μηλοπέπων, a term alluding either to size and shape ('apple-melon') or sweetness ('honey-melon'). The Romans designated watermelon pepo, and melon melopepo (cf. Isid. orig. 17.10.16), although the latter was shortened by the 4th c.A.D. to melo. However, references to the cucumis may sometimes apply to the melon or watermelon since the word was not restricted to signifying only the cucumber, and this is borne out by the survival of the word in current Italian nomenclature.
applied in a similarly haphazard way, a circumstance that is hardly surprising considering that among the many varieties of *Cucumis melo* L. are forms with long narrow fruits, superficially resembling the garden cucumber (see M. Zohary, *Plants of the Bible*, Cambridge 1982, p. 86, and also p. 85 for a photograph of a watermelon).

35.1 Ἐψηθεῖσα μαλῶς ... διαφανεῖναι: This is a précis of Gal. (*Alím.fac. 2.3.2-5=6.561-562K*). Unlike Gal., Orib. considers it pointless to explain σαφὴ ποιότητα χυμῶν οὐδεμίαν as that which possesses no harshness, saltiness, astringency, or bitterness. Also omitted is the first paragraph of Gal.'s chapter (*Alím.fac. 2.3.1=6.651K*), which stresses the importance of cooking the large gourd to avoid the cold heaviness on the stomach and ensuing nausea that resulted from eating raw large gourds, a somewhat surprising exclusion unless Orib. felt that it was common knowledge or that his extract brought over the point adequately.

35.2 ἡ δ' ὀπτηθεῖσα ... ποιότητα: Orib. derives this section from Gal. (*Alím.fac. 2.3.7=6.563-564K*), leaving aside only the reason for seasoning large gourds with marjoram, namely that anything watery needed something harsh, acidic, astringent, or salty to make it pleasant to eat. The central part of Gal.'s chapter (*Alím.fac. 2.3.5-7=6.562-563K*) mentions three other recipes for large gourds and their respective effects: with mustard they caused a bitter and hot juice to be assimilated, with ραπάης they engendered a salty juice, and with quinces they had an overpowering harsh juice during assimilation. Although these recipes are forgotten here, along with the fact that large gourds were corrupted in the stomach
if they did not pass through quickly, Orib. quotes
the sentence concerning ταξία ὄλο elsewhere (4.1.28 and
n.). For 'simple sauce' see 4.1.42n..

35.3 ἐνιοτεὶ δὲ κενοῦντες ... παραπλήσιαι: By excerpting this
sentence from Gal.'s previous chapter (Alim.fac. 2.2.2=
6.559K) on the naming of όφραῖοι (fruits that ripen in
the 40 days after the rising of the Dog star: see Orib.
1.39.ln.), Orib. seems almost to be appending it as a
suddenly remembered afterthought. For the sake of brevity
he ignores, on the whole, Gal.'s generalising chapters
(e.g. Alim.fac. 1.37=6.551-553K on the different seeds
growing among each sort of grain; 2.22=6.598-601K on the
theory that the consumption of apples and pears loosens
the bowels.

As Orib. states here large gourds (pallentesque cucur-
bitae, Verg.Cat. 3*.13) were watery, cold, and of no
2.10, Bon.Mal.Suc. 13.1=6.811K, Alim.fac. 2.45.1=6.635K,
Orib.Syn. 4.34.1, Cels. 2.18.3, 2.27, Garg.Mart.med. 6,
cf. Col. 11.3.48). Being cooling they were ideal for
11=15.539K, Anthim. 56, cf. Dsc. 2.134 who used them
shredded and plastered on externally for inflammations,
swellings, and childhood fevers), and their moistness
made them laxative (Hp.Aff. 55=6.266L, Vict. 2.54=6.560L,
Diph.Siph.ap.Ath. 2.59b, Gp. 12.19.8, Cels. 2.29.1, Gal.
Alim.fac. 1.1.20=6.465K). Other physicians also stipu-
lated the needfulness of cooking (Menodor.ap.Ath. 2.59a,
Cels. 2.24.1), Phan.Hist. (ap.Ath. 2.68d) going as far
as to say that large gourds were inedible when raw, but
good to eat when boiled or baked. As a food they were harmless except when they corrupted in the stomach because of a slow passage they became full of bad juices (Gal. Bon. Mal. Suc. 8.8=6.794K, cf. Alim. fac. 2.11.4=6.586K). Before large gourds were served their rind was scraped off since it was hard to digest (Plin. Nat. 19.72). The longer and thinner large gourds were, the more agreeable they became for the table, and thus Plin. (Nat. 19.72, cf. 19.61, Col. 11.3.50) recommends those which have been left to grow hanging as more wholesome than those grown lying on the soil, particularly since this kind contained fewer seeds, the hardness of which caused disagreeableness; hence the reason for the seeds (separated and arranged in rows, Thphr. HP 1.11.4) being removed before the large gourds were dried, as here, for storing over the winter (cf. Gal. Bon. Mal. Suc. 5.14=6.785K). They could also be preserved for food in brine (Plin. Nat. 19.74). For recipes see Apic. (3.4.1-8).

35.2 ὁριγάνῳ: One common denotation of ὁριγάνου was sweet winter marjoram (Origanum heracleoticum L.) and its varieties, usually called ὁριγάνυ in Modern Greek, a plant that occurs throughout Greece, but only rarely and sporadically in Italy. It was confused with ὁριγάνος Ἡρω- λεωτική, which as a term for a type of marjoram denoted common or wild marjoram (Origanum vulgare L.), which is native in Europe and the adjoining part of Asia, and is widespread in Greece and Italy. The rarity of sweet winter marjoram in Italy indicates that common marjoram was probably the species generally used there; conversely Gal. and Orib. in Pergamum may have meant sweet winter marjoram in their recipe (see A.C. Andrews, 'Marjoram as
a Spice in the Classical Era', *CPH* 56 (1961), pp. 73-
82). With its harsh, hot, acrid, and bitter flavour
12.91, 19.184, 19.186, cf. *Ar. Ran.* 603) marjoram was
ideal for counteracting the wateriness of large gourds,
713K, *Plin. Nat.* 20.175) was no doubt valued in view of
Orib.'s hesitant statement that large gourds were digest-
ed οὐ κακῶς. Marjoram was employed as a seasoning (*Antiph.*
*Ach.* 874), in salads (*Col.* 15.59.4), with fish (*Antiph.*
10.1.1 and 2, 10.3.8), meat (*Apic.* 5.4.6, 7.5.2, *Pap. Heid.*
(ed. F. Bilabel, 'Οφαρτυτίκα und Verwandtes' in
*Sitzungsberichte der Heidelberger Academie der Wis-
senschaften*, Heidelberg 1920, p.11)), and vegetables
including large gourds (*Apic.* 3.4.7, 5.4.3).

περί πεπόνων: Orib. copies this passage almost word for
word from *Gal.* (*Alim. fac.* 2.4.1-2=6.564-565K), and the
lack of alteration firmly justifies Raeder and Daremberg
restoring from *Gal.* <ΤΗΣ δ>' at the beginning of sect.
2. Only the confirming evidence for watermelons pos-
sessing ῥυπτικόν ... τι is removed, namely that dirt and
rough spots on the skin could be removed by being rub-
bed with watermelons. What is predictably ignored is
the following discussion (*Alim. fac.* 2.4.3-4=6.565-566K)
regarding the root of the word πεπόνω (from πεπαίνω,
'ripen'), the adjectival use of πεπόνω with grapes, pears,
and large gourds, and the resulting name σικυοπέπων for

οἱ μηλοπέπονες: Orib. here encapsulates the essential points of Gal.'s chapter on the same theme (*Alim. fac. * 2.5=6.566K), the one large omission being that although the fleshy part of watermelons containing the seeds was not eaten, the inside of melons was eaten. Orib. contradicts himself elsewhere (*Syn. * 4.19.7) by saying that melons did possess τὸ δ' ἐς ἑμετον ἔξομον, and this contradiction is upheld by *Gp. * (12.20.1), where melons are said to be cooling and suitable as an emetic for
phlegm. This vomitory quality was the result of their sharpness (Gal. *Vic.t.Att*. 2.10) which was such as to render them pungent enough to be used as *odoramenta* for faintness (Cael. *Aur.* *chron.* 1.4.108, Antyll. *ap.* *Orib.* 10.20.4, cf. Plin. *Nat.* 19.67). Melons supposedly could be made sweeter if their seeds were soaked in milk and honey before planting (Gp. 12.20.3). Melons were certainly regarded as moist (Orib. *Syn.* 4.34.1, Gal. *Alim.* *fac.* 1.1.21=6.465K), and bad-juiced (Gal. *Bon.* *Mal.* *Suc.* 13.1-2=6.811K), and like watermelons they could not be dried (Gal. *Bon.* *Mal.* *Suc.* 5.13=6.785K). As a food (Capi-tol. *Alb.* 11.3) they were regarded as savoury and so were eaten with pennyroyal and diluted vinegar (Anthim. 58), or pennyroyal, onions, and vinegar (Ps. Garg. *Mart.* *med.* 15), or pepper, pennyroyal, honey, passum, *liquamen*, vinegar, and asafoetida (Apic. 3.7).

38.1 ὀνρητικῶν ... ἑκείνων: This is taken straight from Gal. (*Alim.* *fac.* 2.6.1=6.567K), and thus once again (see Orib. 1.36n.) Daremberg and Raeder are correct in restoring <τι> from Gal.'s text. The subsequent discussion (*Alim.* *fac.* 2.6.1=6.567-569K) is passed over since it is to do with the recognition of foods proper to each individual person and animal, and not with cucumbers.

38.2 τοῖς δὲ καλοῦσ ... πέψει: Orib. extracts this from the point where Gal. resumes his investigation of cucumbers (*Alim.* *fac.* 2.6.4=6.569K), omitting the concluding warn-ing that all bad-juiced foods should be avoided, even if they happen to be easy to digest, since any bad humour collecting in the veins and putrefying could cause malignant fevers. Cucumbers were cooling (Dsc. 2.135.1, Gal. *Simpl.* *Med.* 5.23=11.777K, Cels. 2.27, Ps. Garg. *Mart.* *med.*
Snipping the end off a cucumber, he handed it to Joan, who, without a word, stuck it on her forehead. (This curious custom spreads a welcome coolness on the forehead ...) and watery (Plin. Nat. 19.186, Gal. Simp. Med. 8.18.14=12.122K, Vict. Att. 2.11, Alex. Trall. 5.5=2. 201 Puschmann, 5.6=2.221 Puschmann, Marc. med. 30.35, Cael. Aur. acut. 2.29.159), although they repressed sexual desire (Sim. Seth. s.v. ὀξυοῦρω α =pp. 21–22 Langkavel). They were, as Orib. says, diuretic and good for kidney complaints (Hp. Epid. 7.115=5.462L, 7.62=5.428L, Aff. 57=6.266L, Vict. 2.45=6.544L, Diocl. ap. Ath. 2.68e, Anthim. 57, Cels. 4.17.2, Plin. Nat. 23.143, Cael. Aur. chron. 3.8.121, Larg. 152). Although Alex. Trall. (Febr. 5=1.375 Puschmann) expresses amazement that anyone should believe they caused χολή, Diocl. (ap. Ath. 3.74c) attributes to their coolness and slowness of evacuation their provocation of bile, and they were considered bad-juiced (Cels. 2.21, Gal. Bon. Mal. Suc. 8.7=6.793-794K, 13.1-2=6.811K, cf. Puer. Epil. 4=11.368L), so Orib. is justified in saying that excessive consumption of cucumbers caused immoderate thick humour to collect. There were three kinds of cucumber (σίκουν χυδόντα, Phil. ap. AP. 6.102.5), the Laconicum, Scytalicum, and Boeotium (Plin. Nat. 19.68, Thphr. HP. 7.4.6). J. André (L'Alimentation et la cuisine à Rome, Paris 1981, p.41) suspects that ancient cucumbers were bitter, and perhaps Democritus' surprise at eating a cucumber with a honey-like taste supports this view (Plu. Mor. 628b-d), as does Augustus' substitution of wine by cucumber slices or a tart apple
(Suet. Aug. 77), although to argue, as André does, that the presence of honey and passum in two recipes of Apic. (3.6.2 and 3, cf. Plin. Nat. 20.12) betrays this bitterness is precarious; for other recipes (Apic. 3.6.1, 4.2.7) are completely savoury. Cucumbers were preserved for food in brine (Plin. Nat. 19.74) like gherkins today, and could be cut and hung up to dry in the smoke of the hearth for use with dishes of boiled pulses, mushrooms and vegetables in the winter (Nic. ap. Ath. 9.372e-f, cf. Gal. Bon. Mal. Suc. 5.16=6.785-786K). They were eaten raw after removal of the seeds (Phaenias ap. Ath. 2.68d).

The usefulness and importance of figs in the ancient world is shown by Orib. quoting almost verbatim from Gal. (Alim. fac. 2.8=6.570-573K). Left out is such information as that bread and pork produced compact and strong flesh (Gal. Alim. fac. 2.8.2=6.571K), that the difference between ripe and unripe figs was much greater than in other fruits (Gal. Alim. fac. 2.8.3=6.571K), and that suitable cutting and purgative medicines to be mixed with figs for blocked and indurated livers and spleens included thyme, pepper, ginger, pennyroyal, and savory (Gal. Alim. fac. 2.8.5=6.572K). Ripe figs were laxative, thirst-quenching (cf. Alex. Trall. 5.5=2.193 Puschmann) and extinguishing of heat, whereas dried figs (αἱ ὑπάρξεις) were nourishing, heating, and thirst-provoking (Dsc. 1.128.1, cf. Hp. Vict. 2.55-6.564L, Gal. Bon. Mal. Suc. 8.3=6.792K), thus illustrating Gal.'s point about the marked difference between the two sorts of fig. Gal. comments elsewhere on the μακροχυμα of figs (Bon. Mal. Suc. 13.1-2=6.811K), and
certainly they were among the foods that were *alienae* ... *stomacho* (Cels. 2.25.1, cf. Plin. *Nat.* 23.120, Ps.Garg. *Mart.med.* 49, Ruf.ab.Orib. 1.40.1), but equally only, as Orib. says here, if there was any delay in their being digested (cf. Heraclid.ap.Ath. 3.79f-80a, Gal.*Bon. Mal.Suc.* 8.4=6.792-793K). They possessed τὶ ... ὑπετυκὸν ἀξιόλογον both when eaten (Gal.*Simpl.Med.* 8.17. 43=12.132K, *Comp.Med.* 7.1=13.9K) and when applied externally (Dsc. 1.128.2, Heraclid.ap.Ath. 3.79e, Plin. *Nat.* 23.117). Orib.'s doubts concerning their nutritional value are strange since most other writers expatiate upon their fattening powers (see Orib. 1.40.2n.), but their flatulent effect of short duration was noted (Gal.*Bon.Mal.Suc.* 8.3=6.792L, Ps.Garg.*Mart.med.* 49, Cels. 2.26.2) as was the swiftness of their evacuation (Philotim. ap.Ath. 3.79a-d, Diph.*Siph.ap.Ath.* 3.80b, Gal.*Vict.Att.* 10.76) and their sweetness (Ar.ap.Ath. 14.652f, cf. Gal. *Vict.Att.* 12.89). There were many varieties of fig (Plin.*Nat.* 15.68-73, Macr.*sat.* 3.20.1-5, Col. 5.10.10-11: for a Roman wall-painting of figs see E.S.P. Ricotti, *L' arte del convito nella Roma antica*, Rome 1983, fig.86, 'Bellissimo cesto di fichi che si trova ad Oplontis').

London 1980, Table 2, pp.113-114), at latitude 38°, which runs near Pergamum, the heliacal rising of Sirius/Dog-star (heliacal rising: 'When the sun progresses far enough from a given star, the latter appears above the eastern horizon just before sunrise', Bickermann, op. cit. p.54) in A.D. 100 and afterwards was 28 July, whilst the heliacal rising of Bootis/Arcturus in A.D. 100 and afterwards was 23 September, and in A.D. 300 and afterwards 1 November. For Arist. (HA 6.569b3-4, cf. D.35.10; Arcturus would rise at the end of summer whatever time-reckoning was used, lunar or solar, since the 'end of summer' is a rough observation not a precise calculation) the rising of Arcturus ended the summer (Bickermann, op. cit. pp.53-56). Elsewhere (Alim.fac. 2.2.1=6.558K, Hp. Hum.comm. 3.19=16.433K, Hp.Epid 6 comm. 4.19=17B.184K, Puer.Epil. 6=11.377K) Gal. states that the Greeks called the central part of the summer ὦα which lasted forty days, in the middle of which the Dog-star rose (cf. Ath. 1.22e). The last part of ὦα was therefore included in ὀπόρα, and both these times of the year gave their name to a class of fruits. Thus ὐαὲὶ were all the fruits that ripened under the Dog-star. The meaning of ὀπόρα as a denomination of a class of fruits was restricted in Gal., for he says (Bon.Mal.Suc. 8.3=6.792K) that the Greeks precisely called ὀπόρα just figs and grapes. However, the initial phrase of Orib.'s excerpt seems to show that ὀπόρα included more fruits than figs and grapes, and in fact Gp. (10.74.1) lists ὀπόρα as those things with a pale fruit (χλοώδην καρπόν) without a woody exterior such as nectarines, apples, pears, and plums, whilst Chrysipp.Tyan. (ap.Ath. 14.647f-648a) uses ὀπόρα
in an extended sense to include almonds and hazelnuts (see also Orib. 4.7.12n.). Yet there is invariable frustration in any attempt to pin down Greek technical terms, as Daremberg (p.576) admits: 'On voit donc que les trois expressions ὑφαίνοι καρποί, ὑπάρχα et ἀκρόδρυα, ou du moins les deux dernières, sont employées tantôt dans un sens plus restreint, tantôt dans un sens plus étendu, et, quoiqu'ils ne soient pas complètement synonymes, comme, d'ailleurs, l'entroit dont nous nous occupons le prouve évidemment, il est impossible de tracer toujours de limites exactes entre ces diverses classes de fruits'.

39.4 τὸ τῶν φθείρων πλῆθος: The word φθείρο was applied to several parasites. Arist. (HA 5.556b22sq.) explains that one variety of φθείρο was generated out of the flesh of animals, the sign being a small eruption on the skin unaccompanied by any discharge of purulent matter; if these eruptions were pricked φθείρες jumped out. The second variety of φθείρο arose when the body was surcharged with moisture, and this condition could prove fatal. The latter was perhaps due to the louse Phthirius inguinalis and to the round worm Ascaris, the former to Sarcoptes scabei, a very minute inch-mite. Orib. must be referring to this inch-mite because of his summariness, the fatal disease surely requiring more comment to judge from the other gruesome accounts of it (D. S. 34/35.2.23, Luc. Alex. 59, Plu. Sull. 36.2, Hdt. 4.205, Porph. VP 55; on phthiriasis in general see Cael. Aur. Chron. 4.2.14-18). J. M. Riddle ('Gargilius Martialis as a Medical Writer', JHM 39 (1984), pp.416-421), however, suggests that the fatal disease may have
been epidemic louse-borne typhus which is an acute infectious disease caused by *Rickettsia prowazekii* and transmitted by the human louse *Pediculus humanus*, but concludes that the nature of *phthiriasis* in antiquity remains uncertain. The itch-mite was caused not only from the eating of dried figs (Gal. *Bon. Mal. Suc.* 8.4=6.793K, Paul. *Aeg.* 1.81.1) but also from the consumption of olive-oil into which a gecko-lizard had fallen and died (Ael. *NA* 9.19), or from dirtiness (D.L. 5.5). Gal. (*Comp. Med.* 1.7=12.462K) held that *φθηρίασις* occurred on some people's heads as a result of moist and hot humours, but not when these humours came to such a degree of heat that harsh serous discharges resulted. The remedies for it were drying and capable of drawing from and cleansing deep down in the skin, Archig. (ap. Gal. *Comp. Med.* 1.7=12.463K) enumerating stavesacre, realgar, sodium carbonate, vinegar and olive-oil; sumach and olive-oil; curled dock and olive-oil; and white hellebore, stavesacre, and sodium carbonate (cf. Dsc. 4.152.2, 5.105.1; also M. Grieve, *A Modern Herbal*, Harmondsworth 1976, p.771 on the use of stavesacre seeds as a parasiticide to kill pediculi).

39.5 ἐμπερισθρομένως: See Orib. 1.53.4n..

gether insensible. The former was incurable, the latter could be cured with difficulty. Indurations were the result of thick and cold humours, namely black bile or excessively dry phlegm or a mixture of the two (Gal. Simpl. Med. 5.9=11.736-737K, Hp. Hum. comm. 2.27=16.300-301K, Hp. Vict. comm. 3.19=15.337K, Cur. Rat. Ven. Sec. 5=11.265K). Indurated parts could be cured by things with a moderate heat which were neither excessively moist nor altogether without moisture (Gal. Ad Glauc. 2.6=11.104K), hence the need to mix figs with whatever was cutting, attenuating, and purgative (cf. Plin. Nat. 20.127).

39.6 μετὰ τινὸς τῶν παχυνόντων ἐδεσμάτων: Following the text of Gal. and C2, Daremberg (p.50) inserts the adjective παχυνόντων after τῶν, and this gives the sentence some point. Raeder's version may be palaeographically correct with the Mss. of Orib., but the advice he ascribes to Orib. is very strange since figs were eaten with many different foods: with ham (Apic. 7.9.1), shoulder of pork (Apic. 7.10), with cheese (Plin. Nat. 15.82), bread (Sen. Ep. 8.7.3), and on their own as a dessert (Antiph. Ap. Ath. 3.74d, Polem. Hist. ap. Ath. 4.139a, Dinon ap. Ath. 14.652c, Pherecr. ap. Ath. 14.653a, cf. X. Cyr. 6.2.22). Mixing figs with other foods was not just a culinary aberration seeing as the physician Philotim. (ap. Ath. 3.79a) opined that figs in no way hindered the digestion even as part of a meal. There was a sort of fig jelly bottled in a jar (ficus ... gelata, Mart. 4.46.10).

40.τιτ. Ροῦφου: Rufus of Ephesus was perhaps the most important Greek doctor during the Roman Empire next to Gal., although mediaeval writers conjured up fantasies of him
acting as the personal physician to Cleopatra or being a contemporary of Plato. That he could not have lived before the 2nd half of the 1st c.A.D. is supported by Gal., who numbers him among the νεώτεροι ἰατροί (Atr. Bil. l=5.105K), and the Suda (s.v. Ῥοῦως), which calls him ἡγονώς ἐπὶ Τραϊανοῦ. A precursor of Gal. in many respects, he polemicised vehemently against the theory of the veins promulgated by Erasistratus, and he was among the first people to recognise the crossing of the optic fibres, and the vessels in the uterus which had escaped the notice of all his predecessors. Little of Ruf.'s extensive writing have survived intact, and thus posterity is indebted to Gal., Orib., Aët., Alex. Trall., and Paul. Aeg., among others for preserving large fragments (see: Gossen, 'Rufus', RE n.s. 1 (1920), cols.1207-1212 and J. Ilberg, 'Rufus von Ephesus: ein Griechischer Ärzt in Trajanischer Zeit' in Abhandlungen der Philologisch-Historischen Klasse der Sächsischen Akademie der Wissenschaften 41, Leipzig 1930, pp.1-53). Although this extract partly contradicts what Gal. wrote, the fact that Gal. (Atr. Bil. l=5.105K, cf. Ord. Lib. 3=19.57K) praised Ruf. so highly explains why Orib. considered it permissible to include it in his work. Orib. too (Eup. introd. 6) admired Ruf., calling him ὁ μεγάλος, although this is no doubt an echo of Gal..

40.1 ΣΩΚΑ: This sentence must refer, among other things, to the κακόχυμα of figs (see Orib. 1.39n.).

40.2 αἱ ὁμόλογας ...: This is a divergence from Gal.'s views about the nutritive powers of dried figs. Even Hp. (Vict. 2.45=6.542L) regarded figs with χόνδροι of millet as strong nourishment for τοῖς πονεούσιν. New--
born children supposedly grew sturdy when fed with fig-juice (Herod. Med. ap. Ath. 3.78d), and Plu. (Mor. 131e) listed dried figs along with boiled eggs, meat, and cheese as solid and nourishing food. Orib. omits to say that a diet of figs and water as enjoyed by two sophists of Elis, Anchimolus and Moschus, although promoting a robust physique, caused malodorous perspiration (Heges-and. ap. Ath. 2.44c). On drying figs cf. C. Levi, Cristo si a fermato a Eboli, Torino 1945, pp.62-63: ‘Dalle ringhiere del balcone pendevano e dondolavano pigre al vento le trecce di fichi, nere di mosche che correvano a sorbirne gli ultimi umori, prima che la vampa del sole li avesse tutti succhiati’.

40.3 Πυθαγόρας: Raeder keeps Daremberg’s (pp.576-577) emendation Πυθαγόρας for Mss. γόρα, but preserves Mss. Εὐραμένη for Daremberg’s Εὐρυμένη. Paus. (6.7.10) presents a certain Dromeus of Styphalus as the inventor of the carnivorous diet, athletes previously having eaten cheese (cf. D.L. 8.12), but the tradition of Pythagoras changing the diet of figs for one of meat was more widely accepted (Plin. Nat. 23.121, D.L. 8.12, Ps. Garg. Mart. med. 49, Isid. orig. 17.7.17, Porph. VP 15). Who was this Pythagoras? In D.L. (8.46), in a catalogue of people called by the same name, there is mentioned a Pythagoras σωμασκηνής or ἀλείπτης who was almost contemporary with the philosopher, although Daremberg thought that as ‘cet alipte était de Phliase, et que Rufus indique Samos comme la patrie de l’athlète qui fut le premier soumis au régime animal, il paraît que Diogene n’a pas voulu parler de cet alipte-là’. Yet Ruf. only says that Euramenes was from Samos, not Pythagoras, and so Pythagoras
of Phlius may be meant. Iamb. (VP 5.25) records another Samian Pythagoras (on Samos as the birthplace of the philosopher cf. also Luc.Vict.Auct. 3), the son of Eratocles (the philosopher being the son of Mnemarchus), to whom he attributes the changeover to a flesh diet; perhaps the tradition is too confused to allow any precision. However, a further strong argument against the philosopher's having instituted the carnivorous diet was his almost definite vegetarianism (see J. Scarborough, 'Beans, Pythagoras, Taboos and Ancient Dietetics', CW 75 (1982), pp.355-358, and D.A. Dombrowski, Vegetarianism: The Philosophy behind the Ethical Diet, Wellingborough 1985, pp.35-54, esp. p.43).

41.1-3 οὐκα ... μεταβολλόμενον: Using as his source Gal. (Alim. fac. 2.9.1-2=6.573-574K), Orib. leaves aside the proof (σημεῖον) of the great nourishment in grapes, namely that people who ate them with figs or with bread became fatter, but apart from this omission Gal.'s text remains substantially unchanged. Gal.'s subsequent section (Alim. fac. 2.9.3=6.574-575K) concerning the composition of grapes -- the dry, astringent pips and the moist, fleshy pulp -- is omitted, probably because it merely states in greater detail what is already included by Orib. in his précis; certainly this is the case as regards the pips, Orib. summarising in sect. 4 Gal.'s views on the subject in eight words. Gal.'s account (Alim.fac. 2.9.4=6.575K) of the way people ate grapes, some spitting out both pips and skin, is also forgotten since it has little bearing on diet.

41.3 ὠμὸν ... χυμὸν: Food passed through several stages of
digestion before being converted into blood, firstly in the stomach, then in the liver and veins, and finally in the parts being nourished (Gal. *Bon. Mal. Suc.* 5.17-18=6.786K). When digestion was unsatisfactory 'raw' humour was produced (Anthim. *introd.*, cf. *Hp. Hum.* 6=5.454L), a thick and cold fluid resembling pus (πῦον) but without the latter's evil smell and viscosity (Gal. *Alim. fac.* 1.2.11=6.488-489K; *Hp. Hum. comm.* 1.1=16.52-53K, *Comp. Med.* 10.2=13.332K, *San. Tuend.* 4.4.54-55=6.255K). Not only grapes but also molluscs could engender 'raw' humour (Gal. *Alim. fac.* 3.32.4=6.735K), as could bread made without much yeast and salt (Gal. *Alim. fac.* 1.2.11=6.488K; see also Daremberg, pp. 571-572. 41.4 μαλλον ... τυγχάνοντα: Orib.'s pruning here is too rough, and his wording does not wholly convey what Gal. (*Alim. fac.* 2.9.5=6.575K) was trying to say (on the same problem cf. Orib. 1.50.2n.). Gal. suggests that a rapid transit through the bowels could be achieved by eating just the flesh of grapes without either the pips, as Orib. says, or skin, which Orib. for some reason forgets; still better was to drink just the juice or χλεύκος (cf. Orib. 1.41.8n.), although this could cause flatulence. The final part of Gal.'s section (*Alim. fac.* 2.9.5=6.576K) is omitted, somewhat surprisingly considering it delineates the greater nourishment contained in dry grapes than in watery grapes. The omission of the next two sections (*Alim. fac.* 2.9.6-7=6.576-577K) concerning the preservation of grapes either in χλεύκος or marc is more understandable since it in no way advances the understanding of diet. 41.5-8 τῶν δ' ἀποτεθεμένων ... εἰς πάντα: With intermittent but unimportant gaps Orib. draws his information from Gal.
Sweet grapes (e.g. coccolobis from Spain, Plin. Nat. 14.30; Surrentinum, Plin. Nat. 14.38) passed through the bowels quickly and hence caused little harm (Gal. Vict. Att. 12.90), whilst all ripe grapes were thought to be hot, moist, and laxative (Hp. Vict. 2.55=6.564L). Fresh grapes could upset the stomach, but hanging them for some time dried off their excess moisture and so made them better to eat (Dsc. 5.3.1, Plin. Nat. 23.10, Gal. Vict. Att. 10.81, Bon. Mal. Suc. 8.3=6.792K). Grapes could be stored in γλευκος, ἥψημα (see Orb. 4.1.21n.), sweet wine, rain-water, or marc (Dsc. 5.3.1-2, Plin. Nat. 23.11-12, Apic. 1.12.1). Unripe grapes (δωμαξ, cf. AP 5.304) in contrast to ripe grapes were cooling (Gal. Simpl. Med. 4.12=11.657K and 660K). Grapes were eaten as a dessert (Matro ap. Ath. 4.137b, Antiph. ap. Ath. 2.47d, Mart. 5.78.12) and as an ἤψιν with bread (Suet. Aug. 76.2, cf. Mart. 13.22: for a Roman wall-painting of grapes see E. S.P. Ricotti, L'arte del convito nella Roma antica, Rome 1983, fig.74, '... grappolo d'uva è un piccolo particolare degli affreschi che decorano le pareti di una sale di Oplontis').

41.6 αἱ δ' οἴνῳδεῖς: Strong wine was called οἶνῳδῆς, whilst weak wine was called ὕδατώδης (Gal. Hp. Acut. comm. 3.1=15.628K, Erot. s.v. οἶνον οἴνῳδες = p.67 Nachmanson). The quality of these grapes must be analogous to the wine. ἐνιοί δὲ καὶ ...: 'nonnulli quoque mustum, idque dulce, eiusdem rei causa bibunt: id enim maxime subducit: quod vero ex uvis austeris, aut acidis exprimitur, ad omnia pessimum est' (Rasario, p.214).

41.8 γλευκος: Another rather vague term equivalent to Lat. mustum (CGL 2.263.26), ranging from τὸ ἀπόσταγμα τῆς
σταφυλῆς πρὶν πατηθῆ (Hsch. s.v. γλεύκος, cf. Cato Agr. 23.2) to the juice of freshly pressed grapes (Gp. 5.47.2, 6.13.1, Gal. Alim. fac. 2.9.5=6.575K, Longus 2.2.4) or to the juice derived from the second pressing (Col. 12.36, var.R. 1.54.2), or even to lightly fermented must (Gp. 6.14.2, 6.12.2, 3.15.2, Plu. Mor. 655e-656b). It appears to have been made usually from white grapes (cf. Tib. 1.5.23), to have been sweet in flavour, and was boiled down to make ἐψημα or sapa (Gal. Antid. 1.2=14.11K, Bon. Mal. Suc. 11.3=6.800K, Vict. Att. 12.88, Gp. 19.9.6, Plin. Nat. 14.121, Dsc. 5.6.4). ΥΣΧΥΡΩΣ was also kneaded with millet flour (see Orib. 1.22n.) to make cakes that were first dried in the sun, and then left in a damp place until required as a substitute for yeast (Gp. 2.33.3). Grapes could be preserved in mustum (Cato Agr. 7.2), and from Massilia came a disgusting mustum for the table that reeked of smoke (Mart. 3.82.23, cf. 10.36# and Alexandr. ap. Ath. 4.131f on καπνίας.

τὸ γλυκὸ (τῶν ὑπακτικωτέρων γάρ): The Mss. of Gal. (Helmreich, p.279) read τὸ γλυκύτατον· ὑπακτικωτάτον γάρ τούτο, except for the 6th c. Ms. W which has ὑπακτικῶτερον. Daremberg (p.54), following C², keeps to the text of Gal., although other Mss. of Orib. read τὸ γλυκὸ τῶν ὑπακτικωτέρων, the following γάρ disappearing, and this is what Raeder prints, despite the awkwardness of construction (cf. smoother parallel in Gal. Vict. Att. 2.7: ὅτι μὲν οὖν σκόρδῳ καὶ κρόμῳ ... τῶν λεπτυνόντων ἔστιν; also Alim. fac. 1.24.1=6.537K: τῶν θερμαίνοντων δὲ ἔστι φανερῶς). The true reading may lie with W for, in many cases, of all the Mss. of Gal., 'ueras autem lectiones ... fere solus praebet' (Helmreich, Praefatio, p.XXIX). With
[ω] and [ο] becoming nearly homophonous by the imperial period (e.g. Orib. 1.9.1 ἀχιλλότερον N for ἄχιλλότερον (Raeder, p.11), Orib. 1.14.1 λυμόττοντες AN for λιμόττοντες (Raeder, p.13), Orib. 1.20.3 δυσπεπτότεροι add. for δυσπεπτότεροι (Raeder, p.15); cf. L.R. Palmer, The Greek Language, London 1980, p.177 and S.-T Teodorsson, The Phonology of Attic in the Hellenistic Period, Studia Graeca et Latina Gothoburgensia 40, Göteborg 1978, pp. 42-43; for similar Mss confusion because of pronunciation see Orib. 1.8.1n.) ὑπακτικότερων could possibly have been a scribal slip for the original ὑπακτικότερον, τὸν then being inserted to accord with the grammar, and thus the phrase would run with far less strain τὸ γλυκῷ ὑπακτικότερον γάρ. Even if A and C omit γάρ, it must be kept with N and C² to ensure smoothness of sense. The fact that the Mss. of Gal. read τὸ γλυκύτατον, whereas the Mss. of Orib. read τὸ γλυκῦ, should cause no difficulty since Orib. was often inclined to shorten or simplify words for the sake of brevity (cf. Orib. 1.42.3n., 49.2-3n.).


41.9 τὸ δ' ἀπόβρεγμα: Gal. (Alim.fac. 2.9.12-13=6.580k) explains that to make an ἀπόβρεγμα of grapes what was left of the pulp (βρύτια) after pressing for wine was put into small casks, into which enough water was poured to cover; after leaving to stand a hole was opened at the bottom of the casks, and the ἀπόβρεγμα flowed out, and this was
drunk instead of wine. Sometimes this operation was repeated, although with far less water because of the diminished strength of the pulp, the resulting drink being called διεύντριας. Other authors (Plin. Nat. 14.86, Var. R. 1.54.3, Dsc. 5.6.15) did not apply this distinction, and held that any beverage made with grape-skins and pulp was διεύντριας or ὕλα; it had to be consumed within a year as its power faded. It was administered to fevered patients in place of wine (Dsc. 5.6.16) and caused headaches (Orib. Syn. 4.20.4), but its diuretic quality does not seem to be mentioned elsewhere. Grapes were preserved in ὕλα (Cato Agr. 7.2), and this emphasises its cheapness as a drink (Cato Agr. 25). ἀποθρέγματα were also made of wormwood for ἀποσιτία (Aret. CA 1.1=24A.198K, cf. Orib. 1.49.5n.), and of buckthorn by the Τρυγλοδύτωτες as a drink (Str. 16.4.17).

42.1-6 αἱ μὲν αὐστηραὶ ... οὔδὲν ἔχουσαι: This is lifted almost word for word from Gal. (Alim. fac. 2.10.1-2=6.581-582K), Orib. only omitting Gal.'s preamble to the effect that raisins have the same relationship to grapes as dried figs do to fresh figs, and that there were many sweet raisins but few harsh ones, most being a mixture of these two qualities. Sim. Seth. (s. v. σταφίδες = p.95 Langkavel) also regarded sweet raisins as hotter, harsh ones as colder. Hp. (Epid. 7.80=5.436L) seemed to have envisaged their cooling property when he recorded that a certain Nicoxenus at Olynthus was given βότρυν ἐξ ἡλίου after a fever following phrenitis, as did Gal. (Comp. Med. 9.8=13.317K, cf. Plin. Nat. 23.16) when he recommended cumin mashed with stoned raisins for inflammations of the genitals. Raisins that were heating were laxative (Hp. Vict.
2.55=6.564L) and strengthened the stomach (Ps. Theod. Prisc. Simpl. Med. 130, cf. Gal. Rem. Par. 1.1=14.318K). Elsewhere Gal. (Simpl. Med. 6.1.70=11.842K, cf. Dsc. 5.3.3) by saying that sharp raisins purged away phlegm contradicts what he says here about the power of sweet raisins, and Hp. (Aff. 55=6.266L) diverges still further by asserting that raisins, along with cheese and sesame-seeds, actually caused phlegm. In agreement with Orib.'s statement that raisins could dull biting pains in the stomach are Gp. (2.47.13) and Cels. (2.24.2), who opined that μωασ ex olla were extremely suitable for the stomach. Raisins that were not astringent were better for chest and lung problems rather than for enlarged livers and spleens (Gal. Vict. Att. 10.82). Superior to raisins made from black grapes (Hp. Mul. 1.42=8.101L) were raisins made from white grapes (Plin. Nat. 23.15, Hp. Mul. 1.105=8.228L). There were two methods of drying the grapes: the first involved twisting the stems of the ripened bunches of grapes and leaving them to wither (cf. Honest. ap. AP 5.20.3) on the branches. The bunches were then cut off and hung in the shade (cf. Plaut. Poen. 312, Alex. Trall. 8.1=2.331 Puschmann κρημαστή σταφυλή; cf. Cato Agr. records a speedier method involving hanging the bunches of grapes ad fabrum ferrarium to dry, cf. Cael. Aur. Chron. 2.7.107, 3.2.34). Finally the raisins were packed between vine leaves in jars (cf. Mart. 7.20.9) and stored in a cool, smokeless room. Raisins prepared in this way were extremely sweet and could be kept for a long time (Gp. 5.52.1, Pall. 11. 22). The second method required the grapes to be picked and spread on boards for a short time, care being taken to avoid bruising. The bunches were then plunged into
boiling lye made with brushwood cinders and olive-oil, before being taken out and arranged on wicker-work to dry. They could be stored in pots sealed with plaster, or between vine or plane leaves in jars (Col. 12.16.1-3). Raisins were used to make a wine (Pl.Lg. 8.845b6, Pall. 11.18, cf. Verg.G. 4.268, Hp.Acut. 17=2.362L) and were enjoyed as a food on their own (X.An. 4.4.9, Ant.Fro. 1 p.177(66N) or as one of many ingredients (Alex.ap.Ath. 4.170a, Antiph.ap.Ath. 2.68a, Cato Agr. 143.3); with must, vinegar, and mustard seeds to season turnips (Nic.ap.Ath. 4.133d), with nuts to stuff turdi siliginei (Petr. 69.6), and in sauces for meat (Apic. 8.2.7), fish (Apic. 4.2.30, 10.1.2), and fowl (Apic 6.5.1).

42.3 ἐπικρατητικῶν: Apart from the variant ἐπικρατητικῶν ('as-trengent') in the second hand of C (16th or end of 15th c.; see Raeder, Praefatio, p.V and Daremberg, Indication des manuscrits, p.LVII) the Mss of Orib. are unanimous in their reading ἐπικρατητικῶν. Although there is no problem of sense ('une faculté tempérante', Daremberg p.55), this reading is divergent from the text of Gal. (ἐπικρατητικῶν) as emended by Chartier in his edition of 1639-1676. Is Orib. straying radically from his source, or is he merely substituting a later and simpler form of the same word? Because the Mss. of Gal. have such problems with ἐπικρατητικῶν (p.280 Helmreich: ἐπικρατητικῶν W, ἐπικρατητικῶν V, ὑπακτικῶν AB; cf. also San.Twend. 4.4.78=6.260K, p.115 Koch: ἐπικρατητικῶν Scaliger, ἐπικρατητικῶν M, κατὰ κερατικῶς M¹, ἐπικρατητικῶς VR), the latter explanation for Orib.'s divergence is perhaps the most reasonable and certainly LSJ equates the two words (s.v. ἐπικρατητικῶς). Deriving from ἐπικράννωμι (to mix
something with another thing, esp. wine with water: Hom. Od. 7.163, Damocr. ap. Gal. Antid. 1.16=14.100K, cf. Hp. Aph. comm. 56=18A.169K), the word was applied to the action of tempering ἔπλεκτρα (Alex. Trall. 7.7=2.285 Puschmann, cf. Herod. Med. ap. Orib. 5.30.3, Gal. Math. Med. 9.10=10.640K). Gal. (Simpl. Med. 2.12-13=11.488-419K) explains some of the ideas behind tempering: pain caused by coldness could be relieved by an injection of warm olive-oil, whilst if the coldness was particularly strong rue and bitumen (there is a specimen of Roman bitumen stamped with an official seal in the Museo Nazionale at Chieti, Abruzzo; on bitumen in medicine see R. J. Forbes, Studies in Ancient Technology, vol.1, Leiden 1955, pp. 96-98) could be added to the warm olive-oil. Drugs for tempering biting humours (ἐπικεράνυτα φάρμακα) worked by being stronger than these humours, but if the drugs were administered in too small a quantity or if they were too weak, then bad humours were provoked and nourished, and recourse had to be made to purges. Besides sweet raisins orange-tawny (μέλλον) wines (Gal. Meth. Med. 12.4=10.837K) and chicken broth (Dsc. 2.49.1) possessed tempering powers.

42.5 άι συμπελτήκαι: Named after Σμύρνα, a region of Pamphylia (τόπου Παμφυλίας, Hsch. s.v. Κέσκος; cf. Aret. CD 1.5=24A. 322K, Gal. Vict. Att. 12.98) or Galatia (Plin. Nat. 14.80), which is not such a contradiction as it first seems. R. Syme (‘Pamphylia from Augustus to Vespasian’, Klio 12 (1937), pp.227-231), in his discussion of the separateness of Galatia and Pamphylia, argues that the administration and finance overlapped between the two area, which were at different stages joined either together or to neigh-
bouring provinces such as Lycia, until the time of Vespasian when the 'vast consular province of Cappadocia-Galatia' was constituted, and the Claudian province of Lycia-Pamphylia was reconstituted, thus providing a 'lasting change'. The wines from Διόβελα were renowned for their thickness, sweetness, and darkness (Gal.Meth.Med. 12.4=10.833K, 6.3=10.404K, Simpl.Med. 4.8=11.648K, Hp. Acut.comm. 3.2=15.632K, Bon.Mal.Suc. 11.2=6.800K, Aret. CA 2.9=24A.284K). They were without astringency, had no diuretic action, and were drunk before meals (Gal.San. Tuend. 5.5.16=6.337K). Gal. is therefore quite correct in numbering the grapes ἐκ τῶν γλυκεῖων τῶν μεγάλων. πρὶν ἔσθειν: καὶ πρὶν ἔσθειν appears in the Mss ABP of Gal., but καὶ is omitted by W (p.291 Helmreich).

Raeder rightly deletes it from his text of Orib. as it adds nothing to the sense ('even before eating'?), and must have arisen through dittography with the preceding σκυμβελιτταῖα. Daremberg (p.56) retains it in his text, but shows its redundancy by ignoring it in his translation ('avant de les manger'); A. Olivieri (RIGI 1-2 (1929), p.156) suggests its retention by saying that it 'manca pure in Galeriolf but admits its lack of meaning by pointing out that Daremberg does not translate it.

42.6 γίγαρτον δ' ἐλως οὖθεν ἔχουσαι: When the heart-wood (μήτρα) of the vine was scraped the grapes that were subsequently produced were seedless (Thphr.CP 5.6.13, 5.5.1, Col.Arb. 9.3, Pall. 3.29).

42.7-8 τροφή δ' ἐκ τῶν ἀσταφίδων ...: Orib. here uses as his source Gal. (Alim.fac. 2.10.4=6.583-584K), omitting that raisins, besides being better for the stomach than dried figs, were endowed with less laxative and purgative power
than the latter.

This is but a small part of Gal.’s chapter on mulberries (Alim.fac. 2.11=6.584-587K), Orib. omitting a preliminary disquisition on the difference between Attic and Asian Greek, μόρα belonging to the former, συκάμινα to the latter, although Ath. (2.51b) remarks that the Alexandrians also called them μόρα. The advice to eat mulberries before other foods because they were moist and therefore easily corrupted easily if their passage was delayed by anything taken earlier (cf. Gal.Bon. Mal.Suc. 8.8=6.794K) is reminiscent of the advice regarding peaches (Gal.Alim.fac. 2.19.2=6.593K and Orib. 1.47n). Gal. elsewhere (e.g. San.Tuend. 5.8.7=6.351K, Simpl.Med. 5.23=11.777K, Alim.fac. 2.2.1=6.558K) juxtaposes mulberries with κολόκυνται and πέπονες as having similar properties. After excerpting Gal. (Alim.fac. 2.11.4-5=6.586-587K) from τα τοίνυν συκάμινα καθάρα το καλ το ἦπαρ εἶναι, Orib. jumps to the end of Gal.’s chapter (Alim.fac. 2.11.7=6.588K) with ὑγραίνει μὲν πάντως ..., deriving from the intermediate section only that mulberries possess some astringency, a fact stated in Orib.’s own words (πρόσεος τί δὲ τοῖς συκάμινοι καὶ στύφεως τί) which do not have any immediate connection with Gal.’s phraseology. Mulberries were famous for their dark colour (Arist.Rh. 1413a19, Ps. Verg.Copa 21). Diph.Siph. (ap.Ath. 2.51f), like Orib., considered them to give little nourishment and to be easily digested. When ripe they were laxative (Hp.Vict. 2.55=6.562L, Gal.Vict.Att. 10.76, Plin.Nat. 23.135, Dsc. 1.126.1), but when unripe and dried were costive and thus suitable for dysenteric and coeliac conditions (Gal.Simpl. Med. 7.12.23=12.78K). The root had a skin that was not
only cathartic but also bitter, and hence boiled in water
and drunk was ideal for the expulsion of flat intestinal
2.595 Puschmann, Dsc. 1.126.2). The fruit was cooling
(Gal. Simpl. Med. 4.3=11.631K, Ps. Garg. Mart. med. 49) and
suitable for healthy and sick people (Anthim. 87). The
juice was used in composite medicines for its astringency
(Androm. ap. Gal. Comp. Med. 6.6=12.929-930K) and for its
soothing effect on the mouth and uvula (Plin. Nat. 23.136),
honey sometimes being added for palatability (Gal. Comp.
Med. 6.3=12.910K). Apart from a recipe for mora ut diu
durent (Apic. 1.12.6), mulberries do not appear to have
featured in cooking.

τὰ βάτυνα: Characteristically Orib. disregards Gal.'s
(Alim. fac. 2.13=6.589K) opening sentence regarding the
different names for the blackberry, but otherwise quotes
with a minimum of variation. Perhaps surprisingly be-
cause of its dietetic value he leaves out the latter part
of Gal.'s penultimate sentence, a reminder that black-
berries when unripe and dried were more costive, and Gal.'s
final sentence, a statement to the effect that all medi-
cines made with blackberry juice possessed a more drastic
power because of it. The astringency of blackberries was
well known (Gal. Alim. fac. 6.2.4=11.848K, Dsc. 4.37, Plin.
Nat. 24.117, Hp. Liqu. 5=6.128L). Why an excess of black-
berries was thought to cause headaches, and why this de-
fect should be mitigated by thorough washing is unclear,
unless it was their excessive astringency that was at
fault or their frigorific quality (Gal. Simpl. Med. 4.3=11.
631K, Alex. Trall. Febr. 4=1.361 Puschmann). Certainly
elsewhere Gal. (Alim. fac. 2.38.5=6.622K) criticises black-
berries for being ill-suited to the stomach and full of bad juices. Not only the unripe fruit but also the flower had the power to check the bowels, hence their use in cases of dysentery and stomach fluxes (Gal. *Simpl. Med.* 6.2.4=11.848K, Dsc. 4.37, Plin. *Nat.* 24.119, Plin. *med.* 2.7). Blackberries were used in medicines both externally (for fissured breasts, Hp. *Mul.* 2.186=8.366L; for splenitis, Larg. 131) and internally (for colic, Larg. 113; for flux from the womb, Hp. *Mul.* 2.112=8.242L). Blackberries could be a substitute for mulberries (Gal. *Comp. Med.* 6.6=12.929K) because of their similar properties (Gal. *Comp. Med.* 6.4=12.920K), and the two fruits were sometimes called by the same name of μόρα/mora (cf. Ps. Dsc. 4.37RV, Gal. *Alim. fac.* 2.13.1=6.589K, Anthim. 86), while if more precision was required then a phrase such as μόρα τὰ ἀπὸ τοῦ βάτου (Hp. *Nat. Mul.* 32=7.354L) could be used. No doubt the similarity in colour of blackberries to mulberries (puniceis ... rubis, Prop. 3.13.28; μόρα τὰ ἀπὸ τοῦ βάτου τὰ ἔρυθρά, Hp. *Mul.* 2.112=8.242L) added to the confusion. The Latin equivalent was *rubus* (CGL 2.256.36). Blackberries grew in the wild (Gal. *Alim. fac.* 2.38.1=6.620K), and their presence showed that the land was well-watered and fertile for crops (Col. 2.2.20, Pall. 1.5.1, Gp. 2.5.16, 2.10.6). When ripe and sweet the fruit was eaten as a dessert (D.S. 1.34.9).

κεφαλαλγεῖ: 'Nous ne connaissons pas d'autre exemple du verbe κεφαλαλγέω employé dans un sens actif' (Daremberg, p.578 although on p.692 he requests 'supprimez la note sur κεφαλαλγεῖ'). However, *LSJ* (s.v.) give five examples drawn from Hp., Sor., Dsc., Arr., Gal., and an inscription from Palestine.
45 ὁ τῶν κυνόσβατων καρπὸς: Orib. quotes Gal. (Alim. fac. 2.14=6.589K) almost verbatim, only leaving aside Gal.'s mention of the farmers for whom the fruit of the wild rose or rose hip (see J. D'Andrea, Ancient Herbs in the J. Paul Getty Museum Gardens, Malibu 1982, pp.70-72 and plate) supplied little nourishment, and that they called the fruit κυνόσβατον. The wild rose (Rosa canina L.) was in size between a bush and a tree, with flatter leaves than a myrtle, strong thorns around the branches (hence its use to fence in fields, Col. 11.3.4), a white flower, and an oblong fruit resembling an olive stone which when ripe was the colour of a pomegranate (Thphr. HP 3.18.4, Dsc. 1.94, Ath. 2.70c-d, Sch.Theoc. 5.92, Gal.Alim. fac. 2.38.1=6.619K, Plin.Nat. 16.180 and J. André ad loc., Paris 1962, p.159). E. Richards - Μαντζουλίνου ("Η φυτική διακοσμήση τῶν κλασικών χρόνων", AAA 14 (1981), pp.212-214 and fig.3) suggests that the floral sculptural patterns in certain buildings of the classical period were chosen to depict plants used at that time for medicinal purposes, the tholos of Epidaurus displaying representative medicinal plants from Greece including the wild rose. Thphr. (HP 9.8.5) reports the superstition that the fruit of the wild rose had to be gathered standing to windward to avoid danger to the eyes, but what the danger was he does not say. Dsc. (1.94, cf. M. Grieve, A Modern Herbal, Harmondsworth 1976, pp.690-691) specifies that it was the dried fruit with the woolly (ἔρυθση) inside removed that checked the bowels when boiled in wine and drunk, this woolly part being bad for the windpipe (Gal. Simpl.Med. 7.10.62=12.52K). Elsewhere Gal. (Alim.fac. 2.38.5=6.621-622K) rejects wild rose fruits as being of
little nutritive value and full of bad juices, food fit not even for domestic pigs but only those that lived in the mountains. Naturally these fruits were not used in the kitchen. On the wild rose see also W.L. Carter, 'Roses in Antiquity', *Antiquity* 14 (1940), pp.250-256 and esp. p.253.

ἀρκετὰς ὀξείν χάνειν: ' Summarising his source (Gal.*Alim.*, fac. 2.15.1-2=6.590K) Orib. concentrates on the medicinal powers of the juniper berry and their effects if eaten in quantity, and leaves aside their benefits such as cleansing the liver and kidneys, and thinning thick and viscous humours. Perhaps he expected the reader to have some knowledge already of plants and fruits (cf. Orib. 1.33n.). The berry resembled pepper corns (Plin.*Nat.*, 12.26), was sweet and moderately heating (Dsc. 1.75, Thphr.*Od.*, 5, Gal.*Simpl.*, Med. 6.1.57=11.836K, Alex.*Trall.*, 7.8=2.305 Puschmann), and was used, as Gal. says here (cf. Nic.*Ther.*, 583-586), in medicines: in a remedy for jaundice (Cass.*Fel.*, med. 49), in a recipe for a diuretic wine (Cato *Agr.*, 122), in an antidote against poisonous drugs (Gal.*Simpl.*, Med. 9.1.2=12.174K), to make a vinegar to promote the digestion (Gp. 8.35), with False Dittany (? *Ditamnus albus* L., see M. Grieve, *A Modern Herbal*, Harmondsworth 1976, p.147) to drain off the water in dropsy (Plin.*Nat.*, 24.27), for flatulence (Larg. 109), in an elaborate preparation to purge the internal organs (Plu.*Mor.*, 383e, 384b), and for flux and pain of the womb (Hp.*Nat.*, *Mul.*, 32=7.356L). Perhaps the fact that the juniper berry was δρομητόν ἱματοκίνητον (Gal.*Alim.*, fac. 2.15.1=6.590K) caused stomach-ache when eaten to excess. It was used as a seasoning in cooking (Apic. 8.4.2). On the confusion between cedar and juniper trees

In the chapter from which this note is excerpted (*Alim. fac.* 2.19=6.592-593K) Gal. adds that peaches were originally called μῆλα περσικά, and that the reason for eating them before a meal was to enable them to pass through the bowels quickly, for they were moist and full of bad juices (cf. Gal.*Simpl. Med.* 7.12.17=12.76K, *Alim. fac.* 1.1.22=6.466K, Ps.*Garg. Mart. med.* 44, Anthim. 85) and thus when mixed with other foods caused corruption. Gal. even thought that they degenerated so quickly after being picked that it was impossible to dry them before they rotted (*Bon. Mal. Suc.* 5.13=6.785K, *Alim. fac.* 2.2.1=6.558K), although Dsc. (1.115.4) recommends dried peaches to check fluxes of the stomach and bowels. Gal. (*Bon. Mal. Suc.* 13.1=6.811K, cf. Alex.*Trall.* 7.1-2.251 Fuschmann*) suggests peaches among other things such as cucumbers and melons to cure sick people of dryness and heat in summer. Diph.*Siph.* (ap.*Ath.* 3.82f) thought peaches were good in flavour and more nourishing than apples. The peach tree, coming originally from the East as its name reveals, was a recent introduction to Italy in Plin.'s time (*Nat.* 15.44-46, cf. J. André, *L'alimentation et la cuisine à Rome*, Paris 1981, p.80 and the Pompeian wall-painting in Museo Nazionale of Naples illustrated in W.F. Jashemski, *The Gardens of Pompeii, Herculanenum and the Villas Destroyed by Vesuvius*, New York 1979, fig.390). There are recipes for peaches in *agrodolce* sauces in *Apic.*
(4.2.34, 3.4.8).

