and he once sowed wheat and barley, mixing both types of seed together after carefully selecting them, hoping in this way to find out for certain whether darnel and haver-grass appeared through mutation, or whether these seeds possessed a peculiar nature. Since a lot of darnel happened to appear in the wheat grown from specially selected seeds, but in the barley only a little darnel and plenty of haver-grass, he tried the same method in the testing of other seeds. So he found that inedible seeds such as the hard round wild chickling and axeweed appeared in lentils as a result of mutation, whilst there were clivers that are not only inedible, but also smother the lentil shoots as they are growing, by choking and strangling and dragging them down, just as dodder does to bitter vetch.

These are therefore altogether worthless seeds. Dark wheat is so called from a change that occurs in wheat, but this is far from the badness of darnel. He discovered similar such changes in other seeds, so he instructed those who were using them to pick out everything that was bad, whenever the seeds were being used to maintain health, and not to ignore them, as the bakers do who serve the general public.

For sometimes when the course of the year turns out badly, there springs up in the wheat massive amounts of darnel, and since the farmers do not remove it in sieves designed for this purpose – because total wheat crop would be small – and bakers act similarly for the same reason, the immediate effect is for headaches to trouble a lot of people, and when the summer comes for sores to appear on the skin of not a few of those who eat it, or some other symptom which is indicative of bad juices.

It is therefore important for us to sift the seeds that are going to be used for food, understanding that, even if we do not sense the harm caused each day because of its low level, yet after a long time the harm accumulated from it finally becomes noticeable.

8

ON THE POWERS OF FOODS

Book 2

Introduction

We feed off plants and animals. This is why everyone before me in their books about food has begun with cereals, because in these is that most useful nourishment of bread. So throughout my discussion in the first book of the present work I examined both wheats and barleys – that is einkorn and emmer – and added what are referred to as pulses and legumes. In this book I felt it important to move on to all the other foods which we enjoy from plants, and then to all the foods derived from animals that are particularly valuable to humans. The logic of this seems sound.

Some people do not go through every food that shares a similar nature, nor, on following on from cereals, do they give instructions about all the foods derived from plants, but instead they always base their discussion primarily around those foods which are most useful to humans. It is certainly the case that pork, kid, goat, veal, beef and lamb afford no less use to people than everything that hunters chase up in the mountains, as is in fact the case with the majority of fowl and sea food.

Then, reflecting that it would be impossible to include each type of food in a single book, I concluded that it would not make a great deal of difference if, of the designated foods that remained, I discussed in the second book those from plants, whilst in the third book I discussed those from animals. When selecting the particular book that delineates the power of the foods which are most wanted, the reader has the option, if so wished, of referring on one occasion to the first book, on another occasion to the second or the third book. As the plan is to conclude the discussion about plants in the first two books, I will start with the remainder of what I set out to say, thereby establishing this as the start of my reflections.

In the first book all the foods were seeds; now I will begin with fruits, after making a prior distinction between them and seeds, especially because

many people think it makes no difference whether you say fruit or seed. The seeds that have already been discussed are little different from fruits, but there is no small divide between what is now under discussion. For the fruit of the fig tree is the fig, but the seed of the fig tree is the pip, just as the fruit of the vine as a whole is the grape, yet the pip alone is the seed of the vine. In the same way the fruit of the pear tree and the apple tree are the pear and the apple, but the seeds are the three or four pips in their cores.

Why do I need to say anything more about large gourds and cucumbers – how many watermelons there are, or are not, and how many melons there are, or are not – and about all the other fruits that resemble them? For the whole fruit is radically different from the seed. Of the bean, lupin, calavance, lentil and all the other things that have a pod guarding the seed, the fruit consists of both pod and seed. The greatest part of the whole fruit is contained in the seeds. Only the seed is eaten of almost all the other foods which I discussed in the first book, with just the whole fruit of the calavance being eaten, provided that the fruit is still green; for when they are dried the pods that surround the seeds are useless to humans. The pod of the green bean is not edible, nor is the pod of the chickpea, nor the pods of any of the other things that Theophrastus generally called podded.

Understandably I have mentioned what most people designate as pods, but which some people call calavances, since only in their case is the pod edible. But I have described their power before, as I in fact believe some of the ancients applied the name of bean to them. Fruits come both from trees and from vegetables in the garden, among which some doctors list watermelons, melons and large gourds. It is with these that I shall make a start with the instructions in this book.

Fruits that are called autumn

The Greeks designate as autumn that part of the year during the middle of which the Dog Star happens to rise.[1] This period lasts forty days. It is then that all the fruits appear that are called autumn, although some are already past their best, some are not yet ready, and some are just right, either after the peak of the season or before it. They are called autumn fruits, not only because of the time at which they reach their prime, but also, I think, because they must be distinguished from foods that are suitable for storing, since wheat, barley and the other cereals which have been discussed in the previous book grow every year in the summer, but do not rot quickly, as do gourds, mulberries, melons, round melons, peaches and all other such things. For if they are dried, put into storage

and kept for the winter, their original state is completely changed to something different.

Of course some people remove the seed from gourds, then dry the flesh, store it over the winter, and generally use it far more than some of the other foodstuffs. Yet the state of wheat and barley, as indeed all the other cereals, does not change to anything different in storage; because every cereal holds to those basic properties which were formed right at the beginning of the summer.

Evidently anything that possesses a body with a dry constitution, since it is stable in its condition, is therefore solid, earthy and hence nourishing; whilst anything that is moist in consistency both rots, affords a negligible nutrition and passes easily out of the body. It is for this last reason that such foods go through the stomach more than solid foods, particularly when they contain anything alkaline and laxative, some of the autumn fruits, as I have shown, being quite powerful in this respect; even though I said they were full of bad juices, yet they have no perceptible quality of taste, just as the finest water has no perceptible quality.

So all these things, particularly everything that we eat before it has fully ripened, are flatulent, but pass through the body quickly, seeing as everything that has a thin juice is also quickly distributed. These things are all replete with bad juices, and the only sort of person who would derive any benefit from them is someone exhausted after a very long journey and from excessive heat; in this instance they are of benefit, firstly by rehydrating a dried out body, and secondly by cooling to a moderate degree, if they are eaten when cold.

So they always hold the ability to rehydrate, but their cooling property is not kept if, as I have said, they are served hot to patients; for in their own particular constitutions they are not so cold as to cool the stomach even if they are served warm. An additional cooling agent is required, which can counteract the heat that belongs to the parts in the stomach and the liver, with which the initial contact is made. Since these ideas about all such foods have now been introduced and discussed in general, I shall now move on to the powers peculiar to each individual food.

Large gourds

When raw these are unpleasant and bad for the stomach, since they are extremely indigestible. So that if you are forced, through want of some other food, to eat a large gourd, as by now you will have summed up the necessary courage, a cold weight will be felt lying in the bowels, the

stomach will be upset, and vomiting will be induced, the only way in fact that the ensuing symptoms can be alleviated. So everyone tends to serve the large gourd and many of the other autumn fruits either immediately after boiling, or further fried in a pan or baked. You should bear this statement in mind, for it applies to everything that requires some alteration through heat.

The large gourd, which is the topic of this section, has no recognisable quality in its flavour after it has been boiled, unless you mean by flavour a lack of sharpness, saltiness, sourness, bitterness and anything else of this sort that is clearly defined. Water can be classified like this. It is the universal practice for everyone to designate such things as inert, and I would like to follow this concept in order to keep my discussion clear.

Since the large gourd is like this, it is understandable that it does not lend itself to many methods of preparation, because it is set midway between all extremes, and hence it has the potential of being brought equally and easily to these extremes. None of those foods that naturally have something extreme in them is brought easily to that state through contradictory preparation.

The large gourd furnishes the body with nourishment that is moist and cool, and therefore also scanty, as was said a little before about everything that has thin and watery juices. It passes down easily through the stomach through the slipperiness of its substance and following the principle that is common to all moist foods that are clearly devoid of any astringency.

It is not digested badly, provided it does not rot first. This rotting occurs through faulty preparation, whenever a bad juice collects in the stomach, sometimes as a result of the food lingering there, an occurrence typical of all the other autumn fruits that are moist in composition; for they rot in the stomach if their passage is not anticipated quickly.

The large gourd contains a juice that is without quality as far as the senses are concerned. It distributes all the juice it has as nourishment to the whole body. So, by the same token, whenever it is served with anything that has a strong power, this is readily absorbed: for example, if it is eaten with mustard, it is made bitter, but the juice that is distributed from both mustard and the large gourd has at the same time a pronounced heat; whilst in the same way, if it is eaten with anything salty, just as it is prepared by some people with pickled fish in a casserole, it produces a salty juice in the body. Served like this it is an excellent food, provided the pickled fish belongs to the kind from the Black Sea which people nickname 'apple'.

If large gourds are boiled together with quinces and are suitably seasoned, they have a bitter juice which is effective for the digestion. When

baked or fried they lose a great deal of their their special moistness, and what remains does not acquire any strong power, something which does not happen when they are prepared in a simple sauce. Naturally, oregano accompanies large gourds well because of the watery quality that is innate in them; for everything of this sort demands to be mixed with bitter, sharp, astringent or salty flavours, if the intention is for them to be eaten without unpleasantness and without causing nausea.

Watermelons

The nature of watermelons is generally rather chilling and contains a great deal of moisture. Yet they possess a certain purgative quality, which means that they are also diuretic and pass down through the bowels more easily than large gourds and melons. Their cleansing action you can discover for yourself: just rub them on dirty skin. Watermelons will remove the following: freckles, facial moles, or epidermic leprosy, if anyone should have these conditions.

Watermelon seeds are more purgative than what is known as the flesh, so they are excellent for kidneys troubled by stones, but they produce bad juices in the body, especially when they are not properly digested, which is why they usually trigger cholera. This is because even before they have been digested, they are prone to induce vomiting, and if too much of them is eaten, they certainly do cause vomiting, unless they are accompanied by something that contains good juices.

Obviously the popular name for this fruit has come about from the same sort of association as the adjective black has with ink, for the word for watermelon (*pepon*) has connections with the adjective ripened (*pepanon*), that is to say what has been ripened, which to other people signifies everything that has ripened. A bunch of grapes can be described as ripe, when it it fully ripened, so anything that has not yet reached this state cannot be called ripe, since it is in fact unripe and not in season. By the same token all the autumn fruits, such as pears and large gourds, can be called properly ripe, and just like melons embrace the concept of what is described as ripe.

Hence some doctors do not think it right simply to call them watermelons, but urge that the term 'watermelon-cucumber' should be used. Such discussions are not, I believe, the subject of this present work, because they contribute nothing to the art of medicine. A clear explanation is far more valuable than clouding learning with futile arguments of this kind; clarity can best be reached by choosing terms most familiar to the majority of people and keeping to their basic meanings.

