Sixth Chapter

*Daily physical exercise to maintain health is more important to the prince than to anyone else.*

If what Hippocrates wrote in the third book *Of Regimen* is true, such is the importance of physical activity that health must be the result of a close relationship between it and food. He says that it is “necessary to establish whether the activity exceeds the food or, on the contrary, whether this is greater than the former, or again, whether they are equal; a pathological condition sets in whenever one of the two terms dominates the other; indeed, health is the result of a balance of the forces in play”.

It must be deduced from this that, as it is indispensable to ingest foods daily to live and to maintain health, it must be equally indispensable to perform physical activity every day, precisely to ensure that illness is not caused by altering the balance. If the amount of food is moderate and the physical activity excessive or the energies are dissipated by work, the association of great quantities of food with reduced activity leads to an accumulation of humours and the process that will result in a great number of sicknesses insidiously begins. So if one wishes to maintain health, it is important that the food ration is correct and, in the case of moderate activity, is in proportion to this. It is also correct to appease one’s hunger and allow digestion to take place because, as Hippocrates says in the *Aphorisms*, “those who are hungry should not start work”. According to what Xenophon writes in the first book of his *Cyropaedia*, the Persians paid great attention to the relationship between food and physical energy such as to consider spitting and blowing the nose improper; such actions being seen as highly immoderate with
regard to food. This sounds like a reproach to our age. Indeed, not only has the habit of frequently spitting and blowing the nose become established, thinking these are beneficial to health, but people also resort to the use of tobacco, smoking it, chewing it or sniffing it in order to unblock the nostrils and fauces and cause secretions of the humours that would not accumulate if a more frugal and active life were led. Nature on her part, sufficiently attentive to our needs, has provided us with much more suitable excretory apparatus, both for solid and liquid excrements, but instead we force the organs of smell and taste to perform inappropriate functions. Princes ought to control their inclination to disobey Hippocrates’ precept so as to avoid the risk, not too remote, that it results in damage to the health.

Physical activity for reasons of health befits the prince more than anyone else, given also their rich and nutritious diet. It is also necessary that the quantity of food is not exceeded by the physical activity, such that the balance proclaimed by Hippocrates is maintained. Among the various kinds of activity, that which may be inspired and performed directly is to be preferred. Plato says in the *Timeus*: “The best kind of movement is that which is instigated by oneself. Indeed, it enters into harmony with intellectual activity and with that of the whole body. The worst is that expressed from outside”.

Travelling by carriage, on board ship, being carried on a sedan, and undergoing massages can all be interpreted as activities for the organism, but they are dictated from outside and are not such as to produce positive effects as those deriving from movements of the muscles. These are obtained, for example, by walking or spontaneously performing any other action with the body. In the course of adequate activity, dormant heat is rekindled, circulation of the blood is promoted, and a more even distribution of nutrients in the individual parts of the organism is produced. Transpiration of the skin is facilitated and the obstacles that may form in the intestine and blood vessels are cleared. “The spleen is in pieces, walk”, states Plautus in the *Curculione*. Celsus writes effectively on the same subject in the second chapter of the first book: “Laziness leads to premature old age, work prolongs youth”. In short, what Virgil said of fame may also be said of the body: “It acquires strength by movement”.

The prince who is concerned about his own health, as he is daily concerned with feeding himself, must think no less of per-
forming some physical activity every day. A morning walk is recommended, before eating, preferably outdoors with a clear sky and on days without wind or, if preferred, in the evening before dinner. This is what Hippocrates says: “Work activities should precede meals... There are some activities that are more befitting a prince, such as hunting, riding and dancing. The prince would draw great pleasure from these if they practised them diligently. In antiquity, hunting was the prerogative of princes from the time of their youth. Indeed, they were ashamed if they were unable to draw a bow, and kill wild animals and hit a target dead-centre with an arrow in such a way as to outclass all the others. We read that Thetis entrusted Achilles to Chiron so he could teach him to hunt and get used to tracking animals in the forest and facing boars and other wild animals on the peaks of the most inaccessible mountains. It was for this reason, and for being a brave warrior, that he distinguished himself in the Trojan War. Hunting ought to be seen as a proper introduction to the military discipline, which the prince cannot avoid. Hunting offers a great number of advantages in addition to pleasure, mainly that of health. Going in search of wild animals in steep, inaccessible places on horseback or foot necessitates every kind of movement, so that the body, in warming up, produces humours that reach the head, the stomach and the other intestines and must be readily dissipated by transpiration.