περὶ ἀρμενικῶν: Orib. bases his information on Gal. (Alim. fac. 2.20.1-2=6.593-594K). Pall. (12.7.4, cf. 12.7.6 and Isid. orig. 17.7.7) says that there were three sorts of peaches: *duracina*, *praecoqua*, and *Armenia*. Plin. (Nat. 15.39-40) held that the *duracina* was the best peach, and adds that the *Asiatica* (= Armenia?) ripened at the end of autumn, whilst the *praecoqua* ripened in summer, hence its name; the latter two varieties were, according to Plin., only discovered some thirty years before he was writing (see also Nat. 16.103). Dsc. (1.115.5) however says that the smaller *περσικά μῆλα*, called ἀρμενικά, were known by the Romans as βερίκοκκα (cf. Gal. Vict. Att. 10.77: τῶν ἀρμενίων ἰδίη πρεκόκκα καλοῦσι Ρωμαίοι; the Modern Greek word for apricots is βερίκοκκο). Gal. (Simpl. Med. 7.12.18=12.76K, cf. Alim. fac. 2.11.2=6.585K) says that by his day the old name μηλέα ἀρμενική had been abandoned in favour of πρεκόκκιον, whilst Gp. (10.73.1) and Sim. Seth. (s.v. βερίκοκκα = p. 27 Langkavel) assert that the ἀρμενικάν is the βερίκοκκον. Yet Gal. is not consistent, for he sometimes distinguishes between ἀρμενικά and πρεκόκκια (Bon. Mal. Suc. 13.1=6.811K), as does Ps. Garg. Mart. (med. 44). Col. mentions only Armeniaceae (e.g. 5.10.19, 11.2.96, 10.404). J. André (comm. on Plin. Nat. 15.39, Paris 1960, pp. 87-88) says that the tree originated from Turkestan, and that to begin with praecoquum designated an early-ripening Armeniacaum or apricot, but that later the former became the general name, from which through Arabic albarquq the modern words derive (It. albiscoce, Fr. abricot, Sp. albaricoque, Rus. абрикос). Dura-cina or δωράκινον/δοκάκινον was probably the nectarine, al-
though André advises that it is 'vain de chercher à les assimiler à une espèce moderne'. The old categories 'Αρμενιακά and πρακράκια seem to have lingered until a later date. Gal, is not consistent either concerning the superiority of the digestive qualities of apricots over peaches, for he states that both did not always pass through the bowels easily, and so remained undigested, offering no help towards evacuation (Alim.fac. 1.1.22=6.466K, cf. Sim.Seth. s.v. βερίκοκκα = p.27 Langkavel).

48.3 τὰ πρακρικία: A borrowing from the Latin (Gal.Bon.Mal. Suc. 5.15=6.785K), the adjective praecox also referring to other 'early-ripening' produce, for example figs (Col. 5.10.10), grapes (Col. 12.37), garlic (Plin.Nat. 9.112), and roses (Plin.Nat. 21.19), this word is not listed in LSJ. πρακρικία, as Orib. says here, may have been better than άρμενιακά, but they were still bad-juiced (Gal.Bon. Mal.Suc. 13.1=2=6.811K), moist and watery (Gal.Alim.fac. 1.1.22=6.466K), and not to be eaten in excess (Gal.Vict. Att. 10.77). The reason for their superiority lay in their not acidifying or corrupting (Paul.Aeg. 1.81.1), presumably in the stomach.

49.1 ὅσα μὲν στύφει τῶν μήλων: Orib. draws this sentence from Gal. (Alim.fac. 2.21.2=6.595K) with a few minor alterations. Gal. exhorts the reader with the imperative ζητεί, and consequently uses the infinitives ἔχειν and ἔναι after ψυχρόν and μέσης respectively instead of Orib.'s more prosaic ἴσχει and ὑπάρξει. Orib. excludes from his excerpt some general information (Alim.fac. 2.21.1-2=6.594-595K) concerning the large number of apples and the properties of the juices of the various varieties.
49.2-3 ἡλόν δ' ὡς: Orib. derives this from Gal. (*Alim.* fac. 2.21.4-5=6.596-597K), but with some considerable changes. He contracts ἡδήλον τὸ ἡλόν (cf. perhaps ἐπικρατίκην from ἐπικρατίκην, 1.42.3n.) whilst disregarding that it is ἐκ τῶν Ἑν πᾶλαις εἰρημένων that this fact is clear, and παχύν and χυμὸν are written in reverse of Gal.'s word order. In Gal. it is ὁ γλυκὸς χυμὸς which is assimilated more and not τὰ γλυκέα (sc. μῆλα), although this is a minor slip -- if it can be regarded as a slip at all -- compared with the incompetent handling of Gal.'s information concerning quinces (Orib. 1.50.2n.). Gal. is also more elaborate, saying that only if the sweet juice is completely on its own without any bitterness and thickness can it be assimilated more, whilst if it contains an element of bitterness or thickness it is passed more easily. The same is true for Orib.'s τὰ δ' ἄποια where Gal. on the other hand is describing τι καλ ἄλλο χυμοῦ γένος, but here Gal.'s descriptions are summed up carefully, the one large omission being that it was a variety of apple called πλατανύστινον which was thrown to the pigs in Asia, and that Gal. is comparing watery and unpleasant apples with this variety. Surprisingly Orib. leaves aside completely the medicinal uses of apples (*Alim.* fac. 2.21.3=6.595-596K), harsh ones being administered for stomachs weak because of hot δυσκαρασία and excessive moistness, sharp ones when a not altogether cold thick juice had collected in the stomach.

49.4-6 ὡσα δὲ καλῶς: This is taken from Gal. (*Alim.* fac. 2.21.6-7=6.597-598K), with little altered or left out. Gal.'s recipe for wrapping apples in σταῖς and baking them in hot ashes can be paralleled by Ruf.'s recipe for quinces
There were many varieties of apple, Plin. (Nat. 15.49-52) listing over twenty (see also K.D. White, Roman Farming, London 1970, Appendix A, p.262). Col. (5.10.19) mentions those which were good for the health. Sharp apples strengthened relaxed bowels and stomachs (Gal.Simp.Z.Med. 7.12.16=12.75K, Bon.Mal.Suc. 8.6=6.793K, San.Tuend. 6.10.29=6.431K) and thus apple juice was prescribed for those who passed harsh and irregular stools because of colliquescence (Hp.Acut.(Sp.) 21=2.500L). The cooling properties of apples (Cels. 2.27, Sim.Seth. s.v. μῆλα = p.63 Langkavel, Gal.Vict.Att. 2.11) meant that the juice was useful during the aftermath of a fever (Hp.Epid. 7.80=5.436L). Apples that ripened in spring were sour, injurious to the stomach, and bile-producing, except when cooked (Dsc. 1.115.1, Plin. Nat. 23.100). Unripe wild apples were ideal for loose bowels (Plin.Nat. 23.104), and orbiculata and Scandiana apples dulled flatulence and nausea, and prevented food from turning sour in the stomach or from being spewed up (Larg. 104, cf. Cels. 2.24.1). Ripe sweet apples were wholesome and easily digested, unlike green apples not yet fully ripe which lay on the surface of the stomach (Diph.Siph.ap.Ath. 3.80e-81a, Anthim.84). Apples in general were less digestible than pears (Philotim.ap.Ath. 3.81b), and it was considered best to eat the softer rather than the harder fruit, but not to excess (Gal.Vict. Att. 10.77). Although Archestr. (ap.Ath. 3.101d) branded apples at dessert as a sign of dire poverty, they regularly rounded off a Roman meal (Hor.S. 1.3.6-7, cf. A. Otto, Die Sprichwörter und Sprichwörtlichen redensarten
When boiled they became sweeter (Gal. Alim. fac. 3.31.4 = 6.732K); however, in cooking they do not seem to have attracted much attention. Apic. (4.3.4) giving but one recipe utilizing apples, in a spiny sauce with leeks and meat-balls for shoulder of pork.

49.5 τοῖς ἀνορέξτοις: Those who had an aversion to food were called ἀπωσιτοί, whilst those who had no appetite (ἀνόρεξτοι) were called ἄσιτοι (Gal. Hp. Epid. comm. 1.30 = 17A. 74K). Appetite (ὀρεξίς) sprang from a sensation of want whenever the stomach, unable to bear the veins 'milking' and 'sucking' for nourishment contained it, desired food as a cure for its distress (Gal. Sympt. Caus. 1.7 = 7. 130-131K). The moister the stomach was, the weaker its power of retention, just as the drier it was, the stronger its power of repulsion. In old people the moisture at the mouth of the bowels could grow cold to such an extent that lack of appetite (ἀνορέξια) resulted, and thus excretion waned from the lack of food being distributed (Gal. Hp. Aph. comm. 20 = 17B. 494-495K). Hence the reason for ἀνορέξια generally being considered as arising from bad temperament (ὕσυρασία): Paul. Aeg. (3.37.4) classified an ἀνορέξια arising from thin and biting humours stinging the stomach and causing nausea, thirst, and fever; and another stemming from thick, viscous, yet not mordacious humours that brought on nausea but not thirst (cf. Sor. 1.24.1, Suda s.v. ἄηδία). These peccant humours could be emptied either by vomiting or evacuation (Alex. Trall. 7.3 = 2.253 Puschmann). Hedge-parsley (καυκαλίς, Tordylium apulum L.) in ἔξυμελι purged the upper bowels emetically, and thus cured ἀνορέξια (Gp. 12.32.2), as did
ὑδρόμελι, ἀπόμελι, and μελίμηλον by themselves (Antyll. ap.Orib. 5.29.8). Hot δυσχαρσία which engendered ἀνορεξία could be combatted by cooling foods and drinks such as meloa (recipe in Gp. 18.21), endives, lettuce, and cold water; cold δυσχαρσία could likewise be opposed by heating foods and drinks, such as old wine, hydrogarum, and garlic (Paul.Aeg. 3.37.6). Lack of treatment for ἀνορεξία could result in death (Aret.CA 2.3=24A.261K).

διαρροοῂζομένων: Cael.Aur. (acut. 3.22.222) explains diarrhoea as an out-pouring of liquid matter through the anus without any pain, with the result that the body became wasted. If this condition persisted and the bowels were scraped, then by the subsequent ulceration dysentery was caused (Gal.Hp.Aff.comm. 6.77=18A.191-192K). Diarrhoea was brought about when the stomach was irritated by acidity and got rid of food although still undigested earlier than was proper; or when the stomach was oppressed by the quantity of its contents (Gal.Nat.Fac. 3.5=2.158K, Hp.Vict.comm. 2.7=15.248K, Cog.Cur. 9=5.45-46K, Introd. 13=14.752K). Suitable remedies included the juice of houseleek (ἀείξων μέγα, Sempervivum tectorum L.: 'Boerhavave, the famous Dutch physician, found 10oz of the juice beneficial in dysentery, but it is not admitted into modern practice', M. Grieve, A Modern Herbal, Harmondsworth 1976, p.423) given in a drink (Dsc. 4.88.2), and sumach with rice and wine reduced by boiling to a third (Gal. Rem.Par. 3=14.573K).

δυσεντερικοῦς: Dysentery that arose from yellow bile, when the intestines were first abraded by the harshness of the humour, and afterwards gnawed away and ulcerated, was curable; but whatever arose because of black bile was incur-
able (on death from diarrhoea see Sen. Nat. 2.59.11 and ad loc., H.M. Hine, An Edition with Commentary of Seneca, Natural Questions, Book 2, New York 1981, pp. 447-448), since there was no difference between ulceration and cancer (Gal. Hp. Aff. comm. 4.24=17B.688K, 6.3=18A.11K, UP 5.10=3.381K, Loc. Aff. 6.2=6.381K). There was also a type of dysentery called αἵματος when a considerable amount of blood was passed (Gal. Loc. Aff. 2.5=8.85K). It was thought advisable not to check the dysentery that came about at the decline of a disease lest from the checking another more serious problem started (Gal. Introd. 13=14.753K). Dysentery was caused too by cold and inclement weather (Gal. Hp. Hum. comm. 3.11=16.386K, cf. Arist. Pr. 861bl-5) and the consumption of harsh things such as onions, garlic, and old meat (Aret. SD 2.9=24A.154K, cf. Plu. Mor. 101c). R.E. Siegel (Galen's System of Physiology and Medicine, Basel 1968, p. 288) remarks: 'An accurate comparison, however, between the ancient and modern diagnosis of cholera, dysentery, and diarrhoea is not possible, since Galen based the definition of these diseases on different concepts. The modern clinician derives the diagnosis of these diseases from purely etiological principles whereas Galen and other physicians of antiquity classified these diseases as a single group. They divided the cases, however, according to severity of symptoms from the milder cases of diarrhoea to cholera, the most severe'. As Orib. recommends here, astringent substances (see also Cels. 4.22.4) were employed as remedies: hypocist (Cytinus Hypocisthis L., Gal. Simpl. Med. 7.10.27=12.27K), flower of wild pomegranate (Gal. Simpl. Med. 6.2.3=11.847K), oak-gall in
astringent wine (Gal. Rem. Par. 2.24=14.466K and M. Grieve, A Modern Herbal, Harmondsworth 1976, p.597: 'Medicinally, they [oak-galls] are a powerful astringent, the most powerful of all vegetable astringents, used as a tincture internally, in cases of dysentery, diarrhoea, cholera ...'),
linseed in vinegar (Plin. Nat. 20.250), and dried unripe mulberries (Orib. Eup. 2.1.M27).

50.1 περὶ κυδώνιων: Orib. quotes verbatim the first sentence of his source (Gal. Alim. fac. 2.23.1=6.602K). Gal.'s preservation of quinces by boiling them in honey can be paralleled with Ruf.'s instructions (ap. Orib. 4.2.20).
Quinces were renowned for their astringency (Alex. Trall. 4=2.131 Puschmann, Dsc. 1.115.2, Gal. Simpl. Med. 3.15=11.579K, Loc. Aff. 2.9=8.114K, Ps. Garg. Mart. med. 43, Hp. Vict. 2.52=6.562L) whose force suffered diminution during cooking (Plin. Nat. 23.100). Apples, of which the quince was the Cydonian (cf. Seren. 435 'poma Cydon ... Cretaeis misit ab oris'), ranged in nature from being sweet to harsh to weak and watery, the cold and watery element seeming to predominate (Gal. Simpl. Med. 7.12.16=12.75K, Macr. sat. 7.6.13; cf. Alex. Trall. Febr. 7=1.415 Puschmann, and Hp. Morb. 3.17=7.160L where the cooling properties of quinces were used to counteract parching fever.

50.2 ὅ δὲ ἀπὸ τῶν στρογελίων χυλὸς: There were several sorts of quinces. Glaucides (ap. Ath. 3.81d) lists μῆλα κυδώνια, φαύλια, and στρογελία; Cato (Agr. 7.3) has mala strutea, cotonea, Scantiana, and Quiriniana; Col. (5.10.19) delineates strutea, chrysolmelina, and mustea. Although ancient writers described στρογελία as smaller and sweeter than κυδώνια (Dsc. 1.115.3, Gal. San. Tuend. 6.15.2=6.450K), it is probably impossible to assign to the name a modern
variety because of the lack of evidence. Orib. derives
this section from Gal. (Alim. fac. 2.23.1-2=6.602K) with
considerable abbreviation: to begin with, Gal. is discus-
sing τὸ διὰ τοῦ χυλοῦ τῶν στρουθίων μήλων φάρμακον and
not just the juice, and it is this φάρμακον that could
last up to seven years, or εἰς πλείονας ... ἐνιαυτοὺς in
Orib.'s words; and secondly, Gal., stresses the useful-
ness of the medicine in cases of loss of appetite, a
remarkable omission on Orib.'s part considering he re-
produces everything Gal. says about the φάρμακον engen-
dering a thick crust on the mouth of its storage jar, at
first sight an irrelevance to dietetics, unless it is ar-
gued that this information is merely reassurance for people
worrying about whether or not their juice might have gone
off. However, even if this explanation is upheld, Orib.
can justly be accused of mangling Gal.'s words, for the
φάρμακον in question was made with στρουθία juice, honey,
ginger, white pepper, and vinegar, boiled together until
the consistency of honey (Gal. San. Tuen. 6.15.1=6.450K).
It is far more plausible that this thick and spicy con-
coction should last for a long time and form a crust than
the plain juice. It was probably the harshness of this
medicine that aroused the appetite (cf. Orib. 1.54n. on
olives in brine being used for the same purpose), for
στρουθία on their own were less astringent than κυδόνια
(Ath. 3.81c). The ancients, not in general exact with
their terminology, appear to have taken στρουθία on occa-
sion as a synonym for κυδόνια (Antiph. ap. AP 6.252.1, Nic.
Alex. 234 and Sch. ad loc., Plaut. Per. 87), whilst Thphr.
(HP 2.2.5) regarded the στρουθίον as being the stock from
which the κυδόνιος developed, in the same way as the ἄχρας
originated from the ἀπίος.

50.3 ὁ δὲ κυδωνίων χυλὸς: With a few minor changes this is lifted from Gal. (Alím. fac. 2.23.3=6.603K), and here Gal. is talking of the juice which was universally recognised as suitable for stomach fluxes, coeliac affections, and dysentery (Dsc. 1.115.1, Ps. Garg. Mart. med. 43, Plin. Nat. 23.103, Alex. Trall. 8=2.291 Puschmann). Orib. misses out the final part of Gal.'s argument which both details a Syrian recipe for μηλοπλακοῦς, made from pulped quinces boiled in honey that was of such longevity that it could be exported to Rome, and gives a synopsis of τὸ φάρμακον made with στροφύλια. Quinces were stored either in barrels in the same way as pomegranates, or steeped in honey (Col. 12.47.1-3). In medicine they were used among other things as an antidote for poisoning by Meadow Saffron (ephemerone, Larg. 193); in cooking with leeks, honey, liquamen, oil, defrutum (Apic. 4.2.37), or eaten with veal or beef dressed in liquamen, pepper, asafoetida, and olive-oil (Apic. 8.5.2), or served on their own studded with spikes so as to resemble sea-urchins (Petr. 69.7; for a wall-painting of quinces from the villa at Torre Annunziata see: W.F. Jashemski, The Gardens of Pompeii, Herculanum and the Villas Destroyed by Vesuvius, New York 1979, fig. 489).

51.1 τὰς ἀπίους: Orib. has excerpted this sentence from Gal.'s opening (Alím. fac. 2.24.1=6.603K) to his chapter on the same theme. What is disregarded (Alím. fac. 2.24.1-3=6.603-605K) is in many respects a reiteration of the facts given about apples, with an examination of why Ἡρ. (Epid. 2.1=5.84L) prescribed pomegranate juice with ἀλυτία meal for heartburn. As with apples there were many varieties of

Ripe pears were heating, moistening, and laxative; hard unripe pears were costive (Hp. Vict. 2.55=6.562L, Dsc. 1.116, Ps. Garg. Mart. med. 40, Alex. Trall. 8.1=2.331 Puschmann). When eaten raw pears were cold and phlegmatic (Gal. Vict. Att. 2.11, Puer. Epil. 4=11.368K, Cels. 2.27, Alex. Trall. 5.6=2.221 Puschmann), but nevertheless were suitable for the stomach (Cels. 2.24.1). Gal. (Simpl. Med. 6.1.51=11.834K) explains the dichotomy between hot and cold in pears as due to a combination of watery, sweet, earthy, and cold properties. Anthim. (84) and Alex. Trall. (5.6=2.221 Puschmann, cf. Mnesith. ap. Ath. 3.80c-d) thought that ripening made pears good to eat, whilst Plin. (Nat. 23.115, cf. Gal. Vict. Att. 2.11) held that all pears were cibus onerosus unless cooked, and particularly if boiled down with honey (cf. Plin. Nat. 15.58, Apic. 1.12.4). Despite medical warnings pears were eaten raw in water at symposia (Alex. ap. Ath. 14.650c), no doubt so that their coolness could counteract the heat of the wine, and as a dessert (Juv. 11.73, Mart. 5.78.13). In Apic. (4.2.35) they feature in a savoury dish with pepper, cumin, honey, liquamen, olive-oil, and eggs. They were also eaten sliced and dried (Col. 2.21.3, Plin. Nat. 23.115).

βόδις: Gal. is correct in saying that pomegranates too were like apples, for there were several varieties (Plin. Nat. 13.112-113, Gal. Alim. fac. 2.21.1=6.594K). The juice of sweet pomegranates was laxative but somewhat burning, that of wine-favoured pomegranates was flatulent, whilst
that of sharp pomegranates was cooling (Hp. Vict. 2.55=6.562L, cf. Gal. Simpl. Med. 4.3=11.631K, Thphr. HP 1.12.1, Sim. Seth. s.v. δουλ = p.88 Langkavel). This coolness was put to use for fevers (Hp. Epid. 7.94=5.450L). Although Plu. (Mor. 652f) recalls that it was wine-flavoured fruit that was cooling, this apparent discrepancy can be correlated with Hp.'s statement by reference to Thphr. (CP 6.6.4), where it is said that wine-flavoured juices underwent many changes, being first astringent, then sharp, and finally sweet. Pomegranates, like apples, were astringent (Gal. Loc. Aff. 2.9=8.113K, Simpl. Med. 1.34=11.441K, 5.15=11.756-757K, Plin. Nat. 23.106) and therefore strengthened the stomach (Gal. San. Tuend. 6.10.29=6.431-432K, Bon. Mal. Suc. 8.6=6.793K, Meth. Med. 10.3=10.674K, Vict. Att. 10.82, Cels. 2.24.2). Pomegranate juice mixed with honey stopped vomiting (Hp. Mul. 1.93=8.222L, Marc. med. 30.62), and the dried pips taken with other foods checked the bowels and stomach flux (Dsc. 1.110.2, Hp. Mul. 1.109=8.232L). The fruit was served as a dessert (Antiph. ap. Ath. 2.47d, Matro ap. Ath. 4.137b, Men. ap. Ath. 14.651a), but the numerous pips (Hdt. 4.143.2, Plu. Mor. 173a) were not always eaten (Thphr. HP 4.3.3, Arap. Poll. 6.80). The pips of the acid pomegranate (ῥόας ὀξείας, cf. Larg. 41) were used in the dish called μύμα made with meat, fowl, or fish seasoned by cheese, vinegar, asafoetida, cumin, thyme, savory, onion, and coriander (Epaenet. ap. Ath. 14.662d-e). Wine was made from pomegranates (Pall. 4.10.10).
age of cereal; the omission of culinary information is not uncommon in Orib. (cf. 1.28.1n., 29n., 32n.). Pomegranates did possess no nutritional value (Ps. Garg. Mart. med. 41, Dsc. 1.110.1) as Gal. says, whilst in contrast with other 'apples' pears were nutritious (Ps. Garg. Mart. med. 40). The final section of Gal.'s chapter on pears and pomegranates (Alim. fac. 2.24.5=6.605K) is ignored, for it is merely a discussion on the difference between Attic ὅλα and Ionic ὅα, which Gal. himself states is irrelevant τῷ βίῳ τῶν ἀνθρώπων.

μυναῖς: This variety of pear was named after the unit of weight μνᾶ (Plin. Nat. 15.39; 'nec non quaedam e piris libralia appellata amplitudinem sibi ponderis nomine adversunt'), which was cognate with the Lat. libra (CGL 2.361.43 and P. Chantraine, Dictionnaire étymologique, vol. 3, Paris 1984, p. 644). The term was also applied to stones (X. Eq. 4.4, Poll. 1.200), truffles (Plin. Nat. 19.34), lumps of fat (Pall. 4.12.3), and Purple-fish (πορφύρα, Speus. ap. Ath. 3.89a and ad loc. L. Tarán, Speusippus of Athens: a critical study with a collection of the related texts and commentary, Leiden 1981, pp. 246–248).

were astringent they could be utilised as a substitute for quinces (Alex. Trall. 4=2.13 Puschmann). There were three sorts of medlar, the anhedon, Gallicum, and the setania (Plin. Nat. 15.84; Thphr. HP 3.12.5 distinguishes ἄνθηδων, σατάνελος, and ἄνθηδονοςειδης), the latter being nearer in its properties to the apple and so less astringent (Plin. Nat. 23.141). Medlars were usually picked for storing when not yet ripe, and could be preserved in diluted vinegar, or in chaff, or in must after being steeped in salted water for five days; when ripe they could also be preserved in honey (Poll. 4.10.22). Because the fruits contained three stones an alternative name for them was τρίκωκων (Gal. Simpl. Med. 7.2.11=12.71-72K). A wine was made from medlars (Plin. Nat. 14.103).

When ripe medlars were sweet (Cael. Aur. Chron. 4.3.70), and were eaten as a dessert (Poll. 6.79). Orib. is perhaps referring to the harsh unripe fruit when he says that sorb-apples were ηδιω ... εις έδωδην. although Gal. adds that medlars were more medicinal than culinary (Alim. fac. 2.25.2=6.606K), and their powerful astringency would obviate any excessive use.

τὰ οὖα: Sorb-apples were astringent (Alex. Trall. 5.5=2.193 Puschmann, see also Orib. 4.7.14n) and hence ideal for upset stomachs and dysentery (Alex. Trall. 7.5=2.269 Puschmann). O. Polunin (Trees and Bushes of Europe, London 1976, p.79) says that sorb-apples are 'only edible when frosted, or over-ripe and used for making alcoholic beverages'.

τῶν φολνίκων: Orib. here copies almost word for word Gal. (Alim. fac. 2.26.2-3=6.606-608K), omitting the opening com-
ment (*Alim.* fac. 2.26.1=6.606K) as to the harmlessness of calling dates either βάλανοι φοινίκων as the ancient Greeks did or φοίνικες as the Greeks of Gal.'s time did; and the closing section (*Alim.* fac. 2.26.4=6.608K) which concerns the flatulent and dangerous qualities of green dates (cf. Thphr. HP 4.4.13). *Apic.* (1.2) lists among the ingredients for *absinthium Romanum* a date from the Thebaid (*Thebaicam*, cf. Dsc. 1.109.2, Cael.Aur.aeot. 2.37.200, Theod.Prisc.log. 36). *Plin.* (Nat. 13.42-50) describes the different varieties of date, from which he singles out the *caryotae* as being famous for food and juice, the best growing around Jericho as Gal. says, although equally highly spoken of were those found in the valleys of Archelais, Phaselis, and Livia in Palestine (cf. Var.R. 2.1.27). Among the other sorts of date were the *nicolai* (cf. Alex.Trall. 4=2.139 Puschmann) and the *patetae*. Dates were hard to digest and caused headaches when eaten to excess (Dsc. 1.109.1, Sim.Seth. s.v. φοίνικες = p.112 Langkavel, X.An. 2.3.15, Gal.Rem.Par. 1.1=14.318K, Ps.Garg.Mart.med. 58, Anthim. 92). However, when dried their tendency to cause headaches was diminished (Plin. Nat. 23.97). Being very sweet dates contained much heat, but also some astringency like all the other parts of the palm tree (Gal.Simpl.Med. 8.21.6=12.151K, Bon.Mal.Suc. 4.38=6.779K). They furnished thick juices (Gal.Vict.Att. 12.90-91, Bon.Mal.Suc. 4.34=6.777K). *Plin.* (Nat. 19.91) specifies a concoction mixed with *pinguibus caryotis* (cf. φοίνικες λιπαρός here, and *Gal.Alim.* fac. 1.24.5=6.538K, Alex.Trall.Febr. 7=1.411 Puschmann) to overcome the acridity of elecampane. In medicine dates were most often used for sore throats and the spitting of blood, perhaps
because of their thick and viscous juice (Marc.med. 14.46, Larg. 74, Ps.Garg.Mart.med. 58, Alex.Trall. 4 = 2.139 Puschmann), and also in a remedy for an ulcerated bladder (Larg. 148). As a food they were eaten for dessert (Petr. 40.3, cf. Plin.Ep. 1.76, Antiph.ap.Ath. 2.47d, Alex.Trall. 1.15=1.545 Puschmann), as a prandial ὑπὸ with bread (Gal. San.Tuend. 6.7.11=6.412K), and in sauces for ostrich (Apic. 6.1.1), chicken (Apic. 6.9.4), slices of meat (Apic. 7.6.10), and fried fish (Apic.10.1.1). Dates were also made into wine (Ephipp.ap.Ath. 1.29d).

53.1 κατὰ τὴν Παλαιστίνην Συρίαν: 'Vltima Syriarum est Palaestina, per interualla magna protenta, cultis abundans terris et nitidis' (Amm.Marc. 14.8.11). There were three provinces of Palestine, the first comprising Samaria and Judaea with its capital at Caesarea, the second Gallilaea governed from Scythopolis, and the third Idumaea and Arabia Petraea, with its capital at Petra (P. De Jonge, Sprachlicher und Historischer Kommentar zu Ammianus Marcellinus XIV 1-7, Groningen 1935, p.75).

53.4 τὸ ἡμαρ ἐμφόρεται: Sweet foods with thick juices blocked the liver and spleen (Gal.Bon.Mal.Suc. 4.41=6.780-781K). Other things causative of blockages were coldness in winter, since without heat the nutritive juices remained hard to digest (Gal.Meth.Med. 12.3=10.829K); milk, but only when the extremities of the vessels (ἀγγείων) which transferred the food from the concavities of the inwards (ἐν τῷ σύμβαντι ὑπὸ σπλάγχνου) to the convexities (τὰ κυρτά) were narrow (Gal.Alim.fac. 2.14.12=6.687K); white bread without much salt or yeast when eaten by old men, whose vessels were by nature narrower (Gal.San.Tuend. 5.7.5=6.342); and lack of anger and passion which made
the body more phlegmatic and colder, and thus prone to hepatic and splenic blockages (Gal. San. Tuend. 1.8.17=6.41K). The main function of the liver was to draw nourishment into itself, and by a process which Gal. calls 'transformative' (ἀλλοωτική) to digest and alter this nourishment so as to make it like itself. Anything remaining was excrementitious and was expelled by the liver's 'secretive' (ἐκκριτική) or 'separative' (ἀποκριτική) power (Gal. Comp. Med. 8.6=13.193K). The liver was also the principal instrument of sanguinification and the source of the veins (Gal. UP 4.12=3.298K). When a blockage arose at the portal fissures of the liver because of thick or viscous juices there followed a sensation of weight (βάρους αίσθησις) lying on the right hand side of the abdomen (Gal. Loc. Aff. 5.7=8.345K). R. S. Siegel (Galen's System of Physiology and Medicine, Basel 1968, pp. 243sq.) delineates an effect of blockage: 'Galen correctly described the production and secretion of yellow bile as the specific function of the 'flesh' of the liver ... Impaired function of the liver would lead to jaundice by retention and accumulation of this humor in the blood'.

φλεγμαίνων: Α φλεγμονή was a red and hard mass (δύνας) which caused throbbing pains (Gal. Def. Med. 382=19.441K, Diff. Resp. 2.7=7.853K, Ad Glauc. 2.4=11.101K). It owed its genesis to blood becoming blocked in a part of the body subject to putrefying flux (Gal. Cris. 2.12=9.693K, Hp. Vict. comm. 3.19=15.337K), whether because of wounding, spasms, bruises, ruptures, dislocations, fractures, or exhaustion after physical exercises (Gal. Ad Glauc. 2.1=11.73K). When the flux was thin in consistency, the cure
for ψεύγμονη lay in drying and heating medicines (Gal. Comp. Med. 6.9=13.993K).

περί ἐλαιῶν: Orib. here quotes Gal. (Alim. fac. 2.27.1=6.608-609K), the only omission being the statement that olives were preferably eaten with bread (cf. Gal. San. Tuend. 6.7.10=6.412K), and that ἄλμαδες and καλυμβάδες eaten before meals with garum rather than bread loosened the bowels. Verg. (G. 2.85-86, cf. Plin. Nat. 15.4) records three kinds of olive, Cato (Agr. 6.1) eight, Var. (R. 1.24.1) seven, Pall. (3.18.4) six named and an unspecified number of unnamed, Col. (5.8.3) nine, of which the orchis and the radius he regarded as better gathered for eating than for their oil. A hot and dry climate was the most suitable for the olive tree, such as in Libya, and Cilicia (Gp. 9.3.1, cf. P. Brown, Augustine of Hippo, London 1967, p.20). Diph. Siph. (ap. Ath. 2.56b) lends support to Gal.'s view that olives provided little nourishment, and adds that they caused headaches, black olives in particular being oppressive both to the head and to the stomach. Cels. (2.26.2, cf. Larg. 104 and his remedy for those 'qui adsidue inflationibus urgentur') in contrast thought that olives engendered the least flatulence, whilst Plin. (Nat. 23.73) said that pale olives were useful to the stomach, dark olives less so, and both were suspect as regards the head and eyes. Olives when completely ripe were moderately hot, but when unripe more astringent and cooling (Gal. Simpl. Med. 6.5.3=11.868K). They began banquets (Mart. 13.36, cf. Plaut. Curc. 88-89) and with chickpeas and lupines ended them (Mart. 5.78.17-21), and Apic. (3.9.5) has a recipe for cabbage with herbs, garum, wine, olive-oil, and oliuas uirides. On the arch-

ai ὑποσαρδεύουσα: Plin. (Nat. 15.6) specifies that the best age of pickling olives for quality and flavour was when the berry was turning black, at which stage they were called drupae in Lat., and drypetides in Greek (cf. Ath. 2.56a). In another passage (Nat. 12.130) Plin. glosses druppa as an olive not ripe enough to eat but already beginning to change colour, from which an inferior oil could be pressed (cf. Nat. 15.26). Less specifically the word was applied to ripe olives (Sch.Ar.Lys. 564, Thphr.CP 2. 8.2, Suda s.v. δρυπετεῖς, Moer. 437 = p. 396 Pierson), to fat μάξα (Cratin.ap.Ath. 6.267e), and to elderly prostitutes in opposition to τὰς ὑποσαρδεύουσα with bodies firm as olives steeped in brine (Ar.ap.Ath. 4.133a). Hsch. (s.v. δρυπετεῖς) lists another word δρυπετεῖς as meaning olives fallen unripe from the tree, but P. Chantraine (Dictionnaire étymologique, vol.1, Paris 1968, p.299) suggests 'cette forme peut être une simple altération populaire de δρυπετηῆς'. Every olive, not just δρυπετεῖς, of course supplied an oily juice (Gal.Simp. Med. 4.8=11.649K). δρυπετεῖς were sometimes eaten sprinked with salt (Corn. Long.ap.AP 6.191.3-4).

ai ἀλμάδες καὶ κολυμβάδες: Moer. (90 = p.47 Pierson) says that the former was the Attic word, the latter the general Greek term, and generally there was no difference in the method of preparation, the two words being interchangeable (Suda s.v. ἀλμάδες, Phryn. 87 Fischer). A synonym for κολυμβάδες was νηπτίδες (cf. Poll. 6.45, literally 'swimmers'). Possibly, in view of καὶ rather than ἃ two
different olives are mentioned by Orib.: ἀλμάδες must then mean olives in brine (ἄλμη), and Col. (12.49.8) recommends a concoction of one part brine to two parts vinegar, although using the term more loosely he says that this will turn posία olives into colymbades. Gp. (9.33) gives detailed instructions as to how ripe darkening olives picked with their stalks should be washed in cold water, dried, and then carefully laid in a jar in which salt, brine, vinegar, and olive-oil have been mixed; the jar was then covered over with fennel. Pall. (12.22.1), again using the term imprecisely, treated columbares olives by spreading them on fennel, dill, or mastic, and pouring on top vinegar and brine. If Orib. is giving two sorts of preserved olive then κολυμβάδες are olives left floating in their own oil without any admixture, just as Plin. (Nat. 15.16) describes, but this precise distinction should be treated with caution, especially since olives in olive-oil would be unlikely to contain τὸν στύφοντα χυμόν, although Cael.Aur. (chron. 1.1.25) remarks that colimbades were very young green olives which would have some astringency. Far more probable, however, is that καὶ is used here to link alternative names for the same product (see J.D. Deniston, The Greek Particles, Oxford 1934, p.292), or in other words olives in brine. Pickled olives were considered wholesome but constipating (Diph.Siph.ap. Ath. 2.56b, cf. Gal.San.Tuend. 5.9.5=6.354K), and aroused the appetite (Plu.Mor. 687d, Cael.Aur.chron. 1.1.25); they were used in cooking with chicken (Apic. 6.9.9).

54.2 αἰ δὲ ἐν ὑδάτι: Vinegar was an important ingredient in pickling, Gp. (9.29, cf. Pall. 12.22.5) giving a recipe
for preserving unbruised black olives in salt, olive-oil, and oxymel, whilst Col. (12.49.6) recommends an initial steeping for forty days in salt, mastich, fennel, and weak vinegar, which was then drained off and the olives put in a solution of must boiled down to a third or must reduced by a half and mixed with vinegar. Olives in vinegar were easily digested (Philotim. ap. Orib. 2.69.10), the vinegar serving as an appetiser (cf. Dsc. 5.13.1, Op. 8. 35, Plu. Mor. 734a, Diph. Siph. ap. Ath. 4.133f, Ruf. ap. Orib. 5.11.3).

κάρυα τά τε μεγάλα: Orib. takes this section from Gal. (Alim. fac. 2.28=6.609-611K) with characteristic omissions such as the initial discussion concerning nomenclature, mention of the more open texture (χαυνοτέρα) of walnuts, and a reference to the antidote to noxious drugs of walnuts and rue. The unusual προσποθρεχομένων (Alim. fac. 2.28.4=6.611K) is changed to ἐμπροθρεχομένων which is slightly more common (cf. Orib. 1.41.8n., 42.3n., 49.2-3n.), and Gal. refers to walnuts as βασιλικά κάρυα, not κάρυα μεγάλα. In fact the usual terms for walnuts were κάρυα Περσικά and κάρυα βασιλικά (Poll. 6.80, Dsc. 1.125.1, Thphr. HP 3.6.2, Gal. Antid. 2.7=14.142K, Alex. Trall. 8.2=2.355 Puschmann) or just κάρυα (Gal. Vict. Att. 10.79, Alim. fac. 2.11.2=6.585K), but κάρυα μεγάλα is also found in contrast to κάρυα σμικρά or hazelnuts (Gal. Bon. Mal. Suc. 5.8=6.784K, Simpl. Med. 7.10.12=12.15K, ap. Orib. 1.1.2, cf. Var. L. 5.102). When dried walnuts were hard to digest, bad for the stomach, and caused headaches (Dsc. 1.125.1, Cels. 2.25.2, Plin. Nat. 15.87), whilst eaten fresh they were sweeter and less bad for the stomach (Dsc. 1.125.2, Plin. Nat. 23.147, cf. Var. R. 1.67, Thphr. CP 4.2.1);
perhaps their bad effect on the stomach sprang from their excessive astringency (Gal. *Comp. Med.* 6.2=12.906K, *Simpl. Med.* 7.10.12=12.13K), hence the reason for eating dried figs with them (Gal. *Bon. Mal. Suc.* 8.4=6.793K, Sim. *Seth.* s.v. κάρυα = p.49 Langkavel). As Gal. says here, when they matured they inclined ἐπὶ τὸ ἐλαιῶδες (Plin. *Nat.* 15.88, Mnesith. *ap. Ath.* 2.54c) and an oil was pressed from them (Plin. *Nat.* 15.28, Dsc. 1.125.2). They could be stored during the winter (Gal. *Vict. Att.* 10.79), sometimes in sand (Var. *R.* 1.59.3) in much the same way as they are preserved in sugar today. They were eaten as a dessert (Ephipp. *ap. Ath.* 1.29d), as an ingredient in sweet cakes (Chrysipp. Tyan. *ap. Ath.* 14.647f-648a) and sauces (Apic. 6.5.3), and ground with cumin, liquamen, passum, brine and olive-oil as a substitute for salt fish (Apic. 9.13.2).

Τὰ λεπτοκάρυα: Hazelnuts were also called νυκτὶς Αβέλλανας after Abellanum, the town in Campania which was supposedly their place of origin, or Ponticae νυκτὶς, because they were introduced into Asia and Greece from Pontus (Plin. *Nat.* 15.88, Isid. *orig.* 17.7.24, cf. Orib. *Syn.* 2.58.4, CGL 2.359.38, 3.358.53). There was a smooth (calua) hazelnut called Praenestina after Praeneste in Latium (Plin. *Nat.* 15.90, 17.96, Cato *Agr.* 8.2, 133.2, Macr. *sat.* 3.18.5-6). Ps. Garg. *Mart.* (*med.* 54) and Plin. (*Nat.* 23.150) say that hazelnuts conferred fatness to the body, which perhaps corroborates Gal.’s assertion here that there was more nourishment in them than in walnuts, although Diocl. (*ap. Ath.* 2.53d, cf. Cels. 3.27.4B) believed the reverse to be true. They caused headaches and were bad for the stomach (Dsc. 1.125.3, Diph. *Siph. ap. Ath.* 2.54b), being oily, flatulent, and hard to digest (Philotim. *ap. Ath.* 2.53f, Cels.)
2.26.2), especially when mixed in with other foods (An-
thim. 89). Their substance was more earthy, cold, and
14K). The nut was roasted (Plin. *Nat.* 15.89) or blanched
and peeled (Marc. *med.* 26.33, Mnesith. *ap.* Ath. 2.54c) be-
fore being used. It was added to sweet cakes (Chrysipp.
Tyan. *ap.* Ath. 14.647f-648a), salads (Col. 12.59.3-4), and
to various sauces (Apic. 6.5.2 and 3, 8.1.7).

56 *περὶ ἀμυγδάλων:* For this section Orib. has selected a few
phrases from Gal. (*Altrim. fac.* 2.29=6.611-612K) to give a
brief picture of the medicinal value of almonds. Missed
out are such facts as the lack of astringency in almonds,
and the correct gender of the word, which Gal. too says
has no value for healing. Almonds, and especially bitter
ones, were ideal for cutting through and thinning thick
and viscous things, and for aiding expectoration (Gal.
5.4=2.157 and 2.171 Puschmann, 5.6=2.223 Puschmann, Dsc.
1.123.1, Zopyr. *ap.* Orib. 14.52.1, cf. Gp. 18.17.3 and reme-
dy for coughing sheep). They were fatty and oily (Gal.
(*ap.* Ath. 2.53d), in contrast to Gal., held that almonds
were nourishing, but Diph. *Siph.* (*ap.* Ath. 2.54a) consider-
ed that they contained little nutrition (on almonds see
also Orib. 4.7.28n., and M. Zohary, *Plants of the Bible,*
Cambridge 1982, pp.66-67 for photograph and reference to
almonds containing about 50% fat).

57 *περὶ πιστακίων:* The pistachio came from the East; Thphr.
Indian or Bactrian terebinth (*τέρμυνθος*), and says that
the nuts were, in sweetness and palatableness, superior
to almonds which they resembled. By the 1st c.A.D. the
pistachio was established in Syria (Dsc. 1.124, Plin. Nat.
13.51), and was grown in Italy in the 4th c. (Pall. 3.
25.33), preferably in a sunny and well-irrigated place
(Pall. 11.12.3) sometimes grafted on to almond or tere-
binth trees (Pall. insit. 157, Gp. 10.11.1, 10.65.1).
Orib. here cuts his source (Gal. Alim. fac. 2.30=6.612K) to
the bare medical facts, omitting Gal.'s information about
pistachios growing in Egyptian Alexandria and Syrian Ber-
oia, their aromatic quality (ποιότητος ἀρωματιζούσης, cf.
Isid. orig. 17.7.30 nardi pistici odorem), and their negli-
gible benefit to the stomach. It was their fine-particled
substance and astringency which made pistachios suitable
for cleansing and removing obstructions in the liver, chest
med. 55, Alex. Trall. 1.15=1.545 Puschmann). Pistachios
could be stored for the winter (Gal. Vict. Att. 10.79) and
were enjoyed as a food (Ath. 14.649c, cf. Plin. Nat. 23.
150, Anthim. 91); however Apic. makes no use of them in
his recipes.

περί κοκκυμίλων: Orib. here quotes only a small part of
his source (Gal. Alim. fac. 2.31=6.613-614K) to give a bare
outline of the properties of plums. Gal. (Alim. fac. 2.
31.1=6.613K) says that when thoroughly ripened plums were
rarely astringent, harsh, sharp or bitter, which was the
case if they were not ripened (cf. Anthim. 85); and that
the second best plums were Spanish. Boiled in μελίκρατον
with a lot of honey they were laxative (cf. San. Tuend. 5.
9.3=6.353K, Vict. Att. 7.51, Ps. Garg. Mart. med. 46; the
contrary view that they were costive in Dsc. 1.121 is at-
tacked by Gal. *Simpl. Med.* 7.10.35=12.32K). Diph. *Siph.* (ap. Ath. 2.50b) also held plums to be of little value as food, whilst their moistness (cf. Thphr. *HP* 1.12.1, Gal. *Vicot.Att.* 2.10, San. *Tuend.* 5.8.7=6.351) was the cause of their laxative effect (cf. Alex. *Trall.* 9.3=2.419 Puschmann). They were dried for storing over the winter (Gal. *Bon. Mal. Suc.* 5.15=6.785K, *Puer. Epil.* 4=11.367K); Pall. (12.7.15) explains that *damascena* were spread out on wicker work in the sun to dry. Plin. (*Nat.* 15.43) distinguishes between *pruna* and *damascena*, calling the latter a foreign tree which, although grown for a long time in Italy, had a larger stone and less flesh than in its country of origin, and never dried into wrinkles because of the lack of its native sunshine. However, Gp. (10.73.2) mentions that δαμασκηνὸν rather than κοκκυμηλὸν was the general name for the plum, and Gal. (e.g. San. *Tuend.* 5.9.3=6.353K) uses δαμασκηνά as an adj. (τῶν δαμασκηνῶν κοκκυμηλῶν) and not the name of a separate fruit (cf. *Isid. orig.* 17.1.10: 'coccymela, quam Latini ob colorem prunum uocant ... cuius generis Damascena melior, a Damasco oppido, unde prius asportata est', and Ath. 2.49d). Like peaches, if they putrified in the stomach plums could be dangerous (Gal. *Bon. Mal. Suc.* 8.1=6.791K). Eaten fresh (Alex. ap. Ath. 2.49e; cf. painting of a transparent glass bowl containing quinces, plums and green almonds in P.W. Lehmann, *Roman Wall Paintings from Boscoreale in Metropolitan Museum of Art*, Cambridge Mass. 1953, p.206 and plate 24), or cooked (Petr. 31.11).

Fig. 4: From left to right, black grapes, fresh figs, jujubes; see Orib. 1.41, 39 and 40, 49 respectively (photograph by M.D. Grant).

Fig. 5: In clockwise order, red plums, black plums, fresh dates, dried carobs, pears, damsons; see Orib. 58.1, 53, 60, 51, 58.2 respectively (photograph by M.D. Grant).
to both when he records both σημικά and ζίζωμα as containing little nourishment, cf. Paul. Aeg. 1.80.3) was a recent introduction in his day to Italy, Sextus Papinius Allienus, consul in A.D. 36, having brought some cuttings from Africa in the last years of the principate of Augustus (the jujube being a native of Asia: see O. Polunin, Trees and Bushes of Europe, London 1976, p. 134 and fig. c; this is betrayed by the name ζίζωμα itself, since it is not a Greek word but 'eine ausländische Apfelart': see L. Meyer, Handbuch der Griechischen Etymologie, vol. 3, Leipzig 1901, p. 270 and E. Boisacq, Dictionnaire étymologique de la langue grecque, 4th edn., Heidelberg 1950, p. 310). In the same chapter Plin. mentions tuberes (Neapolitan medlar), and distinguishes a white and a red variety, the latter called syricus or Syrian because of its colour. But J. André (ad loc., Paris 1960, p. 91) argues that the adj. syricus cannot refer to colour, and suggests plausibly that it is a corruption of σημικά, after the Greek name for jujubes (τὰ σημικά); certainly Col. (9.4.3) recommends not only red but also white jujube trees for bees. Thphr. (HP 4.4.5) reports an Indian tree whose fruit is like that of the cornelian cherry (τοῖς κρανέσοις), and this probably refers to the jujube. Plb. (12.2 ap. Ath. 14. 651d-e) gives a full description of the λωτός which must be the jujube (Thphr. HP 7.15.3 mentions that λωτός was a common name for several plants): the tree was not tall, was rough and thorny, and the fruit at the beginning was similar in colour and size to ripe white myrtle-berries (ταῖς λευκαίς μυρτίσι), but as it grew its colour changed to red, and in size resembled round olives, and it had
a very small stone. As a food it was similar to a fig or date (cf. Hdt. 4.177; a modern synonym for the jujube is 'Chinese date', T. Fitzgibbon, The Food of the Western World: An Encyclopedia of Food from Europe and North America, London 1976, p.96), but of superior fragrance (see also F.W. Walbank, An Historical Commentary on Polybius, vol.2, Oxford 1967, pp.319-321). The tree could be grown from seed (Plin. Nat. 17.75) or cuttings (Gp. 10.3.4, 10.43). Pall. (5.4.3) advises storing ripe zizyfa in a sealed earthenware pot kept in a dry place, or cutting them down on the twigs and hanging them up. Gp. (10.44) talks of laying up jujubes in οἶνόμελι.

Orib. here quotes almost all of his source (Gal. Alim. fac. 2.32=6.614K) apart from Gal.'s statement as to the jujubes' want of medicinal properties; however, Sim. Seth. (s.v. ζύζυφα = p.40 Langkavel) recommends their decoction for coughs and problems of the chest, kidneys, and bladders. Garg. Mart. (med. 48) adds nothing except that jujubes caused thirst, and attracted merely by their pleasantness of taste.

59.1 ἀδρόντων: 'Est hoc mulierum et puerorum effraenatorum edulium' (Rasario, p.216). Daremberg (p.580, although on p.692 he asks without giving reasons for this note to be ignored) expresses bewilderment over the true reading here, pointing out that Gal., after reprimanding everyone who tried to speak like the Athenians of the classical period, would hardly have used a word such as ἀδύρω, which is generally seen only in poetry and was probably not in circulation in his time; nor can Daremberg understand why Orib., or a copyist, should use so poetic a word in place of the common ἄκρατοῦντων found in Gal., which of
course bears a different meaning. The latter objection
can be countered by examining the readings of the Mss' of
Gal. (p.301 Helmreich), WAB transmitting δυρόντων, and U
δυρόντων: only Charter's edition (Paris 1679) contains
δυρόντων, a change undoubtedly made on the same grounds
as Darmenberg's uncertainty over the true reading. As
for the former objection, the word does appear in prose,
albeit rarely (P.l.Lg. 7.796b7, Procl.in Prm. p.863S, Him.
Or. 63.7, cf. 74.2), and thus Raeder is correct in retaining
it. On the subject of 'poetic' words in prose R.J.
Durling ('Lexicographical Notes on Galen's Writings',
Glotta 58 (1980), p.265) rightly comments: 'Much more re-
search needs to be done on the employment of allegedly
poetic words in prose. How often, however, does a poetic
word need to be employed in prose for it to lose its
poetic associations? And how conscious are the prose
authors of these poetic association? Is not the distinc-
tion, in the last resort, utterly artificial?'

59.2 Ολίγοστήν: In the text of Gal. Helmreich (p.301) reads
Ολίγην. Ολίγοστήν seems an unusual reading to adopt, al-
though Raeder (p.26) makes no comment in his app. crit.
The word appears to be almost invariably changed to Ολίγοσ-
tήν elsewhere, e.g.: J. Burnet on Pl.Lg. 953a2 (Oxford
1914), W. Christ on Arist. Metaph. 1053a9 (Leipzig 1903),
and R.D. Dawe on S.Ant. 625 (Leipzig 1979) who proffers
the following on this subject: 'I make no pretence of
being able to solve this crux. But it may be worth
pointing out that Ολίγοστός as no more than an error for
Ολίγος occurs at Arist. Po. 1458b25' (Studies on the Text
spelling, perhaps Orib. is here acting independently and stressing the paucity of nourishment from jujubes.

περὶ κερατίων: Gal.'s love of word-play (the difference between κεράτια (carobs) and κερασία (cherries), Alim. fac. 2.33=6.615K) is omitted by Orib. as being superfluous to dietetics. The subject of the original sentence is ἔδεσμα, whilst Orib. makes it κεράτια, and the description Εὐλόδες is turned to χολόδη, although this could be a mistake of the Mss (cf. Sim.Seth. s.v. Εὐλοκέρατα = p. 73 Langkavel: Εὐλοκέρατα, ἢ καὶ κεράτια λέγονται and following note). Finally ἄλλ' οὔθε διαχωρεῖται ταχέως is a complete reworking of Gal.'s ἄλλα καὶ τὸ μὴ διαχωρεῖσθαι ταχέως οὐ συμπρόν αὐτοῖς υπάρχει κακόν, and Gal.'s splendidly morose wish that it would have been better if carobs had not been exported from the East is forgotten. What remains is more a note using Gal. than a quote from Gal., an interesting insight to Orib.'s method of composition. The size of a man's finger and occasionally curved like a sickle, the carob was sweet (Plin.Nat. 15.95, Gal. Simpl.Med. 7.10.20=12.23K), and when dried was costive, good for the stomach, and diuretic, but when fresh was bad for the stomach and the cause of diarrhoea (Dsc. 1.114, Plin.Nat. 23.151, Ps.Garg.Mart.med. 51). J. André (comm.on Plin.Nat. 13.95, Paris 1960, pp.110-111) says that the carob (Ceratonia siliqua L.) is a native of Syria: Thphr. (HP 1.11.2) records that people called carobs 'Egyptian figs' (συκῆ Αἰγυπτικα) which was, as he says elsewhere (HP 4.2.4), erroneous, as the carob did not occur in Egypt but in Syria, Ionia, Cnidus, and Rhodes (cf. Larg. 121, siliquam Syriacam). Col. (5.10.20, Arb. 25.1) calls the
carob *silīqua Graeca*, and by giving straightforward instructions for planting shows that it was well established in Italy by his time (see also Pall. 3.25.27, 12.7.23, Sp. 10.72). There is a photograph of a carob in M. Zohary, *Plants of the Bible*, Cambridge 1982, p.63.

