

Zofia Rzeźnicka

Final Conclusions



The sources discussed in this volume have been analysed with regard to the role of milk and milk products occupied in the dietetics, medicine and gastronomy of late antiquity and early Byzantium. It can be concluded that, due to their popularity in the Mediterranean Basin, the foodstuffs were of great interest to the medical circles of the day. It needs stressing that the essential framework of dietetic and *materia medica* knowledge concerning dairy had been developed by generations of Greek physicians over a relatively long timespan until it was given its final shape by Galen in the 2nd c. AD. The doctrine formulated in his treatises was embraced by the physicians of early Byzantium so earnestly that they did not venture beyond the canon nor did they contribute in any way to its further development.

As for milk, firstly, it needs stressing that in the Mediterranean region, unlike wine, milk never gained the status of a staple drink. Nevertheless, Greek physicians offered a detailed description of the influence the consumption of milk exerted on the functioning of the human body. In view of the material gathered, it can be maintained that physicians considered

milk to be a non-homogeneous substance which consisted of three elements, i.e. thick curd, watery whey and fat. At this point, it needs to be stressed that the data concerning the dietetic properties of milk found in medical treatises very often corresponds to the information provided by the agronomic literature of the day. Hence, it can be assumed that this kind of competence was relatively widespread in the period of interest, especially among villagers who depended on breeding animals. The experts in medicine as well as ancient and Byzantine agronomists were aware of the fact that the composition of milk varied depending on the species. Cow milk was considered the thickest, and therefore the most nutrient-rich, while sheep and goat milk followed. The consistency of the particular kind of milk also depended on the season. According to the writings, the best milk was obtained from healthy animals, neither too young nor too old. Milk became much thinner in spring, when animals fed on plants which, due to the frequent rains, absorbed the most moisture. Milk thickened in summer, when the rains subsided. Another factor that influenced the quality of milk was the type of feed given to animals, of which the inhabitants of the Mediterranean world were perfectly aware.

From the point of view of the producer, obtaining the thickest milk possible was the best option, as it was nutritious in itself and also constituted a perfect raw material for the production of cheese. However, the authors of medical texts pointed to the hazards of consuming milk with a high curd content on the grounds that it was conducive to blocking internal organs and generated kidney stones. Therefore, they recommended milk with a balanced content of thick and thin elements. Goat's milk can be assumed to have best met this criterion (and goats are considered to have been the most popular species of milk animals, followed by sheep and then cows). It has to be remembered that farmers were guided primarily by practical considerations, such as the possibility for herds to graze on mountain clearings and the lower costs of keeping the livestock (these criteria were fulfilled primarily by goats and then by sheep).

Medical treatises also provide information on how the problem of milk going sour, unavoidable in the hot Mediterranean climate, was commonly addressed. The physicians were aware of the fact that this

process not only had a negative influence on the taste of milk, but also modified the dietetic properties of the product. That is why they recommended drinking milk fresh from the animal; if this was not possible, they suggested prolonging its usability through bringing it to the boil and/or preserving it with salt or honey. It can be argued that in the Mediterranean region, high quality milk was a seasonal foodstuff (the best quality feed being available only in late spring and early summer), available primarily to the rural population (who had direct access to milk fresh from the animal) but not in large quantities. Hence, it can be assumed that in urban areas, fresh milk was a rare, and therefore, expensive delicacy. It is most probably for this reason that, in the source literature, milk was described as a foodstuff of mainly peasants and barbarians.

It can be inferred that the inhabitants of urban areas consumed milk that had already gone slightly sour. This might explain why milk was attributed to have had laxative properties and was considered harmful for the stomach and other parts of the digestive system. The same symptoms, however, can be also interpreted as revealing the widespread lactose intolerance in society of that time. The above factors, however, did not adversely affect the practice of drawing on the attributes of fresh milk in various therapeutic procedures. Due to its soothing properties, milk was used primarily in all kinds of therapies in which the internal or external application of non-invasive, soothing remedies, such as enemas and rinses, was necessary. Moreover, cognizant of the opposing effects that curd and whey had on the human body, physicians skilfully used one or the other in the treatment of digestive system disorders, e.g., when symptoms such as diarrhoea or constipation occurred. In the case of the latter, physicians recommended milk with a high whey content, which stimulated the intestines and facilitated defaecation. Patients who suffered from dysentery were, in turn, administered milk with a high curd content, which was obtained through boiling down whey.