As well as extolling with considerable praise the advantages brought by hunting for maintaining health, poets and writers have constantly described the merits of the ability and experience achieved in the use of the bow. Virgil writes of Aeneas that he killed seven deer with arrows on the Lybian coast to provision his seven ships; Martial writes of Domitian, who killed wild animals; and Ausonius tells of Graziano, who killed a lion. It is worth noting what Sidonius Apollinaris has to say on this subject in the epistle where Theodoric, the king of the Goths, is described as being very skilled at hunting and in drawing the bow. Apollinaris says that when a hunt was announced, Theodoric went carrying his own bow at his side without thinking of diminishing his royal dignity; on the contrary, he thought it less than manly to take a bow held by others. Holding the bow at the level of his head, he would draw it with great energy, take the arrow, load and shoot and, in the words of the same writer, would “announce the target he intended hitting
and, once chosen, would not miss it; you would have called the shot more precise than the actual look with which he set the target”.

Riding is another kind of activity that is well suited, or rather necessary, to a prince. Indeed, princes run considerable risk if they do not learn to mount, to stay on by strength and hold the reins, as horses are not given to flattery, nor do they know how to distinguish between a prince and a commoner, and certainly few of them resemble Bucephalus. The success and admiration aroused among the people by a prince who proceeds publicly on the back of a fine, powerful, foaming horse is incredible. The custom of raising equestrian statues to illustrious men in squares and public roads was common in antiquity and still is today. The movements of the body caused by riding, which is always accompanied by jolting, are very useful, moving the dense, stagnant humours from their place and facilitating their excretion. I once had to treat a Modena groom struck by an acute fever caused by intemperance and by guzzling too much water. His abdomen was distended and tense such as to suggest hydropsy (an accumulation of fluid), and did not go down with any remedy. I convinced him to return to his normal activity of breaking horses, and with that he was perfectly restored and is still alive. So riding frequently is recommended for princes to maintain their health. Thomas Sydenham prescribed it particularly in cases of chronic illnesses. If such kinds of activity are effective in the cure of the illness, they will also be so in the preventive stage; indeed, according to what Hippocrates says in the books of The Epidemics, “that which cures can avert the onset of the disease”. Certainly princes were once more used to riding, as in the case of the kings of Persia who used to receive ambassadors on horseback. So was the habit of publicly proceeding in royal carriages, either sitting in them or driving them personally.

Riding is not without side effects. Indeed, for those with a predisposition to gout, kidney stones or certain diseases of the bladder, it is more than a little risky, as Hippocrates says in his book on Airs, Waters and Places referring to the Scythians, who suffered from sciatica as a result of riding for long periods of the day. Hippocrates also claims that riding too much can lead to impotence in men, something that must be related to the jolting transmitted to the kidneys and to the spermatic ducts; furthermore, such a condition also, in some cases, may lead to gonorrhoea. Riding practised
in moderation does much for the health, at a measured pace on a quiet horse, which princes certainly do not lack. It is a matter of the comprehensive exercise of passive poses and active movements, as Galen says in the eighth chapter of the second book *On Safeguarding Health*; indeed, those who ride have to flex many muscles, harmoniously recruiting them into a tonic activity. The characteristics of riding allow an increase in natural heat, promote the evacuation of excrement, considerably fortify the stomach and strengthen and sharpen the organs of sense. Trallianus advises riding for deafness and for headache.