χολόδη: The same word applied to carobs elsewhere in Orib. (3.10.1) in an extract drawn from a different place in Gal., shows that χολόδη is the genuine reading, although without this correlativeness the epithet ξυλόδη could apply equally well to carobs (see Daremberg, pp.580-581).

περὶ καπνάρεως: Orib. concentrates on the medicinal aspects of the caper derived from Gal. (*Alim.fac.* 2.34=6.615K), and omits that it grew mostly in Cyprus, that as an ὀψων it stimulated the appetite, and that tender caper shoots were eaten seasoned with brine and vinegar. While Orib. says that it removed blockages from the inwards (τὰ σπλάγχνα included both liver and spleen, Gal.*Meth.Med.* 13.17=10.921K, *Victr.Att.* 12.114), Gal. specifies liver and spleen. This vagueness is more likely to be a result of compression than of Orib. disagreeing with what Gal. had said. The spleen, with its flesh that was thicker in texture than that of the lungs to the same degree as it was looser in texture than that of the liver (Gal.*Hp.Hum. comm.* 1.14=16.157K; see also A.W. Ham, 'The Structure of the Spleen' in A. Blaustein (ed.), *The Spleen*, New York 1963, p.1: 'The spleen is roughly the size and shape of a clenched fist. It lies in the shelter of the left ninth, tenth, and eleventh ribs, with its long axis parallel to them. Its purple colour is due to its great content of blood. It is soft and more friable than most organs'), eliminated the thick atrabilious humours formed
in the liver (Gal. UP 4.15=3.316-317K, Sympt. Caus. 3.3=7.222K, Hp. Hum. comm. 2.27=16.300K), so that jaundice arising in this organ was darker in colour than that arising in the liver (Aret. SD 1.15=24A.114K, Gal. Nat. Fac. 2.9=2.132-133K, cf. Hp. Epid. 2.1.10=5.82L); on the function of the liver see Orib. 1.53.4n. The caper is a wild plant growing in rough and thin-soiled localities (Dsc. 2.173.1-2, Col. 11.3.54-55, cf. Timocl. ap. Ath. 13.567e). Plin. (Nat. 13.127, 20.165), in an outburst of patriotism, declared that only the Italian caper should be used, foreign varieties being harmful. Caper berries (baculae, Plin. Nat. 25.96) were preserved by being pickled in a mixture of two-thirds vinegar to one-third brine (Col. 12.7.2, cf. Mart. 3.77.5, Alex. Trall. 7.4=2.163 Puschmann), caper stalks by being partially dried and then pickled (Col. 12.7.5). As was generally the case with plants, capers that grew on hills or places without water were stronger in power than those growing in fields or gardens (Gal. Vict. Att. 2-7). The caper's uses in medicine were numerous: to remove obstructions in the liver and spleen as here (Gal. Simp. Med. 5.12=11.746K, Meth. Med. 13.17=10.920K), to induce periods and purge phlegm through its bitterness and harshness (Dsc. 2.173.2, Gal. Simp. Med. 7.10.7=12.9-10K, cf. Alex. Trall. 7.3=2.257 Puschmann), as a diuretic (Cels. 2.31), and given with oxymel at the start of a meal to remove kidney stones (Gal. Meth. Med. 14.16=10.999-1000K, Aff. Ren. 8=19.694K). For the caper as a food see: Apic. 4.1.1 and Plaut. Curc. 90; on the caperbush in general see: M. Zohary, Plants of the Bible, Cambridge 1982, p.98 (with photographs).
Sycamore-fig (Ficus sycomorus L.) from Gal. (Alim. fac. 2.35=6.616-617K). It grew mostly in Caria and Rhodes and places that were not rich in corn, and the regularity of the fruit made it useful in times of famine (Dsc. 1.27.2, D.S. 1.34.8). Plin. (Nat. 13.56-58, cf. Thphr. HP 4.2.1) describes the tree as resembling a mulberry in foliage, size, and appearance. The fruit, a sweet fig without any seeds inside, was borne not on the branches but on the trunk in grape like clusters, a phenomenon known as cauliflory (see the photograph and description of the Sycamore-fig in M. Zohary, Plants of the Bible, Cambridge 1982, pp.68-69). The fertilization of the Sycamore-fig by wasps is vital to the ripening of the fruit, but then no seeds are produced since the ovaries are converted into galls which make the figs inedible; to prevent the setting of this type of fruit the tree was incised with an iron hook (cf. also Ath. 2.51b). As Gal. says, the fruit was sweet (Dsc. 1.127.1) and cooling (Ath. 2.51c, Alex. Trall. 1.16=1.585 Puschmann), although Str. (17.2.4) records that it was not prized for its taste (see also V. Reichmann, 'Feige (Sykamore)', RLAC 7 (1968), pp.683-689).

Perhaps because of the strangeness of the subject Orib. quotes his source (Gal. Alim. fac. 2.36=6.617K) with only a few minor alterations. The persea (Mimusops Schimperi Hochstett, see M. Schnebel, Die Landwirtschaft im Hellenistischen Ägypten, München 1925, pp. 312sq.) was apparently brought from Persia, where it produced a poisonous fruit, to Egypt, where alone it produced an edible fruit (Gal. Comp. Med. 2.2=12.569K, Symp. Caus. 3.4=7.227K, Sem. 2.1=4.603K, Ps. Arist. Plant. 821a
33-37, Plin. Nat. 15.45, and Sch. Nic. Ther. 764 where Bolus, a pupil of Democritus, is quoted as saying that the persea was used by the Persians to kill sentenced criminals; cf. also Ael. NA 10.21, Paus. 5.14.3). However D.S. (1.34.7) believed that it was introduced into Egypt from Ethiopia by the Persians when Cambyses conquered the area. Str. (17.2.2 and 4) supports this view by saying that the persea was found only in Egypt and Ethiopia. Thphr. (HP 2.2.10, 3.3.5, CP 2.3.7) reports that attempts to grow the persea elsewhere, for instance at Rhodes, were a failure as the tree only got as far as flowering and bore no fruit. The tree is mentioned frequently in papyri (e.g. POxy 2969.11, 53.7, 1188.3). The tree bore abundant fruit, as large as a pear, oblong, almond-shaped, and grass-green in colour (Thphr. HP 4.2.5, Plin. Nat. 13.60, cf. Plu. Mor. 378c and J. Gwyn Griffiths ad loc., Aberystwyth 1970, pp.536-537; there is a black and white photograph of perseas found in Tut-ankh-Amon's tomb in W.J. Darby, P. Ghalioungui, and L. Grivetti, Food: The Gift of Osiris, London 1977, vol.2, fig.18.20), whose sweet and easily digested flesh was good for the stomach (Dsc. 1.129).

64 περὶ κιτρίου: This passage is excerpted from Gal. (Alim. fac. 2.37.2-3=6.618-619K). Dsc. (1.115.5) says that alternative names were Μησίνα, Περσινά, and κεδρόμηλα (the latter because the green unripe citron resembles the unripe cedar-cone; or because cedar and citron trees have spines around the leaves, Ath. 3.84d; or more fancifully because the fruit and leaves had the smell of cedar, Isid. orig. 7.7.8), and that the fruit is oblong, wrinkled, golden, strongly-perfumed, with a seed like that of a
pear. They are first mentioned in Greek literature by Antiph. (ap.Ath. 3.84a-b) in the first half of the 3rd c.B.C. as coming from Persia. Thphr. (HP 4.4.2), after describing the tree in detail, reports that its habitat was Persia and Media, and adds that the fruit was not eaten but was placed among clothes to keep away moths, and its juice was used as an emetic with wine to bring up poison (cf. Ath. 3.84d-85c). Verg. (G. 2.126 and Seru. ad loc., is the first Latin author to mention the citron, and he also refers to it as from Media. That Juba II of Mauretania (c. 50B.C. -A.D.24) mentions the citron implies that it had been naturalised in Africa along the Mediterranean coast (ap.Ath. 3.83b). In Petr. (38.1) a guest at Trimalchio's dinner relates to Encolpuis that the millionaire's estates grew citria (a conjecture of Jacobi for Ms. creadrae: see M.S. Smith ad loc., Oxford 1975, p.83), but the general tone of the passage must surely be a joke at the expense of the gullible guest (cf. P.A. George, 'Petroniana', CQ n.s. 17 (1967), p.130). Plu. (Mor. 733e) reports that in his day older people were unused to such novel items of food as citrons. By the 4th c.A.D. the tree was acclimatised in Italy, and Pall. (4.10.16) talks of the citrons produced on his estates in Sardinia in the district of Neapolis. Citron trees were best grown in the sun in porticos and kept covered during the winter (Gp. 10.7.11) for they were killed by frost and cold (Gp. 10.7.10). Gal. (Simpl. Med. 7.12. 19=12.77K) says that the flesh and skin were eaten (sweeter varieties must have been developed), but that the seeds were inedible (but cf. Gal.Simpl. Med. 4.7=11.646K
where citron seeds are said to have a hot and bitter taste). Conversely Plin. (Nat. 13.103, cf. Nic.Alex. 533) thought that the whole fruit was 'execratum ... odore et amaritudine', yet like Orib. prescribed it to strengthen the stomach (Nat. 23.105, cf. Sim.Seth. s.v. κίτρα = p.52 Langkavel).

The problem faced when discussing κίτρον is whether the word is a specific term for the citron, or a generic term for citrus fruits. Most writers (e.g. E.H. Warming-ton, The Commerce between the Roman Empire and India, 2nd edn., London 1974, p.218; B. Flower and E. Rosenbaum, The Roman Cookery Book, London 1958, p.53, note 1; F. Olck, 'Citrone', RE 3 (1899), col.2612; W.J. Darby, P. Ghalioun-gui, and L. Grivetti, Food: The Gift of Osiris, London 1977, vol.2, pp.703-705; J.M. Riddle, 'Gargilius Martialis as a Medical Writer', JMH 39 (1984), p.422, n.64) are sure that, because of an almost total lack of evidence otherwise, the only citrus fruit known to the ancients was the citron (Citrus medica L.), the orange and lemon having been introduced by the Arabs to mediaeval Europe. In the course of their conquests into Asia and Africa far beyond the territory influenced by the Roman Empire the Arabs became acquainted with sour oranges (Citrus Aurantium L.), which were apparently brought from India in the 920's to be sown in Oman, and from there were carried to Iraq, Syria, and Egypt; the lemon (Citrus limon [L.] Burm.) originated in southern China, was mentioned as an Indian fruit by the Arabs in the 10th c. under the name limūnah, and by the latter part of the 12th c. was firmly established in Spain; the lime (Citrus aurantifolia Swingle) was taken by the Arabs from
India to Egypt and Europe at about the same time as the sour orange and the lemon (see H. J. Webber and L. D. Batchelor (eds.), *The Citrus Industry, vol.1: History, Botany, and Breeding*, Berkeley and Los Angeles 1943, pp.1-17; also pp.396-398 on the citron).

However, S. Tolkowsky (*Hesperides: A History of the Culture and Use of Citrus Fruits*, London 1938, esp. pp. 1-111) argues for ancient knowledge of all the citrus fruits, and not alone, for F. Brunet (*Oeuvres Médicales d'Alexandre de Tralles*, Paris 1933, vol.1, p.93) translates χυλό κατρίου (Febr. 7=1.431 Puschmann) by 'jus de citron, ou d'orange', and A.C. Andrews ('Acclimatization of Citrus Fruits in the Mediterranean Region', *Agricultural History* 35 (1961), pp.35-46) in general supports Tolkowsky's thesis with few modification and amendments. D. Casella ('La frutta nelle pitture pompeiane' in G. Macchiarioli (ed.), *Pompeiana*, Naples 1950, pp.360-364) stated that lemons, oranges, and limes were grown in Italy in the 1st c.A.D., and he based this statement on various mosaics and wall-paintings found in Pompeii and Herculaneum; however, his assertion that a painting in the House of the Ephene (*ibid.*, p.367 and fig. 46) represents a pineapple (*Bromelía Ananas L.*) must surely render his arguments suspicious as pineapples are definitely from America. Likewise a large part of Tolkowsky's argument rests on fruits depicted on mosaics, wall-paintings, and sculptures, but an examination of some of his examples reveals how difficult his argument is to support: mosaic 9992 in the Museo Nazionale of Naples shows three birds perched on the edge of a large basin which rests on a square pedestal (photograph in M. Grant, *Nero*, London 1970, p.194). To
the bottom right of the picture is a feline creature, to the left a spherical orange fruit with some dark green pointed leaves still attached. Tolkowsky believes it is an orange, yet it could equally well be a pomegranate, especially because of what appears to be protuberance at the end facing the viewer as on a pomegranate. The garden room from the House of Livia at Prima Porta, whose frescoes have now been removed to the Museo Nazionale in Rome, is also thought by Tolkowsky to show orange and lemon trees, although with artistic licence bearing quinces, the explanation being that at the time of composition the citrus trees had not become sufficiently acclimatised in Italy to bear fruit. In a detailed study of the painting, M.M. Gabriel (Livia's Garden Room at Prima Porta, New York 1955, pp.32sq.) lists the numerous trees and plants depicted such as viburnum, oleander, cypress, quince, pomegranate, spruce, laurel, pine, oak, and arbutus, but she makes no mention of citrus trees, and the round and orange fruits certainly look like quinces and pomegranates. A mosaic probably from Tusculum and housed in the Museo Nazionale at Rome (No.58596: for photograph see W.J. Jashemski, The Gardens of Pompeii, Herculaneum and the Villas Destroyed by Vesuvius, New York 1979, fig. 419), divided into three bands separated by thin brown lines, shows some ill-executed birds in the top and bottom sections, and in the central band a line of six fruits resting on some dark green leaves ('possibly orange leaves' according to Tolkowsky). Even if Tolkowsky's interpretation of the fruits as being, from left to right, an apple, a lemon, a sour orange, a citron, a sweet orange, and a lime is rather too trusting of the clumsy rendering,
the second fruit from the left at first sight appears to be a lemon. Unless looking more closely it is regarded as a citron, and the knobbly pale yellow fruit third from the right is a pine-cone, since similar representations of the latter appear frequently in Roman art in scenes of cornucopia (see also Orib. 1.13.6n. for pine nuts in cooking), and the two 'oranges' and the 'lime' could equally well be apples (photograph of a citron in M. Zohary, Plants of the Bible, Cambridge 1982, p.123). The fruit that was sold to me in a Naples fruit market in August 1984 as a 'cedro' had a slightly bubbled skin, but otherwise resembled the fruit second from the left in the mosaic, and if the artist was wanting the proportions to be correct then the fruit is far too large to be a lemon, yet the proportions would be roughly suitable if it were a citron and the fruit third from the left were a pine-cone. Tolkowsky also cites as evidence the mosaics of Santa Costanza in Rome, built between 320 and 330 as the mausoleum for Constantine's daughter: certainly yellowish oblong fruits are represented (A. Grabar, The Beginnings of Christian Art 200-395, trans. S. Gilbert and J. Emmons, London 1967, plates 202, 206, 207; W.F. Volbach, Early Christian Art, London 1961, plates 32-35), but need they be lemons or even citrons? It is far more likely that they are pomegranates, for in Christian symbolism these fruits alluded to the Church because of the inner unity of the countless seeds in one fruit, and, since in pagan mythology they were an attribute of Proserpina and the return of spring and rejuvenation of the earth ('Symbol der Zeugung und Fruchtbarkeit', J. Murr, Die Pflanzen-welt in der Griechischen Mythologie, Innsbruck 1890 (repr.
Groningen 1969), pp.50-51; cf. also Jul.Or. 5.176b), they also came to represent the hope of immortality and resurrection (G. Ferguson, Signs and Symbols in Christian Art, New York 1961, p.37). A fruit imbued with such connotations would surely strike a greater chord in a Christian tomb than a citron, even if, as M. Gough argues (The Origins of Christian Art, London 1973, p.80), the mosaics were 'blatantly Dionysiac', hence the reason for Santa Costanza being known in the Renaissance as the 'Tempio di Bacco'.

Archaeology too cannot furnish any conclusive evidence: in the course of her excavations of the cities buried by Vesuvius in A.D.79, W.F. Jashemski (The Gardens of Pompeii, Herculaneum and the Villas destroyed by Vesuvius, New York 1979) came across earthenware pots bored with breathing holes for the roots of trees planted therein (pp.29 and 240), a practice associated today with citrus trees, and root cavities that may have belonged to lemon trees, although equally well to citron trees (pp.285 and 295). In the House of the Fruit Orchard on the Via dell'Abbondanza in Pompeii is a painting of a female oriole in what could be a lemon tree, but again a citron tree cannot be ruled out (plate 420).

The literary evidence is slight. Sch.Nic.Alex. 533 says: Τὸ Μηδικὸν μῆλον, δ ἐστὶ τὸ νερᾶντζιον. The Byzantine and Modern Greek for the bitter orange is νερᾶντζι, but even Tolkowsky admits that it is impossible to affix a date to the scholion. Hsch. (s.v. κυτρίον) explains κυτρίον as τὸ Ἰνδικὸν μῆλον, and Tolkowsky hazards that this could be referring to the orange. The Babylonian Talmud (Succ. 36a) talks of a 'spherical cit-
ron', but this cannot be used as evidence for the culture of oranges in the Roman period. No ancient author, even in the most detailed accounts of the properties and growing of κίτρων, remarks on what surely are wide differences between oranges, lemons, and citrons. It is true that special sorts of citron were grown, for instance μέλανα κίτρια after grafting with an apple tree cutting (Gp. 10.7.8) and ἕρωθρα κίτρια after grafting with a mulberry tree cutting (Gp. 10.7.12, cf. Pall. 4.10.16, although Mr. R. Kerby, the Assistant Curator of the Royal Botanic Garden in Edinburgh, says in a letter that he would question strongly the grafting of 'Citrus' Rutaceae on to 'Pomegranate' Punicaceae as the families are not even closely related), and round glass jars or clay moulds in the shape of a human or animal face could be fixed at an early stage around the fruit to produce unusually shaped citrons (Gp. 10.7.6, 10.9.1-3). But these are not examples of ancient ignorance to explain the different citrus fruits available as Tolkowsky postulates. It is interesting to note that perhaps the most important factor in the spread of the citron tree through the Mediterranean was the adoption around 136 B.C. of the fruit in place of the cedar cone by the Jews as part of the ritual of the Feast of the Tabernacles (see I. Erich, 'The Influence of Religion on the Spread of Citrus', Science 129 (1959), pp.179-186, where however it is also argued that the citron was used by the Jews long before the 2nd century B.C.).

65 περὶ τῶν ἄγριων φυτῶν: On this section Daremberg (p.581) understandably remarks: 'Nous ne savons pas pourquoi Orib. a rattaché au premier livre ce chapitre, qui paraît
avoir plus de rapport avec le commencement du second, où il est également question d'herbes potagères'. There were three types of wild plant, those which grew outside the area of cultivation or fallow ground or pasture, those found in pasture, and those growing in fallow fields. Wild plants supplied the deficiencies of the farinaceous diet of the poor, and added a relish to plain food (see J.M. Frayn, Wild and Cultivated Plants, JRS 65 (1975), pp.32-38 and A.C. Andrews 'Alimentary Use of Hoary Mustard in the Classical Period', Isis 34 (1942-1943), p. 162: '(Hoary mustard, Sinapus incana L.) ... remained a wild plant of no economic importance, belonging to the category of wild herbs commonly used by country people to supplement their larders'). Wild vegetables such as wild lettuce, gum succory (or wild chicory, Cichorium intybus L: 'On the Continent, especially in Belgium, the young and tender roots are boiled and eaten with butter like parsnips, and form a very palatable vegetable', M. Grieve, A Modern Herbal, Harmondsworth 1976, pp.197-199), chervil, gingidium, and chicory were all ξαφόχυμα (Gal.Bon.Mal.Suc. 8.8=6.794K, cf. Diff.Feb. 1.4=7.285K), but were nevertheless considered fit to cook (Diocl.ap.Ath. 2.68d, cf. Pl. R. 2.372c6); travellers have made mention of the consumption of wild herbs in Greece today, for example K. Andrews (The Flight of Ikaros, Harmondsworth 1984, p.104): 'We all sat down at a table and the soldier's mother brought plates of bitter herbs in olive-oil'; ibid. (p.177): 'The boy's mother brought us a dish of mountain herbs for our supper'; and P. Levi (The Hill of Kronos, London 1980, p. 129): 'On Sundays the whole of Athens goes on excursions far into the country ... the women ... spreading out in
battle order over entire hillsides in search of wild salad. And at stripping an archaeological site of its irises and anemones they are more damaging than the most voracious herd of goats'.

τῶν ἄκανθωδῶν: A little before the passage Orib. excerpts here, Gal. (Alim.fac. 2.39.3=6.623K) lists what he means by ἄκανθωδή: golden thistle, spindle thistle, eryngo, blessed thistle, white thistle, and pine thistle. They were eaten raw dipped in garum and vinegar, and with olive-oil poured over them after they had been boiled in water (Gal.Alim.fac. 2.50.1=6.635-636K). Δρίτα (3.16) suggests dipping herbae rusticae in liquamen, olive-oil and vinegar, or cooking them in a pan with pepper, cumin, and mastic berries. Artichokes (νινάρα) when hard and woody engendered melancholic bile, and Gal. (Alim.fac. 2.50.2=6.636-637K) advises thoroughly boiling them and eating them with olive-oil, garum, wine, and coriander.

ἄριστης γῆς: The Mss of Orib. (Raeder, p.27; Daremberg, p.73) are hesitant over the correct reading, the first hand of A recording ἄρι, a correction in a second hand recording ἄριστης, which is also the reading of C; on the other hand, the Mss of Gal. (Helmreich, p.307) appear to be unanimous in their approval of ἄριστης. Although Orib. does occasionally select a different word from Gal. to express himself, the general sense of what he says remains the same (e.g. 1.61n.: τα σπλάγχνα for σπληνα καὶ ἦπαρ; see also 1.55n.), and this rather argues against ἄριστης. In view too of Gal.'s preference περὶ τῶν ἀπαλῶν ἄκανθων to pluck them before they have become withered and hard (Alim.fac. 2.29.3=6.623K) and the parallel phrase ἀνίσχοντα τῆς γῆς ἄρτι τὰ τοιαῦτα φύτα (Alim.fac.
2.50.1=6.635K), the reading ἀρετὴ τῆς of Daremberg ('... il faut en excepter les plantes épineuses, au moment où elles sortent de terre') is preferable to Raeder's ἀριστὴς γῆς (Rasario, p.218, evidently came to the same conclusion as Raeder: 'spinosos qui in terra optima exoriuntur'), although it could perhaps be argued that ἀκανθῶδη grown in good soil would be more succulent than those grown on poor ground, and this may have been on the copyist's mind when making his transcription (cf. perhaps Mnesith. Ath. ap. Gal. Alim. fac. 2.59.2=6.645K: τὸ κατὰ γῆς πεψυκτος ἐδόξημον ἐστι).
TEXT AND TRANSLATION
ΟΡΙΒΑΣΙΩΤ ΙΑΤΡΙΚΩΝ ΣΤΥΝΑΓΩΓΩΝ

ΒΙΒΛΙΟΝ Δ'

α. 'Εκ τῶν Γαληνοῦ, περὶ παρακεκυής τροφῶν.

Τὴν εὐτενεστάτην διλυμαν δημὶος ὧταν ὡς χρή πτεύει, τὸν ὄνομαζο- ἰ ΜΕΝΟΝ ΤΡΑΓΩΝ ΠΟΙΟΥΣΙΝ. ΤΑΥΤΗΝ Δ' ΑΥΤΗΝ ΚΑΙ ΤΗΝ ΤΙΡΗΝ, ΚΑΘΑΠΕΡ ΚΑΙ 2 ΤΗΝ ΚΡΙΣΗΝ, ἈΡΤΟΠΟΙΟΙΣ ΠΙΤΕΣΟΝΤΕΣ ὙΜΩΙΣ· ΛΕΙΜΑ ΤΑΡ ΞΟΥΕΙΝ ΞΕΩΘΕΝ.

Τῶν πυρῶν δ' ἀλεξέβητων, εἴ τις ὑποκείθηκε τὸ λεπτότερον διέμενον ἀρτοὺς ἐκ τοῦ λοιποῦ ποιήσαι τοὺς πιτυρίτας ὄνομαζομένους, εἰλι- τῶς καὶ εἰμιδαλίτας ἐκ τοῦ καθαρυτάτου. Ζῷμης δὲ πλεῖστον 4 χρηζοῦσιν οἱ καθαροὶ καὶ μελαχηθήναι δέονται μᾶλλον οὐκ εὐθὺς τε μετὰ τὴν Ζῷμην ἢ τὴν μᾶλεξιν ὄπτάεθαι· τοῖς δὲ πιτυρίταις ἀρκεῖ καὶ Ζῷμη βραχεία καὶ μάλεξιν ἀθενής καὶ χρόνος ὀλίγος. οὕτω δὲ 5 καὶ τῆς ὑπότεςεως αὐτῆς μακροτέρας μὲν οἱ καθαροὶ, βραχυτέρας δ' οἱ πιτυρίται δέονται. τὸ μεταζὸν δὲ τῶν καθαρυτάτων καὶ ῥυπαρυτάτων 6 οὐκ ὀλίγον ἐκτὶ πλάτος ἐν τῷ μᾶλλον τε καὶ ἡττον· ἐκτὶ δὲ καὶ μέσον ἐιδος ἀκριβῶς αὐτῶν οἱ αὐτόπυροι τε καὶ εὐτκομιστι προσατερουσυμοι, ἐξ ἀδιακρίτων ἁλύρων, μὴ χωρίζομένου τοῦ· πιτυρώδους ἀπὸ τοῦ καθαροῦ, τινόμενον. ἐκ τῶν νέων κριθῶν φρυτειῶν εὐμέτρως τὸ 7 κάλλιεστον ἀλμίτον γίνεται· τούτων δ' ἀπορούντες ἐνίοτε κάκτων ἄλλων αὐτὰ σκευάζομεν. εὐωδῶν δ' ὄντων ἀπάντων δεκα καλῶς ἐκεύ- ἔθη, μάλετο ἐκτιν εὐώθη τα ἐκ τῶν ὀρίστων καὶ νεὼν κριθῶν τινό- μενα μὴ πάνω ἔφρον ἔχουσιν τὸν ετάχων. ἐν ἔθει δ' ἐκτι πολλοὶς ἰ τῶν ὑπαιπόνων ἐπιπάττετεν αὐτὰ εἰραιψ ὡς οἰνοὶ τίλυκε ὡς οἴνωμέλιτι
THE FOURTH BOOK OF THE MEDICAL COMPILATIONS OF ORIBASIANUS

1. From the works of Galen on the preparation of food.

1 Whenever people winnow as one ought the best emmer
2 they make what is called tragos. The same grain as well
3 as einkorn, along with barley too, they make into bread
4 after winnowing in an identical fashion; for these grains
5 have a husk on the outside. As for wheats that have been
6 milled, if after sieving off the finest meal one makes
7 bread from what remains behind, then these breads are cal-
8 led 'bran-loaves', whereas from the refined meal one
9 makes silignitai and semidalitai breads. White breads
10 want more leaven and require rather to have been kneaded
11 and to be baked not straightway but after leavening or
12 kneading; for bran-loaves on the other hand a little yeast
13 and gentle kneading and a short space of time suffice.
14 Thus white breads require longer baking, whilst bran-
15 loaves require shorter baking. There is a considerable
16 difference between the whitest breads and the darkest, a
17 difference which is occupied by intermediate categories;
18 however, there is also a class of bread that holds a mid-
19 dle point exactly between the two types of bread: it is
20 called 'wholemeal' or 'unrefined', because it is made
21 from unsifted meal, or in other words flour from which the
22 bran has not yet been separated. From young barley that
23 has been moderately parched comes the best barley meal;
24 on occasion when we lack this sort of groats we prepare
25 them from other grains. Of a wholesome smell are all
26 groats that have been properly prepared, especially what-
27 ever has been made from the best young barley which does
28 not have a completely dry ear. It is the habit of many
29 people who are in sound health to sprinkle the barley
καὶ ποτε καὶ ὤδατι καὶ πίνειν ἐν τῷ θερεὶ πρὸ Ἡσυχίας. Ἡ τριῶν ὑψών τοῦ λουτροῦ, καὶ φασίν αἰειδάνεθαι τῷ πόματος ἀδίψου. τίνοντι δ᾽ ἐκ τῶν ἄλφιτων καὶ μᾶζι ὤδατι φυσιοδέντων. χόνδρος δὲ τοῦ μην τένους ἐκτὸς τῶν πυρῶν τοὺς ἐξ αὐτοῦ τούτου εὐκαίριον φιλήματι χυλὸς τάρ ἐκτὸς οὕτως αὐτοῦ μεμιμένου ὤδατι, καὶ πλείστης περίμενος ἐγκύβως ἔξεστι μὲν τοὺς εὐκαίριοντας, ὡς αὐτάρκης ἐγκύβως, οὐ μικρὰς δὲ βλάπτει τοὺς νοσοῦντας· ἐν τάχει τάρ ευνίσταται καὶ παχύνεται διὰ τὸ καλλώδες εἶναι. χρῆ τοῖνυν ὤδατι παμπόλλῳ μιμύνται ἐπ᾽ ἀνθράκων ἐρείν ἐπὶ πλείστον ἀνήθῳ κινοῦντας, μέχρις ἐν ἥμηρα, τηνικαῦτα δ᾽ ἐπικάλλειν ἥδη καὶ τῶν ἕλληνυ τὸ δ᾽ ἔλαιον οἱ καὶ κατ᾽ ἀρχὰς εὐθέως ἀναμίεις, οὔδεν βλά-ρεις. τοῖς δ᾽ ὑπαίνονσιν, ὅταν ποτὲ διὰ δήενοι εὐφρόνιον τὰ ἐν τούτῳ διέχοι σεβαχὴς φιλήματος, ἐγκύβως χρῆ μέχρι πλείστου τῶν χόνδρων ἦς τενεβάθασι ταχέως, εἶτα τορυθήσατος ως ὤμοιωθήσαται. πτείνεται χυλῷ διηθημένῳ, τηνικαῦτα διδόνας βορείαν, ἡ ἅρτυς εἰς αὐτὴν τὴν τπλοῦτον χόνδρον. πτείνετα δὲ προσπόντως εὐκαίριοντος, ὅταν ἐπὶ πλείστον ἀνοικήσατα τῆς κατὰ τὴν ἥμηρα, εἶτα μετὰ ταῦτα διὰ μαλακοῦ πυρὸς ἄχρι πολλοῦ χυλοῦ, μιμύνοντι δ᾽ αὐτῷ κατ᾽ ἐκείνον τὸν καρδὸν δέος, ὅταν ἀνοικήσα ἐρείν ἐπὶ ἄκρι-βῶς γεύσης, ἐπικάλλειν χρῆ τοὺς ἄλλα λεπτοὺς οὐ πολὺ πρὸ τῆς ἐδώσεις· ἔλαιον δὲ καὶ εἶ κατ᾽ ἀρχὰς εὐθέως ἔμβάλλοις, οὐ βλάψειες

1 Ἡσυχίας  CDVG Daremberg: Ἡσυχίας Σ2: Ἡσυχίας Σ: Ἡσυχίας Raeder
with reduced wine or sweet wine or honeyed wine and then to drink it with water in the summer two or three hours before bathing, and they say they have discovered a thirst-quenching drink. There is also made from groats kneaded into a paste with water barley-cakes. Chondros is manufactured from a type of wheat; one must pay attention to the soups made from this particular grain; for its juice is mixed with water, and although needing a lot of boiling it deceives those who are preparing it as being sufficiently boiled, and so causes not a little harm to invalids; the reason for this is that it quickly sets and thickens through being glutinous. Hence one should boil it on the coals with plenty of water for as long as possible stirring it with dill until it has been cooked, and then one should immediately add some salt; if you also mix in oil right from the start you will cause no harm. In the case of healthy people, whenever they have need of a soup because of severe mordant pain of the stomach or evacuation of bilious excrements, it is necessary for them to boil chondras for a long time so that it becomes soft, and then to stir it in order to render it like the strained juice of pearl-barley, and finally to give it to drink. The seasoning can be the same as for refined chondras.

Pearl-barley is suitably prepared when it has swelled to its fullest extent during boiling, then after this put on a gentle flame until it has wholly converted into juice. There is mixed with it vinegar at that precise moment when it has completely swelled; when it is carefully boiled one must add fine salt, but not too much, for edibility; and if you should wish to add oil at once from the start you will not harm the boiling; it is not necessary
τὴν ἔσησεν· οὐ μὴν ἄλλο τι χρή μιτυνόειν ὅτι μὴ πράσου βραχὺ καὶ
19 ἀνήθου, καὶ ταῦτα εὔδος ἐν ἄρχῃ. δεὶ βε προβρῆζεται ἐν ὑδατὶ τὴν
μὴν πτεικάνην ἐπ᾽ ὀλίγον, εἴτε ἐμβαλόντας θυία τρίβειν διὰ τῶν χει-
ρῶν ἐχουσῶν ἐν ἑαυτῶς τι πραξῆ, καθάπερ οἱ ἐπάρτος ἔστιν ἐκ ὅν
20 πλέκωσιν ὑποθήματα τοῖς ὑποζύγιοις. ὅσος δὲ ἔστω τῆς τρίγυις
ἀπεγνώσαι τὸ προσκείμενον λέμμα· καὶ μὴ πᾶν ἀποπέση τὸ ἄχυ-
ρολε· ἣ ἐνοθεία πτεικάνη ὑποτικωτέρα μὲν τίνεται, ἐλάβην δ᾽ οὔθε-
21 μιν ἐτέραν προστρίβεται. χειρίσθη δὲ εκενασία πτεικάνης ἔστιν, διὰ
οἱ μείρειροι τρίψαντες αὐτὴν ὑμὴν ἐν θυίᾳ μεθ᾽ ὑδατος, εἰδ᾽ ἐγκατατάτη
ἐπ᾽ ὀλίγον, ἐμβάλωσι τὸ καλούμενον ἐμημά τε καὶ εἰραίον· ἐνίστε δὲ
καὶ μέλι καὶ κύμινον ὀμα τούτοις ἐπεμβάλλουσι, κυκεύα πάλλον ἢ
22 πτεικάνην παρακαυεδόντες. ἔσεμα γίνεται κάλλιστον δ καλοῦσι φακο-
πτεικάνη, οὐκ ἐσω τῷ μέτρῳ μιτυνότες, ἀλλ᾽ ἐλαττὸν τῆς πτεικάνης, ὡς
ἐν χυλουμένης τε καὶ εἰς ὕδαν αἰρομένης μέγαν· οἱ φακοὶ τὰ ὕδατ
μενοὶ βραχὺ προσανοιδέσκουσιν. ἢ τε μὴν ἄρτως ἢ· αὐτὴ καὶ τοῦτω
τῷ ἐδεματι τῇ κατὰ τὴν πτεικάνην ἔστιν, πλὴν ὅτι θύμβρας καὶ γλύκους
ἐπεμβαλλομένης ἠδυίν τοίς ὑπὲρκαὶ καὶ εὐπεπτοτέρα τίνεται, πτεικάνης ὥς
23 καιροὺς τούτοις, ἀλλ᾽ ἀρκουμένης ἀνήθι καὶ πράσῳ μόνῳ, μοχθη-
ροτάθη δ᾽ εἶτι εκενασία φακῆς ἢ διὰ τοῦ εὐραιοῦ τοῖς πολλοῖς ὅπο
24 τῶν ματέρων εκενασίμης, κρας δὲ χορίειν εὶ βούλει ευνείειν, τῇ
μὲν πτεικάνῃ πρόσφατον, καὶ μάλιστα τοὺς πόδας, τῇ δὲ· φακῇ ταρ-
χηρὼν ἀρμόττον εὐρήσεις, ὤσπερ τῇ τὸ μεταξὶ τούτων, δ νεαλε ὅνο-

1 πολλοῖς G Darenberg et Raeder: πλουσίοις oodd.
to mix in anything else except a little leek and dill, and
these right at the beginning. One should soak in water
beforehand raw pearl-barley for a little while, and then
on putting it in a mortar pound it with the hands while
holding something rough, such as Spanish broom from which
they plait shoes for beasts of burden. Let the limit of
the pounding be the moment when one has thoroughly removed
the surrounding husk; if however not all the chaff has
come off, then the barley will be somewhat darker after
being boiled, but it does not inflict any harm besides.

The worst method of preparing barley is when cooks after
pounding it raw in a mortar with water, then boiling it
a little, add what is called 'reduced' or 'diminished' wine;
sometimes they even add honey and cumin along with these
wine preparations, and so make a hotchpotch rather than
barley-soup. There is an excellent food which people call
lentil-and-barley soup, where they add the barley and len-
tils not in equal measure, but instead less barley, since
it would thicken the juice during decoction and also gain
a great deal of weight; for lentils on the other hand, when
they are boiled, swell up only to a small degree. The
seasoning is of course the same for this food as for
pearl-barley, except that when savory or pennyroyal have
been put in as an addition it becomes more pleasant and
easier to digest, whilst pearl-barley is unsuitable with
these seasonings, and suffices with just dill and leeks.

There is a thoroughly wretched method of preparing a len-
til dish perpetrated by cooks for many people using re-
duced wine. If you wish to boil pork, either when fresh
with pearl-barley, particularly the trotters, or with
lentils when pickled, you will find suitable as being the
μάζους, τῇ φακοπτικάνῃ χρήσιμων εἰς ἥδεν ἡ τε καὶ πέψιν. καλὸν 28 ἔδεμμα καὶ τευτλοφακή, καὶ πολλὰ δεῖ ἐμβάλλειν τεῦτλα καὶ βραχύ πλέον ἁλῶν ἢ τάρου· τλυκέος· ὑπακικυστότερος τὰρ ὤστος. κολοκύτη 27 δὴ εἰκότως ὑρατᾶν χαίρει διὰ τὴν ύδατώδη ποιότητα εὐμφυτὸν ὑπάρχουσαν αὐτὴ· πάντα τὰρ διε χαράτα δρυμέων ἢ δέεσιν ἢ αὐστροίς ἢ ἀλκοίς ἀναίμνυσθαί δεῖται χυμικός, εἰ μέλλοι μήτε ἀράη ληφθεὶς εἰςθαί μήτε ναυτιώδεις ἔργαζεθαί τοὺς λαμβάνοντας. ἠδείτον δὴ ἐκτίν 29 ἔδεμμα κολοκύτη μετὰ ταρίχους ἐν λοσάδι εἰκεναχεικα, μάλιστα εἰ τὸ τάριχος εἰς τῶν Ποντικῶν τῶν καλωμένων μύλλων. τὰς τογγυλίδας, 29 δὲ καὶ βουνάδας καλοῦσιν, ἐπὶ πλέον ἦσειν χρῆ· κάλλιττα δὴ εἰς αἱ διὰ ἐψηθεῖται. καὶ ἡ τοῦ ἄρου δὲ βίζα παραβλησίως ἐδείκται τῇ ποιήσε ἐν χώραις δὲ τεῖς φυτῆς ἐριμυτέρα· κατὰ δὲ Κυρή· 31 καὶ τὴν ἐρμαλιὰν ἔσται τὰς φυτῶς τούτων πρὸς τὴν παρ᾽ ἡμῖν χώραν· ἡ καὶ τὰς ποιήσες δὲ γαρ ἔριζεν ὑλῆς πρὸς τρία ἐχθῆς τοὺς τᾶς-ποιεῖς, ὡς καὶ τῶν τογγυλίδων ἐναι χρησιμότερον. καὶ τὴν τοῦ δρας· 22 κοντίου δὲ βίζαν ἐψάντες δεῖ ποι τρία ὅστως ἐδείκτεν διδομὸν, τὴν δὲ τοῦ ἀσφυδείου εἰκενάδοντες ὡς τοῖς θέρμοις. ἐπειδὰν δὲ τὰ τοῖς ἀστά δεῖ ἐψώμεν, δια τοια INDIRECT_WILDCARD πρότερον ὄσμων ἀποψήλως ἐμβάλλειν προσήκειν εὐθέως ἐτέρῳ θερμῷ, καὶπεῖτα
midway point between the two foods that which people call 'new', since it is useful with lentil-and-barley soup both for enjoyment and for digestion. Beet-and-lentil stew is also a good food, and one should add a large quantity of beets, and quite a lot of salt or sweet fish-sauce, because in this way it is more laxative. The round gourd is naturally suited to marjoram because the latter's moist composition is at harmony with it; the reason for this is that all such things need to be combined with harsh or sharp or bitter or salty juices as suits them, if it is intended that those who take them as part of their diet should neither eat what is unpleasant to the taste nor should be made nauseous. The large gourd is extremely pleasant as a food prepared with pickled fish in a casserole, especially if the fish should happen to be the sort from the Black Sea which are called corvi. Turnips, which people also call kohlrabi, must be boiled for a long time; the best are those that have been boiled twice. The root of cuckoo-pint is eaten in much the same way as that of the turnip. In some places there grows a harsher variety; whilst in the countryside around Cyrene there belongs to this plant the opposite properties to that on the land around us; in fact the cuckoo-pint in those places is hardly medicinal and bitter at all, so that it is said to be more useful even than the turnip.

After boiling the root of edder-wort two or maybe three times we give it thus to eat, whereas we serve the root of asphodel prepared in a similar way to lupines. Whenever we boil these vegetables twice, when it seems best that they should undergo only a moderate amount of boiling, after pouring away the first lot of water it is a good
πάλιν ἐν ἐκείνῳ καθεψεῖν, ὡς τακράν γενέσθαι ἁρρὴ τὰρ μήτε ἀέρος μήτε ὕδατος ψυχροῦ ναῦσειν τὸ δίς ἐμψύμενον' οὐκέτι τὰρ ἀκριβῶς
44 γίνεται τακράν, οὐδ' ἄν ἐπὶ πλεῖστον ἐψῆς. τοὺς καθλίας χρὴ δεύ-
τερον ἐψήσαντας, εἶτα ἀρτύσαντας οὕτως τὸ τρίτον ἐψεῖν, ἀχρίς ἄν
tακραὶ τένωνται' τρόφωνοι τὰρ οὕτως τένωνται' πρὸς ὑπατωτὴν δὲ
tαστρός εὐθὺς ἐξ ἀρχῆς ἀρτύσαντας ἐλαῖῳ καὶ τάρφ, καὶ ὄνων βραχεῖ.
45 τῷ γενομένῳ ἤεμῷ χρηκθαί. πρὸς ταριχείαν δ' ἐπιτήδεια εὐμάτα
ἐστιν δὲκαὶ καὶ περίπτωματικά ἐχει τάς ἀρκας: τὰ τὰρ ἤτοι πάνω

τοῦ εὐματος οὐκ ἐπιτήδεια ταριχεύσεθαί. τὰ γοῦν ἑπὶ εὐματα δια-

πατήμενα τοὺς ἄλειν ἀθρῶτα γίνεται εκελευθεῖμαι, καθάπερ λατως' σι
dὲ τῶν ἀκμαζόντων τε καὶ πιόνων ὕδων κάρκες ἐπιτήδειοι ταρι-

χεύσθαι, τὴν ἀποτίαν ἐκατέραν ἐκπεφευγοῦσι, ἐπηρότητα μὲν τῶν γετη-

ρακότων, ἄμετρον δ' ἤτροτητι τῶν νέων χώρων' ὡς τὰρ τὰ ἑπὶ

eὐματα βύρσαις δυοια γίνεται ταριχεύθει ὲντα, τὸν ἐναντίον τρόπον δὲ

47 λιὰν ὑγρὰ διαρρεῖ καὶ τῆκεται τοῖς ἄλειν ὁμιλοῦντα. διὰ τοῦτο ὁδὲν


οὐδὲ τῶν ἠχών ὅςοι μαλακοζάρκοι τε ἐλεῖ καὶ ἀπέρριτοι, καθαπερ οἱ

πετραῖοι καλούμενοι καὶ τῶν ὄνεικων οἱ ἐκ καθαρᾶς θαλάσσης, ἐλει

tαριχεῖαν ἐλεῖν ἐπιτήδειοι' κορακίνοι δὲ καὶ μύλλαι καὶ πηλαμύδες, ἔτι
tο τὸ ἕφικται καὶ τὰ χρηματά καὶ τὰ σαιρίτανα καλούμενα πρὸς ταριχείαν
idea to transfer them at once to another lot of hot water, and then to boil them again in this fresh water, so that they become tender; for it is imperative that whatever is to be boiled twice should not come into contact with either cold air or cold water; this is because it will no longer become properly tender, not even if you boil it for a very long time. One must boil snails a second time, then after seasoning one must boil them a third time until they become tender; for when they are tender they are nourishing; but in order to make them laxative they must be seasoned at once right from the start with a sauce made from olive-oil, fish-sauce, and a little wine. All flesh that has both a hard and at the same time excrementitious composition is suitable for preserving; but flesh which has either a completely soft or completely dry composition and which possesses a simple structure is not suitable for preserving.

In fact dry flesh sprinkled with salt is not fit to be eaten on account of it being withered, an example of this being hare; but meat from pigs that are fat and in their prime are suitable for preserving; but the following two types of meat ought to be shunned because of their extraordinary nature, namely the dryness of old pigs and the immoderate moistness of young porkers; this is because dry meat which has been preserved is like leather, whilst in contrast all meat that is excessively wet flows away and is dissolved as it combines with the salt. This is the reason therefore why none of the fish that are soft-fleshed and plain, such as the so-called 'rock-fish' and the variety of common hake from clean sea-water, are suitable for preserving; but guarracini, corvi, young tunnies, not to mention older tunnies or tuna, and the so-called coly-
...επιτήδεια. καὶ τὰ κητώδη ἒ τῶν θαλαττών ζώων ταριχευόμενα βελτιώμενα θύμα τίνεται, περιττωματικὴν ἔχοντα καὶ αὐτὰ τὴν 'εόρκα' μοχθηραὶ· ἦν αἱ τρίται πρὸς ταριχείαν εἰς διὰ τὸ ἔνευ καὶ ἀπέριττον ἔχειν τὴν ἑόρκα. πρόδηλον δ' ἐκ τούτων, ὡς δὲν μὲν εἰκληρᾷ καὶ νευρώδῃ καὶ οἰονεὶ δερματώδη τίνεται ταριχευθέντα, δύσπεπτα πάντα ἔστιν· τὰ δ' ἐναντίως διατιθέμενα λεπτομερή μὲν αὐτὰ γίνεσθαι, λεπτύνειν δ'· ἐκεῖχομενα τοὺς παχεῖς καὶ καλλώδεις χυμοὺς. ἀριστα δ' ἐκ τῶν εἰς ἐμὴν πείραν ἐλθόντων τὰ τε γαθερίκα ταρίχη (ἑάρδας δ' αὐτὰς καλοῦσιν οἱ νῦν) οἱ τε ἐκ τοῦ Πόντου κομίζομενοι μέλλοντες δευτέραν δ' ἐναυτοῖς ἔχουσι τάξεις οἱ τε κορακίνοι καὶ ἡ πηλαμῆς καὶ τὰ εἰρείτανα καλοῦμενα. ἔγκεψοις πάς ἀμείνων τίνεται τὰ πάντα μετὰ τῶν τεῦνων· τους καὶ θερμαίνοντων εἰκονακέις· τῶν λευκῶν· ζωμὸν· καὶ ἀπλῶν ζωμὸν· εἰκούσεις εἰς ὅσα τοῖς μόνοι καὶ ἠλάτως καὶ ἁνήσου καὶ πράσοι βρασάνες, ἀλάλῳ εὐμείων· ἐπεμβαλλόμενοι μετὰ τὴν ἐφεσιν τὴν αὐτάρκη. τὸ ἀφεύμα τῶν πλείστων ή καὶ πάντων, ἐφ' οὗν ἄν ἐφή θρόνον, ἀλκούμενον ἀεὶ τίνεται, ῥυθεὶς ἐκ καὶ πικρόν· τὸ μέντοι εὐερέαν σῶμα τὸ κατὰ τὸ ὅψωρ ἐγηθέν, ἀποτιθέμενον ἐν ἐκείνῳ τὰς ἐκ ἁρχῆς ὑπαρχούσας αὐτῶ ποιότητας, ἐν τῷ χρόνῳ τὸ καλοῦμενον ἀποίκοι τε καὶ ὅσατόντος ἔχον τί μῆτε πικροτήτος ἡ· στύψιμον. τὰ γοῦν πικρὰ· εἰ δεύτερον· τριτον ἐγήθη· βουλήθης· τέλειος ἀποδεχόμενος τὴν πικρότητα κατὰ τὸ ὅψωρ, καὶ ἔκτας τῶν ἀποίκων· ἐμείως κατὰ τόνδε τὸν τρόπον καὶ τὰ δριμέα ἐγηθέντα ἀποθέηται τὴν ὁμούτητα· καὶ ἐπὶ τῶν εὐσφόντων ὁ αὐτὸς λόγος ἀρμότει.  

1 ζωμὸν oodd. : del. Daremberg.
mackerels are suitable for preserving. Cetaceous fish are better preserved than those freshly caught from the sea, since they possess excrementitious flesh; red mullet are wretched for preserving because they have dry and plain flesh. It is evident from these examples that those things that are preserved, since they are hard, sinewy, and resemble skin in texture, are difficult to digest; those things that are contrarily composed consist of fine particles, and on being eaten reduce the thick and glutinous humours. The pickled fish from Gades, which people now call tuna, and the corvi which are exported from the Black Sea, are the best of those on which my experience has touched; guarracini, young tunnies, and the so-called coly-mackerel take second place to these. All brains are better in every respect prepared with cutting and heating seasonings. Make white sauce and simple sauce from just water, and olive-oil, dill, and a small quantity of leeks, while a suitable measure of salt is added after sufficient boiling. The decoction of most or even all these things will always be more salty in proportion at the time you spend boiling them, and latterly also bitter; however, a solid body that is boiled in water which then has removed those qualities which existed in it right from the beginning becomes in time that which people call flavourless and watery, possessing neither saltiness nor bitterness or astringency. If indeed you want to boil bitter things a second or third time, this action will transfer completely the bitterness to the water, and they will become like those things with no flavour; similarly as in the previous example anything harsh in flavour when boiled will have its harshness removed; and the same argument applies in the case of as-
τὸ δ’ ἐδωρ ἐψώμενον ἐπὶ πλείονα χρόνον αὐτὸ καθ’ ἐαυτὸ ἀλυκώ- 45
tερον ἐαυτοῦ γίνεται.

β. Ἐκ τῶν Ῥοῦφου, περὶ σκευασίας ἐδεικτικῆς, κεῖται ἐν
τῷ Περὶ διαίτης ἐν τῷ ἀ λόγῳ πρὸς τῷ τέλει.

"Osca μὲν ὁπτῶντες προσφέρομεν ἐπικαίνει τοὐ καὶ τῇ ἐπίκαιντες ὑπαίνει, ἵ
καὶ τόις τῇ φύσει ἐπερίπτωσι. Ἰδιαίτερα δὲ καὶ τοῖς μεταμέντεοι ζ
ἱδούμενοι, οἴον τῷ κοριάννῳ καὶ τῷ ἀνήψῳ καὶ τῷ κυμίνῳ καὶ τοῖς
πράσιοι καὶ ὁσκ ἂλλα ἐπὶ χρείαις ἱδούμας. κρης δὲ ὅτι ἐκπαίν αὐτὸς ἱδ
ἱδούμενο ἐπίκαινα ποιεῖν τὰ τὰρ ὁπτῶς ἠμῆνται καὶ τῇ ᾠκτρί
ἐπίκαινα ἐπικαίνα. Κάλλιστα δὲ τὰ ἀλλ’ ἀρχῆς μισθοῦν τέχνους δὲ δόσια ἴ
ἐκ ὀόκτερου τι ἐπικαίνεσται οὐ τὰρ Ἰση ή ἤψεις πρότοι δ’ ἄν τοῖς
μὲν ἐπικαίνεοι (ἐνταῦθα καὶ οἱ ἄλλοι πλείον εἰς τὸ ἐκτινὲς τῆς πι
μελῆς, καὶ δέχεται τὸ πίνων τοὺς ἀλλάς) κρητεῖν δὲ πλείκτης τῷ πυρί
tὰ δ’ ἐξούδα καὶ τὰ ἀναίμα εἰς ἥλας ὀπτῶν, τῷ καὶ ἀλάκτωρ πυρί. δόσια ἴ
δε κρῆς εἰς ἡ προβάτων ἔψεις, μετὰ θερινῆς τροπῆς τῆςκαὶ τὰρ ἐκτὶ
δ’ ἐξούδα καὶ τὰ ἀναίμα εἰς ἥλας ὀπτῶν, τῷ καὶ ἀλάκτωρ πυρί. δόσια ἴ
καὶ διαμένων διοὐμότερον ἡγεῖτο. τούτων δὲ εἰς τῇ ἐκτῇ ἐστὶ εἰς τὸ ἐπὶ-
θέμα ἀφαίρετο καὶ πλείκτης ὀδη ἔψεις καὶ τοῖς ἱδούμενοι ἀλλοιοῦν
καὶ τὰ δικτα τῶν μὲν διογμοῦ διακόπτεις καὶ ἄλλων πάντων πρώτοι
πάρ τοῖς μελετούσι καί μὴ ἐπικαίνεστε εἰς λιπαρώτατοι καὶ ἤδι
trigent substances. Water after being boiled for a long time will become of its own accord more salty than it was.

2. From the writings of Rufus concerning the preparation of foods; this passage comes in the first book of the work On Diet, towards the end.