Melons

Melons are less moist than watermelons, do not contain so many bad juices, are less diuretic, and not so good at passing down through the bowels. They do not have the power to induce vomiting like watermelons, just as they do not rot nearly as quickly in the stomach as do watermelons, since in watermelons either the accumulation of a wretched juice or some other cause sets off the rot.

Although they fall far short of summer fruits that are good for the stomach, they do not possess the characteristic of being bad for the stomach which watermelons possess, nor do they induce vomiting like watermelons. People do not eat the flesh of watermelons inside which the seeds are contained, but they do eat the flesh of melons with the seeds, and this contributes to their passing through the body. Anyone eating only their flesh passes melons through the body less effectively than watermelons.

Cucumbers

These have a certain diuretic quality, too, just like large gourds, but less pronounced, and their substance is not so moist either. This is why they do not rot nearly so easily in the stomach as do large gourds. Some people digest them (as they do many of the other foods that people for the most part do not cook) through an affinity of their nature with them, a phenomenon described in my work *On the Temperaments* and with even more stress in my book *On Simple Medicines*, which show foods are peculiar to each species of animal due to their wholly unique composition: thus for mules and horses bran, straw, oats and so on; but for lions the raw flesh of animals; and for humans all such flesh cooked, and bread made, as I have said, from cereals.[2]

Furthermore, quails eat hellebore, just as starlings eat hemlock, but come to no harm, in the same way as cows that eat vetch. What therefore remains crucial to distinguish is that foods are each digestible and indigestible, either through the uniqueness of their composition or through some attribute that surfaces during testing. The sort of thing I mean by an attribute has been explained in my first book, for foods either contain bilious juice, or completely wretched waste matter that often collects in the stomach as in some people who have a constitution that is hot without being moist, and a rather bad temperament that is dry and fiery. For these people rot whatever in others is easily transformed and digestible, and a belching occurs which is completely greasy.

Always remember that, even if someone digests whatever most people

find indigestible, the juice distributed from this to the body possesses the same nature. Thus it is impossible for a thick and earthy juice to appear from large gourds, even if they are digested extremely well, just as from lentils and beef it is impossible for there to appear that watery and moist juice, which of course is even described as thin in consistency.[3] In this especially lies the means for the maintenance of good health and protection against diseases, as has been shown elsewhere and will now, since the discussion is under way, be repeated in a brief summary.

So in the case of those who digest cucumbers well, whenever they ignore any qualms about eating a lot of them, a collection of cold and relatively thick juice occurs in the veins over a long period of time, which in addition cannot, without problems, be converted into good blood through venous digestion. It is for this reason that I would recommend that all foods that contain bad juices be avoided, even if they are easily digested by some people. As a result of eating cucumbers, a wretched juice that is the cause of malignant fevers collects unnoticed in the veins over time, whenever there is a minor reason for putrefaction.

Fruits that grow on trees

Clearly pears, apples, peaches, pomegranates and all such similar things that are fruits from trees are useful as food, although there are other fruits which are not eaten and which I do not intend to discuss in this present work. In general, as regards edible fruits, it is important to have knowledge of their basic background: that is moist fruits distribute their moist and thin nourishment to the body; and that in addition foods of this sort pass rapidly through the whole body and are excreted either through the urine or through the skin.

This is why doctors are quite right in saying that these foods afford little nourishment. By way of contrast is the consistency of hard fruits, from which much more nourishment is incorporated into the body, for their passage through the body is slower, especially when there is contained in these fruits some thick, viscous or astringent juice.

Figs

Figs not only have what is a trait common to all summer fruits, but also to all fruits that are called seasonable, and that is they cannot avoid having an element of unwholesomeness, although this trait is less noticeable in them compared with all the other seasonable fruits. But

they also contain something good which readily passes through the stomach and easily goes through the whole body. They possess a considerable facility to purge, as a result of which their consumption promotes the expulsion of sandy sediments in people with kidney problems.

Since all summer fruits afford little nourishment to the body, ripe figs have next to no nutrition; in fact they do not make strong firm flesh, as does bread and pork, but rather spongy flesh, as do broad beans. They fill the stomach with flatulence, and so cause pain, unless on being eaten their passage through the body is swift, and if this is coupled with a prompt evacuation, they cause flatulence of short duration, and so they are usually less harmful than autumn fruit.

Compared to figs that are not ripe, the excellence of ripe figs is considerable, and this excellence is manifest in all other fruits without exception. Figs that are perfectly ripe come close to causing no harm at all, just like dried figs which have many uses, but they are bad for those who eat too many of them. For the blood which they produce is not altogether good, and so the result is a large number of fleas.

They have an attenuating and cutting power, which is why they encourage the stomach to evacuation and cleanse the kidneys; but they are harmful to inflammations of the liver and spleen, just like fresh figs, although this is due to a property inherent in all sweet foods and drinks, and not because of some special power.

For those affected by blockages or indurations they afford no help or harm; but mixed with cutting, attenuating and purgative medicines they are particularly beneficial, and because of this some doctors administer them with thyme, pepper, ginger, pennyroyal, savory, calamint, oregano or hyssop before any other food is eaten so as to help such problems in the liver and spleen. By the same token, if dried figs are used when one of the other ingredients has a power that is harsh, generally attenuating and cutting, then what is eaten is useful not just for those who have this complaint, but also for healthy people. It is safest for the alimentary passages through the liver to be open just as much in the case of the sick as of the healthy.

Thus many people give figs with medicated salts that attenuate in both vinegar and in fish-sauce, having through experience found them useful. It is reasonable to suppose that some of these people will share this knowledge with lots of others after some doctor has encouraged them to do so. Anyone who eats fresh or dried figs with one of the fattening foods does not suffer any harm.

Grapes

Figs and grapes are what one might call the chief of the autumn fruits. They nourish more than all the other autumn fruits and they contain fewer bad juices, especially when they are fully ripe. Those who guard the fruit on the vines provide the greatest proof of their nutrition, because throughout the two months that they keep watch they only eat figs and grapes – with perhaps a little bread as an accompaniment – yet they maintain a good weight. The flesh which results from them is not strong and dense, like that from meat, but rather spongy and flaccid, which is why it quickly reduces as soon as this food is stopped.

Grapes nourish less than figs, and the greatest advantage that they have is of passing through the body quickly. So if on any occasion they are held in the body, they are quite harmful, whilst figs when ripe do not possess this character. For even if they do not become noticable by their passage through the body, yet they are digested well in the stomach and furnish nourishment to the body without any problems. Neither of these attributes is held by grapes, for they are not digested well when they are retained in the body; and in the course of their distribution to the liver and veins they produce a raw juice which is not easily converted into blood.

The reason is that the substance of the grapes is composed of what can be described as flesh and the moisture that is contained there, from which wine is made; and in addition the pips and the covering on the outside that is like a membrane surrounds all these things. But the substance of the pips is dry and somewhat astringent; it passes right through the intestines whilst undergoing no perceptible change in itself, just like the seeds in figs. There is a double correlation between the two fruits: firstly the seed provides the building block for the whole plant; and secondly it passes through the body without change, without being converted into juice and without being processed in the course of digestion.

There is also a connection with the skin that surrounds both fruits, since this fulfils the same function for them as the skin does for animals. The skin undergoes hardly any transformation in the stomach, and some people spit it out as useless, after sucking it and everything which is inside, together with the pips. Some people even try to spit out the pips, and particularly when the grapes are large; for with little grapes this is awkward to do.

The stomach clearly is especially loosed when just the flesh and juice of the grapes is drunk without the pips and the skin, but the effect is still more powerful when juice is drunk on its own. This juice is called 'must'. If the must does not find a swift exit, it fills the bowels with flatulence. Some nourishment for the body is derived from the must, although there is more

nourishment in the fleshy part, which is why some grapes nourish more than they pass, whilst others pass more than they nourish. Therefore grapes in which there is little juice furnish more nutrition, whilst those which have more juice nourish less, but pass through the body more.

Grapes that are called 'noble' are those in which the pips contain a substance, which I call the flesh of the pip, that has little moisture but rather more solidity. These grapes are used during the course of the autumn, after being kept in different ways: for they are laid up in must, and also stored with seconds after being packed into clean jars.

By 'seconds' I mean the solid parts left behind when all the juice has been extracted from the grapes in the press. These solids are placed in containers, after being being compacted and squeezed very hard. The same product, which I call seconds, is also called 'lees'. The term for a mass of pressed grapes is in turn applied to the stalk of the grapes that grows from the branches. What the grapes hang from I myself call the 'peduncle'. Into this lees the new pots full of grapes are put, carefully covered with lids, so that nowhere is any air admitted, and pitch is plastered where the lids meet the jars, thereby stopping all evaporation. The pot itself should be made from fragrant clay and perfectly baked.

This type of grape strengthens a relaxed stomach, and stirs those who have lost their appetite to take food, but it does not pass down through the stomach and, if eaten to excess, affects the head. Much worse for headaches are grapes stored in must; but when hung up they do not harm the head so completely, check the stomach, or trigger its evacuation. They work in the same way with the appetite, since they neither awaken one that is weak, nor diminish one that is strong. More digestible than the other types of grape is that which I said people store in must and seconds for the whole of the following year up to the next vintage. When they have dried, those which are hung up become useless, some as soon as spring comes, the rest at any rate by the summer.

There is a considerable difference between the grapes in sweetness, astringency, sourness or absence of any pronounced quality. People call the last of these 'vinous'. Grapes that are sweet possess a hotter juice, and so cause thirst, whilst astringent and sour grapes are cooler. Vinous grapes lie midway between hot and cold. Sweet grapes relax the bowels, particularly when they are juicy, and, after these, juicy vinous grapes.

Sour and astringent grapes are useless not only for this purpose, but also for digestion in the stomach, assimilation and nutrition. In fact sour grapes, even if they are left to hang on the vine to ripen properly, do not turn sweet like this, although some astringent grapes change towards being sweeter when hung for a long time. As for acidic grapes, just as with sour grapes,

even if they have hung for a long time, they cannot be made any sweeter, so it is right always to be cautious about eating them.

The safest use for all grapes is when they are naturally fleshy and ripe; they should be eaten in moderation, whether they are ripened to their fullest extent on the vine, or whether the rest of the ripening process follows from being hung up. After grapes that have been hung up come those that do not contain any astringent or acidic quality; these can be eaten in large quantities to move the stomach. Some people also drink must for the same purpose, particularly the sweetest must that is available, because it is extremely laxative, whilst must made from astringent or acidic grapes is perfectly useless in every respect.