It is also thought that riding serves particularly to strengthen the legs, regarding which Suetonius notes that the doctors advised Germanicus to ride often because it was noted that he had fragile legs. Personally, I agree with this recommendation, considering that the legs work hard with the stirrups when riding. It is inevitable that anyone riding frequently keeps the muscles and thus the entire leg in tension. It follows that the blood that reaches the arteries, not being able to easily flow through the veins, stays there longer, resulting in prolonged perfusion and better sustenance of that region. The same phenomenon is reproduced in all those organs and body parts that are exercised more than others, which is why the hands of the baker are larger and more robust; thus “the function creates the organ”, as Avicenna says. If the prince has no contraindications due to kidney or joint disorders, he should ride quietly and suitably for the good of his health, and for the purposes of training, so that he does not find himself unprepared if having to take part in some military campaign.

Our programme next includes another kind of activity much suited to a prince, an activity that he does for simple amusement: dancing. As this is a non-continuous, episodic activity, it is not such as to lead to fatigue. It offers the same advantages as other activities: revival of the spirits and bodily heat, shaking of the organism, and agility and strength of the limbs in various movements. It is usual for princes to be taught to dance in their youth so that as adults their movements in public are marked by grace and dignity. Indeed, the prince who has not been taught and proves incapable of moving his feet to the rhythm of music is unworthy and unseemly. Herodotus says on this subject that Hippoclides of Athens broke off his marriage to Agarista, daughter of Kleisthenes, tyrant of Si-
kyon, because the latter danced in such a clumsy and listless way. Scipio loved dancing, even at an advanced age and, according to what Seneca says in his treatise *On the Tranquillity of Spirit*, "that soldier's body, more accustomed to triumphs, when dancing moved not in an effeminate way, as the ancients used to do at games and festivals, but shook itself in a manly fashion, such as to not be humiliated, even had his own enemies been watching him".

I will not make further mention of the advantages and usefulness of dancing, precisely delineated by Lucian when he rebuts Crato, who rather disapproved of such activity and characterized it as effeminate and unworthy of a man. The undoubted benefit of dancing is not only serenity of spirit and health of the body. Another benefit may be added to these: that dancing can prepare the prince for the use of arms and for fighting hard in the field. We read that the Theban general Epaminondas loved dancing and thought it fostered the agility of the body, making men livelier in battle. Homer tells us that the Cretan, Meriones, fought with such marvellous agility and bodily elegance in the Trojan War that he was nicknamed "the dancer" by Greeks and Trojans alike. Riding and dancing are a prelude to the martial arts for every prince. It is unthinkable that those who are born to govern should avoid initiating such instruction. Being carried on a sedan-chair cannot be compared with the activities mentioned above as physical exercise, but like any movement of the body it is always more useful than simply sitting or maintaining a fixed posture, which tires more than it invigorates. The muscles of the legs and thighs are in static tension when a fixed posture is maintained for long periods. This is very often the cause of varicose veins in the lower limbs, and must be why Juvenal says that "the haruspex will have varicose veins"; indeed, soothsayers used to stay in fixed postures for long periods to carry out their observations. Travelling by ship can at times be useful; sailing along the coast where the breezes are drier being regarded as healthier than river or lake sailing. "Coastal sailing and walking the shores are very useful things", says a Greek proverb noted by Plutarch in the *Symposium*. Of all other activities, walking is highly recommended by Hippocrates in the second book of *Regimen*, especially in the morning and, at times, also after dining. On the advice of his doctor Acumenus, in the *Phaedrus*, Plato preferred walking in sunny places well away from the city rather
than in gardens within its walls, because the air in the former was more refreshing.

Ball games were fairly widely played by the ancients and are recommended by Galen in many of his works; they are still played in our day. According to what their contemporaries wrote, the Roman emperors were unashamed to play in public with balls both with a small and large ball. Suetonius tells us that Vespasian, who enjoyed good health until old age, often exercised in the ball court. According to Eutropius, the emperor Antoninus could often be seen among the athletes; Catarino d'Avila notes that the great warrior Gustavus Adolphus, for whom winning was an amusement, played with a ball in the presence of his army commanders after claiming victories, still covered in blood. The extent to which even moderate physical exercise favours the safeguarding of health and its continuation is shown by Herodicus, the inventor of the art of gymnastics, who lived to a be hundred thanks to this activity, in what is a useful example for us all.