1 Everything we eat that has been roasted is dry; and everything that has been boiled is moist, even if it happens that these things are by nature different. There is differentiation too in the seasonings that are added, for instance between coriander and dill and cumin and leeks and all other such seasonings as are now used with meats. One ought to make things pronounced with seasonings as rarely as possible; this is because whatever has been seasoned in this way is noticeable even in the stomach. The best seasonings are those which have been mixed in from the beginning; the worst seasoning is anything that has been mixed in later: the reason for this is that the cooking is not even; it might be satisfactory in the case of the strongest seasonings (where there is more salt during the melting of the soft fat, and the fattiness absorbs the salt); use a strong fire; but if you want to bake weak and bloodless foods, use a gentle fire. Boil sheep's and goats' meat after the summer solstice; for during the summer solstice they have a rather overpowering smell (especially rams and billy goats), and on being roasted they become even smellier. Any cover or lid ought to be removed during boiling and one must boil the meat in plenty of water and adjust the seasonings to taste and cut through the bones of rank-smelling meat and crush them all; for the marrow is the first thing to putrefy and yet if it has not putrefied it
7 ετοι. τινόςκεῖν δ' δεα τε αὐτίκα ἐψεῖν δεῖ, καὶ δεα εἰς ὅστερον. κρέα
tα μὲν τῶν ἄτριων πάντα εἰς ὅστερον· τὰ δὲ τῶν ἡμέρων, ύδε 
καὶ διός καὶ αὐτὸς αὐτίκα, βοῦς δ' εἰς ὅστερον· ὁρνίθων δὲ 
tὰς μεγάλας καὶ ἑλέας καὶ ἀλεκτριώνας καὶ φάκες καὶ πέρδικα 
καὶ ταῦτα καὶ ἀπατητὰ εἰς ὅστερον· τρυγώνα δὲ καὶ περιστεράν 
καὶ κίλχαν 
αὐτίκα· ἵππος δὲ πάντας ἐτι επαίροντας· οὐ γὰρ δέχονται τοὺς ἐσθί
cιούς χρηστοὺς. δεα δὲ δεὶ μὲν ἐσθίζειν, ἐψεῖν δὲ, ταῦτα τὸ δέος
9 ποιεὶ γαθυρύτερα. τὰς δ' ἀλεκτριώνας καὶ διώκειν, ἐθεάτας 
tοῦ δέος· ἄρκει δὲ καὶ ἡ δίωσθε· καὶ γὰρ εἴ τι τῶν ἄτριων ἀπὸ όρέα 
eὐπὸς ἐψεῖν, οὐδὲν ἄν μέτα μέμψεσθαι· μὴ καὶ ἐπαινέσαι τὰ 
μέγιστα. 10 χαλάζας δὲ τὰς ἕν τοῖς κράσι, τινομένας δ' ἔν τοῖς ὑδαῖς, ἠγού τὰς
· μὲν ἀλήτας ἡδίως τὴν τάρκα ποιεῖν, τὰς δὲ πλείους ὑποτέραν καὶ
11 ἀνθετέραν. πειράσθαι μὲν ὅν μὴ χρήσθαι τοῖς τοιοῦτοι· εἴ δὲ που 
δόνω, κηροῦ προσευμβάλλειν βραχύ· ὁπτώντας δὲ τοὺς ἄργους τῷ κηρῷ
12 χρείαν. διαγνώση δὲ, ἐτι Ζῷντος τοῦ ἱερείου, εἶ ἑυεις χαλάζας, παρὰ
τε τὴν γλώσσαν εκποτόμενος (διασημαινε γὰρ ἐνταῦθα) καὶ τοῖς ποιε
13 τοῖς ὅπεθεν· οὐ γὰρ δύνανται ἀτρεμένις. δεόντε δὲ θάσον λεύονται ἐψεῖν, οἱ μὲν νυμφὸν ἐμβάλλουσιν, οἱ δ' ὅπου ἐιλφός, οἱ δὲ κηρόν, οἱ
δέ τῆς κράδης καὶ μᾶλλον τῶν ἔρινεων· οὕτω δὲ καὶ τοῖς ὅπτωμένοις
is particularly fatty and sweet. One must learn what sort of things need to be boiled first, and what sort of things need to be boiled later. All meat from wild animals is boiled later; but as for meat from domestic animals, pork, lamb, and goat need to be boiled immediately, whilst beef is boiled later; on the subject of fowl, large birds, marsh birds, chickens, woodpigeons, partridges, pea-fowl, and francolins are boiled later; turtle-doves, pigeons, and thrushes are boiled immediately; all fish must be cooked while they are still quivering; for they do not readily tolerate being kept. Vinegar makes friable everything that must be left until the next day and then cooked. As for chickens one must chase them, and pour over them some vinegar: the chase is worth it; the reason for this is that if you were to cook some wild game immediately after a hunt, no great harm would come to you; even if you did not boil it immediately you would praise it most highly. Consider the fact that a few pimples on meat such as the ones that appear on pigs make the flesh more pleasant, but a larger number of pimples make the meat more moist and disagreeable. Therefore try not to use these meats; if you do have need of them for some reason or other, add a little bees-wax; smear the roasting-spits with wax. One can determine whether the pimples are present even while the victim is still alive by examining the tongue (for the pimples appear there), and the back feet; for they cannot stop trembling. Some people add sodium-carbonate to everything they want to boil faster, others add asafoetida juice, some bees-wax, others the sap of fig twigs and particularly those from wild fig trees; the latter also provide a faster cooking time for things being roasted.
14 Αάσεως τήν ὄπτησιν παρέχουσιν. ὑποτρίμματα δέ, τὸ μυττωτὸν καὶ τὸ ἀπὸ τῆς μινθῆς καὶ τὸ ἀπὸ τοῦ σελίνου καὶ δέκα τυρίζ καὶ δέει εκευ-άζεται, πάντα εἰς πέγνιν μᾶλιστα, τὸ δέ μυττωτὸν διαχωρεῖ τοῖς εκόρδοις. 15 νηρώσει δ’ ἐκείνῳ εὐθείᾳ κρέα, ἢν ἔξαρακθῆ ἐπὶ τῆς ἐγκτεσεως καὶ βραβηθῇ 16 πρὸς μικρόν ἔδατι ἄλλων ἔχοντι καὶ θύμου ἢ τῆς τραγοριτάνου. οὐ δεῖ δὲ τοὺς ἱερὰς προταλαιοῦν, ὅτι μὴ τοὺς ἄταν εκπροσό, μὴ ἐξαράκην δεὶ μὴ τὰ μαλάκια πάντας δ’ ὁμοίως τοῖς κρέαει προ-βρέχειν ἔδατι τῷ ἄλας ἔχοντι καὶ τὰ θύμα μοί ποιεῖν δ’ οὕτως μὲν κρέα τὰ τῶν τετραπόδων καλῶς ἐψηφῆντα κάθεσθαι, ὅτις τάχειτα κατα-πνησθῇ τ’ δ’ ἄλλα μὴ προεκείν μηδ’ ὅπταν, ἀλλὰ μόνως τῷ πυρὶ ἐκκρέμειν πάνω τὰρ οὕτως ἀποτίνεται μὲν ἢ ἱερά, δ’ ἐκ τοῦ κολλύδεας 17 ἐκείνῃ ὑκεμέταται, οὕτω δὲ μὴ δυνητὸν ἐκείνῃ ὅπτησαι, τούτους πρέπει 18 ἐφθούσι δεὶ μᾶλιστα λιτώς. οὕτω δὲ καὶ δρνεα καὶ τὰ κρέα, ὅπτε 19 χαίρεις τις ἐφθοῖς. εἰ δὲ τις τὰ δτρέα προεξέχεσα ὅπτα ποίησει καὶ εὖν νάπτει δειτην καὶ πεπέρε οἰμβάντοι νῦν δὴ αὐτά, οὐ μείον ἢ τοὺς διδύμους τῶν ἀλεκτροδῶν ἐπαινέσεται τοὺς ἐκδύδιους καὶ τοῖς νοσοῦ- 20 εῖν. τὸ κυδώνιον οὐ πάνυ φθείρεται λαμβάνει δ’ αὐτὸ δεὶ 1 ἢτοι εὖν μέλιτι ἐγείται καὶ βραχεί ὁνῆς, τοῦ λέπου ἀφαίρεθαν, ἢ τὸ επέρμα ἐκκαταρτείται καὶ μέλι ἐχεῖται, δι’ δ’ αὐτῶ ἐταῖς περι- πλάσσεται καὶ ἐντίθεται μαρίλῃ, ἔστε ἂν τὸ εταὶς κατακαυσθή την-

1 post δεῖ lacunam indicavit Raeder.
Spicy sauces, that is the *myttoton*, both the one made from mint and the one made from celery and all those prepared with cheese and vinegar, are all especially good for the digestion, but *myttoton* relaxes the bowels with the help of garlic. Meats are suitable for elderly people, if the meats are chopped up finely before boiling, and marinaded in water for a short time with salt and with thyme or goats' marjoram. It is not necessary to leave fish to mature, except those which are very hard, nor to beat them, except when they are cephalopod molluscs; one ought to marinade beforehand in water mixed with salt and thyme all fish just as in the case of meat; do the same for meat from quadrupeds and cook them well by thoroughly boiling, so that they can be quickly digested; the other sorts of fish should neither be boiled nor baked but should just be buried in the fire; for cooked in this way the fish skin is completely removed, and there is sucked out too whatever glutinous element is present. It is permissible to boil those things which cannot be baked especially if they are boiled gently. The same is true for fowl and meat, whenever one derives pleasure from whatever is boiled. If one first boils oysters and then bakes them and one eats them with a little mustard and pepper, one will commend them even to those who are ill as a delicacy on a par with cocks' testicles. The quince is not at all ruined if you follow these instructions: you must take it and either it is boiled in honey and a little wine, after the skin has been removed, or else the seed is removed and honey is poured over, and spelt dough is wrapped around the whole fruit and it is placed in the embers, until the dough has been completely burnt away; then this
καύτα δὲ τούτο μὲν περιβρηται, αὐτὸ δ' ἔλον ἔφθον ἔτει καὶ τὸ μὲλὶ
πᾶν ἀνηρύσκει.

η. Ἐκ τῶν Διοκλέους, περὶ εὐκασίας τριφών.

'Επεὶ τὰ πολλὰ τῶν ἐδεικτῶν προσδεῖται τινος εὐκασίας καὶ 1
τίνεται βελτίω, τὰ μὲν προστιθεμένων αὐτοῖς, τὰ δ' ἀφαιρομένων, τὰ
δὲ διαπιθεμένων πως ἄλλως, ἦγους ἀρμόττει: μικρὰ περὶ τούτων εἰπεῖν.
ἔτει δ' οὐκ ἔλαχιστον τῶν τοιούτων καὶ πρὸς ύπείραν καὶ πρὸς ἰδιόν 2
ἡ κάθαρσις ὦμόν ὄντων ἔτει καὶ δὲ πρῶτον επουδάζειν οὐδενόν
ἐπούρν περὶ τούτου, περιαρειώντα τε τὰ μὴ χρήσιμα καὶ καθαίροντα
dea tinaς autōn ἔχει δυσχερείας. καθαίρεται δὲ πάντα, τὰ μὲν ἔγυν-
καν, τὰ δὲ βρεχόμενα, τὰ δὲ πλυνόμενα πολλάκις ἀφεσίν μὲν ὁν
ἀρμόττει τὰ μὲν πυρίας ἢ ετρυφνόττηται ἁρσωτά τινας ἐν ωδαί, τὰ
δὲ βηθητικὰ ἀρμόττητας ἐν δεῖ Κεκραμένη, ἀποθέχειν δὲ τὰς
ἀλμυρίδας, πλύνειν δὲ τὰ ἁρσωτά τινας ἁκαθαρσίας. τῶν ἁρσωμένων 4
δὲ καὶ ἀπτωμένων τὸ πῦρ καὶ τὰ ἡδύσματα πρὸς ἐκατὸν ἀρμόττοντα
μᾶλλα περιαρείται τὰς δυσωδίας καὶ τὰς ἀχυλίας καὶ τὰς μοχιπηρίας
tῶν χυλῶν. ἐπετείχειν δὲ πρὸς ταυτά πάσι θάνατον, κύμινον, κορίανον 5
καὶ τὰ λοιπὰ τῶν χυλῶν ἡδυσμάτων, μηδεν τετριμένων, ἀλλ' ὑπό
τὸ τοιοῦτον ἀρμόττει, τεθλαμένων ὁ χυλός· ἔτι δ' ὀρίζει, θύμβρα,
burnt layer is removed, and thus the whole quince is cooked and all the honey is absorbed.

3. From the works of Diocles, concerning the preparation of foods.

Since the majority of foods stand in need of a certain amount of preparation and are made better, some of them requiring something to be added to them, some of them something to be removed, others needing to be handled in some other way, then perhaps this is the right place to say a little on these matters. Not least among these considerations both for health and for enjoyment is the cleaning of whatever is still uncooked; and it is of paramount importance in this matter to make efforts stopping at nothing, by stripping off everything that is of no use and removing all those things which have something troublesome about them. All things are cleaned, some by being boiled, others by being soaked, others again by being washed several times; thus it is fit to clean by boiling in water those things which possess a certain amount of sharpness and pungency, and those things which have a certain amount of biting sharpness in blended vinegar, and to soak well those things that are salty, and to wash the things which have some impurity. The fire for things that are boiled and baked, and the flavourings suited to each food remove in particular the bad smells, the insipidness, and the badness of the juices. Add in addition with reference to all these considerations rue, cumin, coriander, and the other fresh green seasonings, but do not crush any of them, but for that which something crushed is suitable, the juice of crushed seasonings is to be used; there is also marjoram, savory, thyme, salt, vinegar, and olive-oil
θύμον, δλες, δεος, θλιον, ξχοντα πάντα τάς έαυτών ἀρετάς. τυρός
dὲ πάς χείρων μὲν ἐτι τῶν εἰρημένων· ἡκίστα δὲ ἀν λυπήσειεν αἴτειος
κτισικῆς εὐώδης μὴ παλαιός δέλτος, καὶ μάλλον ὀπτός. εἰλφιον δὲ,
eἰ ἄρα ποι δεῖ, τὸ λευκότατον καὶ εὐωδέστατον καὶ πικρότατον· αῖ
γὰρ ὁμίαυ ἡνυμάτων ἱδόνας καὶ ἀρετάς ἤχουσιν. τὰ δὲ πάχη τὰ
dιὰ τυροῦ πλείάνος καὶ ησάμου καὶ εἰλφίου καὶ τριμμάτων πλήθους
tινόμενα πρὸς ἱδόνην μὲν οὐδὲν γίνεται μάλλον, ἐνοχλεῖ δὲ πολλάκις.
ὁμώτετε δὲ τὰ μὲν μικρὰς ἡ μηδεμίας ἑπανορθώσεσθαι δεόμενα τῶν
ἀθων ἐγεῖν, ὡς ἀπλώς εἰπέν, ὃδατ' τὰ δὲ βρωμάδη καὶ ὑπὸ καὶ
ἄχυλα μετ' ἄδους. ἔγειν δὲ δεί καὶ τὰ ὑπάκα καὶ μωρὰ μετ' ἄδους,
tὰ δὲ κακοχυλότερα καὶ αὐστηρότερα δεῖ γλυκεῖ. μέγιστον δ' ἐστὶ τὸ
eυνηθῶν καὶ κεραυνύναι ἀρμοττόντως πρὸς ἐκαστα τοῖς χυλοῖς καὶ
tαῖς ὁμαίς ἀνευ τριμμάτων· μάλιστα δ' ἐν τὶς τοῦτον κατασταχάναι
εσηκοῦσεσθος, ὅπως μήτε ὁμη μήτε χυμῷ μηδενί κατακορεῖ τὸ
μειωμένον, ἀλλ' ὁμη τῇ πάντων μία καὶ χυλὸς εἰς φανήσεται ψρέ-
pων ἐκάστω τῶν ποιουμένων. ἔγεται δὲ πάντα ἐπ' ἀνθράκων δυμαλώς·
ἐρθαι δ' ἦταν γένηται, γεόντων ἐτὶ τῶν ὑπρών, ἔξαιρεν ἐκ τῶν ἀγγείων,
cαὶ μή βρέχειν ἐν ψυχομένους, δὲσα μὴ μετὰ τῶν ὑπρῶν ἑσθίεται.
ὅπτον δὲ πάντα ἐτὶ μαλακοῦ καὶ δυμαλοῦ πυρός, καὶ τὰ μὲν μοχθη-
ροῦς ἤχοντα χυλοῦς ἐξικμάζειν μάλλον, τὰ δὲ χρηστοῦ ἔτυχολότερα
ποιεῖν.
which have altogether the same properties as the seasonings mentioned previously. All cheese is worse than the things we have spoken of so far: goats' cheese which has been made with rennet is the least harmful unless it is somewhat old, and particularly when it is baked. Asafoetida, if it is needed in some degree, should be the whitest, most fragrant, and most pungent available; for the scents of seasonings possess useful properties and a capacity for delight. Whatever is thick and heavy from an excess of cheese, and from sesame-seed, asafoetida, and a mass of pounded seasonings are for enjoyment and nothing more, since they often cause trouble. In brief it is all right to boil in water any foods which are eaten with bread that have little or no need of culinary adjustment; whereas odorous, moist, and insipid things should be boiled with vinegar. One should boil moist and flavourless things with ordinary vinegar, but whatever has a bad flavour and is astringent in sweet vinegar. The most important point is the suitable combination and mixing for each individual taste and smell without pounded seasonings; one can achieve this goal best by having the aim that the mixture should not contain an excess of one flavour or smell, but rather that overall a single smell and taste should ensue appropriate to each of the recipes.

Everything is to be boiled evenly on the coals; when they are cooked, and the water is still bubbling, remove them from the pot, and do not allow the food to rest in the water as it cools, unless it is to be eaten with the stock.

Bake everything on a gentle and even fire, and whatever has bad juices will exude more moisture, whilst everything that has good juices will become more succulent.
Δ. Ἐκ τῶν Μνησιθέου τοῦ Κυζίκηνοῦ, περὶ κράμβης.

1. Κράμβης χρῆ κατακόψαι ύστεράτως εὐθυρίω, εἶτα ἀποπλάνη αὐτῷ καὶ τὸ ὑδωρ ἐὰς αὐτὴν ἀπηθήκην καὶ συγκατακόψαι κορίου καὶ πηγάνου δεό

2. ώς ικανόν· εἶτα ἀνεμέλητα λάνον, καὶ δεόν οὖν τι μικρὸν αἰλοφόρον ἐπείσον. ταῦτας εἰ θέλοις κατεκθέειν δεόν δεύδαφον, οὐδὲν μὴ οὐσία ἐν τῷ
eἰσώματι ποιητῶν· ἀλλὰ καὶ εἴ τι προοιμάρχει, ἐκβάλλει, καὶ εἴ τι ἀμαρτώ

3. ρωμαίοις περὶ τούς ὀφθαλμούς, παῖε· καὶ πνιγμούς, καὶ ἐπὶ περὶ τὸ διά

4. φρασμα καὶ τὰ ὑποχόνδρια εἴ τι προεπίπτει ἄτομον, καὶ δεα ἐπηλή, ἐὰν ἦ

5. εὐμεγέθυς, ταπεινώσει αὐτόν· πρὸς τᾶς τοὺς μελαχροικοὺς τοιούτων ἄνθρω

6. περὶ ἔχεισθαι ψυχὴ· καθαίρει γὰρ τὰς φλέβας. πρὸς δὲ τὸ ἀρκρικά

7. οὐχ ἔτιν ξέρον τοιούτον, οἷον ἐκ τῆς κράμβης εὐκτέομένη οὕτως καὶ διδο-

8. μένη νῆστε πρῶτοι. πρὸς δὲ τοὺς δυτενερικοὺς δέι τῆς κράμβης λα-

9. βόντας εἰς ὑδωρ δαυίλες ἀποβρέχειν εὖ, εἴτα ἐμβάλλοντα εἰς ἔρμον ὑδωρ ἐφεῖν, ἐκεῖ καὶ γένηται ταχέως, εἴτα ἀπηθήκαι τὸ ὑδωρ πάν, ἐπι-

10. βάλλοντας καὶ ἐκατ. εἰτα, εἴτα ἐνσυκτάζεσαι, εἴτα ἐμβάλλοντα εἰς ἄγγεῖον

11. ἐναρθήκαι δι τὸ ἄνουμον καταφορᾷ, ἢ μόνην ἐκθέειν τὴν κράμβην καὶ

12. διδόναι ψυχρόν. τούτῳ δὲ χρῆ ποιεῖν μὴ ὑπαξ, ἀλλ' ἐκάστην ἡμέραν

13. πρῶτοι εἰς πλείστον ἡμέρας· μὴ πολύ δὲ, ἵνα μὴ προσετῆ.
4. From the writings of Mnesitheus of Cyzicus, concerning cabbages.

1 You should cut up cabbages with a very sharp knife, then wash them and allow the water to drain off; cut up together with the cabbage a sufficient quantity of coriander and rue; then sprinkle with honeyed vinegar, and grate on top a small quantity of asafoetida. If you want to eat a piece of cabbage the size of a saucer, nothing bad will remain in your body; but if any badness was present beforehand, it removes it; and if obscuration affects the eyes, it stops it; and it alleviates choking, and moreover if anything strange troubles the area around the diaphragm and the soft part of the body below the cartilage and above the navel it remedies it, and anything that is in the spleen, even if it is of considerable size; eating raw cabbage produces wonderful effects: the reason for this is that it purges the veins. For those who are suffering from gout there is nothing which approximates to cabbage prepared in this way and given early in the morning to a patient who has not eaten. People who are troubled by dysentery must take some cabbage and soak it well in plenty of water, and then put it in hot water to boil until it is tender; then they must drain away all the water, pour over oil, and sauté; and finally after putting it in a pot they should crumble into it pieces of whatever cereal food they want, or else they should eat the cabbage alone and served cold. This should be done not once, but on each day early in the morning for several days; do not use much cabbage, in case it becomes oppressive.
ζ. 'Εκ τῶν Διεύθυνος, ἀρτιῶν εἰκονισῆς.

"Ἀρτον δεὶ εκενάζειν ἀλεύρινον ἐκ πυροῦ ως ἀκολοθώτου καὶ 1 κούρφως ὑπεζωμωμένου γλυκεῖας ὕμη, ως ἐκ στερεωτάτου τοῦ σταίτος·
δεὶ δὲ πλείωνο στρόνγυλο τριβεσθαι. ἦ δ' ὄπηθες ἦ ἐπὶ τοῦ ἰππίου μοι 2
φαίνεται ἄσφαλτον τῆς ἐν τῷ κριβάνῳ, ἔτι δὲ μᾶλλον ἦ ἐν τῷ
ἀληθείᾳ μαλακή τε τὰρ καὶ πλεῖων χρόνον ἦ ὄπηθες γίνεται, πρόκοπος
τε ἀπὸ τοῦ πυρὸς τῷ ὄπημένῳ οὐ δρῦς εὐμβαίνει παρὰ τὸ ἐκτὸς
τῆς ὑπόκαυσιν εἶναι. ὃ δὲ ἐν τῷ κριβάνῳ ὄρτος Ἐπρότερος μὲν τοῦ 3
ἐν τῷ ἰππίῳ καὶ εὐστομώτερος, οὐκ ἀσφαλῆς δ' ἦ ὄπηθες, ἀλλὰ ταχύ
τα ἐκτὸς ἐπικαλέται, ὡστε τὰ ἐντὸς ὑμὰ εἶναι. ὃ δ' ἐγκρυφίος Ἐπρό-
τατος τῶν ὄρτων ἐστίν' ἐτι δὲ τοῦτο ἐργαίδεστα ἡ ὄπηθες τῆς ἐν
τῷ κριβάνῳ· δεὶ δ' ἀνθρακίαν τε εἰναι πολλῆν καὶ ἐπὶ τῆς ἀνθρακίας
τέφραν ἱκανήν ἐπείναι. τὸ δὲ σταῖς βέλτιον μὲν δὲν εἶ ὁ ἀλεύρινον ἐ
καὶ μὴ ἐξ εὐμίδαλέως τετερημένον καὶ τετριμμένον ἱκανός, καὶ τὴν
μακροκτίτα πλεῖον δεὶ ἐξεῖν ἦ ἐν τῷ κριβάνῳ ὄρτον· ἐτα ἐπιτιθέντα
ἐπὶ τὴν τέφραν τὴν ἐπὶ τοῦ πυρὸς, κατακαλύψαι ἀνωθὲν τὸ σταῖς
ἀληθή τέρφη, εἰθ' οὖσια τῆς ἀνθρακίας ἐπιβάλλειν ως πλείτην καὶ
μᾶλλον ἀνωθὲν ἐπικαίειν καθ' δὲν ὄπταται τόπον. οὖσι δ' ὄρτος Ἐ
Ἐπρότατος πάντων ἐστίν' εἶ ὁ δ' ἄν χρησιμότατος πρὸς τὰς κοιλιὰς
τὰς υγρὰς τε καὶ ἀπεπτύτας καὶ δει φλέσαν ἐξουσία πολὺ.
5. From the writings of Dieuches, methods of preparing breads.

1. Wheaten bread should be prepared from the least glutinous ordinary wheat as possible, and this gently fermented with sweet leaven, such as is made from the very hardest spelt flour; it requires milling for a long time. Baking in an oven seems to me safer than in a covered earthenware vessel, but better still is baking in a 'milk-bread' oven: for the baking is gentle and takes a long time, and burning from the fire does not readily happen to the bread in baking because of the fact that the heat is outside the oven. The bread baked in a covered earthenware vessel is drier than bread from the oven and more suited to the stomach, but the actual cooking is not safe, since the crust quickly burns on surface with the result that the crumb remains uncooked. The bread baked in the ashes is the driest of the breads; in addition this type of baking is more troublesome than baking in a covered earthenware vessel: there must be a lot of hot embers and a sufficient amount of ash lying on top of these embers. Dough made from spelt is better, provided that is is made from the finest wheat flour and is thoroughly milled, and one must have more softness to the dough than is the case with bread baked in a covered earthenware vessel; then place it on the ashes on the fire, and completely cover the top of the dough in more ashes, and arrange the embers over the top so that most of the surface and especially the top is scorched on whatever part it is baked. This bread is the driest of all breads: it is extremely useful for moist bowels, indigestion, and everything that has a large amount of phlegm.
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1 Ὁ Grant: β' oodd., Raeder et Darenberg.

2 ἡ συχῆς BCMV Raeder : ἡ συχῆς A : ἡ συχῆ Darenberg.
6. From the works of Dieuches, concerning groats.

1 Use groats when preparing drinks and anything boiled, and put extremely well toasted groats into boiling stock made from fowls, and do not stir, but let the barley soften, whilst heating it without touching it either directly over the fire or else in a bain-marie until it is properly cooked, and put into lamb or kid stock, and boil together for people suffering from dysentery. If suffices to put into a pint and a half of the finest and ripest groats four and a half pints of milk and water, in the proportion of two-thirds of milk to one third of water, and the head of a poppy which has been toasted; or after mixing near the fire one tenth of an ounce in weight of pounded figs, boil the ingredients together, and serve after cooking to the consistency of soup: it provides some respite and also sleep for those who are convalescent. However, nobody should make use of it too often, but rather just three or four times, and particularly in the case of people who are strong; the reason for this is that it causes diminution of strength, and what is more those who use it too much pass scanty urine. There is also a type of groats from oats; the oats are parched with their husks, and are then completely winnowed, milled, and pounded, just like groats from barley; this type of groats made from oats is better and somewhat less flatulent than barley-groats.

7. From the works of Dieuches, concerning the preparation of foods.

1 For those who are weak and are no longer able to take any food more substantial than water, the best action to take is to thoroughly soak, boil, and gradually mix the food into whatever drink is being administered; for it
άνάδοσιν ἀπὸ πάσης τῆς τροφῆς λειτήν τε καὶ εἰς ἀτμήν διαλυμένην ἀναδίδοσθαι, περιττώματα τε μὴ ὑπολείπεσθαι ἐν ταῖς κοιλίαις καὶ 2 δὲ δὴς ἡμέρας ἀναδίδοσθαι τροφῆν δὲ καὶ πόμα. μάλιστα δ’ ἡ τοιαύτη προσφορὰ χρησίμη ἐν εἰς διδομένῃ οἷς εὐνευτήκασιν αἱ κοιλίαι καὶ μὴ ἐκταράσσονται ἱερὰ δὲ καὶ βάρος ἔχοντες προεδρέουσιν τροφῆς. ἀποβρέχοις μὲν οὖν ἄν τι τὸ τὸ ἄλφιτον τὸ καπρύδον καὶ τὰς καλομένας ἐρικάδας· πλείστην δ’ ἀφράσι δύναμιν οἱ ἐρτοὶ χρύσεματοι κλασθέντες καὶ ἀποβραχέντες· ύψαυτες δὲ καὶ δ’ πυρὸς φυσικεῖς 4 καὶ ἐρείξθεις ἀποβρέχοιτο ἐν δυμώσις, τῶν δ’ ἀφερψυμένων ἐπὶ μᾶλλον δ’ τὸ πόμα κρείττον καὶ τροφιμώτερόν ἔστιν. τοις μὲν οὖν πυρείσσομεν καὶ ἀλλ’ αἱ κρίσεις μὴ βρδίως γίνονται δεῖ τὴν κρίθην μὴ περιπτεῖσθαι, ἀλλὰ πλῶντα ἔψειν τῷ ὑδατὶ· πρότερον δὲ χλιάναντα ἀποχεῖν καὶ ἄλλο ἐπιχέοντα ὑδωρ ἔψειν· ἔψειτο δ’ ἄν καλώς, εἰ δέκα κοτόλας ὑδατος εἰς μνῆν τῆς κρίθης ἐπιχέας· ἐψεῖτο δ’ ἐως ἃ ἡ κρίθη βατή· εἶτ’ ἀπεπόθησα τὸ λεπτότατον ὑδωρ, μίστων μέλιτι ἃ ἀπὸ καθ’ ἑαυτό 6 ὅπως. τοῦτο καὶ τὴν κοιλίαν εὐλυτον ποιεῖ καὶ οὐρεῖται καὶ τρέφει 7 ἰκανῶς. δίδοται δὲ καὶ ἡ εἰς τὸ ἄλφιτον κρίθη φρυγίεσις, ἡν κάρυχινα καλοῦσιν· δεῖ δὲ πρὸ τοῦ ἀλεθῆναι αὐτήν ἀποτρέψαι κούφως τὸ προς- κεκαμένον ἄρρυμον καὶ ἀποβρέαντα ἔψειν. τὴν κοιλίαν μᾶλλον ἐφι- στησιν ἐκείνου· δεῖ δ’ εν τῷ ὑδατὶ ἔψειν, καθάπερ καὶ τὴν ὑμήν
happens to distribute in us from all nourishment a delicate assimilation which is dissolved into vapour, and what remains after the digestion of the food is not left behind in the bowels, and for the whole day the food is distributed at the same time as the drink. Such a way of taking food would be particularly useful when given to those whose bowels are constipated and their bowels are not disturbed; for they have need of light food which has some strength in it. Therefore one should soak dried friable groats and that which is called 'burghul'; bread discharges the most power when broken into pieces when still very hot and saturated; similarly too toasted and pounded wheat should be soaked in the same way. But the drink which is yet more powerful and nourishing is that of things which have been well boiled. So for those who have fallen ill of a fever and for those in whom the crises do not come easily, one must not strip off the husk of the barley, but rather one should boil barley after washing it in water: first one must pour away the hot water and then boil another lot of water which has been poured in; it should cook properly if you pour in five pints of water to twenty-one ounces of barley; it is boiled until the barley splits; then after straining off the thinnest water serve by itself or mixed with honey. This concoction relaxes the bowels, and is diuretic and moderately nourishing. Also given is barley toasted until it turns into groats, which people also call cachrus; before grinding it one must rub off lightly the husk that has been previously scorched and then boil it after soaking it well. It checks the bowels more than groats; one must boil it in water, just like raw barley.
κριθήν. ἀφεψοὶ δ' ἐν τις καὶ τάς καλουμένας ἑρίκηδας ἐν ὑδατί, ἀπ' ἐκόμενος τοῦ κινεῖν, ὅπως ὑς λεπτότατον ἢ τὸ ἔσθημα. ἀφεψοὶ δ' ἐν 111 τις καὶ ἄρτους καταξόμουσα καὶ τοὺς ἔρησοι καὶ τοὺς προσφάτους καὶ 1 πυρὸς ὑμοῦς καὶ πεφρυμένους καὶ κέτρον καὶ σχεδὸν πάσαν τροφήν, ὅποιαν ἢ ὑπολαμβάνον τῷ κάμνοντι οἰκείαν εἶναι, καὶ ἐν τῷ πόματι τῷ διδομένῳ καὶ ἐν ἐσωτὶ ἄρνῳ καὶ ἐν άλλοις πλείοις χυμοῖς.

τὰ δ' ὑποτριβόμενα παχύτερα μὲν τῶν διαβρεκτίων φαίνεται εἶναι 11 καὶ τῶν ἀφεψωμένων καὶ ἱεροῦτερα, ὑποτρίβοιτο δὲ σχεδὸν πάσα ἡ προειρμένη τροφὴ ὑσαύτως εἰς τὰ διδομένα πόματα, καὶ τῶν ἄρτος 12 ὑδρῶν πολλὰ καὶ ὑπεριέκα τῇ τροφῇ μέρει καὶ δυνάμεως πρὸς τινάς τῶν ἀρρωστούντων καταχρύτῳ ἄν τις, κόπτων καὶ τρίβων καὶ ἐξευλάβουν εἰς τὸ διδομένον. δεῖ δὲ τοὺς μὲν ἄρτους, καὶ τοὺς ἔρησος καὶ 13 τοὺς προσφάτους, καὶ τὰ πόματα βρέχαντας τρίβεσθαι διένετα ὑδατί καὶ ἠθεὶν δι' θοινίου. μίστος δ' ἐν αὐτοῖς πρὸς τὸ τὴν λευκότητα μὴ 14 ἐμφαινεσθαι τὴν ἀπὸ τοῦ ἄρτου τοῦ εἰκόνος επέρμα φύξεις καὶ ἀμύγδαλα καὶ ετροβίλους καὶ οὕα, καὶ μεθ' ἐνὸς ἐκάστῳ καὶ μετὰ τινῶν ἢ πάντων, ἀνήκου τῇ ἡ μοράθῳ ἐπέρματος μικτην, τοῖς μὲν οὖν πυρέσσουσιν ἐν μελικράτῳ, τοῖς δ' ἀνεῖ πυρετῶν οἶνου παραχέον. ἢ 15 δὲ κέτρον καὶ ἡ μελίνη τριβόμενα δὲν ἐρυθρείς περιλεπτείμενα οἷς αἱ κοιλίαι ἐκκολουθεῖται καὶ οἷς λεπταὶ καὶ πολλαὶ ύποχωρίεις τίνοις. δεῖ δὲ τρίβοντα διινάς ὑδατί μὴ ἐλέεσσιν ἔξυβρός τῷ ἄνδρι, 16 καὶ ἐκχύλεις διὰ πυκνοῦ θοινίου, ἐν κατούλη ὑδατος ἐπισχέων οἴνου

1 καὶ add. Daremberg.
9 One can also boil the so-called 'burghul' in water, whilst refraining from stirring it, so that the process of boiling may be as gentle as possible. One can boil leavened bread, both dry and fresh, and wheat, both raw and parched, and millet, and in fact almost all food, whatever is assumed to be suitable for the sick person, and the food is given as a drink both in lamb stock and in many other liquids. Those things that have been gradually mixed into a dish seem to be thicker than extracts prepared by maceration, and also stronger than those things that have been boiled down, and nearly all the foods previously mentioned can be gradually mixed in drinks which can be offered to patients. One can use many fruits with hard rinds and pulses in the role of nourishment and bodily strength for certain sick people, by cutting, crushing, and converting these fruits by pressing into juice for whatever drink is administered. It is necessary after soaking to mash bread, both when dry and fresh, and popana, and after they have been steeped in water to strain them through a piece of linen cloth. Mix with them so that the whiteness of the bread does not show toasted cucumber seed, and almonds, pine-nuts, and sorb-apples, either each of them singly, or some or all of them together, and after mixing in some anise or fennel seed, put into honeyed milk for those suffering from a fever, and for those without a fever pour in some wine. Millet and panic when ground are suitable after being stripped of their husk for those whose bowels are bilious and for those whose stool is thin and excessive. One must after milling soak these grains in no less than an eighth of a pint of water per person, and after straining through a piece of thick linen cloth pour into a half
αὐτηροῦ τὸ μέτριον, πρόςφερε νῦστ' ἀρμόδει ὶ' ὑποτρίβειν τῇ 17 κέτχῳ τὰ Εὔβοικὰ κάρμα εὖν τῷ λέγματι τῷ ἐντὸς μὴ πολλὰ, καὶ εὐνεκχυλιζόμενα μετὰ τῆς κέτχου ὁφήμα τένοιτο δὲν τοῖς πυρέσσου- ειν. ἀκεθενέτατον μὲν πάντων τὸ ἀπὸ τῆς κάχυπου ἄτομα· δεὶ δ' αὐτῆς 18 δέσον ἡμιχανινίκιον ἐν ΞΕ κοτύλαις ὑδατος· ἐὰν δὲ διέφος ἥ, τορυμνὰν κρείττον κατὰ τὴν πτιεάνην καὶ ἀποχυλίζειν. τούτῳ καὶ τὴν κοιλιάν 19 ἤκεστον ἄν καταφέροι τῆς πτιεάνης, ὅ τε χυλὸς λεπτότερος γίνεται. βόρμου δὲ (οἱ δὲ βρόμον καλούσιν) εὐπεπτῷτατον πάντων τῶν ὑπερών, 20 καὶ τὸ ὁφήμα κάλλιστον ἔστιν, ἱερωτάτου ὅ' ἦ τὸ ἀπὸ τῆς κάχυπ- υ, τῆς δὲ πτιεάνης ἀκεθενέτερος καὶ ἱδίων· ξυμεταὶ δὲ τὸν αὐτὸν τρόπον τῇ πτιεάνῃ κοτύλην ἐν ὑδατος κοτύλαις δέκα. τὸ ὅ' ἀπὸ τοῦ 21 φακοῦ ὁφήμα ποιεῖν ἄφωκτον περιπτέσεντα, τέφησε πός λεπτοτάτης ἐλατίνης: μεμιμείνης διπλασίας ὅ δ' φακός ἔστιν κύριφως δὲ χρὴ παί- ειν, ἔστε ἂν καλύς περιαχυρισθῇ, καὶ εἰςεὶ λεπτὴν κοκινής, καὶ ἢ μὲν τέφησι κάτω εἶσαι τὸν δ' φακὸν πλεονάκις πλύγοντα ἐφείν, ἀνήσου τι ὑποθέντα ἢ τῇχυμωνος ἀνέλαιον· τὸν δ' ἄλα μετρίων ἠμβάλλειν καὶ ἀξείδιον βραχύ ἐπιχείν, ὅταν διέφος ἥ' τοις δ' ἀπφρέτοις, καὶ οἷς ἡ κοιλία καταφερῆς, οἶνον ἄντι τοῦ δέους μίτειν εὐδωςτάτου κύαθον. ὑποθέσεν δ' ἂν τῇ κολλῇ καὶ ἀποι καὶ μῆλα τὰ κυδύνια τιμηθέντα 22 καὶ συνεβόλημεν τῇ φακῇ ἄνευ οἶνου καὶ δέους· ἐγείροι δ' ἂν ἡ κοτύλη

1 ἐλατίνης Daremberg et Raeder : εἰ<.ατ<.>ος Ν : εἰλατίνης

2 in marg.: ἡ δατύπης Α ἡ δ' ἀτύπης Σ : λατίνης Δ.
pint of water a moderate amount of astringent wine, and administer it to the patient on an empty stomach. It is suitable to mix into a paste with millet a few chestnuts with their inside skin, and after squeezing out the chestnut juice a soup can be made with the millet for those who are suffering from a fever. The weakest soup of all is that made from parched barley; one should put one quart of parched barley into three pints of water; when it is thoroughly cooked it is better to stir it in the same way as pearl-barley and to express the juice. This preparation purges the bowels less than pearl-barley, and its juice is thinner. Bormos or oats, which some people call bromos, are the most easily digested of all the pulses, and the soup made from them is excellent, for it is stronger than that from parched barley, and weaker than that from pearl-barley and more pleasant; it is boiled in the same way as pearl-barley, half a pint of oats in five pints of water. The soup from lentils should be made after the husks have been removed without parching, and by mixing in double the quantity of the finest fir ash than there are lentils; one should tap the lentils lightly until they are properly freed from their husks, and sift them in a fine sieve, and the ash will appear underneath; boil the lentils after washing them several times, pouring over a seasoning free from olive-oil with dill or pennyroyal; add a moderate amount of salt, and pour a little vinegar on top when they are thoroughly cooked; for those without a fever, and for those afflicted by diarrhoea, mix in one twelfth of a pint of the most fragrant wine instead of vinegar. Pears and quinces when chopped up and boiled together with lentils without wine and vinegar help the bowels; let half a pint
23 τῶν φακῶν ἐν ἑπτὰ κοτύλαις ὑδατος. χρήσαιο β' ἐν πρὸς τινα, ὡν
dei τὴν κοιλίαν ἐξυπαίνειν, τῶν νέων τεύτλων ἄρα τὰ πέταλα εὐτ-
24 καθευθών ή μαλάχην ή εἰκανὸν ή κολοκύντης λεπτά κατατεμων. ἀμύλην
δὲ χρήσαιο ἐν, ὡν ἐν τῷ πυρέσσειν αἱ κοιλίαι καταφέρονται μίστοις
β' ἐν αὐτοῦ καὶ εἰς τῶν φακῶν πρὸς τὰς κοιλίας χρήσαιο β' ἐν αὐτῷ
καὶ ἐν γάλακτι πρὸς τὸ ὑδατρ μίστων καὶ αὐτῷ καθ' ἐαυτῷ μᾶλλον β'
ἐν ἀρμόσεις δυσεντερικοῖς καὶ βηχύδεις καταρροϊκοῖς ἐφοίει δ' ἐν τε·
25 δέκα δραχμὰς ἐν κοτύλαις β' ύπροῦ. κέτχρος β' ήκιστα μὲν ἀρμόζει
tοῖς πυρέσσουσιν' οὐ μὴν ἀλλὰ τοῖς τε κατὰ κοιλίαν ἐνοχλουμένοις
eἰσαρμοτεῖ μάλιστα ἐφοίει δ' ἐν τὸ δεύβαφον ἐν δέκα δεύβαφοις
ὕδατος· δεὶ δὲ τρίψαντα ἐν θυίῳ παραχέν τοῦ ὑδατος τὰ μέτρα τὰ
tριγμένα καὶ διέντα καὶ ἡθέντα ἐν τῷ ὑδατρ οὕτως ἐγείν, ἀνήφοι
26 καὶ ἀλλὰ μικρῶν ἐμβάλλοντα. μίστοις β' ἐν τοῦ κέτχρου τὸ ἡθέμα
καὶ εἰς φακῆν καὶ εἰς πτειάνη καὶ εἰς πάν ῥόφημα ἀντὶ τοῦ ἐλαιὸς.
27 πλὴν εἰς φακῆν, τὸ τοῦ εἰκὸς επέρμα ὑμῶν. καὶ διηθῶν μίσες τῇ
πτειάνη καὶ τοῖς λοιποῖς ἐψήμασιν ή τοῦ κώμου τὸ κάρυον, δ καλοῦει
ετρόβιλον, ή τὰ Ποντικὰ ή τὰ Θάσια κάρυα, μάλιστα β' οἷς ἀντὶ γά-
28 λικτος βούλοι τὴν μίζην ποιείδαι. τοῖς βηχύδεις β' ἐν ἀρμόσες
μάλιστα, τῶν ἀμυγδάλων ὑποτρίψας εἰς τὰ βοφήματα· τοῖς δὲ κατὰ
κοιλίαν ἐνοχλουμένως ἀντὶ τοῦ ἐλαίον ὑποτρίβειν τὴν λευκὴν μῆενα,
ἣν εἰς σφέσαν εὖν τῷ ἐλύτρῳ καὶ ἐκχύλισαν εἰς τὸ ἔρυμα· εὐν-
29 ερτεί καὶ πρὸς τοὺς ὑπνους. ὑποτρίβειν δὲ δεὶ πρὸς τὰς κοιλίας καὶ

of lentils boil in three and a half pints of water. You can use for some people, whose bowels need to be moistened, lentils boiled together with the tops of the leaves of young beets or with mallows or with cucumbers, or with large gourds after you have chopped these vegetables up finely. Use starch for those whose bowels are loose during a fever; one can mix some starch too into the lentil dish for the bowels; one can use it both in milk and mixed with water, and also on its own; it is especially good for people suffering from dysentery and for catarrh-laden coughs: boil two ounces of starch in two pints of water.

Panic is least suitable for those with a fever; although it is not good for the latter, it is particularly good for those troubled in the bowels; boil one eighth of a pint in one and a quarter pints of water; after pounding in a mortar one must boil in water a moderate amount of what has been noted, after soaking and straining it, and adding a little dill and salt. You can mix that which is strained off the pounded barley into lentil dishes, into barley soup, and into every soup instead of olive-oil, except into lentil dishes you can mix raw cucumber seed. And after straining mix with the pearl-barley and the rest of the concoctions either pine-nuts, which people call pignolias, or hazelnuts, or almonds, particularly if you want the mixture to be made in place of milk. By gradually mixing some almonds into them you can make the soups more suitable for people with coughs; for those who are troubled in the bowels, mix in white poppy seeds instead of olive-oil, after gently toasting the seeds together with their pods and converting them into juice by pressing, and put them into the mixture which is being boiled; this also encourages sleep. For the
τὸ εὐβοικὰ κάρυα, Ὁ καλοῦσι Σαρδιανά, εὖν τῷ ἐντὸς λέμματι τῷ ὃντι εὖν τῷ καρύῳ τρίψας ἐκχύλιζε ἔλε ὁ ὡδρι τῆς μήκωνος. ἔφοις τῷ ὃν καὶ εὐμίδαλιν τεταρτημόριον αὐτῆς ἐν δέκα κοτύλαις ὦδατος μετ' ἔλαιου μετρίου καὶ ἄνηθου, προπλύνας τὴν εὐμίδαλιν· ὁμοίως ὃ καὶ τὸν χόνδρον, ἐλ θελικὰ βόρημα ποιεῖν. ἔφοις ὃ ἄν καὶ τάλα 81 μίστων, ὡδ τατέραν ὅντων τῶν ἐφιματών, θερμῶν ἐπιχείων καὶ μὴ πολὺν χρόνον εὐνυπῶν· δεῖ δὲ τὸν χόνδρον προβρέχειν ἐν ὄβατι, εὖ ὁδῆς μίσθου τὸ τέταρτον μέρος τῆς ὁξίνικος, ἑκατέρου ὃ αὐτῶν πρὸς τὰς ἐπτὰ κοτύλας τοῦ τάλακτος δύο· μαλακῶς ὃ ὧν ἐπὶ ἀνθράκων, μιγνύσι καὶ διὰ χειρὸς ἔχουν τοῦ μὴ διακαθάναι. μίστοις ὃ 82 ἄν καὶ πρὸς πάν ἐρυμα τάλακτος. τὸ δὲ πάπανον, δὲ τινὲς ἱερὰν 84 καλοῦσιν, ἀλητότερον ἔστασιν ἐλ κόψας λεπτῶν ποιήσαις ὑποτρίβων ἡ τῶν ἀμυτδάλων ἡ εἰκόνι σχέματα· ἐλ δὲ μῆ, ὡς εἰώθαις, μετ' ἔλαιου καὶ ἄνηθου ὑπεῖν. χρότῳ δ' ἄν τις αὐτῷ πρὸς τὰς κοτύλας καὶ αὐτῷ 84 καθ' ἑαυτὸ καὶ πρὸς τὸν φακὸν μίστων· τοῖς δὲ πυρέσσεσε πρόκειται πάντων ἀχρειότατον. καλὸς δ' αὐτὸ ἐφοίς καὶ οἰ ἐν τοῖς ὀρνιθείοις 85 ζωμοῖς καὶ οἰ ρνείοις ἐφοίς· ἐν πλείονα τὸ τάρτα ζωμῷ ἐφοίς καὶ ἐν χώταις, ὃς ἀπόκειναι οὕθω κινοῦντες, ὑστε εισπνοῦνε οὕτως μᾶλλον τῆκεσθαι καὶ δίεθρα γίνεσθαι. δὲ δὲ Ἐπόδ άρτος ἔρυμα κοιψότατον· 86 δεῖ δὲ τοὺς ὅντο πυρέσσωσι ἡλιανάντας εἰς πόρο καὶ προβρέζεστα τρίβειν λείον καὶ δεκα δραχμὰ ἐν δωδε κοτύλαις ὑπεῖν, βοφίματος τὸ πάχος ποιοῦντας· ὑποτρίβειν δ' αὐτῷ ἡ τὸ τῶν ἀμυτδάλων ἡ τὸ τοῦ

1 eις add. Raeder.

2 πυρέσσουσι Grant : πυρέσσουσι A : πυρέττουσι Darenberg et Raeder.
bowels one should mix in the Euboean nut or sweet chestnut, which some people call the Sardis nut, not only the nut itself but also the inner skin; having ground it up squeeze into the water some juice from the poppy seeds. Boil quarter of a pound of the finest wheat flour in five pints of water with a moderate amount of olive-oil and dill, having washed the flour beforehand; similarly too chondros if you wish to make it into a soup. Boil it, and on mixing in the milk, at the moment when what is being boiled is thoroughly cooked, pour on hot water and do not boil together for too long; one must soak the chondros in water, and then mix in three-eights of a pint of chondros, and one pint of each of the two ingredients to three and a half pints of milk; gently boil on the coals, mixing and holding it in the hands to prevent it heating to excess. You can mix in milk to everything that is being boiled. Popanon, which some people call itiron, is harmless if you prepare it by cutting it up into small pieces and grind in some almonds or cucumber seeds; if you do not do this, boil as usual with olive-oil and dill. One can use this for the bowels both on its own and also mixed together with lentils; but for people suffering from a fever it is the most use- less aliment of them all. People cook it properly when they boil it in stock made from fowl or lamb; they boil it in plenty of stock in earthenware pots, neither touching nor moving it, as it happens to become particularly soft in this way and well cooked. Dry bread is the light- est thing that can be boiled: one should pound it finely for those suffering from a fever after warming it in the fire and soaking it, and boil about two ounces in one pint of water, making it the consistency of soup; grind into it
εἰκόνων επέρρα. τοῖς δὲ μὴ πυρέζουσι, κόπτων τὸ μέτεθος εσμιδάλευσι 87
η χόνδρον, οὐκί τον χρόνον προβρέει, ἀπὸχάς τὸ ὄνωρ, τὰς δέκα ἄρθρας ἐν τριεὶς ἡμικοτύλαις ἐφέυν ὑποστράντα τι τῶν εἰρήμενων, καὶ ποιοῦντα χόνδρον τὸ πάχος προσφέρειν μετὰ μελίτος, ἢ ὡς ἢ λεῖται ὁ κάμον. χρῆσαι δ' ἄν τις καὶ πρὸς τὰς κοιλίας τὰς 88
ἀπεπούςκαι καὶ τοῖς φυσίδεις καὶ οἷς ἐξυπαντολείναι, καὶ αὐτῇ καθ'
ἐπαύτῳ καὶ μετὰ φακοῦ καὶ πρὸς τὰς εὐνεσθηκίας κοιλίας ζωμῷ ὑρνί
θων μείζον τοῦ ὀτικοῦ καταβρέχων ἡ ἑψων.

ἡ ᾿Αμύλου καὶ τῶν ἀλλῶν ὑποστάσεων εἰκονισία.

Γίνονται δὲ καὶ ὑποστάσεις, καθάπερ τὸ ᾿Αμύλου, πάντων τῶν ἃ
ἐπηρώντο τὸ δ' ᾿Αμύλου τίνεται οὕτως εσμιδαλεῖν ὡς καθαρωτᾶτην
λαβόντα, κούφως προβρέκοντα, πλῦνειν καὶ ἀπηθεῖν δ' ὁδονίου ὡς
πλείστῳ ὕδατι καὶ τὴν κόλλαν ἐξαιρεῖν ώς μάλιστα· ἐὰς δ' ἐν κεραμί
ἀγχεὶς καταστήναι ὑδωρ ἀπηθήσαι, καὶ πάλιν ἄλλο ἐπίσει ὑσοῦτως
καὶ πάλιν ποιεῖ οὕτως, ὡς καθαρὸν τὸ ἀπηθούμενον γένηται, εἴτε
ἐξελῶν τὴν ὑπόστασιν ἐξαιρεῖς ἰδίως ἐν κεραμί ἀγχεὶς, ὡς ἀν
eἰς τέλος Ἐπαναθή, ὑσαῦτος δὲ καὶ τὸν ὄμον δεῖ ποιεῖν καὶ μάλιστα
τὸν λευκὸν· ἐφεξαντα καὶ ἀποθαλάσσαντα τὸ ὄχυρον βρέξειν καὶ τρίβειν
λείον, διέτα δ' ὕδατι πλεῖσιν ἀποχεῖν πολλάκις τῆς ἡμέρας, ὡς
καθαρὸν τὸ ἀποχεύμενον ἡ, καὶ ἐπαύναντα ἀποθέθει. χρῆσαι δ' ἄν
τὸν ἐπ' ἐμπών, εἰς τὸ ἐξημα μῖστων πρὸς τὸ ἀναπτύξειν καὶ
either almonds of cucumber seed. For those who are free from fever, pound it in a mortar to the size of fine wheat flour or groats, soak it for a short time, pour off the water, and boil two ounces in three-quarters of a pint of water, grate in some of the previously mentioned ingredients, and after making it the thickness of groats serve with honey, or as it pleases the sick person. Some people use for bowels racked with indigestion not only foods which cause flatulence but also those which are full or moisture, both by themselves and also with lentils, and for constipation they use them macerated or boiled in more stock made from fowls than solid matter.