I use those names which the people of today use, because I think it is better to put over the facts clearly than to speak in ancient Attic Greek. For anyone to whom the latter exercise is more valuable than a lucid explanation, the term 'refuse' is used for the solid parts of the grapes, when the must has been expressed, but for olives the term 'pressing' is used, when olive oil has been expressed; that which is left behind from wines, the majority of those who speak Attic Greek call 'lees'. So there is no general name among these people, as there is among all the other people who call the leftovers of crushed grapes 'lees'. In fact these three products are known by the Greeks of today under the name of 'lees'. The infusion from what is left after grapes have been crushed is called lees, which once again those speaking Attic Greek call 'seconds'. I personally call it 'pressings'.

After the remains of the crushed grapes have been put into small jars, water is poured over them until they are immersed, and when this seems to have been carried out satisfactorily, the hole at the base of the jar is opened so that the infusion can be drawn off. This is drunk instead of wine. Obviously the water is added by experience according to the quantity of crushed grapes, to ensure that the seconds are neither completely watery nor like neat wine. Then more water is again poured over the crushed grapes, although less than the first time, to make it acceptable to drink, which is why some of those who speak Attic Greek think it reasonable to call it 'seconds', which is not the same as what was described earlier.

Each type causes headache, unless they are drunk very watered, but it is the first variety that affects the head the most. What is good about this drink is that it quickly passes as urine, although it matters a great deal as to what sort of grapes were used to make the infusion. For when they are sweeter, the drink is far sweeter and is urinated more quickly, but when they are sour or sharp, the drink is far more unpleasant and less diuretic. The infusion becomes stronger and more like wine when the lees is kept

until spring or summer; when used in the winter it is unlikely to affect the head and similarly it passes less in the urine.

Raisins

Raisins have the same relationship to grapes as dried figs do to fresh figs. There are many sweet varieties of raisins, but altogether few astringent varieties, most raisins being a mixture of sweet and harsh qualities. There is present in sweet raisins some indistinct harsh quality, whilst in sharp raisins there is present a hint of sweetness. Harsh raisins are colder in consistency, just as sweet raisins are warmer. Harsh raisins generally strengthen the stomach and block the bowels, but it is clear that astringent raisins do this even more than harsh raisins. Sweet raisins are midway in all of this, neither loosing the stomach strongly nor drawing on the bowels. The ability to temper the juices is always present in sweet raisins, as is the power to purge moderately, so that from a combination of these two effects they dull the biting pains in the mouth of the bowels, which is also called the stomach, and so there is a call for them as a reputable remedy for excessive biting pains.

Among the varieties of raisins the best are those that are oilier and have a thick skin. Some people make excellent raisins from large sweet grapes, for example the *scybelites*, but before they eat them they remove the pips. When they are old they have a hard and thick skin, so they must be soaked in water before eating, which also allows for the pips to be removed more readily. On the other hand, some grapes are harsh and small, but they have absolutely no pips. These are grown in Cilicia and are pale brown in colour, whilst those grown in Pamphylia, including the *scybelites*, are black in colour. As I have said, these are the largest varieties, whilst the smallest are the golden ones which are grown in Cilicia, and in fact other varieties are grown in Cilicia that are both sweet, black and medium in size, as they are in other areas, particularly in Libya.

Numerous varieties of grapes are grown in Asia: there can be found pale brown grapes, black grapes, sweet grapes and rather sour grapes. In cold localities, however, grapes do not fully ripen, nor do some of the raisins, which is why they are used in wines flavoured with resin to prevent them from acidifying quickly. The differences in the colour of raisins has nothing to do with their power, and the same is true for the differences in size. It is only the quality of taste that matters, and by paying attention to this you will ascertain, as I have already said, for what purpose and at what time the grapes should be used.

The nutrition from raisins is similarly distributed in the body as with grapes: a sweet quality from sweet grapes, harsh from harsh grapes, mixed from grapes with both qualities combined. In terms of quantity, there is more nourishment from oily and sweet raisins, and less from harsh raisins without any oiliness. If you compare an equal quantity of grapes with oily sweet raisins that have been stored, you will find the raisins to be more nourishing. These grapes have less of an aperient and purgative power than dried figs, but they are better for the stomach than dried figs.

Mulberries, which are also called morus

I have not written this book for those who choose to speak only Attic Greek – in any case they would probably not want to read it because they consider it far more important to pursue the health of the mind rather than the health of the body – but rather for doctors (who are not too bothered about whether Attic is used or not) and anyone else who lives logically (that is paying more attention to the body and soul than to honour, reputation, wealth and political power). I am fully aware that these individuals regard the Attic dialect naturally as being no finer than other dialects, but they do hold the health of the body to be the finest action in a life devoted to what is natural. On the basis that the clearest exposition will be of the greatest use to these people, I shall write the conventional modern nomenclature, even if what I set down was not the norm among the ancient Greeks.

The term mulberry is probably familiar to most people, if through nothing else than the medicine called moraceous that is made from the juice and which is good for the mouth. Recalling some of the autumn fruits which I mentioned earlier, many people today do not have a clue as to what Athenians six hundred years ago called them. Nowadays it can be observed that Athenians do not call each fruit anything different from other Greeks, but use the term 'mulberry' for 'morus' no less than mulberry itself, as well as applying the basic vocabulary for peaches, walnuts, apricots and other such fruits, following the common usage of other Greeks. Nobody can come to any harm if they are ignorant of the ancient nomenclature of fruits, but knowledgeable of their powers. Rather than being proficient in their nomenclature, it is better to know that, of the foods which are laxative, you should eat last those which pass slowly, whilst those which pass quickly should be eaten first, because such fruits rot in the stomach if they remain there for any length of time.

People in general do not appear to be completely unaware of the order

in which you should eat food; in fact we can see them following this order in the case of most foods. They eat radishes before olives and fenugreek in fish-sauce, and after these mallows, beets and other such vegetables with olive oil and fish-sauce. Experience over time with foods prepared every day has taught them about their powers, if they have any sense, for everything which comes from long experience is only recorded and remembered by those who are attentive.

When mulberries reach an empty stomach after being eaten first, they pass through the bowels extremely quickly and prepare the way for other foods; but eaten second after other foods, or meeting with a bad juice in the stomach, causes them to rot quickly, because like gourds they posses an unusual capacity to rot that is difficult to describe. They may be the most harmless of the autumn fruits, but if they pass through the body without digestion they rot badly like melons, although they do not cause any great harm if they pass through the body quickly.

The correct time to use mulberries is the same as for melons, that is when the fabric of the stomach is dry and hot; this is also essential when the liver is like this. Mulberries and round gourds have nothing astringent about them, just like unripe gourds, cucumbers and melons; but this quality is plain in mulberries, especially when they are not yet properly ripe, and there is an even greater sharpness the more unripe they are. Some people, after picking them from the trees, dry them and store them, because they are a good medicine for dysentery and chronic diarrhoea.

But here is not the place to for me to discuss the power of medicines. Let me return instead to everything that mulberries can do as a food. I have already stated that they pass through the body easily, perhaps due to just the moistness and slipperiness of their flesh, but perhaps also due to some admixture of a harsher quality that encourages evacuation sufficiently, seeing that the astringent quality not only does nothing to assist the bowels to move, but can even constipate them. You have learnt in my book *On Simple Medicines* that quite a few things are composed of opposite qualities.

So I am showing that mulberries have just a little power on their own, compared with the great power that is present in purgative medicines, and as a result of this they both pass easily, but also rot if they stay in the stomach for any length of time. If they do not rot, they generally moisten, but they do not on the whole cool, unless they are eaten when cold. Like melons they supply hardly any nourishment to the body, but there is nothing in them that is emetic or bad for the stomach as there is in melons.

Cherries

Some cherries are like mulberries, although having less astringency; others are like blackberries, although they have a more pronounced astringency; and others are far more astringent than both these fruits. As regards the power in each of the varieties that I have just mentioned, refer in each case to mulberries and blackberries.

Blackberries

Some of those who live around me call the fruit of the bramble 'blackberry', just as they call the fruit of the mulberry tree 'mulberry' or 'morus'. Blackberries are rather astringent, and cause headaches if eaten in large quantities. Some blackberries also open the stomach. This fruit ought to be washed well before eating, something that should be done with mulberries too.

Blackberries do not relax the bowels, but instead check them, and if they are dried when still unripe and stored, they are even more liable to cause a stoppage. All medicines that are made with blackberry juice possess a more drastic power because of them.

Rose hips

The fruits of the wild rose are a little more astringent than blackberries, and thus are more costive too of the stomach. Peasants eat them, although they offer little nourishment to the body. They call these fruits 'rose hips'.

The fruit of the juniper tree

These fruits are called 'juniper berries'. They are fairly sharp, but contain some sweetness as well as some astringency. There is an aromatic hint about them too. Through their bitterness they are clearly heating, because it has been shown that everything bitter is heating, and also because of the aromatic smell and taste, since everything aromatic is hot. Juniper berries cleanse anything in the liver and kidneys, and they evidently thin any thick and viscous juices, and for this reason they are mixed in health medicines.

They contain a small amount of nutrition for the human body. If too many are eaten, they bite the stomach and heat the head, which is why they sometimes cause painful repletion.They neither check nor encourage the passage of foods through the bowels, but they are moderately diuretic.

The fruit of the Syrian cedar

The fruit of the Syrian cedar is called 'cedrelate seed'. It resembles the juniper in colour and shape – for it is yellowish and round – but it is distinguished by its bitterness. So it already seems that this fruit belongs to a medical catalogue, since it does not furnish the body with any nourishment, unless it is soaked in water. This is the common factor with all bitter foods: that after their bitterness has been removed they supply hardly any nourishment to the body. In addition the fruit of the Syrian cedar is harder and drier than juniper berries, so it is of course smaller and contain nothing as aromatic. It is therefore clear that it causes considerable biting pains in the stomach and triggers headaches, unless it is eaten in strict moderation.

Pine nuts

The pine nut has good thick juices and is nutritious, but it is not easy to digest. The Greeks today call them *strobiloi* rather than *konoi*.

Myrtle berries

The Greeks call this fruit the myrtle. Like the juniper berry it provides no nourishment, but its power is the complete opposite. For it is considerably astringent, and so it checks the bowels. In its power it is cooling, although not in proportion to its astringency, because it contains not only astringency, but also an admixture of some bitterness. It is a trait common to all foods with a marked medicinal quality that, when they lose this power through boiling, baking or soaking, they afford hardly any nourishment for the body, whereas to begin with they give absolutely no nourishment. The same thing happens with onions and leeks.

Apricots

Whether you want to call this fruit the Persian apple, or just 'apricot' as the Greeks do now, or whether you want to search for some other ancient name, is up to you when you have a free moment. Remember whichever name is most useful, and that the juice and flesh rot easily and are generally bad.

This means that you should not eat them, as some people do, after other foods, for they rot as they rest on top. It is essential to bear in mind these basic facts which are applicable to everything that is full of bad juices, moist, slippery and easy to pass: that because of these attributes they must

be eaten before other foods, for then they pass through the body quickly, and lead the way for other foods; and that whatever is eaten last rots everything else.