Bodily exercise also rightly includes that inspired by Venus, but it must be legitimate. It is what Tiberius called *clinopale*, but considerable moderation is necessary in this arena because, if such exercise goes beyond certain limits, the strength of the organism is exhausted and may actually weaken the equilibrium of the spirit. If such limits are not surpassed, however, it may prove useful. The spirit may draw benefits from it and it is able to instil great vigour. Celsus expressed himself admirably on this subject: "coupling neither must be overly feared, nor overly desired; practised frequently it satisfies the spirit, practised rarely it excites it".

There is nothing more improper for those whose destiny is to govern others than to practise celibacy. The greatest desire of the subjects is that the court be rich in heirs. It is proper that the good prince, on reaching the correct age, take a wife in order to procreate. But to maintain his health, he ought not to fulfil too conscientiously his duties to his wife. At this point it is a pleasure to note Licurgo's brilliant consideration, which is conceivably more pertinent to a prince than to any other person. That very wise man, on being questioned as to why his laws sanctioned the fact that the husband should not have continuous amorous relations with his wife, but should separated from her at times, replied that he had set that rule for three reasons: first because, not remaining always at his wife's
side, the man is more desirable; second, because love between hus-
band and wife, at times dormant, is revived; and third, because the
children are stronger and more lively. Amorous practices, if marked
by moderation, encourage the circular motion of the blood and
dilation of the vessels. The latter notion was well known to the
women of the past, who used to measure the circumference of the
virgin's neck with a thread before she proceeded to the nuptial bed.
The measurement was repeated the following morning with the
same thread. If it was not long enough to go around the neck, the
jubilant women proclaimed that the virgin had become a woman.
Catullus alludes to this custom in his *Wedding of Peleus and Thetis*
when he sings: "The wet-nurse, seeing her again at dawn, will no
longer be able to encircle the neck with the thread".
Seyenth Chapter

The inversion of sleep with wakefulness, much in vogue in the courts of princes, is little conducive to maintaining health.

It should not seem strange that the health of a prince is often not good and that he falls ill. The explanation may be found in the fact that he goes against not one, but almost all the precepts for maintaining health. Rather, it ought to seem strange that princes do not fall ill more frequently and seriously. Indeed, many of them depart from the normal manner of living in such a way as to suggest that they aim precisely to distinguish themselves from others, like the planets that naturally follow an opposite path to that of the multitude of stars with their constant order from east to west. That which Ovid says in the second book of his Metamorphosis is pertinent to this, when he has the Sun speak of itself: “I move in an opposite direction, resolute, with rapid progress”.

One of the most sensational errors a prince commits in his unnatural activities is that of sleep and wakefulness. It is known that princes sleep when all others are awake and intent on their work and, in contradistinction, are awake while not only men, but also the animals of the land and fish of the sea, all give themselves up to sleep. I leave it to princes themselves to judge what good may come from such an inversion of the night-day rhythm that is largely contrary to the rules of nature. It is in any case evident, in wanting to follow the natural order, that night is made for resting and sleeping and that day must be destined for staying awake and working. Is it not perhaps true that when we want to sleep we protect ourselves from the light? Light, by its nature, drives the lifeblood toward the outside world and alerts it, while darkness is conduc-
cive to sleep, which attracts the lifeblood inside. The phenomenon is well illustrated by that oracle in the first book *On Regime* by Hippocrates: “Light to Hades, darkness to Jupiter, light to Jupiter, darkness to Hades”. So Esiodo, in his *Theogony*, is right to refer to “Sleep the son of Night, Night of Microcosm, Wakefulness of Day”. “One ought to sleep at night and stay awake during the day”, states Hippocrates in his *Prognostics*, while Galen comments on this passage with the following words: “In Hippocrates’ time, there was no contradiction between things according to nature and those derived from custom; in our times, the rich behave in an opposite way, both with regard to others and to sleep, sleeping by day and staying awake at night”.