8. The preparation of starch and other sediments.

1 There exist sediments, just like starch, from all pulses; starch is made as follows: take the whitest fine wheat flour, and begin by gently soaking it, wash it, and strain it through a piece of linen cloth with as much water as possible and remove as much as you can of the sticky paste; allow it to stand in an earthenware pot, then drain off the water and once again in the same way pour in another lot of water, and repeat the process following this procedure until what is strained through the cloth becomes clear, and then remove the sediment and dry by baking in the sun in an earthenware pot until it is completely dry. One should treat bitter vetch in the same manner, and particularly the white variety of bitter vetch: pound it, sift out the bran from the meal, macerate, and grind finely, soak in plenty of water, and change the water several times a day, until that which is poured away is clear, and store away after drying it. One can use starch when mixed in concoctions in the case of empyema for the spitting up of
γυναίκα εἶς κἀθαρείν καὶ εὐσκεπτίαιν καὶ εὔχροιν, ἐν οἴνομελητὶ διδοῦσ
καὶ μετὰ ἀλητῆς. ἰκανὸν δὲ ἀεύβαφον ἐστὶν ἐρετμοῦ τῷ ὑπαίνοντι
καὶ ἄνδρι καὶ γυναικὶ. γίνεται δὲ καὶ φακὸν ὑπόστασις ἑρείχθεντος
tὸν αὐτὸν τρόπον καὶ βραχέντος καὶ τριφθέντος, καθάπερ ὄροβος, καὶ
ἀποχυθέντος τοῦ ὑδατος, ἐως ἐν καθαρὸν τὸ ἀπηθοῦμενον γένηται.
6 Ἐπρανθείσα δὴ ὑπόστασις μίστοιτο ἂν πρὸς τὰ ἐψήματα τοῖς κατὰ
κοιλίαις ἐνοχλούμενοις μᾶλιστα καὶ πρὸς κέτχρον καὶ πρὸς ἄρτον ἔρθον
καὶ πρὸς πτισάνην, καὶ πρὸς πλεῖον δὴ ἀλλὰ ἀν τις καταχρήσῃ τινὸς
7 ἐψημάτων. ταῦτα δὲ ἀπὸ τῶν ὀστρίνων ἐψήματα ἁρχειστέρα ἔστι τῶν
προερημένων ἐψημάτων τοῖς πυρέσσουσιν· ἀτροφοῦτα γὰρ καὶ ὄφις
κυκτέτερα τυγχάνει δόντα· χρήσατο δὴ ἂν τις ἐρέμην ποιήσας ἐξ
τῶν ὀστρίνων τῶν ὀστρίνων. τῷ μὲν κυμαίνῃ ἐρετμῷ, εἰ βουλοῦσαν ἄφυνεν
ποιεῖν, ἐπιψῶσα πλεῖον ὑδρῷ ἐψείν· ἐπειδὰν δὲ ἀναφρεῖν καὶ διεφθος
γένηται, ἀποχέας ἂπαν μίζον πάλιν θερμῶν· εἰ δὴ ἰκανὸν τὸ τε-
ταρτημόριον τῆς χοίρικου καὶ τῷ ἱδίῳ ἄπεφθαν γενενυμένω δύο
9 κοτύλαι μιχθεῖται ὑδατος καὶ ἔλαιος. χρήσατο δὴ ἂν τοὺς πρὸς τι
10 τὰς κορώπας καὶ κατάφρους μεῖτων κηρίου τι. χρήσατο δὴ ἂν τις καὶ
πρὸς δυσεντερίας καὶ τεῖνεςμός λιπαρώτερον αὐτὸ ποιῶν καὶ ὑπὸ προ-
11 ἀσφυμῶν οὐδὲ ἀποχέων τὸ ὑδρῷ. μίστοιτο δὴ ἂν εἰς αὐτὸ καὶ μυθός
καὶ κηρὸς καὶ τυρῷ, μᾶλλον ὁ φρυγκός, καὶ τὸ ἔλαιον πλεῖον ὀλε
12 βουλομέθα ἐκκοπροῦν. μίστοιτο δὲ ἂν ὁ ἐρετμός καὶ πρὸς πτισάνην
blood and for women's periods and for corpulence and for good complexion, administered in honeyed wine and with 4 groats. An eighth of a pint of bruised meal is suitable for a healthy person, both male and female. There is also a sediment of pounded lentils made in the same way as sediment from bitter vetch, being soaked, ground, and having had the water for soaking poured away until what is strained off becomes clear. The sediment when dried is mixed into anything that is boiled for those who are troubled in their bowels, especially with millet, with dry bread, and with pearl-barley, and one can use it with the majority of the other boiled dishes. The boiled dishes made from pulses are more ineffectual than the boiled dishes mentioned previously for people suffering from a fever; the reason for this is that they happen not to be very nourishing and cause flatulence; but one can use them after making a meal from the pulses when raw. In the case of broad bean meal, if you wish to render it free from flatulent properties, pour plenty of water over it and boil; when it is covered in froth and is completely cooked, pour away all the water and mix in a fresh lot of hot water; it suffices to add one pint of water and olive-oil mixed together with three-eighths of a pint of what has already been cooked. You can use this recipe for mucous discharge from the nostrils and mucus in the chest after mixing it with some bees-wax. One can use it too for dysentery and constipation after making it more oily, and neither boiling it beforehand nor pouring away the water. There can be mixed into it both marrow and bees-wax and cheese, especially toasted cheese, and a lot of olive-oil for those we wish to void of excrement. The meal can also be mixed with both pearl-
καὶ πρὸς φακὸν τοῖς τεινεσμῶδεις καὶ δυσεντερικοῖς. ἐγείροντα δ' ἂν ὁ μὴ ἄπεφθασε ἐρημός τὸ τεταρτημόριον τῆς χοίνικος ἐν Σε κοτύλαις
ὁδατε. τὸ δὲ πίεσαν ἐγνός ἀφυεστέρον τοῦ κουμίνου τυγχάνει δὴ καὶ εὐκατερμαστότερον· διὸ καὶ μᾶλλον τοῖς ἀρρωστοῦσι προσενέχθαιτο
ἀν τις. δοὶ δ' ἂν τις τοῦτο καὶ πρὸς τοὺς κατάρρους καὶ βεβύδεσειν·
ἐγείροντα δ' ἂν καὶ τοῦτο τὸ τεταρτημόριον τῆς χοίνικος ἐν Σε κοτύλαις
ὁδατε. τὸ δ' ἐκ τῶν πασίων ἐγνός γλυκύτατον τυγχάνει πάντων,
δυσέπου τὸ καὶ τάλλα ἔχον παραπλησία τοῖς εἰρημένοις. ἔγεσται δὲ
καὶ τοῦτο ἐν τῷ Ἰσῷ ὑπὲρ. τὸ δ' ἐκ τῶν δολίων καὶ τῶν ἀράκων
πάντων χείριστον καὶ πρὸς οὐδὲν χρήσιμον τῶν ἄρρωστομάτων ἦσμα
ἀν γένοιτο.

6. Περὶ ἐψήεσων.

1 Ἀπαν ἐσπριον, κριθήν καὶ πυρόν, ἔσχεν δεί, περιπλάνατα εσταίρε
τὸ πύρω τῆς χύτρας· ἔσχεν δὲ δεί ὡς πλέοντον χρόνον καὶ ὡς μαλακτάτῳ πυρί· οὐ τὰρ ἐνδέχεται προκαθαγίαι, ἀντετ ἄτρωτον τὸ
ἐψιμώνεν δοκὸ δὴ ποτε χρόνον ἔσχηται· δεὶ οὖν, διερθῶν ἦν ἐφόδρα
ὄντων τῶν ἐσπριῶν, οὕτως τορμαίον καὶ διὰ χείρας ἔχειν κινοῦντι μή
προκαθαγίαι. Ἐλαιῳ δὲ χρησαί πρὸς τὰ ἐψήμαται καὶ πρὸς τὰ ὅμω
τῷ ἀνομιοτάτῳ καὶ ἐν τῷ εὐτόμῳ μηδεμίαν δύναμιν ἐμφαίοντο· τοῖς
οὕτων δ' ἂν εἴη τὸ ὄμφακιν. τοὺς δ' εὐρυεῖς τῶν ἀιθίων ἐν τῇ
λεπίδι καὶ ἔσχεν καὶ ὅπταν· δεὶ δὲ, κἂν ἔσχης, τὴν ἄρσεν ἀπαλλάθαι
καὶ τὸ Ἠλαίον Ἰκανόν καὶ προσεβεῖν τὴν ἀλήθη, εἰτή εἰς ξέοναν καθεύ-
ναι τὸν ἡθὸν· οὕτως δὲ γενομένης τῆς ἐψήεσως, ἐγχυλότερος τε γίνεται

1 διὸ Daremberg et Raeder : διὸ C.
barley and lentils for those who strain at stool and for those who suffer from dysentery. The unskimmed meal should be boiled in the ratio of three-quarters of a pint to three pints of water. Thick soup made from peas is less flatulent than that made from broad beans and is easier to digest; hence one should serve it instead to those who are ill. One can give this soup both for catarrhs and coughs; it should be boiled in the proportion of three-quarters of a pint to three pints of water. The thick soup made from calavances is the sweetest soup of them all, but is difficult to cook and otherwise has similar qualities to the things already mentioned. It is boiled in an equal quantity of water. Worst of all are the thick soups made black-eyed beans and from wild chickling, and the decoction is of no use whatsoever for illnesses.


One should boil all grains, both barley and wheat, plastering around the lid of the pot with spelt dough; one should boil it for as long as possible over an extremely gentle fire; for it will not be burnt, if what is being cooked is not stirred for the length of time it is boiled; therefore as soon as the grains are thoroughly cooked one should stir and agitate them by holding and moving the pot in the hands so that they do not burn. Use for whatever is boiled and for foods eaten with bread olive-oil that has no odour and does not reveal any strength in the mouth; such an oil is that made from unripe olives. Boil and bake those fish which are of a suitable appearance in their skin; you should, if you boil them, assign the seasoning and sufficient olive-oil and boil first in brine, and then drop into the boiling sauce; when the cooking is carried out like
δ' Ἰχθύς καὶ ἔχων τὸν Λιον χυμόν ἐν αὐτῷ. ὡσαυτώς δὲ καὶ ὅπως 4 ἐν τῇ λεπίδι ὄπτωμενος κρείσσων τε καὶ ἀπαλώτατος καὶ τροφημώτατος γίνεται. δεὶ δὲ τῷ ἔλαιῳ τὴν ἄρτυσιν ἀποδιδόναι, τὸν δ' ἠλα ἱκενόν 5 καταπάσσει καὶ λεπτοῦ ἀλφίτου.

1. Ἐκ τῶν Φιλοτίμου, κέρχρου σκευασία.

'Ὁ δὲ κέρχρος τριφθεὶς μὲν ὑπόκε καὶ λειανθεῖς καὶ παραχευμένου 1 πάλιν ὑδατος τριβόμενος καὶ ἀπηδομένος καὶ εὐνεχηθεῖς καὶ γενώμενος δυοικε ἀληθῶς κολλώθης τε καὶ ἐτροφήνηται ἔχων καὶ τὰς κοιλίας ἱστάς καὶ κατεργάζεσθαι δυνάμενος ἔστιν. καλόν ἔδε, δολε ἐψύχες 2 μενος, ύπερ εἰλώσας ἔπειν, δυσκατεργαστῶρος καὶ τὰς κοιλίας ἐνωτε μαλακωτέρας ποιῶν καὶ τὴν ἄλλοσκεις ἐν τοῖς διαχωρισμοῖς οὐ λιαν ἔστιν ἔχων, καν κολλυβεστέρος ἡ' τὸν χυμὸν δὲ γλυκὸν ετύψιν ἔχοντα ἀναδίδουσιν.

2. Ἐκ τῶν 'Αντολλοῦ, τροφαὶ εὐνεχῶς νοσοῦσι καὶ σκευ- ασίαι αὐτῶν' κείται ἐν τῷ Περὶ βοηθημάτων, ἐλ τὸν τρί- τον λόγον, ἐν τοῖς προφερομένοις, ἐν τῷ 3 νεφελιν.

'Εκλεκτέον ἑπὶ τῶν εὐνεχῶν νοσημάτων τροφήν περιθήμα τε 1 ῥάς τε καὶ ἀναδοθήσαν ταχεῖτην καὶ οὐ πάνυ πολύτροφον καὶ ἕρθες 2 δὲ πάσας τὰς εἰρήμενας ἀρετὰς ἄρτος πλυτὸς ἐξ ὑδατος. ἔστω δὲ 3 πυρῶν μὲν τριμηνιαίων, καὶ καθαρῶν δὲ μὴ εφόδρα (πολύτροφος δ' ὁ τοιοῦτος) 4 τετρήσθω δ' εὖ μᾶλα καὶ ἔσπασθη. τεμιδαλίτης δὲ μῆτε τούτων τῶν πυρῶν μῆτε ἄλλων παραλαμβανέσθω διά τὸ ἱερόν.
the fish is more succulent and retains its own juice inside itself. Similarly too a fish baked in its skin is better, more tender, and more nourishing. One should add seasoning to the olive-oil, and sprinkle over a sufficient amount of salt and some fine groats.

10. From the writings of Philotimus, the preparation of millet.

1 Millet is pounded when raw, ground finely, and after some water has been poured on is pounded once again, strained, boiled, and when it becomes glutinous like meal and has a harsh taste it is effective in combatting blocked bowels.

2 On the other hand, when it is boiled whole, just as people are accustomed to do, it is more difficult to digest and sometimes makes the bowels more relaxed and produces a change in the stools which is not excessive, even if it should be rather glutinous; it distributes sweet juice with an astringent effect.

11. From the writings of Antyllus, the foods for those who are continuously ill and their preparation; this passage comes in the third book of the work On Remedies, in the section on foodstuffs one should give to sick people, in the second chapter.

1 One must select in the case of continuous illnesses food that is easily digested, quickly distributed around the body, not too nutritious, and excreted without difficulty (for whatever stays in the body revives fevers); bread macerated in water possesses all the above mentioned qualities. It should be made of three months wheat, and not too refined (for this sort of food is too nutritious); grind it well and bake it thoroughly. Bread made from the finest quality flour both of this type of wheat and the others
εστώ δὲ καὶ ἡμιλος μάλλον καὶ Ισμίτης· ἀποβρέχεσθω δὲ ὅπατι θερμῷ ἄλλῳ καὶ ἄλλῳ εὐνεχεῖς ἀποχομένῳ μὴ πάν τὸ τοῦ ἄρτου μέρος, ἀλλὰ τὸ Ἴνδοθέν· τὸ γὰρ δερματώδες αὐτοῦ πρὸς τὴν διαδοχὴν καὶ τὴν πέψιν ἀδετον. μέτρον δὲ τῆς διαβροχῆς οὐ τὸ ἀνοίδησαι μόνον, ὅτι ἀλλὰ καὶ τὸ ἀποπνέοια τῆς ζώμης καὶ μηδὲν ἔκεινς ἐκδικήθη. τοῦ δὲ αὐτοῦ τένους καὶ χόνδρος πλυτός, ἀποχολιζόμενος μὲν καὶ πλυνότες ἔμενεν ἰκανός, ἐφθάσας δὲ διδόμενος ἐν ὄρατι ἡ μελίκρατις. τοῦ δὲ αὐτοῦ τένους καὶ χῦλος πτειάνης, ἐφώμενος μὲν ἐν μέρος πτειανῆς πεντεκαΐδεκα μέρεσιν ὁδατος, ὑπολειπομένου δὲ κατὰ τὴν ζωήν τοῦ πέμπτου μέρος καὶ διηθομένου· πίνεται δὲ ὁ χῦλος ἀλήτων προσλαβών ἤ μελίκρατον. καὶ αὐτὸ δὲ τὸ μελίκρατον ἐκ τῶν αὐτῶν τροφίμων ἅν τις θείη, καθεψώμενον οὕτως, ὡσπερ καὶ τῆς πτειανῆς ἔφαμεν, τοῦ μελίτος πρὸς πολλὰ μέρη τοῦ ὁδατος ἀνακεραμένου παραπλησίως εἰς τοῖς πέμπτοις μέροις. εκεύεσθαι δὲ καὶ βάφθαι εἰς τοῦ χόνδρου τόνδε τὸν τρόπον· πλυθείς δὲ χόνδρος θεοῦ, καὶ πολλάκις ἀποβρέχεσθαι τοῦ πλούματος, αὕτε ἐπιβρέχεσθαι ὅπατι καθαρὰ δεν ὧραν μίαν, ἔτα τρίβεται χερσίν ἐν τῷ ὁδατι, ἐς γαλακτιζόν τὸ ὄνωρ τῇ τε χροὶ καὶ τῇ παχύτητι, κατείτα ὦτως διηθομένους ὁ χόνδρος αὐτὸς μὲν ἐξω μένει, τὸ δὲ ἀπογαλακτιζωμένον ἐξ αὐτοῦ προσλαβάνει ἄλλων ἄλλην, ἐπὶ δὲ τῶν δακομομένων τὸν στόμαχον καὶ τὰ ἐντερα βραχύ τι καὶ ἄνησθος, ἐπὶ δὲ τῶν ἀντρέπομένων τὸν στόμαχον καὶ ναυσίποδον γλησσῶν καὶ θύμου, ἐπὶ δὲ τῶν ἐμπνευματομένων κυμίνου· ἔσται δὲ μέχρι
should not be eaten because of its strength. Instead the bread should be stale and leavened; soak it in constant changes of hot water, and do not soak all the bread but only the crumb; the part which is like skin in texture is not suitable for successive use and the digestion. A measure of the amount of maceration comes not only from the rising, but also from the breathing of the yeast and the loss of all its smell. Of the same kind are refined groats, and after having had their juice extracted and being sufficiently washed they are boiled and served in water or honeyed milk. Of the same kind too is pearl-barley juice, one part of peeled barley being boiled in fifteen parts of water, a fifth part being left behind after boiling and strained; the juice is drunk while taking at the same time a little honeyed milk. And some people place honeyed milk in a category apart from these foods, although it is boiled down in the same way as we described for pearl-barley, the honey being tempered with parts of water equal nearly to a fifth part. The soup from groats is prepared in the following manner: the groats are sufficiently washed, the water in which they are washed being changed often, and once again clean water is poured over them for one hour, and then they are rubbed by hand in the water, until the water is like milk both in colour and consistency, and then the groats on being filtered in this way remain on the outside; add a little salt to the milky liquid made from the groats, and a small quantity of dill in the case of people suffering biting pains in the stomach and inwards, some pennyroyal and thyme for those suffering from an upset stomach and nausea, and some cumin for those suffering from flatulence; boil until there is a degree of solidity and offer before
εὐστάσεως καὶ προσφέρεται πρὶν διαψυχῆναι. τοῦτο τὸ εἶδος τῆς τροπῆς ἐληρτίσεται καὶ τῆς τροποφορᾶς εὐκολίᾳ καὶ τῆς ῥαδίως τῆς περίγραφες τῇ ταχείᾳ καὶ τῷ ἀναλομβάνεισθαι. ἔστιν ἢνίκα καὶ χόνδρον καὶ ἀρτὸν προητούμεθα. ἂν μὲν οὖν ἐπὶ τῶν ἄξιων τῶν πυρετῶν εἰσὶν αἰτέπερ ἄρτος πρὸς αὐτὰς τοὺς κάμνοντας ἀναγκαζόμεθα καὶ ἄλλας ἀρτάς ἐφέτερον τροφαὶ, ἐν ἀθέτες Ἰτρῖν τε καὶ λέχανον καὶ ἀļφιτον καὶ ὅν., τὸ μὲν οὖν Ἰτρῖν ἐκ πυρῶν ἔστω, καὶ ὃς ἐν ὧν καὶ ὁ ἀρτός ὑπηρετοῦσι καλῷς· λεπτὸν δ' αὐτὸ δεῖ εἶναι ἐφόδομε τῷ τάρ παχῦ ἀνυμμάλως ὀπτᾶται· καὶ τετριφθαι δὲ δὲ δᾶλλα καὶ ῥαπτότατον, ὡς ἐν ἑκάτη ἀλφίτω εἶναι· ἐφέσται δ' ἐν ὁδαί (μᾶλλον μὲν οὖν ὁμίψις, ἐλ δὲ μὴ ὅτι καθαρωτάτω) ἐπὶ πλείτον, ὡς ὑπὸ τῆς ἐφάγεσις ἐνυδηνίας· ἐκεῖν ἐν οἷον ἀλφίτον ἄλαι καὶ ἔστω ἀναλαίον ἡ ἱππαρχῷ τι παντελῶς ἐλαίου προσάμβαντες, πρὶν ἐμπάσσεσθαι τῷ Ἰτρῖν εὐνυψωμένου τῷ ὁδαῖ τοῦ ἐλαίου. ὅμοιος δὲ καὶ χύνορς ἐφείται εὖ τούτως ἀνυμμάκα. λαχάνων δὲ πάντων ἐπιπεδειότατον μαλάχη ἐν τῷ τάρῳ καὶ ἐλαίῳ ἐφόδι ἐκθείσης καὶ τὸ ἀν' αὐτὴς ἀρχή, δὶ· ἵναι τούτων φυλλῶν ἐγείρεις τῶν νεαρῶν τῆς μαλάχης χωρίς τῶν ἰθῶν, ἐπειτὰ τριβομένων ἐν θύρα καὶ αὐθίς ἐγείρεις ἐν ὁδαί καὶ ἅλλο καὶ ἐλαίῳ. δευτέραν δὲ χύναν ἔστει κολοκύνη· δει δ' ἐπὶ 18 αὔτες τὰς ἐφόδιοι νεαρὰς· ἐφείται δὶς δέκτως· ἵνα μὴ τοῦ ὁδαί ἐγείραμεν διακορίτες τείνονται· ἐνδεδωκα δὲ μετὰ τῆς ἐγείρας καὶ προσφέρεσθεν, μᾶλλον μὲν ἐν ὑδραίμη (καὶ χάρι ὤν· ἄστομος καὶ τοἰ.
it goes cold. When this sort of food has been well prepared we often prefer to groats and bread because it is easy to administer, is digested without difficulty, and is distributed rapidly in the body. These then are the foods for acute fevers: in difficult circumstances we are often forced, either through these things not being available or because they are not familiar to the sick people in question, to use other types of food, among which are ἰτρίων, vegetables, groats, and eggs. ἰτρίων should be made from the wheat from which the best baked breads are made; it must be very thin; for when it is thick it bakes unevenly; it must be pounded extremely finely so that it is of the same size as groats; boil in water (especially in rain water, but if not, in the cleanest water possible) for a long time, in order for it to become one single mass through the boiling. The recipe calls for a little salt and no olive-oil, or there can be added just a very small amount of olive-oil and having first boiled the olive-oil with the water sprinkle on the ἰτρίων. Similarly too ἄχονδρος is boiled with the same seasonings. Mallows are the most useful of all the vegetables eaten after being cooked in fish-sauce and olive-oil, and also the soup from them, made from young mallow leaves boiled without their ribs, and then pounded in a mortar and again boiled in water, salt, and olive-oil. To these the large gourd takes second place; one should choose the very young gourds; boil whole gourds without scraping them, so that they do not become waterlogged whilst being boiled; they are scraped after being boiled and then served, especially in briny water (for then such food is not unpalatable), but if not, one should serve them in fish-sauce and olive-oil.
αὕτη προσφορά), εἶ δὲ μή, ἐκ τάρου καὶ ἔλαιου δοτέον. τὰ δ' ὡς 14
ἐγεῖν δὲ έν ὑδαί κινοῦντας ἀδιαπαύστως αὐτὰ· οὐ τὰρ εὐνίσταται
tὰ κινούμενα οὐδὲ παρχόνεται· βέλτιον δ' ἐν δεύκρατῳ ἐγεῖν' ἐτὶ τὰρ
μᾶλλον ὑπὲρ διαμένει.
One should boil eggs in water whilst stirring them without pause; for when stirred they do not congeal or thicken; they are better boiled in vinegar; for then they stay still more moist.
A commentary on Book 4 of Oribasius'

*Medical Compilations*
1.1-2 τὴν εὐγενεστάτην ... ἔξωθεν: 'Ex nobilissima olyra, de-tracto (ut par est) cortice, tragum quem nominat, conficunt' (Rasario, p. 247). Orib. lifts these words from Gal. (Alim. fac. 1.13.21=6.519-520K), although he omits to say here how ὑδάγως was prepared, this being quoted in full elsewhere (Orib. 1.13.6 and n.).

1.1 εὐγενεστάτην: Wheats which contained a lot of bran were dubbed ἄγενες, whilst wheats from which the greatest quantity of σεμίδαλς could be milled were called εὐγενεῖς (Gal. Ad Glaucus. 2.9=11.120K).

διλυραν: Emmer or Triticum dicoccum Schrk. (see Orib. 1.13.1n.).

τράγων: This was similar in appearance (Σχήμα, cf. Gal. Alim. fac. 1.36.1=6.550K) to χόνδρος (Dsc. 2.93, Gal. Alim. fac. 1.13.17=6.517K, cf. Artem. 1.68 where the two are mentioned together, and Orib. 4.1.11n.) and was made, as Orib. says, from emmer (Gp. 3.8, cf. Plin. Nat. 18.76; διλυρα is a cultural variety of ζεία (Dsc. 2.91), hence Gal.'s statement (Hr. Acut. comm. 1.17=15.455K) that τράγως was made from the latter). The grain was soaked, winnowed, and dried in the sun, this operation being repeated until the seed vessels and bran had been removed; the resulting τράγως was then stored away ready for use (Gp. 3.8).

1.2 τύφων: Einkorn or Triticum monococcum Schrk. (see Orib. 1.13.1n.).

1.3-6 τῶν πυρὸν ... γλυκομενοι: This is based on Gal. (Alim. fac. 1.2.2-4=6.481-483K) with considerable changes in wording and phraseology. For instance, Gal. refers to bran bread as πυτυρίας whilst Orib. calls it πυτυρίτης, and Gal. takes pains to explain that αὐτόπυροι was the
current term, συγκουμενος the archaic for wholemeal bread, whilst Orib. ignores any such differentiation.

1.3 των πυρων: LSJ gives Triticum vulgare, Daremberg (p.256) 'froment'. The word can be used in the all-embracing sense of 'wheat', being often contrasted with barley (Thphr. HP 8.4.1, Hdt. 4.33.1, IG 12.76.38, 40, Pl.Lg. 847e6, Ar.V. 506). If necessary a specific variety of wheat could be named, e.g.: σητανιος πυρος (Sor. 2.25.2), τριμπυτης (Dsc. 2.85), and cf. πυρων ... τι γενος (Thphr. HP 8.4.1). See also Orib. 1.2.1n..

τους πιτυριτας: Bran-bread was also called βραττιμης and εσκυνος according to Philemon (ap.Ath. 3.114e), and was the poorest sort of bread in order of ranking (Poll. 6.72). It provided about half the nourishment of white bread, (Gal.Antid. 1.14=14.69K) being on a par with bread made from light spongy barley (Gal.Alim.fac. 1.10.5=6.506K).

Pl.Com. (ap.Ath. 3.110d) calls Cilician loaves δυπαρους, and this may be referring to the darkness of the bran. Naturally bran-bread was laxative (Gal.Alim.fac. 1.2.2=6.481K, cf. Orib. 1.1.4n.). However, L.A. Moritz (Grain Mills and Flour in Classical Antiquity, Oxford 1958, p. 173) thought that it was 'unlikely that any bread was made from bran alone', and that bran-bread was kneaded rather from the overtails of sieving during the production of finer grades of flour (Moritz, op.cit., p.161).

σιλυνιτας: This was the Roman term (Gal.Comp.Med. 7.1=13.8K, cf. L.A. Moritz, Grain-Mills and Flour in Classical Antiquity, Oxford 1958, p.173) for the whitest or μαθαρωτας sort of bread which was thought to be extremely nourishing but difficult to excrete (Gal.Alim.fac. 1.2.5=6.483-484K, Aff.Rem. 6=19.684-685K). It was made from
silīgo or soft wheat, the best in Italy being a mixture of Campanian silīgo with that grown at Pisa, and from it was produced not only bread but also pastries (pīstrīnarumque opera, Plin. Nat. 18.85, cf. Juv. 5.70-71 and E. Courtney ad loc., London 1980, p.239).

σεμιδαλίτας: This was the next whitest bread after σιλιγνίτης, and also a Greek word according to Gal. (Alīm. fac. 1.2.5=6.483-484K). It was held to be strong, nourishing, difficult to excrete, and to have thick juices (Hp. Vict. 2.42=6.540L, Gal. Hp. Acut. comm. 4.95=15.898K, Dsc. 2.85.1, Diph. Siph. ap. Ath. 3.115c).

1.4 χρόνος ὀλύγος: Without clocks the measurement of time was necessarily vague in ancient recipes, and attempts at greater precision produced somewhat comical results (e.g. εἰς ὅσῳ ζένων, διαλιπὼν χρόνον τοσοῦτον, ὅσον ἀν τις τριῶν σταδίων ὅρων ἀνύσεις, Dsc. 2.78.1).

1.6 οἱ ἀὐτοπυροὶ τὴ καλ ἁγιομυστοὶ: These were two names for a leavened (Plin. Nat. 22.138, Cael. Aur. chron. 5.11.136) bread made from flour with none of the bran removed (Cels. 2.18.4, Gal. Hp. Acut. comm. 2.34=15.577K, Ad Glauc. 2.9=11.120K), hence a rough food (Plu. Mor. 466d) which makes Habinnas' statement of preference over white bread seem positively eccentric (Petr. 66.2 and M. S. Smith ad loc., Oxford 1975, p.185). ἁγιομυστός was the earlier term (cf. Hp. VM 14=1.600L, Acut. 10=2.300L), ἀὐτοπυρός the later (Gal. Alīm. fac. 1.2.4=6.482-483K). Diph. Siph. (ap. Ath. 3.115c), in contrast to Gal., placed wholemeal bread towards the end of his list of breads rather than midway. It was eaten both as an everyday food (Alex. and Phryn. Com. ap. Ath. 3.110e) and in special diets (Hp. Int. 20=7.216L) and it features macerated in rose-oil and
water as a cataplasm for haemorrhoids (Larg. 224).

1.7-9 ἐκ τῶν νέων ... ἀδίψου: Orib. hardly alters Gal. (Alim. fac. 1.11.1=6.506-507K) for this passage on ἀλφίτου.

1.7 ἀλφίτου: This was made from young, half-ripe barley (Poll. 1.247, Hsch. s.v. ἄλφιτον, Pall. 7.12) and was called polenta in Latin (Anthim. 64, Char.exs.gramm. 1.553.25).

Plin. (Nat. 18.72-73) gives three methods of preparing it: previously soaked barley was dried for one night, then parched (cf. Ov.Met. 5.450) on the next day and crushed (frangunt) in a mortar; some people after vigorously parching the barley sprinkled the grains with a little water and let them dry before grinding (molant); the third method involved barley being taken from the ears when still green, then pounding it after soaking it, washing it clean, drying it in the sun, parching it again, then grinding it (molunt). It appears from Plin.'s use of frango and molo that ἀλφίτου could range from merely crushed grains to ground meal (see also Orib. 1.12.1n.).

κάκ τῶν ἄλλων: Dieuch. (ap.Orib. 4.6.4) mentions ἀλφίτου made from oats.


10 γίνοντα ... φυραθέντων: This is a rewording of Gal. (Alim.fac. 1.11.2=6.507K), the original running γίνοντα δ' ἐξ αὐτῶν ὑγρὸ φυραθέντων αἱ μάζαι.

μᾶζαι: See Orib. 1.12.2n..

11 χόνδρος ... πυρῶν: With a shifting of word order this comes from Gal. (Alim.fac. 1.6.1=6.496K).

χόνδρος: Orib. appears rather vague here about the prove-
nance of χόνδρος, Dsc. (2.96) being more specific in saying that it came from emmer (ζέα δίκωμος). Gp. (3.7) explains its preparation: ζέα was winnowed, put into hot water, then pressed. One part of the whitest and finest sand to four parts of pounded white chalk were mixed together, and a small quantity added to the ζέα which was then hulled. When this operation had been completed the ζέα was passed through a large sieve. The best time for carrying out all this was during the Dog Days, or from late July to August. Three grades of χόνδρος were produced: Cato (Agr. 76) refers to the first grade (αλικα prima; χόνδρος = αλικα CGL 2.477.57) in his recipe for placenta. On χόνδρος see also Orib. 1.5.1n. and L.A. Moritz, Grain-Mills and Flour in Classical Antiquity, Oxford 1958, pp.147-149).

1.12- προσέχειν δὲ χοῇ ... τῷ πλυτῷ χόνδρῳ: Orib. takes this passage from Gal. (Alict. fac. 1.6,3-6.497-498K) with a few changes, one of the more noticeable being the imperative γινέσοι for the plain indicative γίγνεται in sect.15, an occurrence that is perhaps seen more often the other way round (see Orib. 1.49.1n.).

1.12 ὀφθήμασιν: A sort of thin soup (see Orib. 4.7.21n.).

1.13 ἄνηθῳ: The fact that dill (Anethum graveolens L.) allayed flatulence (cf. Cels. 2.26.2) and being heating (cf. Alex. Trall. 8.2-2.339 Puschmann) was digestive of raw and uncooked masses is probably the reason why it was used to stir porridge made from χόνδρος, since this dish could be troublesome to the digestion (stirring with bunches of herbs was a standard method in the ancient kitchen, cf. Apic. 7.6.7 agitabis ramo satureia). Its discutient (διαφορητικὸς) property no doubt dispersed τὸ κολλώδης
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1.14 γαστρός: As well as expressions for other internal organs there are two terms found in Orib. 4 for parts of the stomach, namely γαστήρ (1.14, 2.3) and κοιλία/κοιλίαι (7.1,2,6,29,34, 10.2) and a third term found elsewhere in Orib., namely στόμαχος. Arist. in *HA* (495b20sq) regarded the στόμαχος as the complete oesophagus, running from the mouth (ἀπὸ τοῦ στόματος) and terminating at the stomach (ἐίς τὴν κοιλίαν), but elsewhere (PA 674a9sq) he calls the passage connecting the mouth with the stomach οἰσοφάγος. Gal. (*UP* 4.1=3.266-267K) gives the name of οἰσοφάγος to this passage, and adds that it was commonly called the στόμαχος, since 'στόμαχος is the general term for any narrow passage or isthmus, so to speak, leading to a cavity'. Hence the throat, neck of the bladder, and the cervix of the uterus were all called στόμαχος, and this explains Arist.'s interchanging of the terms (cf. Gal. *UP* 5.5=3.332K). However, στόμαχος could also be applied
more specifically to the mouth of the stomach (στόμα τῆς γαστρός, Gal. Symp. Caus. 1.7=7.127K, Comp. Med. 8.1=13.118K, Hp. Acut. comm. 1.17=15.460K, Prog. 8.7=14.643K), Plu. (Mor. 687d) describing it as regulating the appetite by either contracting or opening to admit food. Yet the term was applied haphazardly, as Plu. a little earlier (Mor. 698b) calls the στόμαχος an ἀγγείον, or receptacle for holding the food before it was passed εἰς τὴν κάτω κοιλίαν, a function more suited to the oesophagus, or even the stomach if ἡ κάτω κοιλία is taken to refer to the intestines, although 'lower stomach' is perhaps more accurate (cf. Dsc. 2.169.3, Hp. Acut. (Sp.) 21=2.500L). R. E. Siegel (Galen On the Affected Parts, Basel 1976, p. 207) mentions that Galen spoke of στόματος κοιλίας (cf. Ruf. ap. Orib. 7.26.23), or the upper entrance to the cavity of the stomach, which is still commonly called cardia today; the ambiguity of the term reflects the difficult differential diagnosis between pain of the heart and pain at the upper end of the stomach. γαστήρ must be the stomach, and there appears to be hardly any confusion over this. Gal. (ap. Orib. 24.18.3-11) gives its correct position, the liver lying to the right and embracing the stomach with its lobes, the spleen to the left, the oesophagus entering from above (Gal. ap. Orib. 24.17) and the intestine exiting from below (Gal. ap. Orib. 24.18.11). κοιλία is mentioned by Gal. (ap. Orib. 24.18.10) as being not part of the same body as the ἐντέρον (bowel) but of the oesophagus, and since he distinguishes (ap. Orib. 24.17) between οἰσοφάγος and στόμαχος, he must presumably mean the terms to be taken as 'oesophagus' and 'mouth of the stomach' respectively. Therefore κοιλία is per-
haps a general term for στόμαχος and γαστήρ together (cf. Ruf.ap.Orib. 7.26.20), with the ἐντερον leading off from below and the οἰσοφάγος travelling upwards to the mouth, although D. Gourevitch ('Les noms latins de l'estomac', RPh 50 (1976), pp.96-110) sees considerable overlap between these words, κοιλία meaning 'estomac' and 'ventre', γαστήρ 'abdomen' and 'paroi abdominale' (E. Benveniste, 'Termes gréco-latins d'anatomie', RPh 39 (1965), pp.7-9, discusses these terms briefly with particular reference to the New Testament).

1.16-21 πτισάνη ... παρασκευαζόντες: This passage is derived from Gal. (Alim.fac. 1.9.3-6=6.502-503K) with some changes and omissions. Gal. begins by saying that πτισάνη moistened when it was prepared correctly, whereas Orib. launches straight into how it may be prepared προσηπκόντως; an aside (Alim.fac. 1.9.4=6.502K) on how cooks cheated by adding starch to the soup to make it seem as if it had been boiled for longer than it really had is omitted, Orib. no doubt wanting to avoid putting ideas into his readers' heads; and προδιαβρέξαντας (Alim.fac. 1.9.5=6.502K) is characteristically simplified to προβρέξαντας (cf. Orib. 1.41.8n., 42.3n.). Gp. (3.9) suggeststen parts of water to one of barley, Orib. (Syn. 4.37.4) fifteen parts of water to one of barley boiled until a fifth remained of the original quantity and then strained. See also Orib. 1.10.1n..

1.16 διὰ μαλακοῦ πυρὸς: cf. Xenocr.ap.Orib. 2.58.48 ἐπ' ἀνθράκων μαλάκης, Anthim. 3 lento foco, Dsc. 2.76.4 κούψης ἀνθρακίας, Dsc. 2.76.11 ἐλαφρῶς πυρί, Apic. 4.5.4 lento igni.

1.18 πράσιον βραχύ ...: The use of dill and leeks in this
recipe must be solely for flavouring (cf. Gal. Alim. fac. 1.7.3=6.501K) and not for any medicinal purposes supplementary to the barley, for only a small quantity is specified, and moreover leeks were regarded as flatulent, possessing unhealthy juices and immoderate heat, and being generally bad (μεθητός: Gal. Diff. Feb. 1.4=7.285K, Morb. Caus. 2=7.6K, Dsc. 2.149.1, Diph. Siph. ap. Ath. 9.371e).

For the popularity of leeks in cooking, despite their alleged medicinal drawbacks, see: Apic. 2.3.1, 4.2.27, 6.2.3, 6.9.3, 8.7.10 etc.

1.19 οι σπάρτοις: Spanish broom (Spartium junceum L.; see also S. Boscherini, 'Grecismi nel libro di Catone "De agricoltura"' A&F 4 (1959), p.150) was used to make 'shoes' (solea) for oxen to protect their hoofs after an operation for lameness caused by a down-flow of blood into their feet (Col. 6.12.1, 6.15.1, cf. Pall. 1.24.2, Vet. 12.2, Veg. mulom. 1.26.3), and Sabina Poppaea, the second wife of the emperor Nero, was drawn by mules shod with gilded σπάρτια (D.C. 62.28.1). Horses and mules were not shod in antiquity (K.D. White, Roman Farming, London 1970, pp. 295 and 504 n.91), and thus for use on roads hoofs were hardened by driving the animal to summer pasture on stony mountainsides (cf. Var. R. 2.8.5), or else protected temporarily by solea or metal 'hipposandals' (see R.E.M. and T.V. Wheeler, Verulamium: A Belgic and Two Roman Cities, Oxford 1936, pp.220-221 and plate 63B; S. Frere, Verulamium Excavations, Oxford 1972, pp.171-172 and fig.63; B. Hobley, Excavations at the Lunt Roman Fort, Baginton, Warwickshire: Final Report, Birmingham 1974, p.41 and fig. 12.2). The Spaniards around Carthago Nova used the long leafless shoots (cf. Dsc. 4.154) to make footwear and
shepherds' clothes (Plin. *Nat.* 19.27), and the roughness of these shoots (cf. Isid. *orig.* 17.9.103) was ideal not only, as here, to pound barley, but also to scrub out wine jars (Gp. 3.5.9).

1.21 ἡψημα τε καὶ σιραῖον: These were alternative words for must from the sweetest grapes reduced by a half (Gal. Comp. Med. Gen. 3.3=11.612-613K, cf. Pall. 11.18, Dsc. 5.6.4) or, in a recipe which claims to be for ἡψημα κάλλιστον (Gp. 8.32, cf. Phot. s.v. σιραῖον), for a mixture of 50 ἡρσται of must to 100 ἡρσται of the best wine reduced to one third part. The terms were interchangeable (Gp. 4.15.8, Erot. s.v. οἶνῳ σιραίῳ = p.67 Nachmanson, Sch. Nic. Alex. 153, Plin. *Nat.* 14.18, Gal. *Alim. fac.* 1.13.20=6.519K, Eust. 1385.15), σιραῖον apparently being originally the Attic, ἡψημα the general Greek name (Gal. Comp. Med. 7.1=13.8K, Hp. Epid. 6 comm. 6.3=17B.322K, Moer. 340 = 310 Pierson; σιραῖον is perhaps connected with σιρᾶω 'to filter', P. Chantraine, *Dictionnaire étymologique*, vol. 4.1, Paris 1977, p.1006), the former perhaps being in more common use (Gal. Meth. Med. 12.8=10.867-868K, but contrast Hsch. s.v. ἡψημα and Poll. 6.17 where the reverse is true), the latter sometimes being used as a general term for a decoction (e.g. Aret. CA 1.4.5=24A.211K ὑσσωμου ἡψημα, 2.7.3=24A.278K μαλάχης τῶν ῥίζων ἡψημα, CD 2.5.3=24A.335K τῆς ἡδυόσμου τὸ ἡψημα, etc., but contrast Paul. Aeg. 3.28.3 τοῦ ἀπὸ ὅσχαίων σιραίου). This preparation was made from a variety of musts (Cretan, Mytilenean, Pramnian, Theran: Dsc. 5.6.4, Aret. CA 2.2.14=24A.254K, Gal. Comp. Med. 7.1=13.8K), in colour was dark (Gal. Vict. Att. 12.88, Bon. Mal. Suc. 11.3=6.801K), and because of its sweetness (Ar. V. 878, Ruf. ap. Orib. 5.9.1, cf. Gal. *Alim. fac.* 1.11.1=6.507K) was used

κυκέωνα: Hom. (Il. 11.638-640, cf. Gal. Hp. Epid. 6 comm. 6.5=17B.333K, Ath. 11.492d) describes this as being made from Pramnian wine and grated goat's cheese on which were sprinkled ἀλωτα (see Orib. 1.12.1n.). Hsch. (s.v. κυκέω) adds water and honey to the list of ingredients, and other citations of this preparation include thyme (Ar. Pax. 1169, Thphr. Char. 4.1), pennyroyal (Ar. Pax. 712), mint, rue, dill, coriander, linseed (Hp. Int. 12=7.196-198L, Nat. Mul. 38=7.382L), broad beans and hedge mustard (Hp. Mul. 2. 113=8.244L). Orib.'s point is that πτισάνη was supposed to be a plain food for invalids, not an elaborately seasoned drink like κυκέων, the sometimes bewildering number of ingredients making the word a synonym for confusion or medley (Luc. Icar. 17, Vit. Auct. 14, Theophyl. Simoc. Ep. 82, M. Ant. 9.39). On κυκέων in religious ceremony see A. Delatte, 'Le cyceon: breuvage rituel des mystères d'Éleusis', BAB 40 (1954), pp.690-752.

1.22-25 ἐδέσσαμα γίνεται ... καὶ πέσιν: This is taken from Gal. (Alim. fac. 1.18.5-6=6.526-528K) with one minor and one major omission, Gal. (Alim. fac. 1.18.5=6.526K) specifying that it was the people living around Pergamum (οἱ Παρ' ἠμῖν ἀνδροται) who called this dish of lentils and barley φακοπτισσάνη, and describing the blockages in the liver and the exacerbation of splenic inflammations due to φακο-πτισσάνη mixed with σύραυν.

1.22 φακοπτισσάνην: 'ptisana cum lenticula, quam Graeci phacop-tisanen uocant' (Cael. Aur. chron. 2.13.178). There were other mixtures with πτισάνη and lentils, for instance
tragoptisana ('ex lenticula atque alica', Cael.Aur.chron. 3.2.33), polypody (Polypodium vulgare L.) with πτισάνη (Ruf.ap.Orib. 7.26.69), βολβοφακη (Chrysipp.Stois.ap. Ath. 4.158b), and πολυφακη (Poll. 6.61).

1.23 ἢ γε μὴν ἄρτυσις ...: cf. Gal.Ptis. 4.1=6.821K, ἐπειτα ταχέως ἐψήσαντες ἐπιβάλλουσιν οἱ μὲν ἐψιμα, οἱ δὲ ἀμυλον, καὶ τινὲς κύμινον καὶ μέλι. ἢ ἔστι δ' ἡ τοιαύτη σκευασία μοιχηρά ...

Θύμβρας: Savory (Satureia Thymbra L.), called by the Romans satureia or cunila (Col. 9.4.2, Larg. 124), was, when cultivated, considered pleasant to eat both green and dried (Col. 11.3.57, 12.59.4) since its bitterness (cf. Thphr.CP 3.1.4, HP 1.12.2, Sch.Ar.Ach. 254) was not as pronounced as in the wild variety (Dsc. 3.37). It had a cutting power (Gal.Vict.Att. 2.7, 12.115, Alim.fac. 2.8.5=6.572K, Alex.Trall. 5.4=2.171 Puschmann) and was heating (Hp.Vict. 2.54=6.560L), and thus would have made φακοπτισάνη more digestible, although Cels. assures that it was of bad juice (2.21) and unsuited to the stomach (2.25.1). One property Gal. does not mention savory bestowing on φακοπτισάνη is the aphrodisiac (cf. Mart 3.75.4, Ov. Ars. 2.415, Cels. 2.32).

Γλήξους: Pennyroyal (Mentha pulegium L.) was also cutting and attenuating (Gal.Vict.Att. 2.7, 12.115, Alim.fac. 2.8.5=6.572K, Alex.Trall. 5.4=2.173 Puschmann, 5.6=2.223 Puschmann), heating (Hp.Vict. 2.54=6.560L, Gal.Simpl.Med. 6.3.7=11.857K, cf. Gp. 8.7), and hence digestive (Dsc. 3.31.1, Gp. 12.33). It is listed elsewhere as an adjunct to soups made of barley and lentils (Hp.Int. 44=7.276L, Aff. 41=6.250L, Plin.Nat. 20.153, Apic. 5.2.2, 4.4.1).

1.24 τοῖς πολλοῖς: The Mss of Gal. (Alim.fac. 1.18.6=6.527K)
read τοῖς πλουσίοις (Helmreich, p.245; Rasario (p.249) evidently had the same in front of him when he was translating: 'Pessime autem a coquis lens ex sapa divitibus apparatur') whilst the Mss of Orib. read τοῖς πολλοῖς except for G which agrees with Gal. (Raeder, p.95 and Daremberg, p.262). 'Puisque les lentilles étaient plutôt un aliment des gens du peuple que des riches, nous avons préféré la leçon πολλοῖς, quoique sans cela le mot μᾶγευτος se dise plus souvent des cuisiniers employés par les particuliers que de ceux des gargotes' (Daremberg, p.616).

To form a decision as to the correct reading on anything other than a crude head-count of the Mss seems impossible, and therefore it seems best to follow Daremberg and Raeder and read τοῖς πολλοῖς. Lentils with σίραιον cannot have been an expensive food solely for τοῖς πλουσίοις (100 denarii per castrensis modius, Ed.Dioœl. 1.11, the same price as wheat, 1.1a, crushed broad beans, 1.9, and chick-peas, 1.15; E. Ratti ('Richerché sul luxus alimentare romano fra il 1° sec. A.C. e il 1° sec. D.C.', RIL 100 (1966), pp.157-204) does not list lentils as a luxury item, and I.S. Neale (Roman Foodstuffs and Their Relation to the Social Classes, diss. University of Hull 1969, pp.62-63) says that lentils appeared on the tables of all sections of society; see also M. Dembińska, 'Diet: A Comparison of Food Consumption between some Eastern and Western Monasteries in the 4th - 12th centuries', Byzantion 55 (1985), p.440 on lentils as a 'popular and widespread food'), yet as Daremberg says, μᾶγευτος is perhaps better associated with someone in the service of a house or hired for a special occasion (Posidipp. ap. Ath. 14.695c-d, Plaut.Ps.
than a cook in a *popîna*,
ganea, or *caupona*.

1.25 τοῦς πόδας: Trotters were considered among the lighter parts of the pig (Cael.Aur.chron. 3.2.35), and thus their inclusion, as here, in barley soups (Apic. 4.4.1) may have been to add flavour rather than bulk, especially since salted foods were less nutritious than fresh (Cels. 2.18.10).

ταφιχαρον: This was either meat (Chrysipp.Stoia.ap.Ath. 4.137f, Gal.Simpl.Med. 4.20=11.694K, Hp.Aph.comm. 2.18=17B.485K, Ph.Mund. 21.66, Syn.Ep. 1.2=2B) or fish (Hdt. 9.120.1, Hp.Vict. 1.35=6.522L, 2.48=6.550, Plin.Nat. 32.18, Poll. 6.48, Gal.Alim.fac. 2.3.6=6.563K), or fruit (Pl.Sym. 190d7-8) preserved in salt (Gal.Alim.fac. 2.34.2=6.615K, Suda s.v. ταφιχαρος, Alex.Trall. 7.4=2.263 Puschmann, Sch.Ar.Ran. 558, hence the Latin equivalent *salsamentum* CGL 2.451.56), vinegar (Hp.Vict. 2.56=6.564L, cf. Apic. 1.9.1) or dried (Hdt. 2.77.4, Suda s.v. ταφιχευσιν, cf. F.A. Wood, 'Greek Fish Names', AJPh 49 (1928), p.187 and M. Koehler, 'Ταφιχαρος ou recherches sur l' histoire et les antiquités des pacheries de la Russie méridionale', Mémoires de l' Académie Impériale des Sciences de St.-Pétersbourg, sixième série, vol. 1, St.-Pétersbourg 1832, pp.347-490). A 2nd/3rd century A.D. letter talks of a jar of pickles (το μεράμον των ταφιχευν, cf. Plu.Mor. 668c), being topped up - presumably with vinegar or brine - and recommends the bottom layers as better than the top ones (POxy 2680.22-25). Cato (Agr. 88) explains how brine of a suitable concentration for pickling was manufactured: a basket filled with salt was suspended in an amphora...
filled with clean water which was left in the sun. The basket was shaken several times a day until the salt ceased to dissolve, and the brine was saturated enough for pickling when an egg or small dried fish could float in it. Meats for pickling were first boned, and after salting were packed in old olive-oil or vinegar containers with grape pips and sometimes sweet must (Gp. 19.9.3-6). The salt preserved the meats from decay by contracting the fibres and consuming any moisture (Gal. Simpl. Med. 4. 20=11.694K, 11.2.5=12.373K, cf. D.L. 8.35). Pickled leg of pork is mentioned elsewhere (Gal. Simpl. Med. 10.2.9=12. 271K), and it would have been ideal in ὑγεία for savour and the digestion since pickled foods were ἔσκοτομοι (Xenocr. ap. Orib. 2.58.133) and being heating (Alex. Trall. Febr. 6=1.389 Puschmann, 7=1.407-409 Puschmann, Hp. Vict. 2.56=6.564L) were easily digested (Cels. 2.28.2, cf. Orib. 1.17.1n., 1.54.2n.). Before being eaten salt fish was washed until the water ran sweet (Diph. Siph. ap. Ath. 3. 121c, Plaut. Poen. 241-244, Ter. Ad. 380), and it was served either baked, sprinkled with salt and olive-oil, or cooked plain (cf. Pherecr. ap. Ath. 3.119d, Hp. Aff. 41=6.250L), or in a sauce (Archestr. ap. Ath. 7.303e, Sen. Ep. 95.25). Cic. (Att. 4.8.1, 14.16.1, Fam. 9.16.7) praises a patina tyrotarichi (see Apic. 4.2.17 for recipe); fish preserved either by drying or smoking were dispatched over long distances and were particularly appreciated as gifts in the Byzantine period (Tz. Ep. 39, 98, Theophyl. Simoc. Ep. 8-9, and see A. Karpozelos, 'Realia in Byzantine Epistolography X - XIIc', Byz 77 (1984), pp.24-25); and salt fish is still esteemed in modern Greece (N. Kazantzakis, Βίος καὶ πολιτεία τοῦ Ἀλέξη Ζόρμα, Athens 1964, 7th edn.,

νεαλές: Presumably when Gal. says τὸ μεταξὰ τοῦτων he means midway between what is fresh (πρόσφατος) and what is pickled (ταριχηρόν), although D. (25.61) appears to regard νεαλής and πρόσφατος as signifying very much the same thing. However, later usage (e.g. Luc. Nec. 15, Plu. Mor. 669α) took νεαλής to mean 'freshly salted' (Hsch. s.v. νεωστὶ ἀλούς). Perhaps ταριχηρόν was left to mature, whilst νεαλής designated food straight from the pickling process. Cheese could also be described as νεαλής (Archig. ap. Gal. Comp. Med. 5.1.12.808K) as could milk (Sch. Nic. Alex. 364, τὸ νεαλές γάλα, ἤγουν τὸ νεωστὶ ποθέν).

1.26 καλὸν ἐδεσμα ... γάρ οὖτος: This is a paraphrase of Gal. (Alim. fac. 1.1.43 = 6.477-478K) where it is stated that τευτλοφακή was suitable to administer in both health and sickness, and that if the lentils were boiled twice then the dish became more constipating. Τευτλοφακή was a food composed of opposites, beets being less laxative, lentils more so, and the juice assimilated into the body from it was thus composite too (Gal. Alim. fac. 1.18.9 = 6.529K).

γάρον γλυκέος: Besides being made from fish (see Orib. 4.1.34n.) γάρον was also processed from pears (Pall. 3.
25.12), and it is possible that Orib. is referring to such a sauce here. R.I. Curtis (The Production and Commerce of Fish Sauce in the Western Roman Empire, diss. University of Maryland 1978, p.69) remarks that 'the precise nature of this sweet garum remains unknown', and points tentatively towards another fishless γάρον recipe ascribed to Joachus of Martyropolis made from unleavened bread, herbs, and spices, and recorded by Gal. (Rem.Par. 3=14.546-548K). However, the recipe in Gp. (20.46.5) for γάρον with fish calls for the addition of ἐφημα, and it is more likely that Orib. had in mind the traditional sauce rather than one of the rather esoteric examples. Salt could also effect unexpected saccharic results, for Chrysipp.Stoic. (ap.Plu. Mor. 626e) said τάριχος, ἀν ἀλμη βρέχεται, γλυκύτερον γίνεσθαι (cf. Diph.Siph.ap.Ath. 3.121c, Opp.H. 1.118, Xenocr.ap.Orib. 2.58.67).

1.27 κολοκύνη ... τοὺς λαμβάνοντας: This is an almost exact transcription of Gal. (Alim.fac. 2.3.7=6.563-564K) on the subject of which see Orib. 1.35n.