Apricots and early ripeners

These belong to the peach family, although they differ by being slightly better, for they do not rot in the stomach as they do, nor do they acidify. To most people they seem sweeter, and hence better for the stomach, but in other respects they resemble peaches. This is the case with everything that is sweet, just as for things that are not sweet the stomach tends to be upset, troubled and roused to vomiting, straining to get rid of its pain very quickly. For everything that sinks down, it expels from itself, but anything that floats on the surface it removes by means of vomiting, and the same thing happens when bad juices run into it from the whole of the body. Everything that flows together into the upper part of the bowels is expelled through vomiting, whilst everything that flows into the lower part of the bowels causes diarrhoea.

That little nourishment is derived from all autumn fruits has been stated before. What are described as 'early ripeners' are better than apricots. All those who avoid the term 'early ripener' call both types of fruit apricot (*armeniaka*), but some people, rather than saying this five syllable word, use the word *armenia* with four syllables.

Apples

There is not a single type of apple, just as there is not a single type of pear or pomegranate, for some have a harsh juice, whilst others have a sharp or sweet juice. Some apples have a mixture of these qualities, so that they appear both sweet and astringent, whilst others clearly appear sharp but with an element of sweetness. In addition to these apples there are some that seem astringent, but with a touch of sharpness. You can find some apples that evidently share three qualities, so that they have sharpness, bitterness and a hint of astringency.

It is obvious that these three descriptions – astringency, harshness and bitterness – reveal one aspect of the juice. That sour foods differ from harsh foods by being more astringent, since the underlying aspect of these foods is astringency, is something which you have learnt in the fourth book of my work *On Simple Medicines*, where there is a discussion about the substance and power of the juices. The following facts should be remembered: that all

apples are astringent, that they have a cold and earthy juice, that those which seem sharp are also cold and composed of fine particles, that sweet apples which have a moderate combination of these qualities tend to be rather hotter, just as those apples which are absolutely devoid of any quality and are watery tend to be colder.

So apples should be used according to the powers of the prevalent juices. Harsh apples can be employed when the stomach is weak because of hot bad temperament or excessive moistness, astringent apples can be administered when these two problems are exacerbated, sharp apples can be eaten when a thick fluid which is not completely cold can be assumed to have collected in the stomach. Which means that whatever is cold has no need of sharp apples, but of bitter apples: for sharp and bitter apples cut through the thickness of the fluids, although the method is different between apples that are cold and apples that are hot.

From what I have just said it is evident that astringent apples generally check evacuations, according to their degree of astringency, just as sharp apples, on meeting with a thick fluid in the stomach, cut through it and take it down with them, thereby hydrating the excrement, although if they encounter empty bowels they check them instead. Sweet juice is assimilated more, if it appears completely on its own without any bitterness or thickness, but if it contains some bitterness and thickness, more of it is evacuated.

There is another sort of juice which appears not just in apples, but also in everything else, and this juice is designated watery and inert, as I have mentioned before. It provides hardly anything that is good for the stomach, since it lies between the powers that I have just discussed, not unlike water itself. This is a fault in apples, because if they are being treated as food, these qualities are working either through pleasure or benefit. Whenever such apples are unpleasant to eat, fail to afford the sort of strength to the stomach that astringent apples give, and do not check a flowing stomach, they can without hesitation be despised, just like the apples (called 'platanes' because they look in many ways like the soft leaves of the plane tree) that are thrown to the pigs everywhere in Asia.

Before they ripen on the tree the best sort of apples ought to be regarded with caution, because they are difficult to digest, slow to pass and full of bad juices that can be, in addition, cold and slightly thick. Those apples that have been properly ripened are stored for the winter and the following spring, since they often come in useful for sick people, either when covered in spelt dough and baked gently under hot embers or cooked thoroughly in a bain-marie. You should serve them straight after a meal, sometimes accompanied also by bread to strengthen the stomach and bowels of those

who have lost their appetite or are slow to digest their food, and of those who are suffering from vomiting, diarrhoea or dysentery.

Astringent apples are suitable for the same cases: for they are moderately astringent, when prepared as I have just suggested, whilst those that are somewhat harsh lose all their astringency when prepared like this, thus turning into a very close approximation of apples that are from the outset watery.

Since I have heard some people declare that their bowels are moved by eating astringent foods, I have considered it a good idea at this point to discuss at length for once what I have often come to realise through the process of logic and experiment.[4]

Once I heard a teacher from my home called Protus declare that his bowels had been relaxed after a meal of astringent pears and apples. I realised why this was happening and suggested that he try an experiment based on his experience. As a consequence of this experiment I have delved far deeper than anyone else has in the same situation. What I did was to ask this man to stay with me for a day so that I could observe when and how much he ate of these astringent fruits. My first instruction on inviting him was to live as he usually did and to omit absolutely nothing of his regular diet.

After his bath he did not drink much water, but ate for a starter fenugreek, radishes and all the other foods that are eaten by most people. These he enjoyed before anything else, but at the the same time as he ate he drank a little sweet wine. His next course consisted of mallows in olive oil, fish-sauce and a dash of wine. Then he had some fish, pork and fowl. After a second drink he rested for a while, then ate some astringent pears. Following this meal we went out for a walk. We had not wandered far when his bowels performed in an absolutely commendable fashion. When I had observed this, I made an agreement with my friend, that on the following day he should once again entrust me with his dietary habits. He readily agreed to this. First of all after the bath I gave him some pears to eat, then some other things to follow, just as he usually did.

When he had done this, his stomach passed not just commendably, but also in considerable quantity. He was understandably surprised at what happened, and he asked me for an explanation; I went through with him what I am now going to describe.

'Since', I said, 'anything served with fish-sauce naturally relaxes the stomach when eaten at the start of a meal, astringent foods, when taken at the close of a meal, provide the cause for the evacuation, by strengthening the bowels and stimulating a downwards movement of whatever is contained in them. You would', I added, 'admit the truth of this more by

eating on the next day astringent foods first of all, then something meaty, and as a finale dishes with olive oil and fish-sauce.'

'Certainly not', he answered, 'because I would immediately be sick, eating mallows in olive oil and fish-sauce as a desert.' 'What an excellent reply', I said, 'since mallows upset the belly and especially its mouth, which tends to be called the stomach by everyone now, whilst astringent foods brace and strengthen it. So if some other juice upsets it, as yellow bile has the habit of doing with some people when a lot of it collects, the person thus affected, if something astringent is eaten, at once expels downwards the troublesome juice.'

Then I pointed out to him a young man who, a few days before, had taken scammony juice to cleanse his system, but five hours after the dose no evacuation had taken place, and he complained that his stomach felt compressed, his belly was heavy and swollen, consequently he was pale and anxious, and he shared with me the symptoms that troubled him. 'As to how I cured the man, 'I said, 'let us listen to the young man himself'. I in fact introduced him to the teacher on the spot, and he explained how I instructed him to eat a little astringent apple, pomegranate or pear, and as soon as he had eaten, he was immediately rid of his discomfort, since his stomach passed a great deal all at once.

'You should understand', I said to the teacher, 'that this happened to you when you ate astringent things because of the weakness of your stomach and bowels as a whole.' 'What you say', he replied, 'is the truth and more. For my stomach is naturally like this, and it is easily upset by chance occurrences, and I eat something astringent after a meal the moment I sense my stomach to be sufficiently slack as to be close to feeling sick.' This story about the teacher should be adequate for an investigation into the emptying of the bowels in those who have a weak stomach, whenever they eat something astringent.

Large and small quinces

These fruits have something in them that other pomaceous fruits do not: which is that they possess a greater degree of astringency and a juice that will keep, provided what needs to be preserved is boiled with honey. The juice of other pomaceous fruits acidifies when stored since it contains an excess of cold moistness. Medicine made with the small quince is invaluable for those who have lost their appetites, and when it is not left by accident in the open I have found it to maintain its quality unchanged even after seven years.

It produces a thick crust around the mouth of the storage jar, just like the crust that appears quite often on honey and other similar things. This crust should not be disturbed, if the medicine or honey is to remain fresh for the longest possible time. Let me just say in passing that I give this reminder to ensure that the medicine stays fresh for a long time. Now I shall return to my discussion.

The juice of the small quince keeps, if it has been properly prepared, just like the juice of ordinary quinces, but it is less sweet and more astringent, so that it is employed for strengthening a particularly weak stomach. In Syria is made a quince-cake which lasts for such a long time that containers packed with it are exported to Rome. It is made from honey and the flesh of quinces that has been pulped and boiled with honey.

My medicine, which I make for those suffering from a loss of appetite, is made not only from honey and apple juice, but also contains a little white pepper, ginger and vinegar. But this is not the right moment to talk about it since I have discussed it at length elsewhere.[5]

Pears and pomegranates

By applying everything I said about apples to pears and pomegranates, I will not have to write a separate section on these fruits. Some of these fruits seem to be just astringent and harsh, others are sharp or sweet, and others are made up from a mixture of these qualities, whilst others have no absolute overriding quality and so are watery and harmless. Pears are used in very much the same way as apples.

Pomegranates are similar in some ways, but they differ in one respect, although not when baked with dough, boiled in water or cooked in steam: namely that they contain more juice than apples and pears, which in addition is sweeter in taste than the juice contained in the other two fruits. They are more useful than those fruits in some other ways. Hippocrates mentions them in the second book of his *Epidemics* as follows:

> A woman was troubled by heartburn which nothing could stop. So she sprinkled the finest barley flour over some pomegranate juice and satisfied her hunger, although she was eating only one meal a day. Also she did not vomit, which was what happened with Charion's son.[6]

So it is clear that when the bad fluids swamped the area around the mouth of the stomach (which is also called the cardiac region), the woman became

nauseous and suffered from heartburn. For the word 'cardialgia' signifies nothing more than the symptom of feeling the stomach is being bitten.[7] The barley flour dried these fluids, whilst the pomegranate juice taken with it strengthened the bowels, so that the fluid in the bowel membranes could be rejected. Pomegranates provide hardly any nutrition for the body, so they are never needed for food, but only in the practice of medicine.

Pears (and particularly the large pears which the people who live round me call 'pounders') are quite nourishing. They chop them up and make wafer-thin cakes out of them which they dry and store for the winter. When there is shortage of food in the spring, they cook them in place of foods that afford little nourishment.

The Athenians pronounce the first syllable of *rhoia* (pomegranate) without an i, whereas the Ionians say it with an i. This has no relevance to life, just as it has no relevance to sorb apples, which all the modern Greeks call *oua*, but regarding which the Athenians beg to differ by omitting the u. So I shall leave to one side any speculation about names and return to the powers of fruits.