Seneca forcefully condemned the custom of inverting the time for sleeping and waking. “In Rome there are those who make night day and viceversa”, he says. This custom is very old; it will always be condemned but always maintained.

Among the Greeks, Egyptians and Romans, the rich had the custom of spending most of the night awake, busy banqueting with their friends. We know from the testimony of poets and writers that they ate a modest lunch with their family or restricted themselves to a light breakfast in the morning, while in the evening they dined lavishly in the company of their friends reclining on a three-couched triclinium. The Jews obsequiously borrowed the same custom from the Romans who ruled them. This is why Christ our Saviour should have been installed on a triclinium, despite the ignorant painters of antiquity, to whom all is permitted, who depicted him seated at the centre of a table. Had he not been reclining, how could John have fallen asleep on his breast or Mary Magdelene have washed his feet standing behind him when he dined with Lazzarus in Bethany? Fulvio Ursino showed this in his book *On the Triclinium*, following the discovery of an ancient Paduan marble, as did Ottavio Ferrari in his learned work *On Clothes*. These authors also include a drawing of the triclinium. This consisted of three couches, one in front and the other two at the sides of the table. They were therefore ideal for receiving different guests, and in this way left space in the centre for the servers. A line from Horace is pertinent to this: “Often you may see three couches, four persons on each”.

Those rich men also used to have a special, magnificently furnished bed in their houses, where they dined with great luxury and
pomposity. So these ancients used to spend entire nights dining while reclining on their beds, sometimes from one day to the next, and had mimes, pantomimes, string players and singing masters on hand so that, when they had satiated the body with food, they could nourish the spirit equally with various kinds of attractions. At times they listened to the opinions of men of letters on the most sublime topics, as in the case of Aeneas. After dining with regal splendour in the court of Dido, in the presence of dignitaries, Lopas of the long hair got up and began to sing: “He sang now of the wandering moon and the labouring sun, the origins of men and of beasts, of rain and of fire”.

The same thing can be read in Lucian when he speaks of Julius Caesar who, having beaten Pompey, was greeted with great luxury and display by Cleopatra. After the meal, when the table had been cleared, she asked Achorea to speak of subjects unknown in Egypt on both religious and profane customs, in order to spend the night in conversation. Thus in ancient times the feasts were celebrated a few hours after sunset, or even earlier, as in the case of Domitian. According to Suetonius, he never dined after sunset and, after eating, spent the rest of the night listening to songs, music and learned reasoning; in this way, drawing out the banquet, digestion was almost completed before going to sleep. This manner of inverting the sleep-wakefulness rhythm is less pathogenic than what is practised in our times, with a consumption to similar excess. A prince spends most of the night in occupations concerned with government, drafting letters, receiving those bringing requests and dealing with other business. So it is often midnight before he takes a meal and then allows himself sleep, which thus takes up the rest of the night and a good part of the day, that is to say, the morning hours, when the light of the sun revives the lifeblood. His sleep is agitated and not very restful and he wakes from it sluggish and with his digestion gone awry.

Given that it is virtually impossible to abolish the custom of staying awake at night and sleeping during the day that has become established in the courts, it will be well for the prince to adopt at least some stratagems: advancing the hour of the meal, making it more frugal and leaving a sufficient interval between dinner and sleep. Hippocrates advises walking after dinner in the first book of Of Regimen, which promotes the dissipation of the
flatulence caused by the food consumed. Augustus often used to absent himself from the banquet, leaving his guests to continue eating. He ended the meal with few dishes and provided for intervals enlivened by musicians, actors, circus performers and, very often, comic fools. There must be a rule that governs the time of sleep and waking, which is what Hippocrates used to say. The state of health depends on a relationship between diet and physical activity, and it has to be admitted that the same must exist between sleeping and waking. A proportion of three to one between the two is to be considered adequate, which means that eight hours should be reserved for sleep.