ναυτιώθεις: Nausea arose through overeating (Plu.Mor. 127a, 442f), the presence of purulent matter in the body (Aret.CD 1.13.4=24A.327K, cf. Gal.Comp.Med. 8.3=13.156K), and the consumption of unpleasant things such as bay oil (Dsc. 1.40.2). Salty (Plu.Mor. 669a) and astringent (Gal. Comp.Med. 8.1=13.121-122K) substances could mitigate otherwise nauseous foodstuffs.

1.28 ήδιστον ... μύλλων: Orib. paraphrases Gal. (Alim.fac. 2.3.6=6.563K) for this sentence.

ἐν λοπάδι: B.A. Sparkes ('The Greek Kitchen', JHS 82 (1962), pp.130-131 and plate 6.5) describes the λοπάδι as
a casserole having a rounded but shallow body, offset lips, and handles to be grasped horizontally and rising to the level of the rim which was flanged to receive a lid. The spout, although in some cases vestigial and not wholly pierced through, provided a useful outlet for steam; however, as ancient cooks shook pots to mix the contents rather than stirring them (see Orib. 4.9.1n.), the larger opening in the lids of surviving λοπάδες are unlikely to have been designed to accept a stirring implement as Sparkes tentatively suggests. As here λοπάδες were used mainly in the cooking of fish (Plu. Mor. 182f, Pl. Com. ap. Ath. 1.5c, Euphro ap. Ath. 8.343b, Ar. V. 510, Arched. ap. Ath. 7.292e, Gal. Alim. fac. 3.29.12=6.725K), but sometimes other foods (Őροβάγγη, Dsc. 2.142; Ἐντος, Gal. Alim. fac. 1.19.5=6.531K).

μέλλων: LSJ (s.v.) suggest that this might be the Sciaena umbra L. which does occur in the Black Sea as Orib. says, and likes a rocky habitat (Opp. H. 1.128-130); being a Mediterranean fish there is no English name for it, but the French call it corvè, the Italians corvò, whilst the Turkish name is eqkina, and it is nowadays eaten fried (see A. Davidson, Mediterranean Seafood, 2nd edn., Harmondsworth 1981, p.98 and fig.). D' Arcy Thompson (A Glossary of Greek Fishes, London 1947, pp.161-162) states 'a difficult and uncertain fish', and proffers three tentative equivalents, namely the above one, and secondly Sciaena aquila L., also of the Sciaenidae but 200cm in length as opposed to the 75cm of the Sc. umbra, and making a noise in the water with its resonating air bladder; it too is tasty, having white boneless flesh. Both these identifications are
based on a scholion (ad Opp.H. 1.128-130) which equates μύλοι with μυλόκοπια and μυλοκόποι, μυλοκόπος being the modern Greek for Sc. aquila and umbra. The third suggestion is the grey mullet or Mugil cephalus L. (cf. Dorio ap.Ath. 3.118c). Daremberg (p.263) translates by 'ombrines' (Sciaena cirrosa L.), which although of the Sciaenidae is rarely found in the Black Sea. Of all these explanations the first seems preferable because what little ancient testimony there is fits (other citing occur in unhelpful lists of fish: e.g. Ar.ap.Ath. 3.118d, Mnesim.ap.Ath. 7.329d, Ephipp.ap.Ath. 7.322e, Hsch. s.v. μύλλον) and the noise of the Sc. aquila would surely have been commented on by someone in antiquity when such phenomena were held in great interest (cf. Arist.NA 536b16-25), while the suggestions of grey mullet and 'ombrines' are both putative and stand in need of more support. Poll. (6.48) implies that the fish was pickled, and Gal. remarks elsewhere (Alim.fac. 3.40.6=6.747K) on it being exported from the Black Sea (cf. Ael.NA 14.23 who says that μύλλοι lived in the Danube).

1.29 τάς γογγυλίδας ... ἔψηθεσα: This is one of the rare places where Orib. expresses himself mainly in his own words (cf. Orib. 1.43n., 1.60n.) rather than leaning heavily on the phraseology of his source, in this case Gal. (Alim.fac. 2.60=6.648-649K). The reason for the turnip requiring such thorough boiling was that it was difficult to cook (Gal. Simpl.Med. 6.3.12=11.861K), had an unpleasant pungency ('rapas coquete, ut exbromari possint', Apic. 6.3.2), and needed to be rid of its flatulent and indigestible nature (Diph. Siph.ap.Ath. 9.369f, Damocr.ap.Plin.Nat. 20.19, Cels. 2.26.1, Mnesith.Ath.ap.Gal.Alim.fac. 2.59.2=6.645K, Dsc. 2.110.
1, cf. Hp.Vict. 2.54=6.56OL; on cooking to remove strong qualities see Gal.Alim.fac. 2.62.2=6.651K). Turnip roots were pickled in vinegar, or vinegar and brine, sometimes with the addition of mustard or honey (Gal.Alim.fac. 2.39.3=6.623K, 2.56=6.641K, Var.R. 1.59.3, Nic.ap.Ath. 4.133d-e, Hsch. s.v. ἀλμάδες, Apic. 1.12.8), and although regarded as a humble food for the poor (Alex.ap.Ath. 2.55a, Megacles ap.Ath. 10.419a, Col. 2.10.22) nevertheless feature in recipes on their own and with meat or fowl (Euphro ap.Ath. 1.7d-e, Apic. 3.13.1-2, 6.2.3, Anthim. 52, cf. Petr. 66.7, Alex.Trall. 7.1=2.249 Puschmann). Occasionally turnip leaves were eaten, either during famine (Gal.Alim. fac. 2.39.1=6.622K) or because of religious scruples (Jul. Or. 5.175 d-176a; the sacred law of the Eleusinian Mysteries of Demeter and Persephone frowned on the eating of fruits that grew downwards in the earth since the earth was the last and lowest of things). The aphrodisiac powers of turnips were noted (Gal.Simpl.Med. 6.3.12=11.861K, Dsc. 2.110.1, Diocl. and Dionys.Stoic.ap.Plin. 20.19).

his information here from Gal. (Alim. fac. 2.61.1=6.649–650K). The ἄρον is usually identified with cuckoo-pint (Arum italicum L.) whose native habitat is Italy (Arum maculatum L., a plant of the same family, grows in Britain), and the ancient descriptions agree with this interpretation (see M. Grieve, A Modern Herbal, Harmonsworth 1976, pp.236–239 and plate 32): its leaves resemble sorrel, and it has a long fleshy stem called the spadix, which is prolonged into a purple (ὑποπόρφυρον, cf. Ps. Dsc. 2.167 where there is recorded the alternative name of ΦΟΥΝΙΚΕΟΥ, presumably on the basis of colour) club-like extremity (ὑπεροειδή), and on this are borne light yellow flowers (Thphr. HP 1.6.7–8, Plin. Nat. 19.96, Dsc. 2.167). The cuckoo-pint possesses large tuberous roots, oblong in shape, approximately the size of a pigeon’s egg, brownish externally, white within (δυζα λευκη, Dsc. 2.167), and when fresh fleshy, yielding a milky juice, almost insipid to the taste at first, but soon producing a burning and prickling sensation (cf. Gal. Bon. Mal. Suc. 4. 14=6.770K, 8.10=6.794K, Orib. Syn. 4.2.4). Its purgative, heating, and mucus-ridding properties were recognised in antiquity (Gal. Simpl. Med. 6.1.61=11.839K, Plin. Nat. 24. 143, cf. Pelagon. Vet. 6.71). The root was eaten after boiling in water with mustard or with ὑποτριμματα (see Orib. 4.2.14n.) or with olive-oil, vinegar and garum (Gal. Alim. fac. 2.61.2=6.650K).

παρ’ ἡμῖν: In other words in the countryside around Pergamum, Galen’s home and birthplace.

1.32 καὶ τὴν τοῦ ὄραντιου δὲ διζαν ... διότι...: This statement is derived from Gal. (Alim. fac. 2.62.1=6.651K).
δρακοντίου is customarily identified with edder-wort
(Dracunculus vulgaris L., or 'serpentaire', A. Carnoy,
Dictionnaire étymologique des noms grecs de plantes, Lou-
vain 1959, p.112), a variety of cuckoo-pint (cf. Cael.Aur.
371d, Gal.Succed.=19.728K ἀντὶ δρακοντίου, ἄροι) with a
harsher flavour (Gal.Alim.fac. 2.61.1=6.649K) growing in
shaded places and deriving its name either because its
stem looked like a snake, or because it warded off snakes
24.150, Ps.Apul.herb. 14.1 and Mss illustrations of the
plant facing p.46 of CML 4, ed. E. Howald and H.E. Sigerist,
Leipzig 1927). Edder-wort had a pleasant smell (Marc.med.
20.115) and a bitter and purgative juice (Gal.Bon.Mal.Suc.
4.14=6.770K, SimpI.Med. 6.1.61=11.839K, 6.4.9=11.864K,
Alim.fac. 2.63.2=6.652K, Alex.Trall. 9.1=2.397 Puschmann),
and whilst Thphr. (HP 7.12.2) disapproved of its use as a
food, Dsc. (2.166.4) mentions that the inhabitants of the
Baleares islands mixed the boiled root with honey to serve
at meals instead of cakes. The root was otherwise eaten
in the same way as turnips (Gal.Alim.fac. 2.61.1=6.649K,
see Orib. 4.1.29n.).

τὴν δὲ τοῦ ἀσφοδέλου ... Θερμοὺς: This comes from Gal.
(Alim.fac. 2.63.1-2=6.651-652K). There are three important
varieties of asphodel distinguished by modern scientific
botany, namely asphodelus fistulosus, asph. albus, and asph.
microcarpus, but it is difficult, and often impossible, to
determine with the meagre information supplied in ancient
texts which of the three varieties is being referred to in
any particular case. The plant grows 1-3ft in height (cf.
'caulem eius cubitalem et saepe duum cubitorum', Plin.Nat.
21.109), have radical, long, numerous leaves (cf. Thphr. HP 7.13.2), and are easily grown from seeds (cf. Thphr. HP 7.13.4). The word has passed into modern language: e.g. French asphodèle, German affodill, Spanish asfodelo. Ps. Apul. (herb. 32.2, also Larg. 254 'astulae regiae, quam asphodelon Graeci dicunt') mentions that an alternative name was hastula regia, and this has survived in popular nomenclature as Royal Staff or, more closely, King's Spear (see J.-M Verpoorten, 'Les noms grecs et Latin de l' asphodèle', AC 31 (1962), pp. 111-129). According to M. Grieve (A Modern Herbal, Harmondsworth 1976, p. 72), the roots when dried and boiled in water yield a mucilaginous matter that in some countries today is mixed with grain or potato to make asphodel bread (cf. Plin. Nat. 22.67). The root (fleshy and acorn shaped, Thphr. HP 7.9.4) was, as Orib says, eaten: Plin. (Nat. 21.108) recommended it baked in ashes, then seasoned with salt, olive-oil, and mashed figs. However, Orib. ignores how to prepare lupines in his description of them (1.21 and n.), so it is careless of him to remark that asphodel was prepared in the same way (cf. 1.17.1n., but see 4.1.33n.). Gal. (Alim. fac. 2.63.2=6.652K) decided that asphodel was food fit merely for famished rustics (it grows wild, cf. P. Levi, The Hill of Kronos, London 1980, p. 83 on asphodel growing around the temple at Bassai) because of its discutient and attenuating power which could be dulled only after several boilings. The medicinal quality was put to use in curing alopecia (Gal. Simpl. Med. 6.1.71=11.842K), for jaundice (Hp. Morb. 2.38=7.54L, Orib. Syn. 4.23.5) and for an inflamed spleen (Hp. Int. 30=7.246L).

1.33 ἐπιείκεΐν δὲ τὰ τολμάτα ... ἔψης: Although he omits in his
description of lupines an account of how to prepare them
(see Orib. 4.1.32n.), Orib. now proceeds to close this gap
with this detailed disquisition, taken however from Gal.'s
chapter on cabbages (Alim.fac. 2.4.2-3=6.631-632K). The
choice of source from which to extract is perhaps not as
strange as it at first sight appears, for the culinary de-
tails given by Gal. on lupines are perfunctory whilst those
on cabbages are more than full.

έτέρω θερμῷ: The omission of the noun is common in medi-
ap.Orib. 2.58.119, Dieuch.ap.Orib. 4.8.8, Seren. 540).

1.34 τοὺς κοχλίας ... χρησαί: For this section Orib. para-
phrases Gal. (Alim.fac. 3.2.2=6.669K), leaving aside the
delightful opening sentence of Gal.'s chapter (Alim.fac.
3.2.1=6.668K): οὔτι μὲν οὖν οὔτ' ἐν τοῖς πτηνοῖς ... τοῦτο
tὸ ᾠῶν, ἀντικρύος ῆλον: Snails had thick juices (Gal.
114-115K) and hard flesh that was difficult to digest (Gal.
Hp.Vic.t.comm. 4.26=15.413K, Alim.fac. 3.2.1=6.668K), but
comm. 2.18=17B.484K). After a careful and thorough boil-
ing they became laxative (Cato Agr. 158.1-2, Cels. 2.29.2,
Aret.CA 2.5.5=24A.273K). A simple food (Polioch.ap.Ath. 2.
60b-c, Epich.ap.Ath. 3.85d, Plin.Ep. 1.15.2), often eaten
as a starter or as an accompaniment to wine (Mart. 15.53,
Hor.S. 2.4.58-59, Petr. 70.7; cf. N. Luard, Andalucia: A
Portrait of Southern Spain, London 1984, p.166: 'Snails
are a summer crop. They come in two varieties, large
and small which, eaten in their own clear soup accompanied
by a tankard of beer, are the traditional preparation for
a long night at a town's feria'), they were fried or
roasted with olive-oil, oenogarum, salt, pepper, asafoetida, and cumin (Apic. 7.18.1-4) or, as here, boiled (Seren. 315-317). The best snails came from Sardinia, Libya, Astypalaea, Sicily (cf. Achae.ap.Ath. 2.63b) and Chios (Dsc. 2.9.1), and could be eaten fresh or pickled (Plin. Nat. 30.45). Snails were also bred and fattened in uituaria, an innovation attributed to Fuluius Lippinus sometime before 49 B.C. (Plin. Nat. 9.173-174, Var.R. 3.3.3, 3.14, Macr. sat. 3.13.15).

γάρον: Gp. (20.46) contains four recipes for this sauce, the most complex involving leaving gish entrails mixed with salt sealed in a jar outside in the sun for several months, after which the liquid which had formed from the putrefying fish was drawn off. Another method, perhaps adapted for domestic use, involved boiling fish in brine with a little oregano and wine until the sauce had reduced, at which point it was strained and stored away ready for use. Plin. (Nat. 31.94) recommends mackerel (Scomber scombrus L.) for use in γάρον, and adds that Clazomenae, Pompeii, and Leptis were famous for their γάρον. It could also be made from meat (Dsc. 2.32) and fruit (see Orib. 4.1.26n.). There is considerable modern literature on this sauce: R. Sanquer and P. Galliou, 'Garum, sel et salaisons en Armorique gallo-romaine', Gallia 30 (1972), pp.199-223; C. Jardin, 'Garum et sauces de poisson de l'antiquité', RSL 27 (1961), pp.70-96; M. Ponsich and M. Tarradell, Garum et industries antiques de salaison dans la Méditerranée occidentale, Paris 1965; M. Rénard, 'A propos du "garum sociorum"', Latomus 29 (1970), pp.297-313; other works are listed in R.I. Curtis, The Production and Commerce of Fish Sauce in the Western Roman Empire,

1.35-40 πρὸς ταριχείαν ... τὰ σαρέξιτανα καλούμενα: Apart from a few minor omissions, such as a brief explanation of what was meant by 'excrementitious' meat (τὰς ἔχοντας ἐν γαυταίς ὑγρότητα παρεσπαρμένην φλεγματικῶτέραν: see Orib. 1.20.3n.), Orib. copies this section from Gal. (Alim. fac. 3.40.2-6=6.745-747K).


1.37 ἀπεριττοτι: This refers to 'simplicity' (cf. Plu. Galb. 3.2, Luc. Nigr. 26, Plu. Mor. 267f, Alex. Aphr. Fat. 36=2.208 Bruns, Philostr. VS 1.32.2) or in other words freedom from harmful admixtures or properties ('frei von Schädlichkeiten', Alex. Trall. 1.15=1.537 Puschmann, cf. Gal. Comp. Med. 2.21=13.552K). Such fish included turbot, wrasse, and parrot wrasse (Alex. Trall. 1.15=1.543 Puschmann).

τὸν ὄνισκον: A. C. Andrews ('The Codfishes of the Greeks and Romans', Journal of the Washington Academy of Sciences 39 (1949), pp. 14-15) identifies this fish with the common hake (Lat. asellus Cass. Fel. med. 28, Merluccius vulgaris Fleming), and this is given credence through Romance philology, the species being called asinel at Fiume, nassel-li at Genova, nasello at Acona, and nasell at Parma (but cf. E. de Saint-Denis, Le vocabulaire des animaux marins en latin classique, Paris 1947, pp. 10-11, 'En un mot, l'identification de l'asellus reste incertaine', and other suggestions include Gadus merluccius L. and Gadus tricirrhus L.). Common hake occupied a place midway between hard and soft fleshed fish (Xenocr. ap. Orib. 2.58.2, Gal. Bon. Mal. Suc. 3.1=6.762K) and was nourishing and easily passed (Xenocr. ap. Orib. 2.58.6). It was suitable for pickling (Euthyd. ap. Ath. 7.315f). Opp. (H. 1.102) relates how it loved to feed in shallow muddy water, but Gal. is quite adamant (Alim. fac. 3.29.4=6.721K) that only common hake
living in clean sea-water was good, turbid water causing the flesh of the fish to become oily and glutinous. It was a delicacy (Plin. Nat. 9.61, Petr. 24.7, cf. Ov. Hal. 133), the best specimens being caught off Pessinus in Galatia (Var. ap. Gal. 6.16.5), and features in an elaborate *patina ex lacte* (Apic. 4.2.13).


νορωχίνοι: Daremberg (p.266) translates by 'bolty' (Tilapia (Chromis) nilotica; see also J. Cotte, Poissons et animaux aquatiques au temps de Pline, Paris 1944, pp.54-56), an Egyptian fish, and certainly the bolti was often referred to as Νελατίος in antiquity (Xenocr. ap. Orib. 2. 58.9, Pay. 116.4-5, J.BJ 3.520, Plin. Nat. 5.51, 9.68, 32. 56, Str. 17.2.4; photograph of stone relief of a Tilapia nilotica from the tomb of Idut at Saqqara, c.2423 B.C. in W.J. Darby, P. Ghaliougui and L. Grivetti, Food: The Gift of Osiris, London 1977, vol.1, p.368, fig.7.29).

However, the term probably also stood for another sort of fish that was caught off Sparta (Ar. Eq. 1053) and Italy (Archestr. ap. Ath. 7.294a); D'Arcy Thompson (A Glossary of Greek Fishes, London 1947, pp.122-125) suggests the Heliastes chromis Gthr. or one of the family of Sciaenidae or the grey mullet (Mugil cephalus L.). It is possible that this mysterious other fish earned the appellation because of its similar appearance to the famous Nilotic, either in shape or in dark colouring (cf. Opp. H. 1.33 καὶ νορωχίνον ἐπώνυμον αἰθοπι χροί, Speus. ap. Ath.
Arist. perhaps is talking about it when he says it is a shoaling fish (HA 610b3-5) and spawns about harvest-time (HA 571a26-28) near the shore in tangled weedy spots (HA 543a30-b1). The Egyptian fish was pickled (Plin. Nat. 32.106, 127; on the Egyptian salt-fish industry see D.S. 1.52.5-6) and was considered an unsurpassed delicacy (Mart. 13.85) since it was sweet and fleshy (Ath. 7.309a). The other fish was also pickled after being netted in the Black Sea (Gal. Alim. fac. 3.30.5-6.729K, cf. Xenocr. ap. Orib. 2.58.151) and was held to be of small nourishment, easily passed, and of moderate flavour (Hices. ap. Ath. 7.308d). E. de Saint-Denis (Le vocabulaire des animaux marins en latin classique, Paris 1947, pp.27-29) grapples with this ichthyological problem and presents 'une solution très satisfaisante' for the second fish: 'une espèce petite, d' un brun châtain, que l' on pêche par milliers en Méditerranée, et qui porte encore à Naples le nom de guarracino, en Corse celui de corvolo; c' est le petit castagneau (Sparus chromis L.) de qualité inférieure ...'. N. Douglas (Siren Land, Harmondsworth 1983, p.103) unflatteringly describes this fish: 'The guarracino, for instance, is a pitch-black marine monstrosity, one to two inches long, a mere blot, with an Old Red Sandstone profile and insufferable manners, whose sole recommendation is that its name is derived from korakinos (korax = a raven; but who can live on Greek roots?)'.

This was the name given to young tunnies under a year old (Arist. HA 571a8-12, Sostr. ap. Ath. 7.303b, Plin. Nat. 9.47; see also T.H. Corcoran, The Roman Fishing Industry of the Late Republic and Early Empire, diss. North-
western University 1957, pp.56-58, J. Cotte, *Poissons et animaux aquatiques au temps de Pliné*, Paris 1944, p.84, D'Arcy Thompson, *A Glossary of Greek Fishes*, London 1947, pp.197-199) which lived in the sea where it neighboured rivers or lakes and there was a mix of fresh and salt water (Opp.H. 1.113-116). The best young tunnies were those from Pontus (Gal.*Alim.* fac. 3.30.5=6.728K, cf. Opp.H. 4.504-505, S.ap.Ath. 7.319b, Plin.*Nat.* 32.146, Arist.*HA* 543b1-3), and Ael. (*NA* 15.10) gives a graphic description of fishing for them. Gal. (*Bon.Mal.Suc.* 4.13=6.769K, *Alim.* fac. 3.30.4=6.728K) considered them to have less thick and viscous juices than other cetaceous creatures and thus to be more digestible, but medical opinion was divided for Hices. (ap.Ath. 3.116e) and Alex.Traill. (1.15=1.543 Puschmann, 11.1=2.473 Puschmann) regarded them as difficult to digest and full of thick bad juice. Juv. (7.119-120) mentions a jar of (presumably pickled) young tunnies as a nondescript food (cf. Col. 8.17.12 who recommends intestines of young tunnies as feed for farmed fish); Apic. (9.11) gives a recipe for a sauce with young tunnies consisting of pepper, lovage, cumin, onion, mint, rue, hazelnuts, dates, honey, vinegar, mustard, and olive-oil.

σάρδαι καὶ σαρδίναι: A.C. Andrews ('The "Sardinian Fish" of the Greek and Romans', *AJPh* 70 (1949), pp.171-185) propounds a convincing explanation of these fish. The names occur in close association in contexts that suggest that they are alternative names for the same fish, or refer to very similar fish; *Ed.DioeL.* (5.12) lists *sardae siue sardiniae, siue* probably meaning 'also called'. Xenocr. (ap. Orib. 2.58.142) describes the σάρδα as a large ocean πηλαμός which was excellent as a food when preserved. As the
πηλαμύς was the common tunny (*Thynnus vulgaris* Cuvier), Xenocr. must mean that σάρδα is the common tunny rather more than a year old. Diph. Siph. (ap. Ath. 3.120f) says that σάρδα was the same size as the κολίας, or coly mackerel (*Scomber colias* Gmelin), and the year-old tunny is about the same size as the adult coly mackerel. The σάρδα was pickled (Col. 8.17.12, Plin. Nat. 32.131, Gal. *Alim. fac.* 3.40.5=6.746K); in fact, elsewhere Gal. (*Alim. fac.* 3.30.5=6.728-729K) says that Sardinian τάριχος made from tunny was so famous that the product was generally called τάριχη σάρδα; the most superior salt fish had been called σάρδικη τάριχη, but by Gal.'s day were simply σάρδα (*Alim. fac.* 3.40.6=6.747K). One small group of modern names consists of a few scattered survivals of *sarda* as names for the tunny. However, the majority of modern descendants of the ancient names refer to the small fish of the herring type, especially the pilchard, but also the anchovy, shad, and sprat. The earliest indication of this shift from immature tunny in the direction of the pilchard is found in Epaenetus of the 1st c. B.C. (ap. Ath. 7. 328f), but it is not clearly visible until the post-classical period. The available evidence suggests that σάρδα and σαρδίνη began as terms for year-old tunny of prime quality shipped in preserved form from Sardinia, and then became alternative, secondary names for the fish themselves. Commencing with a limited transfer of application to small fish of the herring group, probably the pilchard, an application which later became predominant, there was a concurrent spread of both applications to similar fish. The term 'Sardinian' became a symbol of ex-
cellence, and by extension was applied to the preserved fish of other centres where the product was of similar type and quality. The shift in later authors of the term in the direction of the pilchard can be explained either by the broadening of the term, or by a decline in the standards maintained by the Sardinian tunny-pickling industry.

τὰ σαρδέτανα: This word does not appear in LSJ, even under the variant spellings σεξείτανα and ἕξείτανα. It was a superior type of κολίας (coly-mackerel), being more delicate (λεπτότερος) and sweeter in flavour (γλυκύτερος: Diph.Siph. ap.Ath. 3.121a). It derived its name according to Str. (3.4.2, cf. Plin.Nat. 32.146) from ἡ τῶν ἕξείτανῶν πόλις (Σεξείτανῶν Ptol.Geog. 2.4.7; ἕξείτανῶν, Mela 2.6), a city in Baetica near the Isles of Heracles opposite Nova Carthago, where it was salted (cf. vice-versa, Scombroaria, named after the scomber caught there, Str. 3.4.6; and also Orib. 4.1.37n. on σαρδαί and σαρδιναί). It is often mentioned together with κολίας (Arist.HA 598b27sq., Epich.ap.Ath. 7.313e, Ar.ap.Ath. 3.118d).

Xenocr. ap. Orib. 2.58.136).

αὶ τρίγλαι: τρίγλη and mullus (CGL 2.458.58) were basic names for two members of the family of Mullidae, the red or plain surmullet (Mullus barbatus L.) and the striped or common surmullet (Mullus surmuletus L.), the mullet proper or mugil being a drab fish held in no great esteem (A.C. Andrews, 'The Roman Craze for Surmullets', CW 42 (1949), pp.186-188 and E. de Saint-Denis, Le vocabulaire des animaux marins en latin classique, Paris 1947, pp.68-69). A gluttonous fish (Ael.NA 2.41) feeding on sand and whatever grew in the sand (Opp.H. 1.95-98) and caught in skeins by trawling (Plu-Mor. 977f), it was preferred by some gourmets caught near the shore by rocks (Sen.Nat. 3.18.4; Archestr.ap.Ath. 7.320a, 325e, cf. Alex.Trall. 9.2=2.403 Puschmann, Opp.H. 1.128-130), whilst other gourmets sought surmullets from the open sea (Plin.Nat. 9.65).

With their growth in popularity from the 1st c.B.C. they were farmed in ponds (Cic.Att. 2.1.7, Parad. 38, Plin.Nat. 9.64; but contrastingly Col. 8.17.7, 'neque enim si uelimus, ut in mari non nunquam conspeximus, in viuario multituidinem mullorum pascere queamus, cum sit mollissimum genus, et seruitutis indignantissimum'). During the early empire the price of surmullets rose to ludicrous heights (Sen.Ep. 95.42, Juv. 4.15, Mart. 10.31.3-4, Suet.Tib. 34.1) but by the late 4th c.A.D. this state of affairs had ended (Macr. sat. 3.16.9). Surmullets were sometimes killed by being pickled alive in garum at the table so that diners could observe their dying chromatic variations (Sen.Nat. 3.17.2, Plin.Nat. 9.66). Their red flesh (Aus. 20.117, cf. Plin. Nat. 37.187) was friable but not soft (Gal.Vict.Att. 8.60, Alim.fac. 3.28.3=6.719-720K) and afforded more nourish-
ment than most other fish (Philotim.ap.Gal.Alim.fac. 3. 30.1=6.727K, Gal.Alim.fac. 3.26.1=6.715K). The best surmullet had the flavour of oysters (Plin.Nat. 9.65) and were eaten grilled with a sauce (Apic. 10.1.11-12), baked (Alex.Trall. 9.2=2.407 Puschmann), in a patina with salt fish (Apic. 4.2.22), and, when salted themselves, seasoned with a sauce (ius in mullo taricho) of pepper, rue, onions, dates, mustard, sea-urchins and olive-oil (Apic. 9.12). On the surmullet see also J. Cotte, Poissons et animaux aquatiques au temps de Pline, Paris 1944, pp.98-101 and T.H. Corcoran, The Roman Fishing Industry of the Late Republic and Early Empire, diss. Northwestern University 1957, pp.41-48.


έχ τοῦ Πόντου: The Black Sea met the criteria set by medical opinion on having the best sorts of fish through having clean water that was supplied by numerous large rivers (Gal.Alim.fac. 3.34.6=6.711K). Fish from the Black Sea were well known (Pers. 5.134, Cratin.ap.Ath. 3.119b, Archestr.ap.Ath. 3.116f who however patriotically denounces it in favour of Sicilian salt fish).

1.41 ἐγκέφαλος πἀξ ... σχευαθείς: This sentence is lifted almost intact from a chapter on brains by Gal. (Alim.fac. 3.7.2=6.677K), who thought that brains had thick juices and were cold, difficult to digest, moist, and phlegmatic (Bon.Mal.Suc. 4.24=6.774K, Alim.fac. 3.7.1=6.676-677K, 3. 15.9=6.693K, Def.Med. 38=19.358K, cf. Vict.Att. 12.114,
Paul Aeg. 1.85.1, Orib. Syn. 4.2.4), hence the need for cutting and heating seasonings, a thought that is echoed by the 14th c. Milanese physician and astrologer Maino de' Maineri (L. Thorndike, 'A Mediaeval Sauce Book', Speculum 9 (1934), p.188): 'De piscibus autem sciendum est quod quanto sunt grossioris carnis et difficilioris digestionis et maioris superfluitatis et humoris nature tanto indigent saporibus calidioribus et acutioribus. Et hoc est verum non solum in piscibus verum etiam in carni-

vocibus'. Conversely Cael. Aur. (chron. 3.2.26) considered pig's brains to be quickly and easily digested. Brains from cows (Orib. Syn. 4.12.1), pigs (Aret. CA 1.10.9=24A.236K), kids (Cael. Aur. chron. 1.1.15) and birds (Gal. Alim. fac. 3.20.7=6.705K, Suet. Vit. 13.2) were all eaten (for recipes see Apic. 2.5.1, 4.2.1, 5.4.5, 8.6.11, 9.4.2) and were held to be strong and nourishing food (Hp. Vict. 2.49=6.552L, Cels. 2.18.8, Gal. Vict. Att. 12.114, Orib. Syn. 4.12.1). μετά τῶν τεμνόντων καὶ θερμαλνόντων: Among the heating foods were hemp seeds (Orib. 1.32 and n.), juniper berries (Orib. 1.46 and n.), rocket, pepper, and onions (Cels. 2.27, Orib. Syn. 4.31.3-6, Gal. ap. Orib. 3.31); among the cutting foods were hyssop, pennyroyal, savory, and leeks (Gal. Vict. Att. 12.115, Orib. Syn. 4.23.6, Gal. ap. Orib. 3.24).

1.42 τῶν λευκῶν ζωιῶν ... τὴν αὐτάρκῃ: This is a paraphrase of Gal. (3.29.13=6.725K) and as such does not help with the Mss reading. Daremberg (pp.267-268) deletes the first ζωιῶν to read τῶν λευκῶν καὶ ἄπλοθν ζωιῶν, but there is nothing wrong in following the Mss and preserving with Raeder (p.97) the repetition. Gal. specifies that there should be plenty of water (δεσατος δαψιλους) and sufficient
olive-oil, dill, and leeks. Halfway through boiling these things some salt was added, but not too much as to make the sauce taste like brine. This recipe was suitable for the digestion and for convalescents (Gal. *Alim.* fac. 32.9.14=6.725K), but variations using, for example, pepper, vinegar, or *garum* could be made for other states of health. Larg. (200) describes *album ius* (CGL 2.359.61 *albus, candidus*) as *pingue et salsum* which agrees with Gal.'s recipes. Apic.'s culinary recipes (e.g. 6.9.11, 7.6.4, 8.8.4) are, in general, far removed from the medicinal versions because of the number of ingredients involved. In contrast to white sauce there was green sauce made with fresh herbs (Apic. 6.5.4) and black sauce made either with blood (Poll. 6.57, *Suda* s.v. *ζωμός*) or with *σίραεον* (Gal.*Hippocr.*1 comm. 1.13=16.541K; see Orib. 4.1.21n. on *σίραεον*). White sauce was an ideal accompaniment to fish (Gal.*Vict.* *Att.* 8.64, *San.* *Tuend.* 4.10.17-18=6.298K), and thus this section should really follow straight on from sect.40, the interposition of sect.41 being another sign of Orib.'s carelessness in composition (see 1.13.1n.).

Οριβ. appears to regard the two sauces as the same, whilst Gal.'s instructions (*Alim.* fac. 3.29.13=6.725K) do not mention 'simple' sauce. Hor. (*S.* 2.4.63-69) contrasts *ius simplex* with *ius duplex*, the former being merely sweet olive-oil mixed with wine and brine. As with many ancient (and modern) recipes, the ingredients and methods of preparation were left to the individual to decide upon, despite that fact that there might be a common name for what turn out to be markedly different concoctions.
The easiest solution is to take ἱαλ as disjunctive rather than copulative (see Orib. 1.22.1n.).

In Apic. (8.1.5) τὸ ἱοῦμενα designates meat stock ("le jus de la viande", J. André, ad loc., Paris 1974, p.89).

1.43-45 τὸ ἰεὼν ... ἡμεῖς: This is a truncated version of Gal. (Alim.fac. 3.31.2-6=6.731-733K).

1.43 ἰπολύν τὸ ἱαλ ἰθανωμέν: As Gal. says here, whatever was without quality and was watery did not taste salty, briny, or sharp, nor did it have any smell (cf. Gal.Alim.fac. 1.1.40=6.475K, Loc.Aff. 3.9=8.176K).

1.44 εἴ δὲ θετερον ἢ τρίτον: Anything with pronounced and unwanted qualities was boiled two or more times so as to be rendered suitable to eat (cf. Gal.Alim.fac. 1.23.1=6.534K, 1.29.2=6.547K, 2.62.1=6.651K, Dsc. 2.105.1, Anthim. 67, Sim.Seth. s.v. πρόσον = p.88 Langkavel).

2.27 Πλιν. Nat. 20.217, Dsc. 3.63, Alex. Trall. 9.2=2.401 Puschmann), heating by others (Hp.Vict. 2.54=6.558L, Gal. Vict.Att. 3.14, Simpl.Med. 7.10.32=12.36K, Ps.Theod.Prisc. Simpl.Med. 36), and was used equally by doctors and cooks (Gal.Alim.fac. 2.51.4=6.638K): in a seasoning for olives (Cato Agr. 119), as a diuretic (Cels. 2.31), for indiges-
tion (Gal. Comp. Med. 8.4=13.167K), and as flavouring for meat as Ruf. says here (for boar, Apic. 8.1.3; in lamb-stew, 8.6.2-3; with sucking-pig, 8.7.11 etc.).

Άνήφω: This was a popular κρέασιν ἡδύσμα (in a sauce for roast meat, Apic. 7.5.4; with wild boar, 8.1.7; with hare 8.8.6), but perhaps not used as much as the other three condiments mentioned here. For the properties of dill see Orib. 4.1.13n..

κυμίνω: Cumin possessed heating and diuretic properties, and was dispellent of flatus (Gal. Simp. Med. 7.10.6=12.52K, Comp. Med. 1.6=12.460K, Ps. Theod. Prisc. Simp. Med. 43, Dsc. 3.59), besides attenuating the thickness of the humours (Gal. Comp. Med. 9.4=13.276K). It was used extensively in cooking (cf. Plin. Nat. 19.160): with sow's womb (Sopat. ap. Ath. 3.101c), with fish (Posidon. ap. Ath. 4.152a), in μύδα (Epaenet. ap. Ath. 14.662a), and with various types of meat (Apic. 7.4.1-2, 7.5.3, 7.6.12, 8.18).

πράσοις: Leeks imparted their onion-like savour to many meat dishes: in sausages, Apic. 2.5.3; in a sauce for meat slices, 7.6.12; with sucking-pig, 8.7.10; with hare, 8.8.13. Ruf. must mean when he says διαφέρει δὲ καὶ τοῖς μισ-γυμένοις ἡδύσμασιν that coriander, dill, cumin, and leeks differed as to their flavours and not their medicinal properties which appear very similar. On the properties of leeks see Orib. 4.1.18n..

2.3 ἐπίσημα: 'Les assaisonnements doivent se révéler très-peu au goût' (Daremberg, p.269). The Greek here seems somewhat strained, perhaps as a result of Orib.'s compression of Ruf.'s original text. It is not clear whether ἐπίσημα refers to the taste, smell, or power of the seasonings.
Elsewhere the adjective is qualified: e.g. οὕδεμίαν ἐπίσημον ... ποιότητα, Gal. *Alim.* fac. 1.1.40=6.475K; τάχος ἐπίσημον, Gal. *Alim.* fac. 1.23.3=6.536K; ἐπισημότερον δὲ τῶν ἄλλων ἀπὸ τοῦ σχήματος, Luc. *Nigr.* 24; ἀναδήματα οὐκ ἐπίσημα, Hdt. 1.51.5. That the foods thus flavoured were ἐπίσημα in the stomach argues for the word referring to power, but taste (as Daremberg) and smell are equally possible, and ἐπίσημα should therefore be taken in an all-embracing sense of 'pronounced', 'noticeable', 'marked'.

κάλλιστα δὲ τὰ ἄπτ᾽ ἄρχης μικρόντα: cf. οὐ μὴν ἄλλο γε τι χρὴ μεγάλειν, διὶ μὴ πράσσου βραχὺ τι καὶ ἄνηθου, καὶ ταῦτ᾽ εὐθὺς ἐν ἄρχῃ (Gal. *Alim.* fac. 1.9.3=6.502K). Whether this was a purely culinary criterion, the flavour of the seasonings blending in better when mixed into a dish at the outset, or whether this is a piece of medical advice, the properties of the seasonings conflicting with those of the rest of the dish unless cooked for the same period of time, is difficult to say. Perhaps it is the former, seeing as the rest of the chapter by Ruf. is concerned with food and not medicine.

οἱ ἄλες: Because salt was drying and absorbent of moisture it was used to preserve meats and other foods (Gal. *Simpl. Med.* 11.2.4=12.372-373K, 4.20=11.694K, *Alim.* fac. 3.40.3=6.745K, Ph. *Mund.* 21.66, Dsc. 5.109.2, Plin. *Nat.* 31.98; see also Orib. 4.1.25n.). Here it is used to absorb the fat from the boiled meat. There were two sorts of salt: artificial, made by evaporating sea-water (see Orib. 1.7.2n.), and natural, which was quarried or scraped from the sides of salt lakes such as Cocanicus in Sicily (Plin. *Nat.* 31.73-81). The saltiest, whitest, and most agreeable sea-salt came from Tarentum (Plin. *Nat.* 31.85). Salt was puri-
fied by being dissolved in water, and the brine thus formed left in the sun until it solidified (Cato Agr. 88). For seasoning foods the best salt was one that dissolved easily and was moist, such as that from Attica and Euboeara, whilst for preserving meats a sharp, dry salt like Megarian was suitable (Plin. Nat. 31.87). A simple meal was bread with salt (Hor. S. 2.2.16, Plin. Nat. 31.89); bread that could be well digested was made with salt and yeast (Gal. Viot. Att. 6.32, Bon. Mal. Suc. 2.3=6.759K, cf. Orib. 1.8.1n.), and salt was used to season cakes (Gal. Alim. fac. 1.3.2=6.491K), brain (Gal. Alim. fac. 3.7.2=6.677K), and sea-food (Gal. Alim. fac. 3.32.4=6.735K). However, garum took the place of salt in a great many ancient recipes (Apic. passim, Orib. 4.1.26n., 4.1.34n.).

Εκτηνευν: This word means 'melting' or 'softening', Erot. (s.v. Εκτηνευν = p.38 Nachmanson) giving as synonyms Ευθηλυνσις and ἵππας. The word can refer to the wasting of veins which, together with flabbiness, caused old men to have catarrhs (Hp. Aer. 10=2.46L, Gal. Hp. Aph. comm. 3.12=17B.588K), or to the softening of a broken limb when denied exercise because of bandaging (Hp. Off. 12=3.312L, Art. 52=4.230L). Hp. (Prorrh. 2.8=9.26-28L) talks of it being impossible for those with gouty concretions on their joints or those living a lazy life and suffering from dry bowels to be healthy by any human art; only dysenteries and ἀλλαὶ Εκτηνευν flowing to the lower areas of the bowels could be of benefit.

Πυμελης: A soft, flowing fat which was not capable of solidifying, in contrast to στέαρ, a hard fat which congealed when cook. The area of soft fat on animals was located by Arist. (HA 520a8sq.) as being between the skin and
the flesh. Plump pigs because of the moist nature of their composition yielded large quantities of soft fat, while cows and goats produced more hard fat on account of their dryness (Gal. *Simp. Med.* 11.2=12.343Ksq.).

2.5 ἀλυσίν: Ath. Med. (ap. Orib. 1.3.2 and n.) agrees with Ruf. as to the best time for boiling goat's meat. Medical opinions on the eating of goats were divided, Hp. (*Vicr. 2.46=6.546L*) thinking goat's meat lighter than beef but heavier than lamb, and that it was easily excreted. Clitom. (ap. Ath. 9.402c-d) regarded it as nourishing and suitable for athletes since its juices were ἐδοτυγαλ and ἀλίσχρος, thus remaining in the bodily substance for a long time. Gal., however, held that the eating of goat's meat produced melancholic blood (*Loc. Aff.* 3.10=8.183K) and was unwholesome as regards a healthy state of the humours and the digestion (*Alim. Fac.* 3.1.7=6.663K, cf. Paul. Aeg. 1.84). Cooks prepared kids rather than goats (Apic. 8.6.1-11, cf. Juv. 11.66, Mart. 10.48.14, Var. ap. Gel. 6.16.5), and sometimes goat's heads were eaten (Alex. ap. Ath. 13.568d) as in the eastern Mediterranean today.

προβάτων: Again, doctors had variant ideas on sheep, but logically so, for as Gal. (*Bon. Mal. Suc.* 4.25=6.774K) explains, meat from older animals was hard, dry, and difficult to digest, whilst that from young animals was moist, tender, and easily digested. Thus lambs had moist and phlegmatic meat, and sheep were excrementitious and unwholesome (Gal. *Alim. Fac.* 3.1.7=6.663K, cf. *Bon. Mal. Suc.* 6.9=6.789K, Paul. Aeg. 1.84). It therefore seems strange that Ruf. should talk of προβάτων and not ἄρνων, for it was the latter that were usually eaten (Apic. 8.6.1-11, Tib. 2.5.38, Philox. ap. Ath. 4.147d, Eub. ap. Ath. 2.65c,
Plaut. *Aul.* 374; also J. André, *L' alimentation et la cuisine à Rome*, 2nd edn., Paris 1981, p. 139 'Le mouton est rarement cité...'); lamb was considered fairly nourishing, but less so than pork (Gal. *Hp. Epid.* 6 comm. 3.2=17B.12K). On the correct time to eat sheep see Orib. 1.3.3 and n..

2.6 οἱ μυελοὶ σῇπονται: According to Arist. (HA 521b4-5) marrow was one of the fluid parts (ἐν τῶν ὑγρῶν) in certain blooded animals, being bloodlike in young animals but becoming fatty or suety in older animals (cf. Plin. 11.214). Since, as Ruf. says here, it putrefied easily, Gal. (*Simpl. Med.* 11.1.3=12.332-333K) advised storing it with dried bay leaves in the winter, and in a cool, dry room in summer. Deer, then calf, marrow were thought to be best, having emollient and soothing powers (Gal. *Ad Glauc.* 2.5=11.104K, *Ad Pis.* 9=14.241K, *Simpl. Med.* 5.9=11.738K, Plin. *Nat.* 28.145). When fresh, bone marrow was more pleasant (ἡδονος), greasier (λυπαρότερος), and sweeter than brain; cooked well it was nourishing, but it was nauseating eaten in excess (Gal.*Alim. fac.* 3.8=6.677K). Gal. believed it a misnomer to call ἔωτιάίος marrow just because it was the same colour as genuine marrow (*Alim. fac.* 3.9=6.678K).

2.7 τὰ δὲ τῶν ἡμέρων: There was considerable difference between domesticated and wild animals, pigs, for instance, that roamed in the mountains having hotter and drier meat than their tame counterparts (Gal.*Simpl. Med.* 10.2.13=12.279K). 

Φάσον: This was the *palumbus* (*CGL* 2.470.23, Cass.*Fel.med.* 48) or 'ring-dove/woodpigeon' (*Columba palumbus* L., see D'Arcy Thompson, *A Glossary of Greek Birds*, Oxford 1936, pp. 300-302). Because woodpigeons had hard flesh (Gal.*Alim.*
It was best, as Ruf. says here, to hang them for a day until they became friable and easy to digest (Gal. *Vit. Att.* 8.71). The size of a cock and the colour of ash, they were regarded as one of the five varieties of pigeons (περιστερῶν, Ath. 9.393f-394b). They were constipating especially when cooked in vinegar (Cels. 2.30.1, Plin. *Nat.* 30.60) and hence were a remedy for dysentery (Plin. *Nat.* 30.58); this was perhaps a result of their dryness (Hp. *Vit.* 47=6.548L). They were a great delicacy (Ar. *Ach.* 1106, Hor. *S.* 2.8.91, Mart. 13.67.1, 2.37.6, cf. Petr. 70.2), and there are a number of recipes in Apic. for them (6.4.1-4). Woodpigeons were specially fattened for the table as early as the time of Cato (Agr. 90), who recommends a mixture of boiled broad beans (faba) and emmer wheat (far) as feed. Var. (R. 3.9.19-21) and Col. (8.7.1-8.8.2) provide more detailed instructions such as confining the birds in so small a space that they could not move, and a different diet of barley meal pellets or bread mixed with wine.

πέρδικα: Because it had hard meat and was therefore difficult to digest Gal., like Ruf., suggested hanging the partridge for a day before eating (*Vit. Att.* 8.71, cf. Apic. 6.3.2; on the partridge or Tetrao Perdix L. see D’Arcy Thompson, *A Glossary of Greek Birds*, Oxford 1936, pp.234-238 and S. Cramp and K. Simmons (eds.), *The Birds of the Western Palearctic*, Oxford 1980, vol.2, pp.486-496 and plate 55). Occupying a position between what is attenuating and fattening, partridge was among δυσμπτότατα τῶν ἐδεσμάτων (Gal. *Bon. Mal. Suc.* 3.1=6.762K) and those that lived in the hills had nothing glutinous about them, unlike birds fattened by rearers on a lot of moist foods (Gal.)
Partridge was reasonably dry (Hp. Vict. 2.47=6.548L), and hence the breast was, when boiled in clean water without any seasoning except for some coriander, ideal for fluxes from the bowels and dysentery (Anthim. 28). Partridge is not often mentioned for the table (Mart. 13.65, Poll. 6.52) and Apic. (6.3.2) offers only one plain recipe.

The peacock (D'Arcy Thompson, *A Glossary of Greek Birds*, Oxford 1936, pp. 277-281), with its hard (cf. Apic. 2.2.6) and fibrous flesh, was difficult to digest (Gal. Alim. fac. 3.18.4=6.701K) and thus Ruf. is correct to advise it to be eaten εἰς οὐσευοῦ (cf. Gal. Vict. Att. 8.71 and Anthim. 24, who suggests hanging for five or six days in the case of old peacocks, and one or two days in the case of young birds until caprientur bene: see J. Svennung, 'Capriare in Anthimi De observatione ciborum', Eranos 32 (1934), pp. 38-40). Although bred on farms both for profit and pleasure (Var. R. 3.6.1-5), their possession even at the time of Col. (8.11.3) was a rara conditio (but contrarily Antiph. ap. Ath. 14.654e, probably however jokingly). They were prized for their beauty, which could alleviate the loneliness of country life (Col. 8.11.1, cf. Antiph. ap. Ath. 14.655b, Arist. HA 488b24, Mart. 5.58.13, Luc. Dom. 19), and there seems to have been a genuine sense of sadness at their being served for dinners (Ael. NA 3.42, Mart. 13.70). The first person to kill a peacock for the table was the orator Hortensius at the inaugural banquet of his priesthood, and fattening was the innovation of M. Aufidius Lurco in 67 B.C. (Plin. Nat. 10.45, Macr. sat. 3.13.1). They were a luxury (Hor. S. 1.2.116, Juv. 1.139sq., cf. Petr. 33.4), and peacock ἵσίτια or rissoles took first place before
those made from pheasant, rabbit, chicken, and sucking-pig (Apic. 2.2.6).

ἀτταγήνα: Francolin (Tetrao francoolinus L., see D'Arcy Thompson, A Glossary of Greek Birds, Oxford 1936, pp.59-61 and S. Cramp and K. Simmons (eds.), The Birds of the Western Palearctic, Oxford 1980, vol.2, pp.479-483 and plate 54), once a rare bird from Ionia (Ov. Fast. 6.175, Hor. Epod. 5.54, cf. Var. ap. Gel. 6.16.5 Phrygia attagena) was, by the time of Plin., caught in Gaul, Spain, and the Alpine regions (Nat. 10.133), but on Crete only in the district of Cydonea (Nat. 8.228). A large bird (bigger than a partridge, Alex. Mynd. ap. Ath. 9.387f), it enjoyed marshy and muddy places (Sch. Ar. V. 257; also dust baths, Arist. HA 633a30sq.). Ruf. is unusual in advising it to be eaten σίγ ὄστερον. Francolins were more easily digested than many other birds (Gal. Alim. fac. 3.18.2=6.700K, Cael. Aur. acut. 2.37.209) since they occupied a position between what is attenuating and what is fattening (Gal. Bon. Mal. Suc. 3.1=6.762K, Aff. Ren. 6=19.685K), especially those that lived in the hills (Gal. San. Tuend. 6.11.6=6.435K). They were a suitable food to be given to those with stomach disorders (Gal. Comp. Med. 8.4=13.173K, Marc. med. 20.26), and won considerable praise at the table (Apic. 6.3.3, Mart. 13.51, Ar. Ach. 873sq., Ar. ap. Ath. 9.387f, Phoenicid. ap. Ath. 14.652e; see also A. Micha-Lampakis, Ἡ διατροφή τῶν ὁρχαίων Ἑλληνῶν, Athens 1984, p.159).

τρυγόνα: One of the five varieties of pigeons (τῶν περιστεροειδῶν, Arist. HA 544b1-7), the turtle-dove (turtur, CGL 2.460.38; Turtur communis Selby, D'Arcy Thompson, A Glossary of Greek Birds, Oxford 1936, pp.290-292 and J. Harting, Handbook of British Birds, London 1891, p.127 and plate 18,
fig.8) migrated in winter (Arist. HA 597b3-5, Var. R. 3.5, 7, Plin. Nat. 10.73). Unlike Ruf., Gal. (Vict. Att. 8.70, cf. Alim. fac. 3.18.2=6.700K) thought it necessary to hang turtle-doves for at least a day because they had hard meat, but since this meat was dry (cf. Hp. Vict. 47=6.548L) it was possible to eat them without risk of painful indigestion, especially those from the mountains. In contrast Anthim. (25) believed that fattened turtle-doves had wretched meat and engendered melancholy bile, whilst those in the wild had a craving to eat hellebore which made them akin to poison. However, Anthim. is alone with his dire warnings, and Col. (8.9.1-4, cf. Var. R. 3.8.1-3, Pall. 1.25) details the methods for rearing these birds for the market on millet or pellets of wine-soaked bread. Hp. (Int. 41=7.266-268L) prescribes lentils, beets, and turtle-doves in a diet to counteract 'typhus' (when corrupting black bile mixed with the blood in the veins to cause sharp pains and lameness). Turtle-doves were a delicacy (Plaut. Mos. 44, Bac. 68, Mart. 3.60.7, 13.53, Juv. 6.39).

περιστεραν: A generic word (cf. Arist. HA 544b29sq.), but when used specifically as here it refers to the Domestic Pigeon (Columba livia, var. domestica, D'Arcy Thompson, A Glossary of Greek Birds, Oxford 1936, pp.238-247: Lat. columba, CGL 2.405.5). It was a faultless food (Gal. Bon. Mal. Suc. 3.1=6.762K) and easily digested (Gal. Alim. fac. 3.18.2=6.700K). Young pigeons were, especially when roasted, suitable for both healthy and sick people (Anthim. 29), and Theod. Prisc. (Log. 37) recommends iced water and baby pigeons snatched from their mothers as a remedy for cholera and diarrhoea. There are recipes for palumba and columba in Apic. (6.4.1-4). Modern Mediterranean tastes coincide
with Ruf.'s advice here: 'On the whole, the Spaniards like to eat their game well-hung in spite of the generally higher temperatures. The exceptions are rabbit, quail, and pigeons which should be eaten on the day after they are killed' (A. MacMhiadhachain, Spanish Regional Cookery, Harmondsworth 1976, p.158).

κίλλαν: A generic term for turdus (CGL 2.349.60) or 'thrush', including such varieties as λυγε, ξοθορως, and τριχάς (Arist. HA 617a18-22, D' Arcy Thompson, A Glossary of Greek Birds, Oxford 1936, pp.148-150). They were easily digested, but of hard meat (Gal. Alim. fac. 3.18.2-3=6.700K), yet Ruf. seems to be orthodox in his advice for cooking them αύτίκα. Roasted with myrtle-berries they were a specific against dysentery (Plin. Nat. 30.58). The practice of fattening thrushes was introduced a little before the time of Cornelius Nepos (c.99-24 B.C.) according to Plin. (Nat. 10.60), and although Col. (8.10.1) complains about the labour and expense involved in rearing thrushes, he nevertheless (8.10.1-6, cf. Var. R. 3.5.1-6) gives precise instructions on where they should be housed, and their diet of dried figs, and wild olive and ivy berries. They afforded great pleasure as food (Pers. 6.22, Pall. 1.26.1) and were reckoned by some to be the tastiest of all the birds (Mart. 13.92, Hor. Ep. 1.15.39; see also J.O. Reta, 'Nil melius turdo': Gastronomía clásica y moderna, Helmantica 28 (1977), pp.403-416). They were served roasted (Pherecr. ap. Ath. 6.269b, Telecl. ap. Ath. 6.268c, Hor. S. 1.5.72), boiled (Pherecr. ap. Ath. 6.629e), with asparagus (Met. Pius ap. Macr. sat. 3.13.12), with peas (Apic. 5.3.2), and as an ingredient in a stuffing for sucking-pig (Apic. 8.7.15; see also A. Micha-Lampakis, Η διατροφή τῶν ἄρχαιων
2.8 δια δε δει μὲν έωλιζειν: έωλα were the remains of food left over from the day before (Suda s.v. έωλα, Hsch. s.v. έωλον, Poll. 1.65, Axio nic.ap.Ath. 6.240b, 3.95c, cf. Hp. Aff. 52=6.260L δ ἄρτος ... πρόσφατος η έωλος), and hence the adjective could be used to describe thoughts or crimes that had gone stale (Porph. Abst. 1.3.1, D. 21.112). Meat that was fibrous and hard, such as that of cranes (Gal. Alim. fac. 3.19.2=6.703K), turtle-doves, partridges (Gal. Vict. Att. 8.70 and peacocks (Anthim. 24), was hung up to mature in order to tenderise it. Meats treated in this way were called σαχνά (Gal. Hp. Prorrh. comm. 3.118=16.760K).