Medlars and sorb apples

To these fruits apply the same facts as to the fruits I described earlier: both are astringent, although medlars are far more so than sorb apples. This means that medlars are very well suited for a stomach that is in flux, but that sorb apples are more pleasant to eat, for at the beginning, unlike medlars, they do not possess any astringency, their juice being harsh instead of astringent.

Obviously it is best to eat only a few of these fruits, certainly not in large quantities as with figs and grapes, but rather as a medicine. This is much more important for you to know than that the first syllable of the word *oua* was written and pronounced by the ancient Athenians with the letter o alone.

Dates

It will neither harm anyone nor will it add any knowledge about its power, if you decide to call this fruit either 'the date' or – as is the custom among all the modern Greeks – 'the date palm' in homonymy with the tree.

There is a considerable difference between the different dates: some are dry and astringent like Egyptian dates, others are soft, moist and sweet like those that are called 'nob-dates', the best of which grow in Palestinian Syria

around Jericho. In between these dates are all the other dates, some containing more, others less moisture, dryness, sweetness and astringency. But provided the extremes are well defined, the average is very easy to detect. In fact there are no dates that do not have an element of astringency and sweetness: nob-dates are a little astringent, Theban dates have a hint of sweetness. Sweet juice has been shown to be nourishing, whilst harsh juice is good for the stomach and for checking the bowels.

All dates are hard to digest and cause headaches if eaten to excess. Some dates also cause a biting sensation at the mouth of the bowels, and these tend to cause headaches. It is often remarked that doctors call the mouth of the bowels the stomach. The juice absorbed from them into the body is generally thick and has something viscous about it, particularly if the dates are oily like the nob-date, but whenever there is an admixture of sweetness with this juice, the liver is very quickly blocked and suffers harm through the inflammation and complete induration caused by this food. Following the liver the spleen is blocked and harmed.

Fresh dates are in all respects more harmful when a few too many are eaten. Sweet dates clearly have a hotter juice, whilst astringent dates have a colder juice. But fresh dates also fill the body with flatulence, just as figs do: for the correspondence between fresh and dried figs is the same as between fresh and dried dates. In areas that are not very hot, dates do not ripen properly, so they are useful for storing. Thus when people are forced to eat them when unripe they are filled with undigested juices, and seized by a shivering that is difficult to warm, and they suffer blockages in the liver.

Olives

Olives generally afford little nourishment for the body, particularly tree-ripened olives. The preferred way of eating these is with bread, but salty olives and pickled in brine olives are eaten without bread before meals with fish-sauce to loosen the bowels. Salty olives and swimming olives have as much astringent juice as tree-ripened olives have greasy juice, so they all strengthen the stomach and whet the appetite. The olives most suited to this task are those that are preserved in vinegar.

Chefs prepare olives in many ways. Indeed, I do not consider it right for a doctor to be completely ignorant of the art of cooking, because whatever tastes good is easier to digest than other dishes which may be equally as healthy. But this is not the right moment to consider either the art of cooking or the culinary profession. A special book will be assigned to this topic.

Nuts

Some people use the term 'royal nuts' for the nuts which everyone else today calls simply 'walnuts'. There are some other nuts called filberts that some people refer to as hazelnuts; they are far smaller than walnuts. Both sorts of nut possess a great deal that is useful, although they do not afford much by way of nourishment to the body, even if there is more nutrition in hazelnuts than in walnuts, since their substance is more compressed and less oily, whilst the walnut is spongier and has more oiliness in it.

For a short time it has a share of astringency, although as time passes this fades away as the whole of its substance changes to an oily juice, until eventually it becomes completely inedible as a result of its oiliness taking on a similar appearance to old olive oil. When green and moist, the walnut has no evident share of astringency or oiliness, but is perhaps rather inert, or what is usually termed watery as I have already said.

The walnut is more digestable than the hazelnut and is better for the stomach, especially when it is eaten with dried figs. Many doctors have written that if both these nuts are eaten with rue before any other food, no great harm will come from noxious drugs.

Clearly whatever is moist is more appropriate for evacuation, whilst whatever is dry is less appropriate. Quite a few people eat these nuts with fish-sauce to help relax their bowels. They are better for this purpose when green, as they then have less of a share of astringency, but when dried and then soaked beforehand in water, as some people do, the power is similar to those that are green.

Almonds

These nuts do not possess much by way of astringency. A cleansing and attenuating quality is prevalent in them, by means of which they purge the inwards and act towards the expectoration of moist matter from the lungs and chest. Some of them have such an overriding power of cutting through thick and viscous moisture that they cannot be eaten because of their bitterness.

They have an element of the fatty and oily quality, just like walnuts, so they too become oily, just like walnuts. This quality in them is less than that of walnuts, so it is only after a longer period of time that they seem to be as oily as walnuts. From these facts it is clear that they are not as useful for purging the stomach, and they afford little nourishment for the body. All nuts that contain a sufficient amount of that overpoweringly bitter quality are extremely useful for the spitting up of matter and of thick and viscous moisture from the lungs and chest.

Among those who do nothing useful in life, but call themselves speakers of Attic Greek, some think it is correct to call this nut feminine, whilst other reckon it is neuter, not realising, as they pit their energies against each other, that both words are written by the Athenians.

Pistachios

These grow in famed Alexandria, but much more so in Beroea in Syria. They do not contain much nourishment, but they are useful for strengthening the liver, as well as purging the juices that block its passages, for they have a quality that is simultaneously bitter, astringent and aromatic. I know that there are many other similar things besides that are good for the liver, as I have shown in my treatise *On Simple Medicines*. I must point out that they offer next to no help or harm to the stomach, just as they neither relax nor constipate the stomach.

Plums

When fully ripened this fruit is rarely found to be astringent, sharp or, in short, with any unpleasant quality. Before they reach this state, some display sharpness, others harshness, others bitterness.

The body derives very little nourishment from this fruit, but it is useful for anyone who chooses deliberately to cool and moisten the stomach to a moderate degree, for it relaxes (through being moist and sticky), just like some of the other items I have already mentioned. They can be used even when dried, like figs, and it is the general consensus that the best plums grow in Syria around Damascus; second to these are those that are grown in the Iberian peninsula, otherwise known as Spain. But the Spanish plums reveal no astringency, whilst some Damascus plums exhibit a lot.

The best plums are those that are moderately astringent, large and spongy; any that are small, hard and astringent are bad to eat and bad for the evacuation of the stomach, a characteristic especially of Spanish plums. Boiled in honeyed wine (use a lot of honey for this) they loose the bowels sufficiently, both if eaten on their own, and even more so if the honeyed wine is taken too. It is obvious that drinking sweet wine after eating plums contributes to the evacuation of the bowels, provided that an elapse of time is allowed and lunch is not taken immediately after them. This should be remembered as a basic rule with everything that relaxes the bowels, and just as with rules that are common to other ideas, it should be assumed that there is no need to hear a repeated explanation of them.

Jujubes

I do not have any information about jujubes that testifies either to their preserving health or to their curing diseases.[8] They are a food for women and little children, since they provide little nourishment, and are at the same time both hard to digest and not very good for the stomach. It is obvious that they furnish the body with hardly any nourishment.

Carobs

The carob (*ceration*), whose third syllable is spoken and written with the letter t, looks nothing like the cherry (*cerasia*) with an s, since it is a food that is woody and full of bad juices; consequently it is difficult to digest, for nothing that is woody is easy to digest. Since it does not pass through the body quickly, it is furnished with considerable bad qualities. So it would be better if these fruits were not exported from the areas in the east where they are grown.

Capers

These are shrubby plants that grow mainly in Cyprus. Their power is generally composed of fine particles, with the result that they afford hardly any nourishment to those who eat them, as is the case with all the other foods that are made up of fine particles. I use the fruit of these plants more as a medicine than as a food. These fruits are brought to where I live sprinkled with salt because they rot when left on their own.

So they evidently contain more nourishment when still green and not yet pickled, for in the pickling process they become completely neutralised and devoid of nutrition (unless the salt is rinsed off), but they do relax the bowels. When used as a food – after being washed and soaked until the salt has gone completely – they furnish very little nourishment; but as an accompaniment to bread and as a medicine they are ideal for whetting a jaded appetite, cleansing the stomach and bringing up phlegm, and for purging blockages of the spleen and liver.

In these instances they should be taken before all other foods, with vinegar and honey or oil and vinegar. The tender shoots of the caper plant are also eaten in the same way as terebinth shoots when still green, seasoned with vinegar and brine like terebinth shoots.

Sycamore-fig

In Alexandria I have seen the sycamore-fig tree and its fruit, which resembles a small pale fig. This fruit is not at all harsh, and at the same time, contains an element of sweetness. As it is somewhat moist and cooling in power, just like the mulberry, it can quite reasonably take its place between the mulberry and the fig. I think this is the reason that it was given its name.

I can only laugh at those who say that it is called a sycamore-fig because it looks like a fig or mulberry.[9] It is not produced in quite the same way as other fruits on trees, since it grows not from the branches and their twigs, but from the branches and the trunk.

Persea

I have seen this grow in Alexandria, since it is one of the great local trees. Allegedly its fruit is harmful in Persia, so that those eating it there die, but when it is transported to Egypt it becomes edible. It is eaten in the same way as pears and apples, whose size is much the same.

Citron

Those who deliberately choose to say meaningless things call it the 'medic apple', and yet they are clear and forceful in their words.[10] An investigation of the following matters is better: namely what powers the different parts of the citron possess, and how the citron can be used beneficially.

I will do this by stating that there are three parts to this fruit: the sharp centre, the fleshy pith and the outer skin. The skin is fragrant and aromatic, not just in smell but also in taste. It is naturally difficult to digest, as it is hard and knobbly. If it is used as a medicine, it helps somewhat with the digestion, just like many other things that have a harsh quality. By the same token when a little is eaten it strengthens the stomach, so that after being cut open and squeezed, its juice is combined with medicines taken in pill form that act as a laxative or purge the whole body.

Vinegar mixed with the inedible part of the fruit in which the pips are found is used for some other purposes, flat vinegar being made sharper through its addition. The middle of both the parts which give nourishment to the body, whilst containing neither harsh nor sharp qualities, are difficult to digest because of their hardness. Anyone who wants to liven up their dull taste, therefore, eats them with vinegar and fish-sauce. It is quickly found, either through experience or on the advice of a doctor, that they are digested better when taken like this.

Fruits of wild plants, including acorns

Plants are generally called wild if they grow in the ground without any agricultural care. For example, vines are called wild if no vine-dresser has bothered to dig around them or prune them or remove young shoots or do anything else to them. Among such plants are included the Valonia oak, oak, ilex, cornelian cherry, strawberry tree and other similar trees; and also of course certain bushes, such as blackberry, wild rose, wild pear, wild plums (which those who live around me call prunes), and a bush which bears a fruit resembling a medlar.