"To have slept seven hours is sufficient for young and old", may be read in the book On Medicine of the Mind and the Body. Plutarch effectively compares sleep to the collectors of public taxes; in the same way that these steal half the taxes, sleep accounts, more or less, for half of life. It follows that the more we sleep, the less we live. If we consider only the time we are well as living time, not that of illness, we should also consider wakefulness as living time, not sleep. Nevertheless, there are important benefits gained from sleep, but only if certain rules are obeyed. The lines of Ovid in which Iris, Juno’s messenger, turns to the God of Sleep dosing soundly in the Cimmerian cave, are apt: “O Sleep, quiet by nature, sweetest Sleep of the gods, peace of the spirit, worries flee with you, who restore tired, weary bodies”.

I have often wondered why sleep is so necessary, to the point that its lack is incompatible with life, or at least makes it miserable. This is what happened to Mecenate, who, staying awake for three whole years, in the end died consumed by sickness. The same thing happened to Nizolio Ciceroniano, who Eurnius says, in the book Of Illnesses of the Head, managed to go for a decade without sleeping but failed to satisfy what had been proposed by a spirit eager for truth. Should someone say that sleep is indispensable for compensating the daily expenditure of vital forces relating to daily wakefulness and natural functions, I personally assert, following the observations made by Santorio in his Static Medicine, that what is unconsciously used and lost at night, in sleep, is far greater than what is assimilated and expended by our organism during wakefulness. Those who claim that digestion of food is completed during sleep thanks to bodily heat, the concentration of energies
inside the organism and the fact that the nutrient juices more readily reach the body parts – and in fact some animals do fatten due to sleep, more than when awake, when the loss of heat and energy prevails – to these I will respond that, despite the truth of all they claim, they still do not manage to show why sleep is so necessary. Indeed, if anyone in good health for any reason finds himself having to spend two or three days without sleep, he feels so weak that he is unable to even stay on his feet, and the possibility of consuming the best foods and most generous wines to restore those energies comes to nothing. How is this phenomenon explained? Why is nothing able to counter those effects caused by the lack of sleep, apart from sleep itself? Or is it to be thought, rather, that in prolonged wakefulness the tone of the fibres is reduced and, due to the uninterrupted movement of forces, they remain in tension when relaxed and are revived only with sleep, when they remain in an intermediate state between movement and inaction? When we are awake, whether in a seated position or walking, the nerves and muscular fibres are in constant tension and thus in activity, even if an alternation in position occurs, while during sleep, all relax in the same way. Thus all animals can be seen to sleep in a curved position: cows, dogs, cats, and all the quadrupeds. Almost all children assume the same position, always curving their legs in bed. As they grow older they continue to sleep with some curvature of the body and would not be able to sleep if forced to keep their legs straight and arms stiff. We can leave this subject to closer investigation by other, sharper minds.

In concluding this chapter, it is pleasing to note Hippocrates' maxim, which, although being perfectly suited to our considerations, requires some comment because of certain obscure aspects of his words. "Sleep, well covered, in the cold", says the master in chapter six of the fourth book of the Epidemics. There have been various interpretations of this principle in its translation from Greek to Latin, as may be seen, for example, in the comments made by Galen and Vallesio. Nevertheless, the most reasonable and authentic interpretation that also offers a useful indication of how to fall asleep is the following: it is better to sleep in a fairly cold, rather than a hot place, to facilitate respiration. Indeed, there is a concentration of inner heat during sleep that mainly occurs at the level of certain internal organs, so that it is preferable to inhale cooler air,
but with the body well covered so that sleep is not disturbed by the cold. The same meaning is implied in the interpretation given by Paolo Heredia. Cornelius Celsus seems to be of the same opinion, or rather, he has borrowed the same precept from Hippocrates when he strongly advises sleeping in spacious rooms. Those who sleep in small rooms to protect themselves against the rigours of winter do not take sufficient care of themselves. This is the case with our nuns and monks of some religious orders, who sleep in tiny cells and take back into their lungs their own air exhaled through the mouth along with the exhalations of the whole body. Doctors have learnt to recognize what bad smells emanate from these cells when they set foot in them in the morning to visit the sick. A prince, who has everything at his disposal, should therefore sleep, according to Hippocrates' teaching, "well covered, in the cold".
Attention must be given to the natural excrements, the real evidence of the processes that take place within the organism, to ensure that these are adequate and one does not impede the other.