τὸ δὲ εὐγενής: Vinegar was held to be sharp (Gal. SimpL. Med. 1. 25=11.424K, 4.3=11.631K), cooling (Gal. Hp. Acut. comm. 3.35= 15.694K, SimpL. Med. 1.19=11.413K, Hp. Vict. 2.56=6.564L, Plu. Mor. 652f, Plin. Nat. 23.54), but with a trace of heat (Gal. SimpL. Med. 8.15.10=12.90K, 1.21=11.417K), astringent (Dsc. 5.13.1) and of a dispellent power (τῆς ἀποκρουστικῆς δινάμεως, Gal. Meth. Med. 11.18=10.799K). Its use as a tenderiser can be paralleled by Ruf.’s use of fig sap (ap. Orib. 4.2.13 and n.). Vinegar was made not only from wine (Gp. 8.33), but also from sorb apples (Pall. 2.15.5), pears (Pall. 3.25.11), figs (Plin. Nat. 14.102), and peaches (Gp. 8.34.1). It was employed extensively in cooking, with gourds (Diph. Siph. ap. Ath. 2.59b), bulbs (Philem. ap. Ath. 2.64e), paunch (Lync. ap. Ath. 3.100f), and in the preparation of curds (Gp. 18.21). Plin. (Nat. 23.57) states that no other condiment served so well to season food or to heighten a flavour.
κλόους can be used to refer to earth that has been dug over (Œp. 3.3.10), to roe (Arist. HA 510b26), and to the fruit of the wild mulberry (Phan. Hist. ap. Ath. 2.51e). Bread made from millet, because it lacked any oiliness, was brittle (κραύγος) and κλόους (Gal. Alim. fac. 1.15.1=6.532K, cf. 1.18.1=6.525K). Gal. (Alim. fac. 3.16.4=6.698K) contrasts κλόους cheese with cheese that is κολλώδης, the difference perhaps between the crumbliness of Wensleydale or Caerphilly and the sticky smoothness of Brie or Lymeswold. The vinegar here is added to make otherwise tough meat tender and easily broken up, so that it becomes like the flesh of red mullet which is accurately described as hard but κλόους by Gal. (Vīct. Att. 8.59).

2.9 τὰς δ᾽ ἀλεκτορίδας: Gal. (Bon. Mal. Suc. 3.1=6.762K) places chicken among the ἄμεμπτοτατά ἐς τῶν ἐδεσμάτων, that is food which occupies a position between what is attenuating and what is fattening. The wings of the young birds were particularly nourishing (Gal. Alim. fac. 3.20.1=6.703K), although the meat as a whole was easily digested (Gal. Alim. fac. 3.18.2=6.700K) and drying (Hp. Vīct. 2.47=6.548L, Int. 22=7.222L), whilst the broth (ζωμός) was on the other hand laxative (Gal. Simpl. Med. 11.1.38=12.361K, 3.15=11.576K, cf. Ad Pis. 4=14.226K). Col. (8.7.1sq.) describes how chickens were fattened: the birds were hung in baskets and confined in so close a space that they could not turn round. They were fed on barley-meal kneaded into pellets with water or sometimes with a mixture of wine and water. Occasionally the birds were let out of their baskets to peck any insects that were biting them. Chickens were boiled (Aret. CA 1. 10.9=24A.236K), and were considered good in a sauce or
roasted carefully a little way from the fire (Anthim. 23). Apic. gives numerous recipes involving chicken, for instance pieces of chicken in a pease mould (5.3.2), roast chicken with various sauces (7.9.1-15), and chicken wings in a vegetable stew (4.5.2).

καὶ γίνομεν: This is a problematic sentence and the solution offered here is by no means final. Ruf. appears to be talking about domestic chickens and wild chickens, and how to ensure that they are tasty and wholesome. The two previous translations offer the following renditions: 'Quant aux poules, il faut les fatiguer en les poursuivant, et de plus verser dessus du vinaigre quand on les a tuées' (Daremberg, p.271) and 'Gallinas vero asservare possimus infuso aceto, quandoquidem ita perdurant' (Rasario, p.250). Daremberg's translation seems to convey better than Rasario's what Ruf. is trying to say, for although vinegar was used as a preservative (see Orib. 4.1. 25n), γίνομεν cannot be taken to mean 'asservare'. However, the idea of tiring ('il faut les fatiguer') is not contained in the Greek whose tortuosity is due no doubt to Orib.'s excerpting (see Orib. 1.13.1n.). On the other hand γίνομεν surely means 'chase', and the suggestion that it means 'seek after' or 'procure' seems lame considering that chickens were not rare creatures in the ancient world (J. André, L' alimentation et la cuisine à Rome, 2nd edn., Paris 1981, p.127-129). Chasing would have the effect of producing lactic acid which supposedly gives meat a superior flavour, and certainly Cels. (2.26.2) mentions that the least flatulence came from whatever was got by hunting and birding, and Gal. (Vicit.Att. 8.69) suggests mountain-
There is a mosaic in the villa at Piazza Armerina which depicts hunters about to eat what looks like a chicken (R.J.A. Wilson, *Piazza Armerina*, London 1983, p.25, fig.11: 'Mosaic of the Small Hunt' (Room 23)).
roaming chickens in an an attenuating diet. Chickens were also considered best when eaten freshly slaughtered (Aret. CD 1.2.16=24A.300K) which underlines Ruf.'s comment about eating τζ τζν ἄγριθν immediately after the hunt. Birds were sometimes cooked in vinegar (Apic. 6.9.3, Theod.Prisc. log. 101, Ps.Plin.med. 2.6), and the general toughness of most 'free range' chickens would necessitate some sort of marinating (see L. van der Post, First Catch Your Eland: A Taste of Africa, London 1977, pp.51-52: 'Even the chicken, the favourite delicacy of the West African table, is rarely tender enough for roasting or grilling straight away but has to be marinated not for flavour so much as to make it tender enough for real enjoyment'.).

2.10 χαλάζας: The pimplles of tubercles Orib. is here referring to are the cysticercus-cysts of the tape worm which are to be detected chiefly on, or rather under, the tongue as Orib. says. Arist. (HA 603b16-26) adds a few more details: the pimplles appeared about the legs, neck, and shoulders, and if few in number the flesh was comparitively sweet, whilst if they were numerous they became watery and flaccid. Not only was an inspection of the tongue revealing, but also the animal was unable to keep its hind feet at rest, again as Orib. describes. Cooks were attentive in these matters (Ar.Eq. 375-381 and Sch.). When undercooked meat is eaten the cyst is digested and viable parasites (Trichina (Trichinella) spiralis) mature, reproduce, and deposit larvae in the intestinal mucosa; however, the morbied effects of trichinosis were not recognised until comparatively moder times, and thus ancient doctors quite readily prescribed the eating of infested meat (see W.J.

Τὸσίν: Pork was productive of the best blood, contained good juices, and strengthened the body, so that it was used by athletes (Gal. *Alim. fac.* 3.1.1=6.660K, *Hp.Vict.* 2.46=6.546L, cf. Eub. ap. Ath. 2.63d-e). Certainly Gal. thought (*Alim. fac.* 3.1.6=6.663K) that moister pork as from sucking-pigs provided less nourishment since it passed through the body more quickly; but the unpleasantness (Ἄηο-εστέραν) which Ruf. associates with pork being ὑγροτέραν must come solely from the pimplés. Pork was also held to be fatty (πιμελώδης, Gal. *Simpl. Med.* 2.20=11.514K, Ath. 9. 402d) and glutinous (γλύσχρος), and thus Gal. advises old people against eating too much of it as it caused stoppages (ἐμφοράξεις). It was used frequently in cooking (Apic. 5.3. 1, 7.7.1, 8.7.1-17, Alex. ap. Ath. 14.655f, *Ov. Met.* 8.648, Petr. 49.9). On the varieties of pig in the ancient world see Fr. Poplin, 'Origine du porc' in *Le porc domestique, Ethnozootecnie* 16, Paris 1976, pp. 6-13.

2.11 κηροῦ ... βραχύ: What result adding wax to the pork was supposed to have on the pimples no other writer seems to mention, unless the wax's promotion of the digestion (Gal. *Simpl. Med.* 7.10.23=12.25K, Paul. Aeg. s.v. κηρός) combatted their ill effect, or its sweetness (Theoc. 1.27, *Hom. Od.* 12.48, cf. Dsc. 2.83.1) disguised their taste. Bees waxes were named after their place of origin (e.g. 'Pontic', Larg. 86; 'Cyprian', *Plin. Nat.* 22.42; 'Etruscan', Dsc. 1.70.3). On wax in general see R. Büll and E. Moser, 'Wachs', *RE* 13 (1973), cols. 1385sq..

2.12 τοῦ ἱερείου: This word was applied at an early date to animals killed for food rather than for sacrifice (*Hp. Aff.*)
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52=6.262L, X.Cyr. 1.4.17, 2.2.2, An. 4.4.9), and Gal.
(Meth. Med. 7.6=10.489K) and Mnesith. Ath. (ap. Orib. 2.
68.9) use both ἵππελον and θῶ as butcher's terms. G.
Bertiaume (Les rôles du mágeiroi, Leiden 1982, pp. 73–74)
gives an explanation for this: 'Outre ces mágeiroi cuisin-
nant dans le cadre de sacrifices, on retrouve à compter du
IVème siècle, moment où le luxe privé se développpa, des
cuisiniers affectés à la préparation des repas dans les
οἶκοι ... ils appliquaient leur art à des chairs achetées
au marché, ou gardées en réserve à la suite de sacrifices
... .'

2.13 νίτρον: This was sodium-carbonate or cooking-soda. A pure
soda called Chalestricum was found at Clitae in Macedonia
(Plin. Nat. 31.107), whilst an inferior soda was made in
Egypt by evaporation in the same way as salt (Plin. Nat. 31.
109). The best soda was light (κοῦφος), crumbling (εὖθ-
ρυπτός), and either red or white in colour (Dsc. 5.113.1).
Soluble in water (Arist. Mete. 383b12, Sen. Nat. 3.20.2–3,
Ov. Met. 15.313–314) and bitter in taste (Gal. Simp. Med. 4.
4=11.632K), it was used as sometimes today in cooking to
make vegetables greener (Apic. 3.1, Plin. Nat. 19.143) and
in bread instead of salt (Plin. Nat. 31.115), but there do
not appear to be any references outside Ruf. to foods
being cooked quicker after the addition of cooking-soda.
oi δ' ὑπὸν σιλφίου: On silphium see Orib. 4.3.7n..

τῆς κράδης καὶ μᾶλλον τῶν ἑρυνεῶν: κράδη is a branch (Ar.
Pax. 627, Sch. Nic. Ther. 853 where the bud or κορύνη is de-
scribed as swelling on a κράδη), or in this case the young
twigs (cf. Hp. Ulo. 12=6.416L where the φλοιὸν χλωρὸν is
probably more appropriate to a shoot than a branch) of the
fig tree. The ὑπὸς (properly the juice tapped from a plant
as opposed to χυλός, the juice squeezed from fruit or vegetables) from the soft shoots of the wild fig was used medicinally (Dsc. 1.128.4). τῶν ἐρινεῶν refers to the juice of wild figs (εἰρινεῶς ἢ ἄγρια σωκῆ, Sch.Nic.Alex. 319; ἐρινεῶς ἢ ἄγρια σωκῆ, Thphr.HP 2.2.4), and the word is used as a noun as here (Gp. 6.2.9, Hom.Od. 12.103, Thphr. HP 1.8.2) or as an adjective qualifying σωκοῦν (Arist.HA 554a15, Eur.ap.Ath. 3.76a); a synonym was ὀλυνθός (ὀλυνθοῦς ἐρινεῦς, Hp.Mul. 2.113=8.244L, cf. Dsc. 1.128.5, Gp. 17.18). Wild figs were more efficacious than cultivated (Plin.Nat. 23.126) since the former have a stronger flavour, and strong tasting things were often thought to be more powerful than weaker tasting things (cf. Anthim. 90 on bitter almonds, and Lucr. 4.10sq. on disguising bitter medicines).

Dsc. (1.128.5) mentions that fig branches when boiled together with meat made the meat οὐκεπτός, and idea similar to that of Ruf., whilst Plu. (Mor. 697b) reports that the hot, bitter, incisive vapour given off by figs cured the flesh of birds by making it friable.

2.14 ὑποτρίμματα: A specific recipe for this sauce is given by Apic. (1.19) consisting of pepper, lovage, mint, pine-nuts, raisins, dates, cheese, honey, vinegar, garum, olive-oil, wine, and defrutum. However, here the word appears to be a general term for sauce (cf. Hp.Vict. 2.56=6.570L, Gal. Alim.fac. 2.61.2=6.650K, 2.40.3=6.626K) with the particular sauces listed afterwards. Sharp in flavour (ingredients included mustard and vinegar, Gal.Vict.Att. 11.85) they were popular with fish (Ar.Ec. 1169sq., Antiph.ap.Ath. 14. 662b, Hp.Aff. 43=6.252L).

μυττώτων: A number of ways of mixing this are mentioned, cheese (Ar.Eq. 771 and Sch., Hsch. s.v. μυττωτῶν, Sch.Ar.
Ach. 174) and garlic (Thphr. HP 7.4.11, Erot. s.v. μυττωτόν = p.59 Nachmanson, Anan. ap. Ath. 7.304b, cf. Moret. 87 and, ad loc., A. Perutelli, Pisa 1983, p.127) being the main ingredients, but sometimes with the addition of eggs (Hsch. s.v. μυττωτόν, Sch. Ar. Ach. 174) and leeks, olives, honey, and olive-oil (Dsc. 2.152.3, Sch. Ar. Eq. 771), or even mint and celery as Orib. states here. Although vinegar appears not to feature in lists of ingredients in other authors, the epithet δρυμός (Hp. Epid. 2.6.28=5.138L, Poll. 6.70, Aret. SA 2.9.3=24A.154K) applied to μυττωπόν suggests its occasional inclusion. This sauce was associated too with fish (Anan. ap. Ath. 7.282b).

μύδης: The different varieties of mint were held to be heating and promotive of the digestion (Gp. 12.33, Hp. Vict. 2.54=6.558L, Dsc. 3.34.1, Plin. Nat. 20.147). On mint see A.C. Andrews, 'The Mints of the Greeks and Romans and Their Condimentary Uses', Osiris 13 (1958), pp.127-149.


διαχωρέτις οὐς σκόρδον: Garlic was believed to act as a laxative (Cels. 2.29.1, Gal. Alim. fac. 2.44.3=6.632K, Ps. Garg. Mart. med. 18, Ps. Theod. Prisc. Simpl. Med. 15) and as a digestive (Gp. 12.30.5, cf. Alex. Trall. 7.8=2.303 Puschmann).

Σύμου: Thyme is mentioned only rarely as a condiment in
Greek sources (see A.C. Andrews, 'Thyme as a Condiment in the Graeco-Roman Era', Osiris 13 (1958), pp.150-156). ἡ τραγοριήδου: This is perhaps goats' marjoram (Thymus Teucrioides L.), a wild mountain herb (Nic.Alex. 310 and Sch.) which was similar in appearance to thyme (serpyllum, hence the alternative δύμον), and was used frequently in medicine being heating and discutient of things in the stomach, this being no doubt the reason why Ruf. recommends it in treating meat for γηρόδοτι (Plin.Nat. 20.176, Cels. 5. 11, Larg. 192, Gal.Simpł.Med. 8.15.13=12.91K; see also Orib. 1.35.2n.). There were several varieties, some with broad leaves, others with small, delicate flowers and thin leaves (Dsc. 3.30.1 and J. André ad Plin.Nat. 14.111, Paris 1958, p.133). Marinading in herbs was common practice in the ancient kitchen (e.g. Apic. 7.4.1).

2.16 προπαλαίον: The word only seems to appear here, the prefix προ- denoting intensity (see LSJ s.v. πρό, D.II.4). Even προπαλαίος is somewhat rare, being used to describe old wine (Philotim.ap.Orib. 5.33.1, Pοξύ. 2596.8, 2728. 19; but οἱ πάνω παλαίοι τῶν οίνων, Gal.Simpł.Med. 4.7=11. 646K), olive-oil (Aët. 15.14), and time (Tz.H. 11.173, Syn. Insomn. 6.2=132B, τοῖς προπαλαίοις χρόνιοις, Const.Porph. Adm.Imp. 50 = p.224 Bekker). As an adverb πρόπαλαι features in Phld. (D. 3.12.24), Plot. (2.3.9), and Alex.Aphr. (Fat. 16). On Ruf.'s preferred state for fish see Orib. 4.2.7n..

έξαράσειν: This means 'to beat', Hsch. (s.v. ἔξαρασάντες) giving as a synonym κρούειν (cf. Sch.Ar.Nub. 1373). Μαλάκτα, or cephalopod molluscs, among which are cuttle-fish, squid, and octopus (Gal.Alím.fac. 3.34.1=6.736K, cf. Arist.
Figs. 6 and 7: 'It is not necessary to leave fish to mature, except those which are very hard, nor to beat them, except when they are cephalopod molluscs', Orib. 4.2.16 (Chios: photographs by J. Davis).
HA 523b22sq.) require beating to tenderise their otherwise hard flesh (Alex. Trall. 7.1=2.251 Puschmann) for cooking (Pl. Com. ap. Ath. 1.5d, Ar. ap. Ath. 7.316b, Clearch. ap. Ath. 7.317b), an action used as a metaphor for physical assault in Roman comedy (e.g. Plaut. Rud. 559, 1010). R. Howe (Greek Cooking, London 1972, pp. 49-50) describes the present day practice of beating: 'Octopus, when it is good, has something of the flavour of lobster and can be much more tender. It all depends on the method of killing the creature, the usual way being a systematic slow beating against a rock or something equally hard and handy. I remember once, when staying in a small hotel along the coast just outside Athens, I heard every morning a slow thump, thump. Curious, I went down to the shore and saw men slapping grey masses of octopus against the flat rock. The octopus, I was told, dies hard and must be killed in this manner; the flesh can be very hard and it needs at least forty hearty slaps to make it tender. It is always the fisherman and not the housewife who does all this beating or slapping and it is usual to kill the octopus as soon as the boats land. By the time they reach the shops or market they are ready for cooking, although a little more hammering with a kitchen mallet does them no harm.'

έγκροβείν: On this method of cooking see Orib. 4.5.4n.

2.19 τὰ δοστρέα: Oysters were eaten both raw (Gal. Alim. fac. 3. 32.2=6.734K, Macr. sat. 3.13.12, cf. Sen. Ep. 78.23, and P.J. Parsons, 'The Oyster', ZPE 24 (1977), p.12 and F. Lasserre, 'L' élégie de l' huître', QUCC 19 (1975), p.149) and cooked (Mnesith. Ath. ap. Ath. 3.92b-c, Gal. Alim. fac. 3.33.2=6.736K). Apic.'s (9.6) recipe also involves sharp ingredients such as pepper and vinegar, perhaps because they were used as

πεπέρατο: There were three types of pepper known to the ancient world: long, black, and white. The fruit of the long pepper is a spike about 1\frac{1}{2} in long of closely packed seeds, tapering to a point, which is harvested unripe and dried in the sun. The fruit of the black pepper vine is an elongated cluster of berries, each berry consisting of a nearly globular drupe at first green, and when ripe becoming red. Beneath the red skin of the berry there is a thin pulpy layer which encloses the white seed. White pepper is the ripe seed of the black pepper stripped of the outer skin and dried (J.I. Miller, The Spice Trade of the Roman Empire 29B.C. to A.D.641, Oxford 1969, pp.80-83).

δισύμος: This was another term for δρτόδες (Gal. UP 14. 11=4.193K, cf. Dsc. 1.112.3). The testicles of cocks fed on grain were thought to be pleasant and nourishing (Gal. ap. Orib. 2.32.4, 2.34, Alex. Trall. Febr. 4=1.367 Puschmann) and were used in elaborate dishes as a delicacy (Apic. 4.
3.3), hence Ruf.'s statement that they were commended as ἐδώδιμοι no less than oysters. In medicine they were used for phthisicís (Theod.Prisc.Log. 61, cf. Alex.Trall. 5.5=2.193 Puschmann), and like oysters no doubt revived the appetites of convalescents. Testicles are a delicacy in the Mediterranean area today: 'The butchers may also have trays of strange-looking little yellow lumps which are unborn chickens' eggs to be put in stews, and bulls' testicles hanging in bunches of forlorn rubbery bags' (N. Luard, Andalucía: A Portrait of Southern Spain, London 1984, p.156); 'In Israel we had eaten chickens' testicles and bulls' testicles ...' (E. Newby, On the Shores of the Mediterranean, London 1985, p.429, cf. pp.376-377 on testicles displayed by butchers in the Souk of Talaa, Old Fez, Morocco).

2.20 τὸ κυδώνιον: The quince, named after its supposed place of origin Cydonia, a town in north-western Crete (Plin. Nat. 15.37), was listed as a variety of apple (see Orib. 1.50. ln. and 2.). Since they were astringent they were used for bowel problems such as dysentery (Larg. 111, 193, Cael. Aur.acut. 3.21.203, Gal.Simpl.Med. 1.39=11.452K, Anthim. 83). Cael.Aur. (chron. 4.3.70, cf. Alex.Trall. 5.5=2.193 Puschmann) recommends either boiled or baked quinces as Ruf. does here, while Dsc. (1.115.1) thought that baking quinces made them more pleasant.

οὐ πάνυ φθείρεται: 'Cydonia mala non admodum corrumpuntur, eaque ex melle sumenda sunt: eadem ex vino quoque detracto cortice coquentur, aut abiecto semine mel inditur' (Rasario, p.251). Ruf.'s phrase can be paralleled (δικαῖοποιοῦται γὰρ οἱ φλεγματώδεῖς χυμοί, Gal.San.Tuend. 6.10.13=6.428K), and Alex.Trall. (5.6=2.223 Puschmann) describes the food
from almonds, pistachios, raisins, and pine-nuts as δύσπεπτος ... καὶ ψαρτικὴ τροφῶν τῶν ἐν τῇ γαστρὶ διὰ τὸ ἐλαιῶδες αὐτῶν. Because honey checked corruption (Col. 12. 47.4; there were two ways of using the word φθορά, one being the process of corruption, the other the state of being corrupt, Gal. Marc. 1=7.666K and C.T. Theoharides, 'Galen on Marasmus', JHM 4 (1971), p.371) Apic. (1.12.3) suggests that quinces should be preserved in honey and defrutum, and this idea must be behind Ruf.'s recipe here. Raeder (p.99) signals a lacuna after δεῖ, but unnecessarily so since good sense can be read from the text as it stands: 'Le coing ne se corrompt pas de tout, et on le prend avec du miel cuit et un peu de vin ...' (Daremberg, p.274). Mnesith. Ath. (ap. Ath. 2.59c) held that quinces were easily affected by the action of heat, and this may have resulted in the protective covering of dough to seal in the goodness (for the same cooking operation cf. Dsc. 5.109.7).

σταλη: This dough was usually made from wheat as opposed to barley (Epich. ap. Ath. 3.110b, Arist. Pr. 927b21-23, cf. Poll. 7.21 where it is distinguished from μάζα). A similar recipe for quinces can be found in Anthim. (83) and for apples in Gal. (Alim. fac. 2.21.6=6.597K).

3. tit. Διοκλέους: Diocles, son of Archidamus of Carystus in Euboea, was one of the most important representatives of the Dogmatic 'school' of the 4th c.B.C., and he won such fame that the Athenians called him the second Hippocrates (Plin. Nat. 26.10, Gal. Introd. 4=14.683K). Gal. judged him in a favourable light (Hp. Pl. Plac. 9.5=5.751K) which must be the reason why Orib. excerpts him (cf. Orib. 1. 40. tit. n.). He wrote works on anatomy (Gal. Anat. Admin. 2.1=2.282K), on bodily health addressed to a certain


3.3 καθαίρεται δὲ πάντα: Prolonged (Orib. 4.1.29n.) or frequent (Orib. 4.1.33 and n.) boiling as well as soaking (Orib. 4.1.25n.) were standard cooking operations in the ancient world.

3.4 τὰ ἡδύσματα: A similar sentiment is expressed by the 14th
c. Milanese physician and astrologer Maino de' Maineri: 'Amplius propter huiusmodi saepores cibaria mala et corrupta ori efficiuntur delectabilia et ab hominibus commoduntur que ab eis non susciperentur' (L. Thorndike, 'A Mediaeval Sauce-Book', Speculum 9 (1934), p.186). Bad tastes were sometimes covered up with a sauce (Gal. Alim. fac. 3.30.3=6.728K), for with no refrigerators to prolong freshness meats would have deteriorated quickly, and smoking, pickling, and drying processes although effective leave a strong flavour of their own which would have had to be counteracted by heavy spicing and flavouring (see C. Driver and M. Berriedale-Johnson, Pepys at Table: Seventeenth Century Recipes for the Modern Cook, London 1984, p.23); nevertheless, the Romans seems to have enjoyed spicy food for its own sake leaving aside the question of putridity (see J. Edwards, The Roman Cookery of Apicius, Translated and Adapted for the Modern Kitchen, London 1984, pp.xx-xxii).

3.6 τυρός ἢ τμής: Doctors in antiquity divided cheeses into two classes, fresh and old. The latter was of bad juice (Cels. 2.21, Gal. Bon. Mal. Suc. 4.2=6.765K), checked the bowels (Hp. Vict. 2.51=6.554L, Cels. 2.30.2, Gal. Ad Pis. 4=14.226K, Simpl. Med. 3.14=11.575K), and was bad for the stomach (Plin. Nat. 28.131). All cheeses had thick juices, but fresh cheese less so (Gal. Bon. Mal. Suc. 4.9=6.767K), whilst every cheese caused flatulence (Cels. 2.26.2) and engendered kidney stones when eaten in excess (Gal. Hp. Epid. comm. 3.15=17B.47K). Thus Diocl. is orthodox in his statement about cheese. Gal. (Simpl. Med. 10.2.9=12.269K, Alim. fac. 3.16=6.696-699K) discusses the properties of cheeses in more detail, and his general view is that most
Cheeses were bad for the health, apart from δεσμαλακτίνος (see Orib. 1.13.2n.), made around Pergamum and eaten when fresh with hot bread (Gal. Alim. fac. 1.13.19 = 6.518K). Col. (7.8) and Gp. (18.9) describe how cheese was made, and how it was preserved either in sweet vinegar and oxymel (cf. Plin. Nat. 11.242) or in salt (cf. Moret. 98-99). Plin. (Nat. 11.240-241) records the most popular cheese available in his day. On dairy products and methods of making cheese see J. M. Frayn, Sheep-Rearing and the Wool Trade in Italy during the Roman Period, Liverpool 1984, pp.127-141.

αγρός: Cheeses were made not only from cows' milk but also from sheep's (Cato Agr. 76.2) and goats' milk (Hom. II. 11.639). Perhaps Diocl. advises using goats' cheese because goats' milk was medium in consistency (Gal. Simpl. Med. 10.2.7 = 12.265-266K), being neither too thin and serous like asses' milk, nor too thick like cows' milk.

ταμοσίνης: Besides using rennet the cheese was curdled with fig-juice, fig-leaves, and the heads of artichokes (Gp. 18.19.2). As A. S. F. Gow explains in his note on Theoc. (7.15-16, vol. 2, Cambridge 1952, p.136), the ancients did not use rennet extracted from the inner lining of the stomachs of sucking calves and other animals as modern dairies do, but rather the curdled milk from the stomach in which the enzyme would still be active (cf. Arist. HA 552b5-6). Rennet came from kids (Aret. CA 2.2.20 = 24A. 256K), asses (Hp. Mul. 2.192 = 8.372L), hares (Nic. Ther. 577) and goats (Plin. Nat. 11.239). Var. (R. 2.11.4) recommends using a piece of rennet the size of an olive to coagulate two congii (roughly 12 pints) of milk. N. Luard (Andalusia: A Portrait of Southern Spain, London 1984, p.161)
describes a traditional way of manufacturing cheese: '...
but our cheeses came from the valley itself. They were
made by José's aunt at his little family farm on the spur
below the house. She was famous for her cheeses along the
straits. They were made in spring from goats' milk from
the valley's flocks and coagulated from the stomach of a
new-born kid, killed after its first suckling. The little
dried bag of the stomach hung from a rafter in the stone
cottage and she broke off a tiny nut from the curd every
day to add to the flocks' morning yield. When the mixture
was ready she would plunge her hands into the bucket and
knead the spring curds until the whey had separated. Then
she would pat and shape the handfuls of cheese on a straw
mat, squeezing out the whey until she was left with a solid
stem-patterned cake. The cake would be dried for a couple
of weeks; after this it was stored in olive-oil in urns
until it was ready to be eaten'.

3.7 σίλφιον: The phrase εἰ ἄρα οὐδὲ ἔστι displays some reluc-
tance on the part of Diocl. in recommending this condi-
tment, perhaps because doctors regarded it as flatulent
and difficult to digest (Gal.Simpl.Med. 8.18.16=12.123K,
8.15.12=12.90-91K, Plin.Nat. 22.100, Hp.Acut. 10=2.298L,
Dsc. 3.80.1). There were several varieties of σίλφιον,
from Syria, Persia, Armenia, and Cyrenaica (Hdt. 4.169.1,
Dsc. 3.80.1), but by the middle of the 1st c.A.D. the
σίλφιον from Cyrenaica was extinct as a result of exces-
sive sheep grazing (Plin.Nat. 19.38, who adds that the last
stalk was sent to the emperor Nero; see also A.C. Andrews,
'The Silphium of the Ancients: A Lesson in Crop Control',
Isis 33 (1941), pp.232-236). Larg. (67) suggests the use
of Syrian σίλφιον if Cyrenaic could not be found. Attempts
to grow the latter variety elsewhere were a failure (Hp. Morb. 4.34=7.546L). Juice (ὑπός) was tapped from the roots and stalk, and was often white in colour as Diocl. says (cf. Dsc. 3.80.2), and the leaves, stalk, and roots were also used in medicine and cooking (Plin. Nat. 19.43, Hp. Acut. (Sp.) 18=2.486L, Gal. Vict. Att. 3.13). The taste was sharp (ὑπωμένη, Gal. Hp. Epid. comm. 5.24=17B.285K) and hot (Dsc. 3.80.1, Gal. Simp. Med. 8.15.12=12.90-91K). Dsc. (3.80.2) says that the Median and Syrian varieties had a more pungent (μυκτωτάτων) smell, and if their identification with the stale-garlic smelling asafoetida is correct, this description is very appropriate. It was used extensively in ancient cooking (Apic. passim, Philem. ap. Ath. 2.64e, Axionic. ap. Ath. 3.95c, Sopat. ap. Ath. 3.101c, Epaaenet. ap. Ath. 14.662d). On σίλφον see also E. Küster, 'Noch einmal die Silphionfrage', Natur (Basel) 7 (1912), pp. 588-590.

3.8 τὰ δὲ πάχνα τὰ διὰ τυρόν: Cheese was served with honey (Pherecr. ap. Ath. 3.96b), melted on leg of pork (Antiph. ap. Ath. 3.96b), chopped in salads (Col. 12.59.3), spread on cakes (Ath. 14.646b), and used as an ingredient in cakes (Ath. 14.646d, Cato Agr. 75, 76, 77, 78, see Orib. 1.1.7n.). Yet this extensive use of cheese in cooking was frowned upon by dietitians as Ruf. says here, presumably because the badness in cheese was thought to affect the other ingredients (cf. Gal. Alim. fac. 1.2.8=6.486K, Anthim. 79-81, Hp. VM 20=1.622-624L).

τριμμάτων: This was a general term for sauce including μυκτωτόν (Sch. Luc. Lex. 6 and Orib. 4.2.14n.), mulberry conserve (Sotad. Com. ap. Ath. 7.293b), and olive-oil and vinegar dressing for fish (Timocl. ap. Ath. 7.295b, cf. Archestr. ap.
Ath. 7.326b). It could also signify a drink made with pounded spices (Poll. 6.18, Ath. 1.31e).

3.10 δἐξι γλυκεῖ: A recipe for sweet vinegar in Gp. (8.36.1) directs that equal quantities of sharp vinegar and must should be poured into a pitch-smeared jar and left for thirty days.


4.1-5 Μνησιθέου τοῦ Κυζικοῦ: After assessing the language of the two surviving fragments of Mnesith. Cyz. (see Orib. 1. intr.2), K. Deichgräber ('Mnesitheos aus Kyzikos', RE 15 (1931), col.2284) comes to the conclusion that this doctor lived in the Hellenistic period; he should not be confused with his more famous Athenian namesake (Orib. 4.4.1-5n.), concerning whom see S. Dow, 'Two Families of Athenian Physicians', BHM 12 (1942), pp.18-26 and J. Bertier, Mnēsithēe et Dieuchēs, Leiden 1972.

4.1-5 Κράμβην χρῆ κατακόψαι: Cato (Agr. 156-157) and Mnesith. Cyz. recount their ideas on the cabbage in a strikingly similar way, as can be seen if sections from the two passages are set alongside:

Mnesitheus
1 ...καὶ συγκατακόψαι κορίου καὶ πυγάνου ὡς ἰκανά· εἶτα ὀξυμέλιτι βάνον, καὶ ὄσον ὁμοῖο τι πικρὸν σιλφίου ἐπὶ- ἐμοῦν ...
2 ...ἀλλὰ καὶ εἰ τι προϊ- πάρχει, ἐκβάλλει, καὶ εἰ τι ἀμαύρωμα περὶ τοὺς ὀφθαλ- μοὺς, παῦει...

Cato (ed. Mazzarino, Leipzig 1982)
157.7 ... (si edes concisam et rutam et coriandrum concisam siccam et sirpicium inrasum) et brassica ex aceto oxymeli et sale sparsa ...
157.6 ... si quid antea mali intus erit, omnia sana faciet, et de capite et de oculis om- nia deducet et sanum faciet ...
3 ...καὶ πνιγμοῦς, καὶ ἐτὶ περὶ τὸ διάφραγμα καὶ τὰ ὑποχόνδρια εἰ τι προσπίπτει ἀτοπον, καὶ ὁσα σπλνή, ἕαν ἣ εὐμεγέθης, ταπεινώσει αὐτὸν.

4 ...πρὸς δὲ τοὺς δυσεντερικοὺς δεῖ τῆς κράμβης λαβόντας εἷς ὅδωρ δαψιλές ἀποβρέχειν εὖ, εἴτε ἐμβάλλοντα εἷς θερμὸν ὅδωρ ἐφείν, ἐώς ἂν γενήται τακερᾶ, εἴτε ἀπηθήσαι τὸ ὅδωρ πᾶν, ἐπιβάλλειν καὶ ἐλαίων, εἴτε ἐνυγκαταζέσαι, εἴτε ἐμβάλλοντα εἷς ἄγγειον ἐνδρύσαι δ τι ἄν βούλῃ σιτίονῇ, ἢ μόνην ἐσθίειν τῇ κράμβην καὶ διεδόναι ψυχρὸν τούτῳ δὲ χρὴ πολεῖν μὴ ἀπαξ, ἀλλ' ἐκάστην ἡμέραν πρῶτ εἷς πλεῖονας ἡμέρας· μὴ πολὺ δὲ, ἕνα μὴ προστῇ.

157.7 ...et si bilis atra est et si lienes turgent et si cor dolet et si iecur aut pulmones aut praecordia: uno uerbo, omnia sana faciet, et intro quae dolorabunt ...

156.5 ...uerum torima moles-ta erunt, brassicam in aquam macerare oportet: ubi macerata erit, coicto in aquam calidam, coquito usque donec commadebit bene, aquam defundito. postea salem addito et cumini paululum et pollinem polentaee eodem addito et oleum.

(6) postea feruefacito, infundito in catinum, uti frigescat: eo interito quod uolet cibi, postea edit; sed, si poterit solam brassicam esse, edit, et si sine febre erit, dato uini atri duri: aqua tum bibat quam minimum; si febris erit, aquam. id facito cotidie mane. nolito multum dare, ne pertaedescat, uti possit porro libenter esse.

E. Brehaut (Cato the Censor on Farming, New York 1933, pp.139-140) recognised the parallel between Mnesith.Cyz. and
Cato (Agr. 157.6-9) and commented that a peculiar feature of the parallelism was that Agr. 157.9 was not so close to the Greek as Agr. 156.5-6. S. Boscherini (Lingua e scienza greca nel "De agri cultura" di Catone, Rome 1970, pp. 63-88) examines in detail the relationship, and posits a common source written from a typically Alexandrian 'scientific' viewpoint, possibly from the pen of Chrysippus, Cleomporus, Bolus, or Pythagoras. He rejects the charge of dubious authenticity, although certainly the passage stands out from the rest of this work in its treatment of the subject. Mnesith.Cyz. and Cato have undoubtably much in common, yet the Latin writer advises salting the cabbage and considers specifically the case of painful affections of the heart and liver, and treats of intestinal encumbrance, whilst Mnesith.Cyz. introduces particulars such as the amount of cabbage, rue, and coriander to administer to a sick person which are lacking in Cato.

Why Cato (Agr. 156.5 and 157.9) repeats in different words the same idea is difficult to see, and P. Reuter (De vestigiis Graecis apud M. Catonis De agri cultura, Leipzig 1903, pp. 32sq.) affords no convincing explanation. It is possible that Cato made use of Mnesith.Cyz., who lived in the Hellenistic period as has been already said (Orib. 4.4. tit. n.). On the subject of the separateness of Mnesith.Cyz. and Mnesith.Ath., H. Hohenstein (Der Ärzt Mnesitheos aus Athen, Jena 1935, pp. 15-18) examined the fragments of the two authors and found considerable difference in style, most notably with the Athenian shrinking from hiatus (the two exceptions occur in Ath. 2.106d and 10.419c) and the doctor from Cyzicus making no effort to avoid even violent hiatus (e.g. σιδηρίω είτα, Orib. 4.4.
A. Sideras ("Aetius und Oribasius: Ihre gemeinsamen Exzerpte aus der Schrift des Rufus von Ephesos "Über die Nieren- und Blasenleiden" und ihr Abhängigkeitsverhältnis", ByzZ 67 (1974), pp. 110-130) discusses the way in which ancient writers made use of their predecessors, centring on Orib.'s and Aët.'s excerpting of Ruf. Ren. Ves., and he concludes that the two later authors utilized a compilation of Ruf.'s writings rather than the original. Cato may have done the same with Mnésith. Cyz., which would be one explanation of the variations between the two writers, or perhaps Cato, seeing as his text is fuller, represents what Mnésith. Cyz. wrote more closely, Orib. truncating the text in his usual fashion.

Apic. (3.9) gives some similar recipes for cabbage, coriander and rue featuring in several of them. Other medical opinions agree with what Mnésith. Cyz. says: good for the eyes (Gp. 12.17.6), spleen (Gp. 12.17.9, 15, Dsc. 2.120.3), purging the veins (Gal. Simpl. Med. 7.10.48=12.42K), pains in the sides (Alex. Trall. 6=2.241 Puschmann), and for those suffering from dysentery (Marc. med. 27.53, cf. Gal. Alim. fac. 2.44.1=6.631K, San Tuend. 5.8.7=6.351K, Hp. Salubr. comm. 2=15.179K), although it was stressed that cabbage had to be boiled very well or preferably twice for its costiveness to take effect (Dsc. 2.120.1). The only adverse effect caused by cabbage was the production of black bile (Hp. Epid. 7.82=5.438L, Gal. Loc. Aff. 3.10=8.184K, Anthim. 50). 4.1 κορίου: This was the later Greek term for κορίανον (Gal. Simpl. Med. 7.10.43=12.36K, cf. Dsc. 3.63, Hp. Mul. 1.66=8.138L, Nic. Alex. 157 and Sch.). On coriander and its properties see Orib. 4.2.2n.
The rue (Ruta graveolens L.) in this recipe must have been envisaged as acting in more than a merely flavouring capacity since its powers coincided with many of those belonging to cabbage. For instance, besides being heating (Gal. Gal. Vict. Att. 3.14, Simp. Med. 4.7=11.646K, 8.16.18=12.100K, Plu. Mor. 647b, Dsc. 3.45.1, Alex. Trall. 7.3=2.261 Puschmann), rue was good for pains in the sides, chest, and intestines, and for coughs and difficulty with breathing (Dsc. 3.45.2, Plin. Nat. 20.136, Gp. 12.25.8, Hp. Mul. 2.201=8.384L, Morb. 2.47=7.68L, Larg. 121); it also improved the eyesight (Plin. Nat. 20.134, Ps. Apul. herb. 90.6) and was diuretic (Cels. 2.31, Hp. Vict. 2.54=6.558L). Both fresh (Aret. CA 1.2.8=24A.204K) and dried (Archig. ap. Gal. Comp. Med. 2.1=12.551K, Nic. Alex. 412-413, Gal. San. Tuend. 4.5.15=6.266K) rue was employed, and it features in many ancient culinary recipes (Apic. passim and A.C. Andrews, 'The Use of Rue as a Spice by the Greeks and Romans', CJ 43 (1948), pp.371-373).

4.2 Πυνγμούς: Choking could arise through inflammation of the larynx (Gal. Hp. Prorrh. 1 comm. 2.89=16.680K), inspiration being made during the ingestion of food (Arist. PA 664b30-33, cf. Anaxandr. ap. Ath. 6.227c), and inflammation of the lungs (Gal. Hp. Aph. comm. 4.34=17B.705K). It was judged a serious affliction (Aret. SA 2.1.2=24A.25K), and in certain cases it could prove fatal (Hp. Coac. 61=5.598L, Aph. 7.59=4.596L).

4.3 Τὰ ἀφθονία: Disease of the joints or gout (cf. Gal. Ling. Hp. Exol. =19.85K, Damox. ap. Ath. 3.102d) was painful (Hp. Epid. 6.4.3=5.306L, Gal. Hp. Epid. 6 comm. 4.3=17B.125K), and cures included special diets and bathing in cold sea-water (Aret. CD 2.12.1=24A.339K, Gal. San. Tuend. 6.11.11=6.436K,
cf. Sen. Ep. 53.3)

4.4 νήστες: Administering cures to patients on an empty stomach was a standard procedure in the ancient world (Gal. San. Tuend. 6.15.4=6.451K, Hp. Morb. 3.11.2=7.132L, Aret. CA 1.2.3=24A.201K, Marc. med. 28.31, Seren. 307, Anthim. 64).


5. tit. Διεύθυντος: Dieuches was a doctor of the Dogmatist 'school' according to Gal. (Ven. Sect. ad Erasistr. 5=11.163K) and teacher of Numenius of Heraclea (Ath. 1.5b). His floruit was towards the beginning of the 3rd c. B.C. (Gal. Simpl. Med. 6. prooem. =11.795K, Hp. Nat. Hom. comm. 2.6=15.136K), and his writings examined among other topics anatomy, blood-letting, and diet (M. Wellmann, 'Dieuches (3)', RE 5 (1905), col. 480).

5.1 ἀλεύρινον: ἀλευρίται breads were placed after σεμίδαλίται in order of merit (Diph. Siph. ap. Ath. 3.115c, Philist. ap. Ath. 3.115d), and J. Bertier (Mnésithée et Dieuchès, Leiden 1972, p.235) remarks that 'il est permis de croire que Dieuchès conseille sous le vocable de ἀλευρινός, une farine légère, par opposition à la σεμίδαλις, qui peut bien être pure, en terme de blutage, mais qui donne des produits plus lourds.' On the subject of ἀλευρίται see Ath. Med. ap. Orib. 1.2.2 and n., and also A. Jardé (Les céréales dans l' antiquité grecque, Paris 1925, p.10): 'C' est ainsi qu'ils distinguaient, d'après l'époque des semaines, les blés de printemps et les blés d'hiver; d'après la qualité de la farine, les blés ἀλευρίται et les blés σεμίδαλίται. Les deux classifications d'ailleurs se rejoignent, les blés de printemps étant en même temps les blés ἀλευρίται,

ή ἐπὶ τοῦ ἰπνίτου: Gal. (Antid. 1.8=14.46K) states πρὸ πάντων δ' εὖξωμος τε καὶ καλῶς ὑπτημένος ὁ ἄρτος ἔσται κριβανιτῆς, σὺν ἰπνίτης, which seems to imply that ἰπνίτης was a leavened bread made from wheat flour (cf. ἰπνίτας ἄρτους, Ath. 4.139a). It derived its name from the ἰπνός, a type of oven where the charcoal was put into a shallow receptacle under the oven floor, and because this floor was not flush with the edge of the base at the back or front, the slit left at the back enabled a draught to be maintained under it (see B.A. Sparkes, 'The Greek Kitchen', JHS 82 (1962), p.127 and fig.2). ἰπνίτης was certainly regarded as being baked better than έσχαριτής because it was less burnt on the outside (Hp. Vict. 2.42=6.540L), but other authors held, in contrast with Dieuch., that κριβανιτῆς was superior, for although the two breads were made the same way, ἰπνίτης was less evenly baked and more difficult to digest (Gal. Alim. fac. 1.2.12=6.489K, Ath. 3.115c). In Phan. (ap.AP 6.299.2) appears the line καὶ τρύφως ἰπνεῦτα πισαλέου φθόος. The ingredients of φθόος were cheese, honey, and σίλιγµες (Chrysipp. Tyan. ap. Ath. 14. 647d), so the epithet πισαλέος is appropriate, whilst ἰπνεῦτα must be an adjective describing the method of baking the φθόος, and not a synonym for φθόος.

ἄµης: An ἄµης was a type of πλακοῦς (Ath. 14.644f, Poll. 6.77) and something of a delicacy (Ar. Pl. 999, Antiph. ap. Ath. 6.262c). The Suda (s.v. ἄµης) states firmly that ἄµης ὁδὸν ὁ πλακοῦς, οὐχ ὁ ἰπνός which might account for the

5.4 ἐγκρυφιας: A bread so called from being baked in the ashes (Gal.*Ait. fac.* 1.2.13=6.489K, Sch. Luc. *Lex.* 3, Ath. 3.110b, Hsch. s.v. ἐγκρυφιας), and made from wheat-meal (ἀλευρον) as Dieuch. recommends here, or in a finer version from σεμίδαλις (Archestr. ap. Ath. 3.112b), although Erot. (s.v. ἄρτον ἐγκρυφιαν = p.26 Nachmanson) records that the Athenians prepared a more elaborate ἐγκρυφιας of juicy dates, wheat-meal, and water. In the Middle East bread is still baked in the ashes: '... and the muleteers, having unpacked and settled down, began to mix a few handfuls of flour with water, to pat it into a dish about an inch long, and put it under the embers to cook' (F. Stark, *The Valleys of the Assassins and Other Persian Travels*, London 1982, p.77); 'Tafas went into one of the twenty miserable huts, and in a few whispered words and long silences brought flour, of which with water he kneaded a dough cake two inches thick and eight inches across. This he buried in the ashes of a brushwood fire, provided for him by a Subh woman whom he seemed to know. When the cake was warmed he drew it out of the fire, and clapped it to shake off the dust; then we shared it together ...' (T.E. Lawrence, *The Seven Pillars of Wisdom*, London 1936). Hp. too (Vicr. 2.42=6.540L) describes it as being extremely dry, hence presumably its usefulness in combating moist bowels (Dieuch. ap. Orib. 4.5.6) as in the diet for the son of Eratolaeus who was suffering from dysentery (Hp.*Epid.* 7.3=5.372L, cf. Acut. (*Sp.*) 21=2.500L). But there was a danger lest, without special
care, the bread might cook unevenly and become difficult
to digest (Ath. 3.115e, cf. Luc. D. Mort. 20.4 for a simile
of a loaf blistering on the outside). Gal. (Alim. fac. 1.
2.13=6.490K) says that ash-baked bread was the worst of all
the breads as regards the method of baking. ἑκμορφίας ap-
ppears to have been unleavened.

6.1 ἀλφίτῳ δὲ χρῆσατο: Nic. (ap. Ath. 3.126c-d) gives a simi-
lar recipe, but using either χόνδρος (see Orib. 4.1.11n.)
or peeled barley instead of Dieuch.'s ἀλφίτον (see Orib. 1.
12.1n.), although instead of just boiling the grains in fowl,
lamb, or kid-stock, Nic. details that they should be boiled
first in olive-oil, then put into the stock, and boiled
with the lid on until they swelled up, at which point they
could be served in hollow pieces of bread or μύστρα.

ὁδατος ἑρμυδῆ: This must refer to a bain-marie, as in Apic.
(4.2.1, cf. 9.10.1) where a patina is cooked either direct-
ly over the fire or 'ad aquam calidam'. Larg. (66) talks
of cooking 'in duplici uaso' which again must be some sort
of bain-marie (cf. Alex. Trall. Febr. 5=1.375 Puschmann on
peaches cooked in steam). For an illustration of a poss-
sible Roman bain-marie see J. Mertens, 'Une riche tombe
gallo-romaine', AC 21 (1952), pp.56-57 and p.42, fig.2,
No.7.

εἰς δὲλφάκειον: Ar. Byz. (ap. Ath. 9.375b) calls pigs as
a whole σύς, sucking-pigs χοῖροι, and young but fully-
grown pigs δέλφακες. He is supported by Cratin. (ap. Ath.
9.375a), Ar. (Ach. 786), and possibly Hdt. (2.70.1). How-
ever, Anaxil. (ap. Ath. 9.374e-f) uses the word of an adult
(τέλειος) pig. On the other hand, the word can be used
7.24, interp. ap. Poll. 1.251). Anaxil.'s interpretation
can be included in Ar. Byz.'s definitions if it is supposed that the pig is adult yet young, and Arist.'s statement could be taken to mean that as the sows grow larger and older their offspring develop into bigger and better pigs. Certainly P. Chantraine (Dictionnaire étymologique, vol.1, Paris 1968, pp.260-261) says that δέλφαξ 'désigne une jeune bête, mais apte à la reproduction', and adds of the diminutive δελφάκιον (e.g. Ar. Thesm. 237, Lys. 1061, Plu. Mor. 82f) 'doit falloir distinguer de χοϊρος'. Why Dieuch. should specify a stock for the δλφίτον made with young but fully-grown pig seems strange, unless like Clem.Al. he is using the term loosely, or else is of the same opinion as Philotim. (ap. Orib. 2.69.3) that young animals are better for their meat than old.

6.2 τῆς χοϊρος ... κωτύλαι: There were 12 κωτύλαι to 1 χοϊρος (Gal. Pond. Mens. Doct. 10=19.770K). As the Mss stand this recipe calls for ¼ χοϊρος to δλφίτον to 2 κωτύλαι (or 1/6 χοϊρος) of water and milk, so the proportions are 3 parts of δλφίτον to 2 parts of water and milk (roughly 1½ pints to 1 pint, since 1 κωτύλη is equivalent to approximately ¼ pint, LSJ s.v. κωτύλη). With such a small proportion of liquid it seems difficult to make this dish the ξοτίλειον tū &y, and one would expect rather such proportions as are given by Orib. at 4.11.4. It is possible to envisage a corruption of Θ to Θ', and this would give the more realistic quantities of ¼ pints of δλφίτον to 4¼ pints of water and milk, or one part of δλφίτον to three of water and milk.

τῆς μήκωνος ὠ κῶδων: The addition of toasted poppy head to this dish of δλφίτον must have provided the main soporific ingredient, although the milky porridge itself was no
doubt soothing and Dieuch.'s warning against drinking too much of this porridge is because in excess poppy-juice and seeds were violently chilling and could cause death (Gal. *Simpl. Med.* 7.12.13=12.73K, Dsc. 4.64.3, cf. Gal. *San Tuend.* 6.14.15=6.447K), which is the reason for the gods Sleep, Night, and Death being represented in ancient art as garlanded with or holding poppies (see Panagiotis Creticos and Stella Papadoce, 'Μήκωνος καὶ ὄμιου ἱστορία', *AE* 102 (1963), pp. 80-89). A similar recipe to that of Dieuch.'s is found in Hp. (*MuL.* 2.149=8.324L) for the displacement of the womb, made with cheese, poppy-seeds, and ἀλπίτα, and again the purpose of the preparation is to provide release from pain (cf. Gal. *Hp. Epid. comm.* 6.5=17B. 331K). Presumably the object of the toasting was to bring out the power and flavour of the poppy-head (cf. Chrysipp. *Tyan. ap. Ath.* 14.647f, and Plin. *Nat.* 20.202 on drinking the juice of boiled poppy). As so often (e.g. Orib. 4.2.13n.) the wild variety of poppy with its longer and smaller head was considered more effective than the cultivated poppy (Plin. *Nat.* 20.202). No other author appears to mention ὀφρα σπάνια as a result of too much poppy, unless Hp.'s statement (*Vict.* 2.45=6.544L) μήκων στάσιμον can refer to micturition as well as defecation. On the poppy in cooking and medicine see Orib. 1.29n..

Συκής: Although σῦκον is the usual word for a fig, συκή for a fig tree (Gal. *Alim. fac.* 2.1.4=6.556K), the latter can be used to denote the fruit as well (e.g. Ar. *Aυ. 590*). But the fact that it was permissible to eat figs δαψιλῶς (Gal. *Alim. fac.* 2.52.2=6.606K, Philotim. *ap. Ath.* 3.79b) tends to vitiate this reading in view of the quantity
specified to be used. Yet maybe Dieuch. uses figs merely to add a hint of sweetness to the dish (cf. Ar. ap. Ath. 14. 652f). That they were strongly diuretic (Gal. Alim. fac. 2.8.1=6.571K, Plin. Nat. 23.120) again makes Raeder's reading (p.101) συκής suspicious since the recipe was supposed to cause οὐρα σπάνια. On figs in general see Orib. 1.39-40 and nn..