In Italy the fruit of this bush is called *unedo*; it is bad for the stomach, causes headaches, and is rather sharp with only a little sweetness. Cornelian cherries, blackberries, acorns and the fruit of the strawberry tree are traditional foods among those who live in the country, whilst the fruits of the other trees and bushes are not. When there are occasional food shortages where I live, the peasants store the abundant supplies of acorns and medlars in pits instead of cereals, and so they keep them for the whole winter and the first months of spring.

Such acorns were formerly forage for pigs, but then people stopped feeding them in winter, as they had usually done up to that time, and instead they slaughtered them at the beginning of winter and used them for food. Later they opened their storage pits and ate the acorns, rendering them suitable for food in one way or another. Sometimes they used to boil them in water, and then bury them in hot ashes to bake them gently. Then again they would grind them and make a thick soup with them. Sometimes they used to soak them just in water, but add some seasoning: they would pour a little honey over them, or cook them with milk. They provide an abundant nutrition, unlike other things that have been described up to this chapter of the present book. Acorns nourish like most of the foods involving wheat, and in fact long ago, so it is said, people lived only on acorns, and the Arcadians carried on doing this for a long time, although all the other Greeks were using cereal crops.

The nourishment from acorns is slow to pass and thick of juice, so it follows that they are hard to digest. The fruit of the strawberry tree is in every respect worse than the acorn from the oak tree, and in the same way the nutrition from what we call chestnuts, since these are the best of nuts which some people describe as easily skinned. They alone of all the wild fruits furnish a reasonable amount of nourishment for the body.

For cornelian cherries, wild plums, blackberries, rose hips, sloes, the fruit of the strawberry tree, jujubes, the fruit of the nettle tree, winter cherries, the fruit of terebinth, wild pears and all other such foods possess little

that is nutritious, are full of bad juices, and are bad for the stomach and unpleasant to taste, since they are food rather for pigs – wild pigs, that is, which live in the mountains – because only wild pigs derive any nourishment from these fruits.

The nutrition from the plants mentioned above

We not only eat the seeds and fruits from these plants, but also the plants themselves, often whole, but often just their roots, or their twigs, or their fresh shoots, in accordance with the usage demanded on each occasion. In fact those who live round me tend to throw away the stem and leaves of the turnip, which they call French turnip, although they sometimes eat these when short of better foods. They do the same with radishes and that vegetable which is called 'charlock' in the local dialect where I live. This plant is, one could say, the wild radish.

When forced through shortage of food, people often boil and eat pellitory, water parsnip, alexanders, fennel, wild chervil, chicory, gum succory, daucus gingidium, wild carrot, and the tender shoots of most bushes and trees; some of these are even eaten when there is no shortage of food, like the top of the date palm which is called the heart.[11]

Why should I say anything more about soft shrubby plants? There are some plants that are eaten with vinegar and fish-sauce as a moderately nourishing dish when there are no food shortages. Other people add in addition olive oil, particularly when the plants are boiled first in water. For they can be used in two ways: the usual way is when they are raw, but sometimes they are boiled. By shrubby plants I am referring to: golden thistle, spindle thistle, eryngo, blessed thistle, spiny thistle, white thistle and one of the two varieties of pine thistle, which a few people pick from the fields, place in brine or vinegar, and store just like turnips, onions, wild leeks, pellitory and similar.

It is clear that, in addition to affording little nourishment for the body, all these things contain bad juices, and some of them are even injurious to the stomach, except, as I said, thistles freshly pulled from the ground. All of these plants are preserved in brine or vinegar, and stored for the whole of the subsequent year. Prepared like this they add a certain relish to food, if they are eaten in moderation, as do the shoots of the chaste tree and the terebinth.

So these are counted among the wild plants, and it is enough to know that in common with these plants they are all full of bad juices. There is no shared rationale for cultivated plants, but it is by far the best thing to know

the power of each plant individually, particularly of those that are in constant use, which for this very reason are much sought after, since they have been proved through long experience to be better than the others. So I shall now say something about them in turn, beginning with the lettuce.

Lettuce

Many doctors judge this vegetable to be superior to all the others, just as the fig is among the autumn fruits; for it has better juice than them. But some people object to it receiving such high praise; even if there was any truth in this, compared with the vegetables and the most nourishing foods that contain the best juices it is second to none, for they say that it generates blood. Some people do not simply say blood but, while claiming that lettuces generate a lot of blood, add a great deal besides. Yet these people are in fact more deceived than anyone else, even if they were aiming sensible accusations at the lettuce; supposing it does generate a lot of blood, no one could reasonably censure it.

For it is clear that, of all the foods, this is the one with the best juices, and if in fact it does have in its nature to produce a lot of blood, it does not give rise to any other humours. If a considerable amount of blood is alleged to collect as a result of lettuces, and this is the reason why they are censured, it is extremely easy to correct the defect, since those who eat them can, first, engage in more exercise, and, second, serve fewer of them. These words should be enough to contradict those who incorrectly find fault with this vegetable.

It is important to realise that, whilst all vegetables produce a negligible amount of blood containing bad juices, the blood produced by lettuces is small in volume and without bad juices, although it is not wholly made up of good juices. Lettuce is eaten for the most part raw, but when in summer they start to go to seed, they are first boiled in sweet water and served with olive oil, fish-sauce and vinegar, or with one of the pickles, particularly those made with cheese. Many people also use them boiled in water before they begin to bolt, which is what I began to do when I had problems with my teeth.

For one of my colleagues saw that this vegetable had for a long time been a regular thing with me, but that now chewing was painful, so he introduced me to boiling lettuces. When I was young I used to use lettuce to refresh my upper bowel which was constantly filled with bile, but when I reached middle age this vegetable provided me with relief from insomnia, since I then yearned for sleep in contrast to when I was in my teens. For in

my youth it was my habit to stay up willingly at night, but no sooner was I past my prime than this sleeplessness persisted, and I became bad tempered staying awake when this was not my intention. Lettuce taken in the evening was the only remedy for my insomnia.

I do not use the term 'lettuce' for anything other than what everyone today calls lettuce, since where I live the term lettuce is applied to another type of wild plant which grows beside the roads, on the banks of ditches, in pools of rain water and many uncultivated areas of land. This plant is small, in appearance like the cultivated lettuce when it has just started growing. It is distinguished by a small amount of bitterness, which increases as it gets bigger, whilst as soon as it has bolted this bitter juice is very firmly marked.

There is also a plant, similar to this sort of lettuce, which is called 'gum succory'. It is quick to bolt and has a pronounced bitterness. Its sap is sticky and white, like that of spurge, but it is not as pungent as the other two. I sometimes use it for sticking back the eyelashes. These vegetables are therefore called 'wild' to distinguish them from the cultivated varieties; I gave a general account of the latter a little before.

Picking up once again by way of summary on cultivated lettuce, which is customarily eaten by everyone and is called lettuce, I will say as a reminder that it has a juice that is moist and cold, although this juice is not in fact bad. Hence it is not digested in the same way as the other vegetables, nor does it check the bowels, just as it does not relax them. It reasonably follows that lettuce does not possess anything astringent or sour, by which the stomach is for the most part checked, nor does there fall to lettuce any of those qualities – such as saltiness, bitterness and anything mildly purgative – that positively encourages it to evacuate.

Endives

Whether the ancient Athenians called what is known only as 'chicory' among the Romans 'endives', or whether they were referring to some other type of wild lettuce, I cannot say for certain. Chicory possesses almost the same power as lettuce, although it is inferior in taste and in other areas that were discussed under the heading of lettuce.

Mallow

Wild mallow is different from cultivated mallow, just as wild lettuce is different from cultivated lettuce. The two types are distinguished, the wild

by its dryness, the cultivated by its moistness. The mallow contains a degree of stickiness in its juice, whilst the lettuce does not, and it is clearly removed from any cooling property, as can be ascertained even before eating it by preparing a poultice for one of the hot diseases – for example erysipelas – with both types of vegetable in turn, just as many people do, by carefully mashing the soft parts of the leaves until they are smooth.

This vegetable passes through the body easily, not just because of its moistness, but also because of its stickiness, especially when it is swallowed with liberal quantities of olive oil and fish-sauce. It is average in the nutrition that it provides. If the juices of these three vegetables are compared, that of beet is composed of fine particles and is purgative, that of mallow is thicker and more viscous, whilst that of lettuce lies between the other two.

Beet

I said that, as with lettuce, there exists not only cultivated mallow, but also wild mallow; but there is no such thing as wild beet, unless you want to designate patience dock as such.

Beet juice seems to be moderately purgative, since it cause the bowels to evacuate and the stomach to suffer biting pains on occasion, especially for those people who are by nature sensitive, and so as a food it is bad for the stomach when eaten to excess.

There is little nourishment in beets, as is the case with other vegetables, but they are more appropriate than mallows for obstructions around the liver, and still more so when eaten with mustard or at least with vinegar. Eaten like this they are a good medicine for those with complaints of the spleen. In fact you could quite reasonably call beet a medicine rather than a food. I regard almost all these things as accompaniments for bread, if they are not eaten on their own as foods, just as sometimes leeks, pennyroyal, thyme, savory, oregano; and still more onions, garlic, nose-smart and the like.

Cabbage

Most people eat this vegetable as an accompaniment to bread, but doctors use it as a drying medicine. There is a discussion about it in my work *On Simple Medicines*, and in the book previous to this one, so I shall now summarise: its juice contains a purgative element, whilst its body contains more that is drying than that is productive for evacuation. So whenever I want whatever is in the stomach to be passed, it is essential to take the

cabbage out of the three-legged casserole, in which it has been cooked with water, and put it at once into pots, in which olive oil has been blended together with fish-sauce. It does not make any difference if salt is used instead of fish-sauce.

But whenever I want to dry a moist stomach, I drain off the first lot of water, when the cabbage seems to have been partially cooked, put it in fresh hot water, and then boil the cabbage once again in this water until it is tender, but I do not cook the cabbage in this water when it is taken for clearing the bowels. For I do not want to get rid of all its special juice for this sort of use, but rather to reserve as much of it as possible, since nothing that has been cooked can really retain its own juice; instead it loses everything if it has been cooked for a long time.

But I said that lentils must be prepared in the same way as cabbage, since they have the power to do two things: that is both to evacuate and to constipate the bowels. Both cabbage and lentils prepared like this are called twice-cooked. Use the same method of preparation with onions, leeks (especially wild leeks) and garlic: in fact whatever else you want to change its original state to something opposite, bearing in mind the following before everything else, that anything cooked like this must not come into contact with either cold air or cold water, for then it will no longer be properly tender, not even if you boil it for longer. It is essential, as I have just said, to have hot water ready, so that when the cabbage is drawn from the first lot of water, it can be put into this hot water immediately.