In the same way that the culinary arts have made the foods necessary for sustaining the body pleasant to the palate and at the same time easy to digest, chemistry, with the tools at its disposal, should be able to reduce all the nutritive juices contained in the foods to a kind of essence. This would facilitate their transfer to the peripheral parts of the body, making the elimination of impurities possible by means of simple transpiration, thus avoiding an accumulation of a great quantity of excrements in the belly that we are forced to expel every day. I think that, even if such an objective could be achieved, the human condition would not be happier; on the contrary, considering the structure of our body, of how we are made up, some disadvantages would ensue and there would also be a loss in terms of decorum. Indeed, the continuous fermentation that takes place in the stomach would have nothing on which to act and we would perceive a kind of abrasion accompanied by suffering. This is the sensation we feel when we have an empty stomach and, as an old saying reminds us, being hungry and not being able to eat makes us impatient. Indeed, when this happens, a flow of bile and pancreatic secretions are created that cannot but induce significant undesired effects. Respiration will be more difficult; indeed, the intestine stretched out by food residues acts as a support for the bowels. This must be why those who eat only once a day seem to have a hanging gut, exactly as Hippocrates says in the sixteenth De rat. vie. in ac. Again according to Hippocrates, in
the fifty-first book *On Fractures and Joints*, fasting is not advised in cases of rib fractures. He says “moderate repletion of the abdomen facilitates alignment of the ribs”. In order for the denser parts to be separated from the chyle, the production of a mass of excrement that must remain for some time in the intestine is necessary. A reasonable swelling of the abdomen, especially in the lower region, is not only useful for maintaining health, but such accentuated rotundity is advisable and helps give grace and elegance to the whole body. A depressed abdomen, as seen in those with a pathology of hypochondria and those suffering from scurvy, is not particularly pleasing. There is truth in what St Augustine wrote in the twenty-fourth chapter of the twenty-first book of *De Civitate Dei*, “there is no part of our body that has not at the same time a useful function and an aesthetic effect. This would be more clearly evident if we were able to quantitatively know the conditions of all these parts relative to their connections and harmonies”.

In speaking of this subject, it is not the case that man should want to distinguish himself from other living beings. By applying solely reason and moderation, not only the excrements but also the secretions of the other organs would be adequately produced in accordance with natural laws. It is not my intention to show how the excretions and natural secretions are formed in our organism, in the healthy subject. The learned Terenzonio, professor of medicine at the Pisa Studio, has comprehensively done so in his most recent works. I propose giving only some indications for protecting the health, in particular that of a prince. In questions of illness, the extreme importance of regularly inspecting the faeces and urine, not only at the stage of diagnosis, but also those of prognosis and therapy, is well known. But it is also useful to act in the same way in conditions of good health. This kind of observation, which is so important and often neglected, absolutely must be made when dealing with a prince, whose wellbeing is so highly desirable. The doctor engaged to control the health of a prince must carefully study and know his character, also when in perfect health, and whether he has a tendency to a diarrhoeal bowel or a constipated one, whether the bowel is influenced by the food eaten and whether it is possible to moderate his excesses. Because of the great variety of foods they eat, many princes have difficult digestion and a diarrhoeal bowel; this means that, digestion being
less than perfect, the abdomen appears more swollen. At times, however, due to the level of moderation and consumption of particular foods, the bowel is more costive, with considerable disturbing consequences. "Abdominal constipation, general confusion, impurity of the vessels, cerebral exhaustion", said Hippocrates in the sixth chapter of the third book of the *Epidemics*. According to the comment on this passage made by Galen, the cause must be considered to be altered gastric digestion, while with similar reasoning we could also consider the intestine’s altered evacuation capacity, in accordance with Vallessio.