οὐον τριῶβολον ὀλικής: This equals ¼ δραχμή, which is approximately 1/100 oz, which if correct is a minute proportion of figs to be added to this dish. Altogether the quantities in this recipe seem odd. Perhaps ήσυχή should be read with Daremberg (p.282), although the Mss all read ή συκής except for A which has ήσυχής, and οὐον τριῶβολον ὀλικής taken as referring to the amount of poppy to be used; this would at least tie in with the general advice about not using poppy to excess.

7.1 τοῖς ἄσθενῶς ...: That sick people could not stomach strong foods was a concept realised in the earliest Greek medicine (Hp. VM 8=1.586-588L) following the idea of 'like to like'; on the importance of drinks in diet see Hp. Aff. 23=6.234L. εἰς ἀτμήν διαλυουένην: ἀτμή, also spelled ἀτμός (e.g. Nonn. D. 1.238, Hp. Plat. 8=6.102L) and ἀτμίς (Arist. Mete. 346b32, Gal. Hp. Hum. comm. 3.13=16.396K) was the exhalation (ἀναθυμίας) which arose from boiling wine and water (Arist. Mete. 384a6, Gal. Alim. fac. 2.21.6=6.597K), from burning (Hdt. 4.75.1), from perfumes (Antiph. ap. AP 6.250.5), and from hot bodies (of a lion, Arist. HA 594b26; of a fevered man, Gal. Hp. Epid. comm. 4.30=17B.218K). This exhalation was moist (Arist. Mete. 359b30), and triggered the sense of smell when, after emanating from some substance, it was carried through the nostrils to the brain (Gal. Simpl. Med. 4.22=11.698K).
Certainly Dieuch.'s ἀνάδοσιν ... λεπτήν when resolved into ἀτμή would not leave any excretions in the bowels and would not aggravate a sick person's condition, but his phraseology is unusual, for elsewhere ἀτμός seems to be used of troublesome vapours: e.g. headaches due to the bowels sending up ἀτμοῦς χυμὸν μοχθηροῦ (Gal. Bon. Mal. Suc. 11.21=6.807K), an excess of hempseed causing an ἀτμόν ... θέρμον to affect the head (Gal. Alim. fac. 1.34.2=6.550K), the corruption of phlegmatic humours in the stomach producing ἀτμοῦς μοχθηροῦς which rise to the head (Gal. San. Tuend. 6.10.13=6.428K), wine filling the head in moist and hot constitutions with ἀτμόν (Gal. San. Tuend. 1.11.1=6.54K), and indigestion producing flatulence which sends fumus to the head thereby starting σκότωμα (Anthim. introd.).

7.3 τὸ καπυρόν: This adjective could be used to describe dry, brittle wheat (as opposed to soft barley, Arist. Pr. 927a 24), easily cut bone (Hp. VC 19=3.254L, v. l. ἐδπριστόν), dried (or smoked?) pork (Antiph. ap. Ath. 3.96b), and walnuts (Epich. ap. Ath. 2.52b). Dieuch. is here presumably specifying a particularly friable sort of ἀλφίτων (see Orib. 4.1.7n.).

tὰς καλομενὰς ἑρικίδας: ἑρικίς is connected with ἑρείκω, a verb usually associated with the bruising or pounding of grain (κριθᾶς ... ἑρπολυμένας, Hp. Nat. Mul. 103=7.416L; ζέας ἑρπολυμένας, Hp. Superf. 34=8.506L). LSJ (s. v. ἑρικίς) translate 'pounded barley, groats' (cf. Gal. Ling. Dict. Exol. Hp. s.v. ἑρικίδες = 19.100K); but Seleuc. (ap. Ath. 3.114b) describes ἑρικίτας as being bread made from pounded and unsifted wheat (ἀσθητοῦ πυρῶν) and like χόνδρος (made from emmer, see Orib. 4.1.11n.), which seems to imply that ἑρικίς was burghul or cracked-wheat, used in Mediterranean cook-
ing today, and not pounded barley. Hsch. (s.v. ἕριχδς) however equates ἕριχδς with ἑρεγμός, whichErot. (s.v. φακὼν ἑρέγματα = p.90 Nachmanson) says is properly ὁ δίχα διηρημένος κύμως. In want of further evidence perhaps Ath.'s cracked-wheat should be supported, particularly as Gp. (14.19.2) lists ἑπεγμός along with πτισάνη and κέγχρος, cereals rather than pulses; on the other hand, ἕριχδς may be no more than a generic term for cracked pulse of whatever description.

οἱ ἄρτοι ὡς θερμότατοι: Breads when hot were considered especially efficacious (Hp.Acut.(Sp.) 20=2.498-500L, Viot. 2.44=6.542L), and when macerated or given with a drink they did not dry (Hp.Aff. 51=6.260L) and so would not exacerbate constipation.

7.5 αἱ κρίσεις: Hp. (Aff. 8=6.216L, cf. Gal.Hp.Prog.comm. 3.1=18B.231K) explained the crisis of an illness as either an exacerbation, or an abating, or a transformation into another disease, or a cessation; or as E. Withington described it ('The meaning of κρίσεις as a medical term', CR 34 (1920), pp.64-65), 'a crisis, preceded or accompanied by an elimination or abscession, refers to the determination of the disease as by a judicial verdict'.


7.7 κάχυρδα: ' ... evidently ... a third name for husked grain without the hulls' (L.A. Moritz, Grain-Mills and Flour in Classical Antiquity, Oxford 1958, p.147). The barley was first roasted (Hsch. s.v. καγχρυὸν, Sch.Ar.Nub. 1358, Cratin. ap.Plusol. 25.1, Str. 15.3.10), then rubbed to remove the husks (Sch.Ar.Eq. 254), and finally pounded (Suida s.v. κάγχρον) as Dieuch. says here. Thus it was similar to ἀλφιτοῦ (see Orib. 4.1.7n.). It was regarded as heating
by Gal. (Simpl. Med. 1.13=11.404K), but there is no mention elsewhere of its binding effect on the bowels.


7.12 τῶν ἄκροδρύων: This category of fruits included nuts (Ath. 2.52a) and also things with a hard rind rather than a shell such as quinces (Glaucides ap.Ath. 3.81a). Soft fruits (ὤπορα, see Orib. 1.39,1n.) were usually, but not always, distinguished from ἄκροδρυα (Hp.Hum. 16=5.498L, Aff. 61=6.268L, cf. Gal.Hp.Epid.6 comm. 5.21=17B.282K, Plu.Alex. 23.5).

7.13 τὰ πόπανα: Orib. mentions that some people called these cakes ἵτρια (4.7.33), a statement which Daremberg (p.286) says is not 'complètement d accord avec les autres définitions de ce mot que nous ont conservées différent grammariens ou scholiasts'. However, Crin. (ap.AP 6.232.4) has the two words in conjunction (ἵτριναποῦδες) thereby supporting Orib. The cakes were round (Plb. 6.25.7) and thin (Juv. 6.541, Suda s.v. πόπανα, cf. Phil.ap.AP 6.231.3), and were used at sacrifices (Ar.Th. 285, Theopomp Hist.
ap.Porph. Abst. 2.16.4, Plu. Mor. 362f, IG 2.1651, CIL 6. 32323.140). How they were made seems uncertain: Hsch. (s.v. πόπανα) describes them as πλακούντα ἀπὸ ἀρτοῦ, which suggests they were made of wheat, while the description in CGL (2.413.36, 'Πόπανα liba singulare non habet') implies that they were similar in composition to the libum, prepared with flour, eggs, and cheese, and baked (Cato Agr. 75). The word πόπανον is connected etymologically with πέπτω, πέπω and πέττω (see Eust. 152.29, 774.60, and G. Herzog-Hauser, 'Popanon (1)', RE 22 (1954), col.49).

δί οὖν: The recipe for garum in Gp. (20.46.6) calls for the garum to be strained two or three times έις δὲν καθαρὸν εκβῆ, and some sort of cloth would have been needed to achieve this. Starch was also strained δί οὖν (Dieuch. ap. Orib. 4.8.1).

7.14 τοῦ σικώνου σπέρμα: On the cooling and soothing properties of cucumbers see Orib. 1.38.1n..

στροβίλους: See Orib. 4.7.27n..

οὗα: According to Plin. (Nat. 15.85, cf. Thphr. HP 3.12.6) there were four sorts of sorb-apple: a round variety like an apple that was the sweetest and most fragrant, a pear-shaped variety that was sour, an egg-shaped type, and a variety called torminate valued solely as a medicine. They were used either fresh, or dried (Cato Agr. 7.4, Var. R. 1.59.3, Pall. 2.15.4), or preserved in sapa (Cato Agr. 143.3). They feature in remedies for stomachs (Hp. Acut. (Sp.) 21=2.500L, Larg. 104, Seren. 555) being astringent (Gal. Simpl. Med. 1.34=11.441K, Hp. Vict. 2.55=6.562L, Cels. 2.30.1, cf. Mart. 13.26), and costive (Dsc. 1.120, Alex. Trall. 9.3=2.331 Puschmann; but less so than medlars, Gal. Simpl. Med. 8.15.1=12.87K), and acidic (Verg. G. 3.380).
Presumably Dieuch.'s recipe here is for people with disordered bowels, although he only vaguely makes mention of ἀρρωστούντων. Sorb-apples feature in a recipe for patīna with brains by Apic. (4.2.33). See also Orib. 1.52 and n.

7.17 τὰ Εὐβοϊκὰ κάρυα: Chestnuts were held to be a type of acorn (Plin. Nat. 15.92; hence their other name Σαρδιανάλ βάλανοι, Dsc. 1.106.3, Dieuch. ap. Orib. 4.7.29; also called καστάνα, Hsch. s.v. Εὔβοικά; λῶπιμα, CGL 2.98.23; for other names see Macr. sat. 3.18.7). They were eaten raw, roasted (cf. Mart. 5.78.15), or boiled (Gal. Bon. Mal. Suc. 4.33=6.778K), and were considered reasonably sweet (Gal. Simpl. Med. 4.8=11.648K). Mnesith. (ap. Ath. 2.54b) believed them to be difficult to digest but, if digestion was possible, nourishing (cf. Gal. Alim. fac. 2.38.4=6.621K), and he advises against eating them raw (cf. Gal. Vict. Att. 10.80), for the cooking process removed the potentially harmful fatty element. Chestnuts are protected by a skin and a shell, the latter being τὸ λέμμα τὸ ἐντός, although Plin. (Nat. 15.92), in contrast to Dieuch., thought that this skin spoilt the taste of the chestnut if it was not peeled off. Chestnuts were not usually used for those with a fever, so perhaps they acted merely as a flavouring in this recipe, for medicinally they were not highly regarded, being but weakly astringent (Gal. Bon. Mal. Suc. 4.37=6.779K; in Theod. Prisc. Log. 64 they are used for haemorrhage from the stomach). Apic. (5.2.2) has a recipe for lentils and chestnuts with herbs, and from chestnuts was pressed
7.20 ὑφόμος: As Dieuch. says here, ὑφόμος was sometimes considered a synonym for ὑφόμος (Orib. Syn. 4.13.6, CGL 2.260. 18, Hsch. s.v. ὑφόμος), although he might have been expected to have said ὑφόμος δέ (ὅπερ δὲ ὑφόμον καλοῦσιν) since ὑφόμος appears to be the more common word. In view of the castigation of ὑφόμος elsewhere (Orib. 1.14 and n.) it must be that Dieuch. is referring to something other than ἐροτή τῶν ὑπομυγίων in this laudatory sentence. There was probably some confusion between Avenna sativa L. and Avenna barbata L., and certainly Hp. (Vict. 2.43=6.542L) concurs in the nutritive value of oats and their suitability for ὑφή whilst Gal. (Simpl. Med. 6.2.17=11.855X) considered them of similar power in medicine to barley. M.S. Spurr (Arable Cultivation in Roman Italy, London 1986, p.61) suggests that in the Roman period oats were better known in their wild form as a weed rather than a cereal crop.

7.21 τοῦ φακοῦ: See also Orib. 1.16n. Dieuch.'s recipe involving merely washing the lentils before boiling differs from other ancient recipes which prescribe not only washing but also that the water in which the lentils are cooked should be changed several times, for brown lentils in particular stain the water an earthy colour (Anthim. 67, Gal.Alim.fac. 1.1.43=6.478K, 2.61.1=6.649K, Plin.Nat. 22. 144), although modern recipes (e.g. E. David, Italian Food, Harmondsworth 1963, pp.138-139) only require washing to remove any dirt. The husks (ἄχυρα) were stripped off because they were hard to digest (Gal.Hp.Acut.comm. 4.84=15. 876K), and this made lentil dishes more nutritious and less astringent (Gal.Alim.fac. 1.18.3=6.526K, cf. Dsc. 2.107. 1), the greater part of the οὐσία being in the seed (Gal.
For flavouring lentils Anthim. (67) recommends vinegar, sumach, and oil; Gal. (Alim. fac. 1.1.14=6.462) oil, garum, and pepper; Hp. (Morb. 2.15=7.28L) honey and vinegar; and Dsc. (2.107.2) amongst other things vinegar, pears, and quinces. So Dieuch. is orthodox in his recommendations. Being drying (Gal. Hp. Epid. comm. 5.33=17B.304K, Alim. fac. 1.18.2=6.525K, San. Tuend. 5.8.7=6.351K) they were ideal for diarrhoea, and Dieuch. is correct in adding mallow or cucumbers to lentils for people whose bowels needed to be moistened (see Orib. 4.11.12n. on the properties of mallow). Apart from their application in medical recipes (Gal. Bon. Mal. Suc. 7.6=6.790L), lentils were used extensively in culinary dishes (Plin. Nat. 19.133, Apic. 5.2.1-3, 4.4.2, Pap. Heid. s.v. λαγανοφανή (ed. F. Bilabel, 'Οψαρτυτίκα und Verwandtes' in Sitzungsberichte der Heidelberger Akademie der Wissenschaften, Heidelberg 1920, p.11), and Mart. (13.9) places lentils from Pelusia between alica and broad beans in order of merit. On lentils see also Orib. 1.17n..

δόφημα: A thin soup (Lat. sorbitio, CGL 2.428.49) made from starch, rice, pearl-barley, χόνδρος, beans, wheat flour, or other such ingredients (Marc. med. 14.42, Gal. Comp. Med. 7.1=13.10K, Hp. MuL 2.117=8.254L, 2.110=8.236L), sometimes with the addition, as here, of some herbs or honey or salt for seasoning (Hp. MuL. 1.75=8.166L, Acut. (Sp.) 30=2.518L, Larg. 186). Hp. (VM 5 1.580L) thought that δόφημα should consist of a small quantity of strong foods in a large amount of water, and this supports Dieuch. 's quantities of 1 κοτύλη of lentils (about ½ pint) to 7 κοτύλαι of water (about 3½ pints). Standing midway between drinks and solid foods (Hp. Aff. 46=6.254L), δόφημα could
be made thicker or thinner in consistency (Hp.Fist. 7=6. 456L, Gal.Hp.Acut.comm. 4.34=15.802K), and were administered mainly to nourish people with fevers without exacerbating their condition (Arist.Pr. 863b6-9, Hp.Aff. 44=6.254L). The words δόφημα and sorbitio were firmly linked with the sick-room (Plu.Mor. 123c, Sen.Ep. 78.25.

Τέφρας ... Ἐλατίνης: Most ash was held to be astringent apart from fig-wood ash (Gal.Simpl.Med. 8.19.4=12.138K, cf. 4.19=11.686K on ash's ability to cut through thick and viscous humours). But the purpose of the ash in this recipe seems unclear, and Dieuch. does not say whether it is to be boiled with the lentils or not. Perhaps the ash facilitated the removal of the husks (περιαχυρίζειν), taking the place of the bran or mixture of unbaked brick and sand in Plin.'s (Nat. 18.98) recommendations for milling; or perhaps the ash was used for colouring like the chalk in the preparation of χόνδρος (see Orib. 1.11n.). Ash was mixed with lentils to help preserve them in storage (Col. 2. 10.16, Plin.Nat. 18.308), but this cannot have any bearing on what Dieuch. says here. E. David (French Provincial Cooking, Harmondsworth 1964, p.382) remarks on wood ash being added to water in which snails are boiled, and thus the most plausible explanation of Dieuch.'s ash is that it was an adjunct to the seasoning.

ὀξείδιον: ὅτι τὸ δέος καὶ ἄλβας λέγεται ἀπὸ τοῦ μὴ λείβεσθαι. ὅτι νενεκρωμένος οἶνος ἐστιν (Suda s.v. δεστ). Rasario (p.253) translates 'aceti parum'.

οἶνου: Hp. (Acut.(Sp.) 21=2.500L) suggests the use of dark wine in cases of diarrhoea without any accompanying fever, the reason being that wine was able to dry (Gal.Hp.Fract. comm. 2.72=18B.524K).
7.22 ἄπιοι καὶ μῆλα τὰ μυδώνια: See Orib. 1.51n. and 1.50n. respectively.

7.23 τεύτλων: There were two sorts of beet, one black (in other words the familiar dark-red type), the other white. The former was diuretic, the latter laxative (Diph. Siph. ap. Ath. 9.371b, Plin. Nat. 20.69, Dsc. 2.123) as Cic. (Fam. 7. 26.2, cf. Mart. 3.47.9) found to his intense discomfort. As in Dieuch.'s recipe here, beets were added to lentil dishes for their astringent and remedial effects on disordered stomachs (Cels. 2.30.1, Gal. Comp. Med. 8.4=13.173K, Dsc. 2.123, Plin. Nat. 20.69, 19.133), but the only other author to specify beet leaves is Plin. (Nat. 22.143) in case the lentil mixture celeriter inarescat. Gal. (Alim. fac. 1.1.43=6.477K) gives precise instructions for making τευτλοφακῆ, using salt or sweet garum, beet, lentils, and later in the same work (Alim. fac. 1.18.8-9=6.528-529K) mentions that the purpose of such a dish was to achieve an evenly balanced mixture, lentils being more laxative, beets less so. The use of beet leaves rather than roots in Dieuch. may have been because the leaves had milder powers (Gal. Alim. fac. 2.59.4=6.646K), and this recipe was intended solely for moistening the bowels; beet root in contrast sometimes caused biting pains in the stomach (Gal. Alim. fac. 2.43.2=6.630K).

7.24 ὀμυλίῳ: Starch was called thus because it was 'made without milling' from every kind of wheat (Plin. Nat. 18.76-77), Dsc. (2.101) explains its method of preparation: clean spring wheat (σητάνιος πυρός) was soaked, the water being changed five times a day and, if possible, five times a night (cf. Cato Agr. 87 who instructs that the grain should be soaked initially for ten days, the water being changed
twice a day). When the grain had softened the water was poured away carefully so as not to disturb any sediment which had collected. The grain was next rubbed in the water, which was then filtered through a sieve to remove the bran and husks; after a final straining the liquid was dried in the sun as quickly as possible to prevent it from acidifying. Dsc. (2.101, cf. Mart.med. 27.138, Herod.Med. ap.Gal.Simpl.Med. 1.34=11.442K) also advises it to be mixed with milk for the bowels, and Marc. often refers to sorbitiunculae made from starch (med. 10.18, 14.42). On the medicinal properties of starch see Orib. 1.6n.

7.25 κυκρος: See Orib. 1.15n. and 4.10.

τὸ δεξαμενον: An δεξαμενον was a type of cup or saucer (Alex.ap.Ath. 12.516e), and thus its use as a unit of measurement (Hp.Morb. 2.47=7.68L, Gal.Pond.Mens.Doct. 4=19. 752-753K) draws an analogy with the American 'cup' measurement.

7.27 τὸ κόνον τὸ κάρυον: By the time of Gal. the usual word for pine-nuts was στρόβιλον (Gal.Alim.facs. 2.17=6.591K). Other names included κόνοι and κόκκαλαί (Ath. 2.57b-c, Gal. Hp.Acute comm. 4.63=15.847K, cf. Phryn. 375). They were believed to be astringent (Dsc. 1.69.3), beneficial to the kidneys and bladder (Plin.Nat. 23.142, cf. Larg. 143, 147), ideal for expectoration of matter from the chest and lungs, and strongly nourishing (Gal.Simpl.Med. 7.10.68=12.55K, 8. 16.22=12.102-103K). If the pine-nuts were mixed with the πυράνη when it was still cooking they would soften during boiling (Gal.Bon.Mal.Suc. 5.4=6.782K), and despite being ἐκ τῶν κακοχυμών (Gal.Bon.Mal.Suc. 4.16=6.771K, but Posidon. ap.Ath. 14.649d merely says that this nut is ήττον ... εὐχυμον), their overall medicinal properties would recom-
mend them for Dieuch.'s recipe. The phrase μάλιστα δ' οίς ἀντὶ γάλακτος is perhaps explained by Gal. *(Comp.Med. 7.1=13.10K)* where pine-nuts are listed with milk and 'suckable' eggs (see Orib. 4.11.14n.) as having similar properties.

τὰ Ποντικά: This was another term for hazelnuts (cf. Ath. 2.53b and Orib. 1.55.1n.).

τὰ Θάσια: A fairly common synonym for almonds (Chrysipp. Tyan.ap.Ath. 14.647f, Aët. 12.37, Gp. 10.57), on which see Orib. 1.56n. and 4.7.28n..

7.28 τῶν ὄμνυγδάλων: In his edition of Plin. *(Paris 1960, p.108 ad Nat. 15.89)* J. André points out that there are two types of almonds, one sweet (var. *sativa* Asch.), the other bitter (var. *amara* Schn., cf. Gal.Simpl.Med. 4.7=11.646K, 5.12=11.745K). Medicinal recipes often specify which type of almond is required (e.g. *amygdala amara*, Theod.Prisc.Eup. 20, Larg. 5, Gal.San.Tuend. 6.3.17=6.393K; *dulcis*, Larg. 147). Bitter almonds were useful for the expectoration of thick and viscous matter from the chest and lungs, and for coughs (Gal.Simpl.Med. 6.1.36=11.827K, Dsc. 1.123.1, Phryn. Com.ap.Ath. 2.53a, Anthim. 90, Ps.Garg.Mart.med. 53), so Dieuch.'s application of them here is correct. On almonds see also Orib. 1.56n..

ἀντὶ τοῦ ἑλάιου ... τὴν λευκήν μῆκωνα: 'Poppy seed is also an important source of oil. There is first a cold pressing which produces a clear edible oil known in France as olivet- te. Second pressings under heat produce a red oil, afterwards decolourized and used for paints and industrial purposes' *(T. Stobart, Herbs, Spices and Flavourings, Harmondsworth 1977, p.204).*

7.31 διὰ χειρὸς ἔχων: Presumably another instance of shaking the
pot rather than stirring with a spoon (see Orib. 4.9.1n.).

7.33 ἱτριον: This was a thin πεμματίλιον made with sesame-seeds and honey (Ath. 14.646d; see also A. Micha-Lampakis, 'Ἡ διατροφή τῶν ἄρχατῶν Ἐλληνῶν, Athens 1984, p.45 and Orib. 1.7.3n.), poppy-seeds (Dsc. 4.63.2), olive-oil and salt (Alex. Trall. 5.5=2.191 Puschmann) which was baked (Hp. Aout. (Sp.) 39). D.H. (1.55.3) agrees that it was flat when recalling a tradition that Aeneas' Trojans used ἱτριον as plates (cf. Verg. A. 7.107sq.), and describes it as πύρινος (Antyll. ap. Orib. 4.11.9 recommends using the same wheat as for bread), whilst Aret. (SA 1.3.13=24A. 308K) and Alex. Trall. (9.1=383 Puschmann) hold it up as an example of a δεξιπνον συτώδεςς. It was a dry cake (καπυρώδη πλάσματα, Sch. Ar. Ach. 1092), sometimes broken up as an ingredient for other more elaborate cakes (Ath. 3.125f, Gal. Loc. Aff. 1.4=8.35K) and porridges (Antyll. ap. Orib. 4.11.9-10). When Dieuch. here gives advice on how the ἱτριον may be rendered ἀλυπότερον ('less liable to cause pain', perhaps from flatulence), he may have had in mind a similar case to that recorded by Gal. (Loc. Aff. 1.4=8.35K, trans. R.E. Siegel, Basel 1976, p.29): 'One person who brings up malodorous gas (το θυσίωδες) admits of having ingested a smelly cake (πλακούντος θυσίωδους) after a meal like one prepared with oil and ἱτριόν.' Since sesame was held by Paul. Aeg. (7.3=2.258 Heiberg) to be γλύκαρον καὶ λιπαρόν, and by Sim. Seth. to furnish τροφήν ... λιπαράν (s.v. σήσαμον = p.99 Langkavel), and remembering that olive-oil was an ingredient of ἱτριον, perhaps θυσίωδες is best taken as 'greasy', its usual meaning; in which case the preparation of ἱτριον described by Dieuch. must have been to counteract this greasiness and make the sesame more digestible, for Plin. (Nat.
22.132) states: 'sesima ... stomacho inutilis in cibis et animae grauitatem facit' (cf. Dsc. 2.98, σήσαμον κακοστόμαχον).


7.36 ἔπρος ἄρτος: See Orib. 4.7.10n. on a mediaeval recipe for bread soup. Hp. (Aff. 6.250L) recommends the crumb of white bread broken up in stock to be given to feverish patients after an evacuation because the lightness of the concoction would not aggravate their condition.

νυρέσσουσι: Both Daremberg (p. 293) and Raeder (p. 105) read νυρέττουσι here. But Dieuch. employs -σο- elsewhere in this chapter (4.7.4, 34), and it seems perverse not to use -σο- here as well following the reading (albeit corrupt) of Λ.

7.38 οἷς ἔνυγραίνουσιν: 'quand on a des selles liquides' (Daremberg, p. 294). This word can sometimes refer to things that have lost their moisture (Thphr.Lap. 10), but usually it denotes things that are full of moisture as here (Arist. Pr. 877a33, Hp.Prog. 2=2.114L, Plu.Arat. 29.6, Mor. 914c).

8.1 τὸ ὀμύλιον: See Orib. 1.6n. and 4.7.24n. on starch. The ὑποστάσεις or 'sediments' (cf. Hp.Epid. 1.8=2.648L, 4.14=5.152L οἴδων ὑπόστασις) had to be broken up before use, to judge from what Theod.Prisc. (log 64, amyllum tritum) and Marc. (med. 26.78, amuli semunciam terito) say, so not only was the ancient process of making 'starch' different from the modern, but the end product was dissimilar in appearance.

ἡλιᾶξων: Drying foodstuffs and medical preparations in the

8.2 τὸν δροβοῦν: There were several sorts of bitter vetch, white (Larg. 165, Marc. *med.* 29.11), red. (Marc. *med.* 17.52), yellow, and cream (Gal. *Alim.* fac. 1.29.2=6.547K, cf. Thphr. *HP* 8.5.1). The time of sowing was also supposed to make a difference, spring-sown vetches being harmless (τρισάλυμον) and not indigestible like those sown in the autumn (Thphr. *HP* 2.4.2). The white variety of vetch specified by Dieuch. here was held to be sweeter than the other varieties of vetch (Thphr. *HP* 8.5.1) and hence less medicinal (Gal. *Alim.* fac. 1.29.2=6.547K), sharper flavoured foods being regarded as more efficacious (cf. bitter almonds in Anthim. 90 and Lucr. 4.10-17). The methods of preparation detailed in different authors are similar to Dieuch.'s instructions here (e.g. Dsc. 2.108.1, Cael. *Aur.* chron. 2.14.204, Hp. *Int.* 1=7. 170L). Dieuch. is not alone either in recommending vetch for the promotion of good complexion when taken internally (Hp. *Vict.* 2.45=6.544L, Plin. *Nat.* 22.153); vetch was also added to face packs (Ov. *med.* 53sq.). Vetch meal was moderately purgative (Gal. *Meth.* *Med.* 8.4=10.569K, Cels. 5.5.2) and drying (Gal. *Simpl.* *Med.* 5.9=11.729K, *Alim.* fac. 1.29.2= 6.547K). It was not possible to make bread from vetch (Gal. *Alim.* fac. 1.16=6.524K), and there are no recipes in Apic. for this pulse, perhaps because it was regarded more as food for cattle than for men (Gal. *Alim.* fac. 1.29.1=6. 546K). On vetch see also Orib. 1.27n..

8.3 ἐπ’ ἐμπύων: Empyema was the name given to a disease which caused slight fever during the day but heavy fever at night, copious sweating, coughing without the expectoration of
much sputum, sunken eyes, flushed cheeks, bent finger-nails, swollen feet, blisters over the body, and lack of appetite (Hp.Prog. 17=2.152-154L). A sweet remedy similar to that described by Dieuch. here is detailed by Hp. (Acut.(Sp.) 30=2.518L) employing boiled squill, cumin, sesame-seeds, almonds, honey, and sweet wine.


8.7 φυσωδέστερα: δοσιά δὲ πάντα φυσώδεα, καὶ ὀμα, καὶ ἐφθα, καὶ πεφυγμένα· ήκίστα δὲ βεβρεγμένα καὶ χλωρά· τούτευς δὲ μὴ χρέεσθαι, ἂν μὴ μετὰ σιτίων (Hp.Acut.(Sp.) 18=2.484-486L).

8.9 τὰς κορύζας καὶ κατάρρονς: κόρυζα signified mucous discharge from the nostrils, whilst κατάρρονς was the mucus in the chest and βρόγχος the mucus in the throat (Hp.VM 18=1.614L, Gal.Meth.Med. 7.11=10.513K, Sympt.Caus. 1.4=7.107K, Hp.Prog.comm. 2.49=18B.180K, Luc.D.Mort.6.2). Gal. (Introd. 13=14.742K) recommends hot, weak, cereal-based foods to draw out these afflictions, and Dieuch.'s recipe is in keeping with this advice.


8.12 τοῖς τελευσμώδεσι: τελευσμός was an inflammation around the intestinum rectum (τὸ ἀπευθυσμένον ἐντερον) which caused frequent urges for stool but scant evacuations, these resembling phlegm or mucus. The condition was easily relieved and was never considered by itself.fatal (Aret.SA 2.9.6=24A.156K, Gal.Def.Med. 270=19.422K, Introd. 13=14.754K, Cels. 4.25.1). Cels. (4.25.2), like Dieuch. here, also prescribes the same diet for τελευσμός as for dysentery, namely foods that are mildly astringent.
δυσεντερικος: See Orib. 1.49.5n.

8.13 Δεσφωθος: Sor. (1.118, cf. Hp. Epid. 7.3=5.370L) describes despumated honey using this word. Skimming the froth off boiling liquids was a common operation in the ancient kitchen (Apis. 5.2.3, 5.3.3, 5.4.3; see also Orib. 4.11.3n.).

8.14 το δε πίσινον ξτνος: Peas were generally thought to be less flatulent and to be more easily digested than beans (Gal. Alim. fac. 1.21=6.532K, 1.28.6=6.545K, Hp. Vict. 2.45=6.542L). ξτνος could be made from peas (Ar. Eq. 1171), beans (Sch. Ar. Ran. 62), or any sort of pulse (χεδροωδ, Phaenias ap. Ath. 9.406c), or even χόνδρος (Gal. Vict. Att. 6.35). It seems that the pulses were first soaked in water and milk (Gal. Vict. Att. 6.35), and then olive-oil or some sort of fat was mixed in during the boiling (Gal. Bon. Mal. Suc. 5.3=6.782K); to an ξτνος made from χόνδρος could be added dill, leeks, pennyroyal, mint, hyssop, and pepper (Gal. Vict. Att. 6.35), so presumably these seasonings could also feature in a πίσινον ξτνος. The consistency of ξτνος must have been reasonably thick to judge from the parallels given by ancient authors (ἀθανι or porridge, Sch. Ar. Av. 78; λεκυθος or gruel, Gal. Bon. Mal. Suc. 5.3=6.782K) and the epithet παχύχυμος applied to it by Gal. (Vict. Att. 7.53). On the medicinal properties of peas see Orib. 1.19n..

8.16 τον φασιλων: Presumably this is an alternative spelling of φασιλων (see Orib. 1.23.2n., and C's reading of διοδ for διο at Orib. 4.8.14). Calavances were enjoyed as a food (Demetr. Com. Vet. ap. Ath. 2.56a, Ar. Pax. 1144) particularly when toasted (Epich. ap. Ath. 2.56a). I.S. Neale (Roman foodstuffs and Their Relation to the Social Classes, diss. University of Hull 1969, p.60) suggests the translation of 'cow-pea' rather than 'calavance'.
S. 18 -cC)v 8oXL')((OV; Littré (6.543 ad Hp.Vict. 2.45) and Daremberg (p.298) translate 'haricots', but as J. André (L' alimentation et la cuisine à Rome, 2nd edn., Paris 1981, p.39) points out: 'Le phaseolus ... n' est naturellement pas notre haricot (Phaseolus vulgaris L.), dont l' Amérique tropicale est la véritable patrie, mais le dolique, banette, ou mongette (Vigna sinensis End.).' LSJ too take δόλιχος to be the Vigna sinensis or 'calavance', but this is the same identification as is given for Ϝάσηλος (see Orib. 4.8.16n.). Many types of beans have a similar appearance, and thus Andre's translation of banette or mongette, known in English under its common appellation of 'black-eyed bean' (see A.K. Bedevian, Illustrated Polyglottic Dictionary of Plant Names, Cairo 1936, p.614), should be tentatively accepted for want of any further information.

In the ancient world there was some confusion over what a δόλιχος was, Gal. devoting a long section of Alim.fac. (1. 28=6.541-546K) in the attempt to explain what other authors meant by δόλιχος (see also R. Joly ad Hp.Vict. 2.45, Berlin 1984, p.269). If it is the black-eyes bean it is hard to understand why it was considered so bad (worse than lentils, peas, broad beans, but better than chickling, Gal.Bon.Mal. Suc. 7.7=6.791K, cf. Vict.Att. 7.45). δόλιχοι were nourishing, laxative, and moderately flatulent (Hp.Vict. 2.45=6.542 L), and when green were eaten pods and all in oil, garum, and sometimes wine (Gal.Alim.fac. 1.28.8=6.546K, 2.1.5= 6.557K). They do not appear in cooking for the more luxurious table.

τῶν ἄρακων: It is understandable that Dieuch. warns against ἄρακος (probably wild chickling, Lathyrus annuus L.) as it was more difficult to digest than chickling (Gal.Alim.fac.
9.1 ΠΕΡΙΠΛΑΝΑΩΝΤΑ ΣΤΑΙΤΩ: Obviously by sealing the pot the cooking juices would be preserved intact along with the goodness of the pulses, and the lack of evaporation would help prevent burning. This method of cooking is noted by Dsc. (2.16), although mud rather than dough is used to seal the pot in this case. Nowadays foil or greaseproof paper are employed for the same purpose (E. David, French Provincial Cooking, Harmondsworth 1964, p.400).

ΔΙΑ ΧΕΙΡΩΣ ΕΧΕΙΝ ΚΛΙΝΟΝΤΑ: Shaking the pot rather than stirring the contents appears to have been a standard cooking process in the ancient world (Larg. 64, Apul. met. 2.7, Anthim. 3, Plu. Mor. 182f, Dieuch. ap. Orib. 4.7.3, Aus. 2.6.5). The same method is used today to prevent soft vegetables from becoming puréed (e.g. 'Courgettes Rapées' in J. Child and S. Beck, Mastering the Art of French Cooking, vol. 2, Harmondsworth 1978, p.485).

9.2 ΤΟ ΑΝΟΣΜΟΤΑΤΩ: Breath smelling of strong spices, garlic, or wine was disapproved of in antiquity (cf. Cic. Pis. 13) being suitable only for rustic boors (Plaut. Mos. 38sq., cf. Poen. 1309-1314), hence Dieuch.'s advice here. Col. (9.14.3) lists some of the δόξα to be avoided: salsamenta, omnia liquamina, and such things as onions and garlic. Plin. (19.113) quotes the Greek writer Menander as saying that smell of garlic on the breath could be neutralised by the eating of a beetroot roasted over hot charcoal.

ΤΟ ΟΜΦΑΛΙΝΟΥ (SC. ΕΛΑΙΟΥ): There were two preparations called by the same name, one made from olives, the other from grapes (Plin. Nat. 12.130). The former was made from unripe olives and was used when new (Thphr. Od. 15) Dieuch. recommends it here because it was not biting (ΔΕΝΙΚΟΥ) but
 cuckold or sweet-smelling (Dsc. 1.30.1, cf. Sim. Seth. s.v. 
ελαιον = pp.39-40 Langkavel). Plin. (Nat. 23.79) regarded
omphacium as utilissimum -- both in cooking and medicine --
and places it in order of merit before olearum olivae (made
in December when the olives began to darken, cf. Cato Agr.
65, Col. 11.2.83).

9.3 τοῦς δ' ἐν ψυχῆς ... ἐν τῇ λεπίδα: λεπίδες were the scales
(Arist. HA 486b21-22), δέρμα the skin (Diph. Siph. ap. Ath. 8.
355f, cf. Mnesith. ap. Ath. 8.357c) of fish. A. Davidson
234, see also Ruf. ap. Orib. 4.2.7) describes what it to be
looked for in a fresh sea-fish: the eyes should be bright
and stand out properly, the gills should be moist and red
(not grey), the body should be firm or even rigid to the
touch; the scales should adhere firmly to the skin, although
some fish have loose, easily detached scales; and the smell
must be fresh and salty. Besides Dieuch.'s advice concern-
ing the scales here, other ancient writers comment on smell
being the test of freshness (Anthim. 47, 49, Antiph. ap. Ath.
6.225e).

tὸ ελαιον ἰκανὸν: Ἄπις (10.1.1) gives the same instruct-
ions on cooking fish, salting them first, then frying them,
and finally plunging them in sauce (cf. Anthim. 42, 45).
In this way, as Dieuch. says, the fish will be crisp on
the outside whilst retaining its flavour and succulence
inside. An Apulian cook gives the following advice on the
frying of fish (E. David, Italian Food, Harmondsworth 1963,
p.171): 'The chef then went into the question of how to fry
fish; it was a more difficult accomplishment than it seemed
to be. Fried fish must be crisp -- not wet and flabby as
they often were. Only barbarians used fat or butter. Olive
9.5 λεπτοῦ ἄλφιτος: Fish when about to be grilled or fried are nowadays usually dredged in flour and coated in oil or melted butter, because this helps keep the fish from breaking up and gives a slightly crisp exterior. Presumably the finely ground ἄλφιτος fulfilled the same purpose.

10. Φιλοτίμου: This is the traditional spelling, but Φυλοτίμος is also found in some good sources (Ath. 2.53f, Gal. Alim. fac. 1.6.1=6.496K, 1.13.2=6.511K). He was a pupil of Praxagoras (Gal. Ut. Diss. 3=2.890K, UP 8.12=3.671K, Sympt. Caus. 1.6=7.124K, Ven. Sect. ad. Erasistr. 5=11.163K), a fellow student of Herophilus (Gal. Math. Med. 1.3=10.28K), and a contemporary of Erasistratus (Gal. Hp. Aph. comm. 6.1=18A. 7K), his floruit can therefore be dated to between 300 and 260 B.C. He was involved in surgery (Cels. 8.20.4), physiology (Gal. Trem. Palp. Conv. Rig. 6=7.614K), and the treatment of internal disorders (Cael. Aur. chron. 1.4.140, acut. 2.16.96). However, it appears that the Περὶ τροφῆς alone of his writings was still read in later times (cf. Gal. Alim. fac. 3.30.2=6.727K on a textual variant in this work). See also Diller, 'Phylotimos', RE 20 (1941), cols. 1030-1032.

10.1 Κέγχρος: See Orib. 1.15n.

ἄλητος: 'Nous avons regardé ce mot comme le neutre d' un adjectif verbal, dérivé du verbe ἄλεω ou ἄλησω' (Daremberg, p.620). Hsch. (s.v. ἄλητος) gives as a synonym ἄλευρον, and the word is used elsewhere to signify 'meal' (Hp. Art. 36=4.160L, Liqu. 5=6.130L, Aret. CA 2.2.7=24A. 250K).

11. Αντῦλλου: Antyllus was a Greek doctor of the 2nd c.A.D., and was reckoned among the best of the Pragmatist school. His merits were in the fields of dietetics, general therapy, and above all surgery, his work on the latter topic being
entitled Χειρουργούμενα and comprising of at least five books. The majority of the fragments of Antyllus' works are contained in the Medical Compilations (see M. Wellmann, 'Antyllos (3)', RE 1 (1894), cols. 2644-2645).

11.1 τῶν συνεχῶν νοσημάτων: 'Continuous' fevers were distinguished from 'chronic' fevers because there was no state of ἀπουρεξία before the disease had completely abated (Gal. Cris. 2.6=9.664K, Dieb. Decr. 2.12=9.888K, Introd. 13=14.729-730 K). Continuous fevers could be caused by inflammations around the liver (Gal. Introd. 13=14.745K) and yellow bile (Gal. Diff. Feb. 2.2=7.336K).

σεμιδαλίτης: See Orib. 1.2.2n.

11.2 τῆς ζύμης: Plin. (Nat. 18.102-104, cf. Pall. 11.21) sets out several methods of making leaven, and concludes with the method most used in his time: some dough was kept over from the day before and through sourness it fermented, a method still employed on occasion today (H. Saberi, Noshe Djan: Afghan Food and Cookery, London 1986, p.43: 'Regular nan is made of wholemeal flour and it is leavened with a fermented starter prepared from a small lump of the dough from the previous day. This will have been left in a warm place overnight.'). Yeast was moderately heating (Gal. Simpl. Med. 6.6.4=11.882K, Dsc. 2.85.2) and hence leavened bread was easy to digest (Cels. 2.28.1, Gal. Alim. fac. 1.7.4=6.499K). Thus, as Antyll. says, it was suitable for sick people (cf. Gal.'s recommendations of bread with a lot of yeast for those who were old and did no exercise, Alim. fac. 1.4.4=6.494K, San. Tuend. 5.7.6=6.343K).

δερματώδες: cf. Ηρ. Nat. Puer. 12=7.188L, ... ὡσπερ ἐπ' ἀρτψ ὀπτωμένψ, λεπτῶν ἐξίσταται ἐπισπολῆς θυμεοειδές· θερμαινώμενος γάρ καὶ ψυσόμενος ὁ ἀρτος αἰρεταί· ᾧ δ' ἀν ψυσάται,
11.3 έν ὄξατι ἢ μελικρατῳ: The fact that Antyll. gives μελικρατον as an alternative to water, as does Gal. in his commentary on Ἡπ.Ασυτ. (1.43=15.498K), shows that he is referring to a mixture of honey and water (cf. Ἡπ.Ἀφ. 15=6.222L, Ἡπ.Μορβ. 3.17=7.156L). There were two other sorts of μελικρατον, the first being made from honey and milk (Ἐ.Ὀρ. 114, Ἡμ.Ὀδ. 10.519), the second consisting of honey and wine (Πολλ. 6.17= οὐνόμελι, Ἱσιδ.オリジ. 20.3.12, cf. CGL 2.367.6). Gal. (ἀπ.Οριβ. 5.14.6-7) states that unboiled honey and water was laxative, whilst the boiled mixture was nourishing, and he continues by giving a recipe: some honey was added to a large amount of water and boiled, the froth being removed (see Οριβ. 4.8.13n.) as soon as it was formed to prevent bitterness. The preparation was ready as soon as the froth stopped forming. Arist. (Μετε. 1092b28) also considered exact proportions unnecessary provided that the μελικρατον was well diluted, although he says that some people use nine parts of water to one of honey; Paul.Αεγ. (1.96) gives similar proportions of eight parts of water to one of honey. It was good for the digestion as Antyll. says (Gal.ἀπ.Οριβ. 5.14.1).

11.7 ἥνικα καὶ χόνδρον καὶ ἄρτον προηγούμεν: Raeder (p.108) indicates a lacuna after this phrase. However, this is unnecessary since a clear sense can be extracted without resort to excessive emendation, and the strained syntax is no doubt a result of Οριβ.'s compression during excerpting (see Οριβ. 1.50.2n.). Reading <ἔστιν> ἥνικα ... προηγούμενα, Daremberg (p.303) translates: "Quand ce genre d' aliment est bien préparé, nous le préférons quelquefois à l' alica et au pain parce qu' il est facile à administrer, qu' il
se digere aise’m et qu’il se distribue rapidement dans le corps'. ήρημονμεθα is an emendation by Matthaei, the Mss revealing some confusion with C and N transmitting ήρημονμεν and η ήρημομένη, and έντιν could well have disappeared through haplography after άναλαμβάνεσθαι (-ECTIN, [AI] easily being taken for [IN] in a hastily written script). Daremberg's version is therefore preferable to Raeder's text.

11.9 ένωθηναι: This recipe is reminiscent of one described by Anthim. (82) where ζιμελα or fine flour is left to cook with goat's milk until buter sic fiat (cf. Anthim. 70 where rice is cooked slowly with milk ut unum corpus deueniat).

11.12 μαλάχη: M. Grieve (A Modern Herbal, Harmondsworth 1976, pp. 506-508) remarks that the demulcent and emollient properties of mallow make it useful in inflammation and irritation of the alimentary canal, and of the urinary and respiratory organs. The action too of the root upon the bowels in unaccompanied by any astringency. Because of its outstanding medicinal properties, and the fact that both its leaves (cf. Luc.Merc.Cond. 26), roots, and flowers can be used as food (cf. Plu.Mor. 158a), Antyll. is justified in calling it ηλαχάνου ... πάντων έπιτηδειότατον. In antiquity mallows were used as a laxative (Mart. 3.89, Cels. 2.29.1, Cael.Aur.chron. 1.1.15, Gal.Alim.fac. 2.42.2=6.629K), for hoarseness (Gp. 12.12.1), and for irritations of the kidneys and bladder (Diph.Siph.ap.Ath. 2.58e, cf. Larg. 147, Alex.Trail. 9.3=2.419 Puschmann). Being easily digested (Hor.Carm. 1.31.16) they were used as food, sometimes as a substitute for bread (Sch.Ar.Pl. 543). Apic. (3.8) has two similar recipes for mallow: with olive-oil, garum, and vinegar; and with pepper, garum, and passum (other recipes,
4.2.13, 4.4.2, 4.5.1). The dried roots of mallow when boiled in water give out half their weight of a gummy matter like starch (ἐχει δὲ καὶ γλυκόρυμ τι κατά τὸν χυλὸν ἢ μαλάχη, Gal. Alim. fac. 2.42.1 = 6.628-629K, cf. Bon. Mal. Suc. 4.42 = 6.781K); no doubt the leaves had enough of this gummy matter to make the ὀφθέμα as described here (on ὀφθέμα see Orib. 4.7.21n.).

11.13 κολοκύννη: See Orib. 1.35.1n.

όδάλμη: According to LSJ this is a hapax, although there is no difficulty over meaning, and the formation of the word is familiar from such compounds as ὀδρέλαιον and ὀδάλμη.

11.14 τὰ δ' ὥλα: Anthim. (35; see M. Grant, 'A Note on Anthimus' De observatione ciborum epistula', Hermes 114 (1986), pp. 383-384) adds that eggs should be put into cold or warm water which should then be gradually brought to boiling point at the same time as being stirred with a spatula, for in this way the eggs could be cooked evenly throughout.

Other authors (Plin. Nat. 29.49, Larg. 115, Gal. Simpl. Med. 11.1.31 = 12.352K, Marc. med. 27.77) recommend eggs cooked in vinegar (δὲξος) or vinegar mixed with water (δὲξωκρατόν), Gal. in particular (Simpl. Med. 11.1.31 = 12.352K, cf. Theod. Prisc. log. 101) for drying fluxes from the bowels which seems strange in view of Antyll.'s assurance that eggs will be ὑγρά after being boiled in δὲξωκρατόν, moist bowels usually being treated with something dry. Eggs were popularly eaten when boiled in water just long enough to heat them; their contents were then sucked out (hence ὀφθέντος, Gal. Simpl. Med. 11.1.31 = 12.254K, Nicom. Com. ap. Ath. 2.58a). The purpose of the sharp point at the tip of the handles of Roman spoons may have been to pick a hole in the shell rather than to spear snails as is commonly believed. Eggs were served
with *garum* (Mart. 13.40), honey, salt (Gal.*Hp.Acut.comm.* 1.17=15.463K), and pine-kernel sauce (Apic. 7.19.3). Besides chickens' eggs, geese's (Plin.*Nat.* 29.55, Petr. 65.2), pheasants' (Anthim. 38) and other sorts of eggs were eaten. Perhaps Antyll.'s instructions for soft eggs show that he preferred them in this way to runny eggs, as did Dsc. (2.50) who believed them to be nourishing; Philotim. (ap.Orib. 2.69.5) held that eggs were more digestible when soft, and Alex.Trall. (9.2=2.403 Puschmann) urges the avoidance of hard eggs.
APPENDIX
APPENDIX

M.E. Milham, in an amusing short article,¹ recounts how a leading American classical scholar, who had been invited to a Roman banquet in the 1930's, was driven because of the inedibility of the unfamiliar seasonings in the dishes to head for a hamburger stand afterwards to satisfy his hunger. However, with the growth, at least in Britain, of overseas holidays particularly during the past decade and the establishment of diverse ethnic restaurants people have become more adventurous in what they choose to eat: supermarkets from St. Andrews to Manchester to Bristol display guavas, papayas, yams, persimmons (of which 'Sharon fruits' are a variety), okra, pommelos, ginger and turmeric roots, and numerous fresh herbs.

It is often habit which predetermines a reaction to a particular dish, and the Roman love of combining honey and pepper in dishes (to me a delicious idea) is no more obtuse than the Tunisians sprinkling pepper on their coffee and tea,² or, to the French, the English serving lamb with mint sauce.³ J. Edwards in his book The Roman Cookery of Apicius describes ancient cuisine as 'delicious',⁴ whilst J.D. Vehling found the recipes in Apicius 'practical, good, even delightful' and lauded some as being 'of the rarest beauty and of consummate perfection in the realm of gastronomy'.⁵ Museum pamphlets and booklets⁶ indicate the awakening interest of a wider audience, and there have been some recent articles of a general nature on ancient eating habits.⁷ Oribasius surely meant his work to be a practical manual of diet and medicine, and therefore this appendix offers a selection of recipes derived from the Medical Compilations and adapted for the modern kitchen.
1) Pancakes, Orib. 1.7.1-2

1/2 lb wholemeal flour
1/2 teaspoon sea-salt
Olive-oil
1 tablespoon honey
1 1/2 oz grated cheese (mature cheddar)
1 teaspoon sesame seeds

Put the flour in a bowl, add the sea-salt, honey, and about 2 tablespoons of water, and mix into a dough, adding more water if necessary to make it the correct consistency.

Knead well for several minutes, and then pat out into a thin circle about 7in in diameter on a floured board. Pour enough oil into a heavy frying pan to come level with the top of the dough circle, heat, and when it is hot but not smoking slide in the pancake and cook steadily for about five minutes. When the underside is golden turn it over. Repeat this turning over if required. If wished the pancakes can be garnished: spread over the top the cheese and sesame seeds, and cover the pan until the cheese is melted.

Serve hot.

2) Cabbage Salad, Orib. 4.4.1-2

1/4 red cabbage
1/2 teaspoon fresh rue
1 tablespoon honey
Bunch of fresh coriander leaves

Shred the cabbage and place in a salad bowl. Finely chop the rue and coriander and put on top of the cabbage. Mix the honey and vinegar together until the honey is completely dissolved and pour over the cabbage. Mix the salad well, and then sprinkle on top the asafoetida.

3) Stewed quinces, Orib. 4.2.20

Quinces
Honey
Sweet white wine

Peel the quinces, slice, and core. Put the quince slices in a pan, add enough wine to cover and simmer with the lid
on until the fruit is soft. Add enough honey for the desired sweetness and simmer again until the juice begins to set to jelly. Skim off any froth that has risen to the surface before turning off the flame. Serve the conserve in individual dishes chilled.

4) Snails, Orib. 4.1.34

Snails
Fruity virgin olive-oil
Garum or salt
Strong red wine

It is possible to buy already prepared snails in a tin, in which case only the last of Oribasius' recommended operations need be carried out. Put the snails in a saucepan on a moderate heat with a tablespoon of olive-oil, stir them, and moisten them with garum or salt and red wine. Leave to cook until the snails are tender and coated in the reduced sauce. Serve. E. David\textsuperscript{8} details the three operations referred to by Oribasius: after a month of starvation the snails are thrown into a pot of boiling water and cooked for 20 minutes. They are then taken from their shells, the little intestine is removed, and after washing in several waters they are boiled for a few minutes. After draining they can be seasoned and cooked as above.

5) Lentil and Barley soup, Orib. 4.1.22-23, cf. 4.1.17

5oz red lentils
3oz pearl barley
½ teaspoon dried savory
1 tablespoon wine-vinegar

½ teaspoon salt
2 tablespoons olive-oil
2 pints water

Soak the lentils and barley overnight. Drain, and pour in the measured amount of fresh water. Simmer gently for an hour or until the barley and lentils are soft and disintegrating. Add the savory, wine-vinegar, salt, and olive-oil, and cook for another half hour until the soup has
thickened with the barley gluten. Serve hot.

6) Pea soup, Orib. 4.8.14

4oz dried peas 1/2 teaspoon salt
1 leek 1/2 teaspoon dill
1 tablespoon olive-oil 1 1/4 pints water

Soak the dried peas in water or milk for several hours. Drain, rinse, and put in a pan. Add the oil, finely chopped leek, and measured water. Bring to the boil, then cover and simmer for about an hour until the peas are tender, or if desired until a smooth texture. Five minutes before serving season with dill and salt. Serve hot with a sprinkling of pepper.

7) Thick bean soup, Orib. 1.18.3

8oz broad beans 1 1/4 pints water
6 tablespoons fruity olive-oil sea-salt

Soak the broad beans for several hours in water, then rinse and drain. Put all the ingredients in a pan and bring to the boil. Cover the pan with a lid and simmer gently for about 1 1/2 hours until the beans have broken up. For a really thick soup the beans can be passed through a sieve (or puréed in an electric blender). Season with more salt if required and serve.

8) Sesame cake, Orib. 4.7.33

8oz sesame seeds 1/4 teaspoon salt
Honey Coarse wholemeal flour
2 tablespoons olive-oil

Mix enough honey with the sesame seeds to blend without making too stiff a mixture. To this mixture add the olive-oil, salt, and enough flour to make a stiff dough, and knead. Then roll out the dough to 1/3in in thickness on a floured board, and cut it into circles. Arrange the circles on a
greased baking pan and bake in a moderate oven for about 15 or 20 minutes until golden brown. Cool on a wire rack before serving.

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NOTES TO THE APPENDIX


8 French Provincial Cooking, Harmondsworth 1964, pp.318-392.
WORD INDEX
This index lists according to the forms in which they appear all the words in Books 1 and 4 of the Medical Compilations, with the exception of the definite article, relative pronouns, and the particles ὁ and καί. An asterisk placed against a reference denotes a discussion in the commentary.

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