Lentils and cabbage dry in almost the same way as each other, and for this reason they affect the eyesight, unless the eye as a whole ever happens to be moister than usual. But for the body, lentils afford considerable nourishment which is thick and full of black bile, whilst cabbage offers meagre nutrition which is wetter than that of lentils, as if this food was not solid but spongy. Cabbage is not a dish full of good juices, like lettuce, but has a wretched juice that smells unpleasant. I have to say that it clearly does nothing good or bad for urination.

Some people, who practise a pathetic form of pseudo-intellectualising, regard 'brassica' as the correct name for this vegetable, as the Athenians did six centuries ago, but not the Greeks of today, who are unanimous in their insistence of applying the term 'cabbage' to only this vegetable.

Orach and blite

These are extremely watery vegetables – without a quality, one might say – and certainly when they are cooked this is even more the case than with the

large gourd, and definitely not less; otherwise among such plants only the lettuce is eaten. If you think about the sort of taste that belongs to orach and blite, and then bring to mind the taste of cabbage, you will conclude that lettuce occupies the midway point between these vegetables and cabbage, since cabbage is quite dry, but these others are complete wet. Hence they are not eaten with just olive oil and fish-sauce, but also vinegar is added, for otherwise they are injurious to the stomach.

It is said that these vegetables are perhaps inclined towards easy evacuation, especially if they combine slipperiness with wateriness, but in fact this inclination is not marked, but negligible, through there being nothing acidic or alkaline in them, qualities which encourage the bowels to evacuation. It is clear that even the nourishment they give to the body is very small.

Purslane

Some people use purslane as a food, but what little nutrition it does provide is watery, cold and viscous; as a medicine it cures sensitivity of the teeth through its lenitive viscosity, about which more is written in my book *On Simple Medicines*.[12]

Patience dock

This plant can, as I have said before, be called wild beet. It is similar not only in taste, but also in power, to cultivated beet. Since beet is more pleasant than patience dock, everyone eats it more, so I do not need a section about patience dock, since I have said everything that needs to be said about beet.

Curled dock

Even the name reveals the quality and power of this plant, for it is an acidic type of dock. Patience dock is not eaten raw, nor is beet, but curled dock is eaten raw in the countryside by pregnant women, and sometimes also by inquisitive children. It is obvious that curled dock is a far less nourishing vegetable than patience dock.

Black nightshade

I know of no vegetable that is as astringent as the black nightshade.[13] So understandably I rarely use it as a food, but frequently as a medicine. It is

efficacious in every instance of astringent cooling, but it possesses hardly any nutrition.

Thorny plants

After these plants have been freshly pulled from the soil, and before their leaves have turned into thorns, they are eaten by the peasants not only raw, but also boiled in water. When raw they are dipped in vinegar and fish-sauce; when boiled they have olive oil poured over them. It has already been said that all vegetables contain very little nourishment, and even this is thin and watery, so shrubby plants are quite good for the stomach. Among such plants are golden thistle, spindle thistle, white thistle, teasel, blessed thistle, tragacanth, spiny thistle and artichoke, which is held in greater honour than it should.

Those who are always trying to be different spell it not with a k and an i in the first syllable (*kinara*), but with a k and a u (*kunara*). This food contains bad juices, particularly when it has already become rather hard, for then it holds a lot of bilious juice and its whole substance is rather woody, with the result that from its thin and bilious juice comes black bile. It is better then to eat it thoroughly boiled, served with olive oil, fish-sauce and wine, with the addition of some coriander; or without this sauce, if prepared in a skillet or frying pan. In the same way a lot of people eat these plant heads, which they call vertebrae.

Celery, alexanders, water parsnip and Cretan alexanders

All these things are diuretic, but the most suitable of them all is celery because it is more pleasant and better for the stomach.

Cretan alexanders are not unusual vegetables – in fact they are sold in large quantities in Rome – but they are more bitter and far hotter than celery, as well as possessing a certain aromatic quality. More diuretic than celery, alexanders and water parsnip, they also encourage menstruation in women. During the spring they put out shoots which can be eaten raw like the leaves. In winter the leaves are the only part of the plant to eat, there not being any shoots then, just as is the case with celery. After the shoots have been produced, the whole plant becomes more pleasant, both when eaten raw or cooked with a choice of olive oil and either fish-sauce, a dash of wine or some vinegar.

But alexanders and water parsnips are eaten cooked, for both of them seem unpleasant when raw. Some people serve celery and Cretan

alexanders mixed with lettuce leaves, because lettuce – which is insipid and moreover contains a cold juice – becomes more pleasant and at the same time more useful if it takes on something of the bitter vegetables. This is in fact why some people also mix the leaves of rocket and leek with it, whilst others combine it with basil leaves as well.

In Rome the usual name for this vegetable is not Cretan alexanders (*smyrnion*) but black lovage (*holus atrum*). Perhaps at the outset it would be right not to number it among the foods, and similarly with the water parsnip and alexanders, for all such things serve as seasonings for foods, just like onions, garlic, wild and cultivated leeks, and in short everything that is bitter.

Among what is bitter can be listed rue, hyssop, oregano, fennel and coriander, all of which can be read about in cookery books, since they possess properties that are useful both to doctors and chefs, although each has a particular goal and aim, and I am surveying the uses of these foods, not the pleasure derived from them. But with some people the unpleasantness in a food contributes a great deal to indigestion, which is why it is better to season these foods in moderation. The common habit of chefs to use unsuitable seasonings in large quantities is such as to cause dyspepsia more than good digestion.

Rocket

This herb is definitely heating, so that it is not easy to eat on its own without mixing it with lettuce leaves. Its seed is believed to generate sperm and to arouse sexual urges. It causes headaches, and even more so if it is eaten on its own.

Stinging nettles, which are also called common nettles

This is one of the wild plants; its power is composed of fine particles. So understandably no one uses it as a food unless under the pressure of great shortage. It is useful as an accompaniment to bread and as a medicine for relaxing the stomach.

Daucus gingidium and wild chervil

Daucus grows for the most part in Syria and is eaten like wild chervil by those living where I do. Generally it is good for the stomach, whether one prefers to eat it raw or boiled. It cannot withstand prolonged cooking.

Some people serve it with olive oil and fish-sauce, whilst others toss it also in wine or vinegar; it is much better for the stomach and whets an weakened appetite when eaten with vinegar. But it is evident that this plant is more medicinal than culinary, because it has a considerable share of astringency and bitterness.

Basil

The majority of people use this as an accompaniment to bread, eaten with olive oil and fish-sauce, but it contains bad juices, and for this reason its unsatisfactory qualities are exaggerated, some people alleging that, if mashed up and put in a new pot, it quickly produces scorpions in a matter of a few days, especially when the pot is warmed by the sun each day. But whilst this is rubbish, one can say in all honesty that this herb is full of bad juices, injurious to the stomach and difficult to digest.[14]

Fennel

This plant sometimes grows of its own accord, rather like dill, but it is also sown in gardens. Dill is invariably employed in seasonings, fennel as an accompaniment to bread. Around where I live it is stored, following almost the same method as with pellitory and terebinth, so that is can be used for the whole year, as are onions, turnips and other similar things, some laid up in just vinegar, others in vinegar mixed with brine.

Asparagus

It is not the present intention to look at whether you should pronounce the second syllable of asparagus with a p, as everyone does now, or with a ph, because I am writing for those who want to maintain their health, not those who make efforts to speak in Attic Greek, even if they know this about Plato, yet have no idea about his writings or thought.[15] Since therefore almost all Greeks call those soft stems, at the moment of bursting into fruit and seed, asparagus with a p, I will explain their power and leave those who use them to call them what they want.

Many vegetables and plants in general in the course of nature produce shoots like this, but not all of them are eaten. So my appraisal will be about everyday usage, just as I have said before.

Cabbage shoots, which some people call sprouts (*cyma*) – through

synaeresis, it seems to me, of the three syllables of the word used for cabbage (*crambe*) – are no less drying than cabbage, although cabbage is drier in constituency than the leaves of other vegetables, especially when it is close to coming into fruit. By other vegetables I mean lettuce, orach, blite, beet and mallow; the reverse is true for radish, asparagus, turnip, mustard, nose-smart, pellitory and almost all the other things which, although bitter and hot, tend to be moister.

Hyacinth, celery, water parsnip, rocket, basil, curled dock, patience dock and all the other pot herbs produce some shoots like this before they go to seed. When they have seeded they dry out and become useless as food. All these plants are boiled in water and served with olive oil, fish-sauce and a dash of vinegar. In this way they become more pleasant and better for the stomach, although they furnish the body with nourishment that is negligible and without good juices.

There is another type of asparagus which grows in the shrubby plants called sweet broom, periwinkle and fiery thorn. There are two subdivisions of these plants, firstly royal and secondly meadow, just as one sort of bryony is different from the other. All these plants are good for the stomach, diuretic and contain little nutrition. However, if they are digested properly, they are more nourishing than the vegetable type of asparagus, to the same degree that they are drier. What is the similarity between the shoots on bushes and the shoots on trees? There is no precise identification, even though the shoots on trees are woodier, so a discussion is needed next on their individual characteristics.

Shoots

The shoots of trees and bushes have the same relationship as asparagus does with vegetables, because these are also new sprouts which appear when the plant is about to fruit. The difference is that the trunk of a tree is permanent, the trunk being the equivalent of the stalk of vegetables and herbs which lasts only for a year.

The shoots of all trees and bushes can be eaten if they are boiled in water, except for some that are either unpleasant in taste or medicinal which nobody eats in times of plenty, since everything else is so much better. Yet in times of shortage they are used out of necessity as food, for they perhaps provide some nourishment if properly digested. But better than these are the shoots of terebinth, chaste tree, vine, mastich, bramble and wild rose. Where I live terebinth shoots are put in vinegar or vinegar mixed with brine for storing.

The difference between the parts of edible plants

I would have hoped that what Mnesitheus wrote in his book *On Foods* was true. General statements, if they are true, explain much in a few words, just as they inflict great damage, if they are not true. This is what Mnesitheus said in general about the parts of plants:

> Firstly all roots are difficult to digest and do not agree with the stomach. I give, by way of example, radishes, garlic, onions, turnips and all other similar things. For in the case of all these plants the root, and whatever is edible that grows under the ground, is as difficult to digest, the reason being that nutriments are carried from the roots to all the parts of the plant. So the roots convey a lot of moisture to these parts, but retain most of the moisture that is difficult to digest, since it is impossible for all this moisture to be digested.
>
> Whatever is digested appears to be brought to perfection, whilst the moisture in the roots, after being distributed to the parts of the plant elsewhere, must have undertaken the final part of the digestion, since everything is fed from the root. So it is inevitable that undigested moisture exists in the root. After collecting in this place, it awaits the completion of the digestion above.