When the bowel is more diarrhoeal than it should be, it is better to act on the diet than with medicine, resorting to foods that have some astringent power and act to strengthen the fibres of the stomach and intestine, such as well baked bread, roast meats and dishes based on rice, quince or pear, but excluding sweet wines and desserts. In cases of a particular constitution, such as alteration of the vessels, the bowel is at times more costive because the chyle does not flow easily through the mesenteric vessels, or the lacteals of the abdomen, according to observations based on the knowledge of the time and of which Dr. Ballonio speaks in his *Effemeridi* on the same subject. Women often have a looser abdomen due to the fact that they fill themselves with different foods in no particular order and lead a largely non-active life such that the vessels do not retain that which they should. This does not happen in men, who have larger vessels and lead a more active life. So if marks appear that are deposited because of vessels of reduced diameter, it is necessary to reduce the introduction of food, favouring rather those that are in some way able to reinvigorate the natural heat and at the same time dilate the vessels, and to pursue some moderate physical activity. If the bowel is more costive, it is necessary to resort to foods that can make it less consistent, such as more tender, boiled meats like mutton, veal, goat, chicken or fish, and to take herb teas, raisins, prunes and the like. "Eat old wrinkled prunes, they help the lazy intestine".

The use of emollient enemas is to be avoided, if not in cases of extreme necessity, because even if prepared with decoctions of herbs and milk, their frequent use leads to the breakage or loosening of the fibres and, not rarely, causes abdominal colic as well as leading the organism into bad habits. I once met a cardinal in
Bernardino Ramazzini. Works

Rome who, because of persistent constipation, had a servant who administered emollient enemas on alternate days, but with results that were not always satisfactory; on the contrary, sometimes they caused considerable abdominal disturbances, but he was so used to that kind of remedy that he could not forego it over many years, as long as he lived. It is much more important to look to laxatives and "ectoproctici" introduced orally so that they constantly cause alterations to the stomach. In cases of a constipated bowel, some prescribe coffee, but this is not exactly innocuous, such that its use should be regarded with suspicion. Indeed, it causes flatulence and cannot be said to be good for the stomach. This is why Ballonio, a doctor with much experience, calls it cacostomacos and in the second book of his Epidemiologia strongly disapproves of its use for diseases of the kidneys and the bladder, whether the organism has been purged or not, and states that coffee must contain a certain quantity of poison. Coffee is similarly condemned by Falloppio in De Med. Pur. Cap. de Caffia, by Giovanni Beverovicio in De Ren. & Ves. Cal, by Ludovico Nonio in his letter to Beverovicio, and by many others. When a prince suffers from kidney diseases, as is often the case, either because of a family predisposition or an incorrect diet, the doctor must be wary of coffee as a laxative for them; he should rather institute a diet that is able to counter the abdominal constipation.

It is advisable to give considerable attention to the excretions of the second and third digestion (urination and perspiration), which are often not in the right proportion. Abundant urination is accompanied by reduced defecation, as Hippocrates says in the fourth book of Aphorisms. If the more fluid materials come together in the urinary tracts, it is no surprise that stools are drier and defecation less frequent, while urination is more abundant. This is in relation to the use of hotter foods, of wines that are too pure or with a warm, dry temperature. Those who have such characteristics are called epiflebi, have ample veins and copious urination; indeed, given the size of their lymphatics, a large part of the humours mixed into the blood flow into the kidneys. In the sixth chapter of the third book of Epidemics, Hippocrates says "porosity of the skin, hardness of the abdomen". This means that abundant perspiration leads to a constipated bowel and therefore a reduced amount of liquids in the intestine; it is these factors that determine softer fae-
ces that is easier to expel. As far as possible, the doctor has the
task of promoting the evacuation of impurities using the organism's
three main excretory apparati, but in a suitable manner and follow­
ing natural laws, achieved by resorting to moderation in food and
the correct use of non-natural remedies.