That is what Mnesitheus states for you. As a speech it is believable, but practical investigation shows him to be deceived. The roots of radishes are in fact much more bitter than their stalk and the leaves. This is also the case with onions, wild and cultivated leeks, and garlic. But if you want to compare the roots of beet, mallow and turnip with their leaves, you will find that the power of their roots is stronger. This is the case with the root of marsh mallow, which appears to be some sort of wild mallow. It is evident that the root, just like beetroot, disperses many types of inflammations, but that the leaves are incapable of doing the same.

And yet all the medicinal plants, whose roots resemble those already described, have leaves that are weaker than their roots, as for example cyclamen, squill, cuckoo-pint, edder-wort and very many others. With other plants most of the substance is in the stems and the trunks, but with these it is in the root, and nature expands and nourishes this part of them, diverting whatever has not been properly worked up in them to the leaves and stalks. These plants therefore have a large root even in winter, whilst the stem grows in spring, at which point it starts to fruit.

With creatures, nature sometimes appears to apply the waste from the

general substance of the animal to the creation of certain superfluous parts – something Aristotle also said – as in the case of deer with their horns, and other animals with the amount and size of their prickles or hair. So it is safer to examine each of the parts in plants by itself, tasting and smelling first, then also testing through eating. For smell and taste, by giving information about the sort of juice and savour the part of the plant possesses, also immediately indicate their whole constitution.

Through experiment their power can be accurately ascertained, if of course one conducts these experiments by means of a suitable application of logic, since in these experiments both the consistency of the plant and its attendant juice are sometimes made known.

For some plants have moist watery juice, whilst others have thick viscous juice, which you should personally taste again, because some of these are sharp, acidic, or bitter, whilst others are salty and briny, just as others are astringent, sour, watery or sweet. It is therefore important not to rely on Mnesitheus, although his general argument is sound, but rather to test each of the parts of plants for themselves.

Turnip

You can call this plant turnip or kohlrabi. The part that grows out of the ground is like a vegetable, whilst the root that is in the earth is hard and inedible before it has been cooked, but once boiled in water it would be surprising if it furnished any less nutrition than related plants. There are so many different recipes for it that it is stored in brine or vinegar so it can be available for use throughout the whole year.

It provides the body with a juice that is thicker than the average, which means that if too much is eaten, particularly if it is not sufficiently digested in the stomach, the humour described as raw collects. No one appears to contradict or support that it relaxes the bowels, especially when it has been well cooked. It calls for lengthy cooking, and it is best when boiled twice, as was said before on the subject of this cooking method. If it is served rather underdone, it is more difficult to digest, causes flatulence and is injurious to the stomach; sometimes it even causes biting pains in the bowels.

Cuckoo-pint

The root of this plant is eaten in the same way as the root of the turnip, although in some places it grows rather more bitter, so that it is closer to the root of edder-wort. After the first lot of water has been drained off, it

must be put into fresh hot water for boiling, as was described for cabbage and lentils. In Cyrene the plant is completely different from the one which grows around my home. For the cuckoo-pint in this locality has hardly anything bitter or medicinal about it, so it is more useful than turnips. So the root is exported to Italy, because it can keep for a long time without rotting or sprouting. Clearly such a vegetable is nutritionally superior, whilst if expectoration is intended from the chest and lungs of any collected thick and viscous matter, the variety that is more bitter and medicinal is better.

It is boiled in water with mustard or vinegar, and eaten with olive oil and fish-sauce, and also with pickles, both those made with salt and those made with cheese. It is not a secret that the juice (by which life is nurtured) distributed from cuckoo-pint to the liver and the whole body is somehow rather thick, as was said about turnips, particularly when the roots are without medicinal properties, like those which come from Cyrene. For near me in Asia many of the cuckoo-pint plants are very bitter and possess medicinal power.

Edder-wort

I sometimes offer the root of this plant to eat, like the root too of cuckoopint, after boiling it two or three times to remove its medicinal quality, when the viscous and thick matter surrounding the chest and lungs requires a stronger power. You should bear in mind a factor common to all foods: that whatever is sour and bitter furnishes little nourishment for the body, whilst whatever is flavourless, and even more so whatever is sweet, provides a lot of nourishment. This is still more pronounced if the foods have a compact substance, and are neither moist, thick or spongy in their consistency.

It is vital always to remember this advice and to ascertain whether each of the foods being tested loses during boiling or baking or frying its strong qualities, for then there will be no need to listen to me discussing each item in turn, but instead I will provide a continuous commentary on what is edible, as I have been doing with all the other items.

Asphodel

The root of asphodel is somewhat similar to the root of squill in size, shape and bitterness. However, when it is prepared like lupins it loses most of its bitterness, and in this respect it differs from squill, for the quality of this

plant is quite difficult to wash away. Hesiod seems to praise asphodel in these words: 'nor how great an advantage there is in mallow and asphodel'.

I myself know that in times of shortage some peasants struggle to make it edible with lots of boiling and soaking in sweet water. Certainly its root has an aperient and thinning power, just like the root of edder-wort. Hence some people administer its shoots as a superb remedy for jaundice.

Hyacinth

Hyacinths belong to the same category as the plants just mentioned. Their root is eaten without the leaves, but sometimes in spring their shoots are eaten. They have a pronounced bitter and astringent power, which is why they somehow whet the appetite in the case of a relaxed stomach. They are not denied to those requiring an expectoration of something from the chest and lungs, even though the substance of their body is rather thick and viscous. Yet their bitterness counteracts their thickness, allowing them to cut through thick and viscous matter, as has been stated in my book *On Simple Medicines*.

So if they are boiled twice, they are more nutritious, but they do not agree with those who need to expectorate, as they lose all their bitterness. When prepared like this it is better to eat them in vinegar blended with olive oil and fish-sauce, since they then become more pleasant, more nourishing, less flatulent and easier to digest. Some men who fill up on their food feel quite clearly that they hold their semen and are keener for sex.

There are many different recipes for them: they can be boiled in water, as I have said, elaborately seasoned dishes can be made with them, they can be served fried, and they are popularly baked in the ashes. However, they do not withstand prolonged boiling, but suffice with an extremely brief time in the water. Some people do not boil them at all beforehand, preferring instead to keep their bitterness and astringency, since this provides greater encouragement for eating.

If they are used for this purpose, there is something beneficial in them, provided this happens over the course of two or three days; but if they exceed this limit when prepared like this, particularly when they are eaten, as usually happens, when still quite raw, they conversely remain undigested. Some indeed cause both flatulence and colic if they are not properly digested. The food that comes from them being eaten like this does not contain good juices; whereas from those which are cooked thoroughly or even twice, as has been explained, the juice is thicker, but otherwise better and more nutritious.

Carrot, wild carrot and caraway

The roots of these plants are eaten, but these provide less nutrition than turnips and less in fact than the taro from Cyrene. They are clearly heating and display a certain aromatic quality. As with other roots they are difficult to digest. They are diuretic and, if used excessively, supply an average amount of bad juice. Caraway root contains better juices than the carrot.

Some people call the wild carrot daucus, since it is more diuretic, of greater medicinal value and in need of lengthy cooking, if it is intended to be eaten.

Truffles

These should be classified among the roots or bulbs, since they have no pronounced quality. Chefs use them as a vehicle for seasonings, just as they do with all the other foods that are called flavourless, harmless and watery in taste. What all these foods have in common is that the nutrition they distribute to the body holds no particular power, but is rather cold, whilst in terms of thickness – of whatever sort is present in what has been eaten – it is thicker from truffles, but moister and thinner from large gourds, and in proportion from the other foods.

Fungi

Of the fungi, mushrooms boiled well in water come close to being a flavourless food.[16] But they are used not just in this way, but also prepared and seasoned in many other ways, like all the other foods that have no particular quality. The nourishment that they provide is full of phlegm and clearly cold as well; it is injurious to the stomach if too many are eaten.

After mushrooms come amanitae. It is generally safer not to touch the other fungi, for they have been the cause of many deaths. I know of one person who ate lots of a particular mushroom which is thought to be harmless; these mushrooms had not been properly cooked. The entrance to his bowels was constricted, felt heavy and was cramped; his respiration was difficult; he fainted; his sweat was cold. He was only just saved by dosing with whatever disperses thick juices, such as vinegar mixed with honey, on its own or with hyssop and oregano gently boiled in it. He took this from someone sprinkled with sodium carbonate, and with their help he vomited the mushrooms which he had eaten, which already were changing into phlegm that was very cold and thick.

Radishes

Those who live in the cities, for the most part, only eat these raw as a starter with fish-sauce to relax the bowels, but some people pour vinegar over them. Those who live in the country often serve them with bread, rather like the other natural accompaniments, among which are fresh oregano, nose-smart, thyme, savory, pennyroyal, serpyllum, green mint, catmint, pellitory and rocket. All of these accompaniments to bread are edible when green. They are eaten with foods, and as plants are classed as herbs.

The stalk and leaves of the radish are eaten, but more out of necessity than from choice. The root however is constantly eaten, but as an accompaniment more than a food, since its power is attenuating and obviously heating. Its bitter quality is predominant. In spring it has the tendency to produce a stalk that grows tall, just like everything else which runs to stalk. This stalk is boiled and eaten with olive oil, fish-sauce and vinegar, just as is the case with turnip, mustard and lettuce.

Obviously this stalk nourishes more than the raw radish, as the bitterness is deposited in the water, yet it contains hardly any nutrition. Some people eat the stalk and the radish itself boiled like a turnip. What is surprising about all those doctors and lay people who eat them raw after dinner to aid the digestion is that they claim what they do has been sufficiently tested, yet everyone else who copies them is harmed.

Onions, garlic, leeks and leeks, both cultivated and wild

People frequently eat the roots of these plants, but rarely the stalks and leaves. Through their considerably harsh power, they heat the body, as well as both thinning the thick juices and cutting through the viscous juices in it. However, by boiling them two or three times you can take away their harshness, although they nevertheless still cause thinning and furnish an extremely meagre degree of nourishment to the body. On the whole they should not be served until they have been cooked.

But garlic is eaten not just as an accompaniment to bread, but also as a medicine for the health, because it contains aperient and discutient powers. If it is boiled briefly to remove its bitterness, it is less efficacious, but it does not still retain its bad juices, in the same way as when leeks and onions are boiled twice.

Wild leeks differ from cultivated leeks in the same way as all similar species of wild plants are different from their cultivated types. Some people store them in vinegar for a whole year, just like onions. You can do the

same for wild leeks, and this improves them as a food and removes some bad juices.

But avoid continual use of all bitter foods, especially when the person eating them is by nature rather bilious. For such foods are suitable only for those who collect either phlegmatic juice or juice that is raw, thick and viscous.