As far as the heat treatment of milk is concerned, medical sources reflect certain aspects of the everyday life of the people in late antiquity and early Byzantium. The physicians adopted a practice which involved placing hot stones in a pot with milk (a similar method was

later developed using iron discs). Such a source of heat made the liquid grow warm evenly, as a consequence of which the risk of burning the milk was less than in the case of boiling it on a hearth, when frequent stirring was recommended so as to minimise the risk of burning. It also needs stressing that the above culinary technology can indirectly serve as a source of information about the quality of cooking pots in those times. It can be inferred that they had a rough surface, which often resulted in milk sticking to the walls, the residue of which was rather difficult to remove from the rough surface. Moreover, according to the sources, it was frequently recommended that milk be boiled in a new pot, which implies that the residue had a negative impact on the smell and taste of other products later prepared in the same pot. Such information leads us to believe that the price of pots was not high, as they were regularly replaced with new ones.

The analysed texts also provide ample information on the use of milk in culinary art. As mentioned above, it was a staple drink predominantly in rural areas, where it was said to have also been boiled into soups or pulps, with flour, groats, starch or *lágana/ítria*. However, due to the relatively small milk production of goats and sheep, the cereals mentioned above were generally firstly cooked in water and then a small amount of milk was added towards the very end of preparation. From the point of view of medicine, the meal thus obtained was not only cheap and nutritious, but it also effectively relieved the symptoms of dysentery. A more luxurious dish based on rice (expensive at the time) was prepared in a similar way. Milk also constituted an important ingredient of casserole-type dishes, marinades, sauces for meats and desserts.

In the light of the material gathered, a few basic facts concerning whey can be established. This liquid did not function as a foodstuff *sensu stricto*. It was recommended (having been separated from curdled milk) exclusively in therapies which were aimed at neutralising harmful humours in the human body or in cathartic procedures. Whey was also used in the production of some cheeses, similarly to modern practises.

Curdled milk, depending on the method of curdling, was called *oksýgala* or *schistón gála*. According to the medical treatises, the former name meant milk that curdled in a natural way (without

using additional substances but by means of natural fermentation), while the latter referred to curd obtained using culinary technologies based either on heat-processing or on adding rennet.

As for *oksygala*, dietitians did not attribute any major health benefits to this foodstuff. What they emphasised, though, was the fact that soured milk, as a heavy food product, with strong cooling properties and a negative impact on the human body, was easily absorbed by people with a hot constitution. Not surprisingly then, the foodstuff was recommended as one of the elements of a healthy diet administered to patients with an increased temperature in certain organs. It needs to be pointed out, though, that in such therapies physicians preferred to recommend the consumption of other, light, foodstuffs which had cooling properties. Nevertheless, *oksygala* had its supporters. Ancient and Byzantine texts show that *oksygala* was not an unequivocal term, and could designate not only soured milk but also fresh cheese. The source literature provides information about the methods of preparing this kind of foodstuff as well as details about possible additional ingredients.

The source material informs us that curd was used mainly to produce cheese, which was a staple dairy product in classical and late antiquity. This was due to mainly practical considerations. Cheese production enabled the surplus milk to be used, and a nutrient-rich foodstuff to be obtained which did not require immediate consumption but could be stored for a relatively long time. Therefore cheese enjoyed great popularity and was in high demand. According to source materials, cheese was produced and consumed on a large scale in rural and urban areas of the entire Mediterranean basin. Goats were the prevalent domestic animals, therefore goat cheese was the most frequent type, but cheeses produced from sheep milk, cow milk and horse milk were also known. Different brands of cheese existed, which were often produced in accordance with local recipes. Depending on the ingredients used, as well as the production and preservation methods, they differed in taste, smell, fat content and consistency. According to the analysed texts, regional cheeses frequently enjoyed a good reputation among gourmands. They were known to have reached even far-flung areas, though with a corresponding increase in cost. This was possible thanks to the well-developed infrastructure, which enabled efficient

transport, and also thanks to the emergence of the demand for mature as well as fresh cheeses. These foodstuffs, often due to their exceptional taste, were rather expensive and therefore popular mainly with affluent customers. The less well-off had to make do with generic cheeses.

However, it needs to be highlighted that the affordable price of these cheaper options was not tantamount to inferior quality. In rural areas, the staple diet was based to a great extent on fresh, home-made quark, which was in line with the dietary recommendations of that day. Such foodstuffs were considered nutrient-rich but at the same time light; meaning they did not block internal organs, whereas mature cheeses contained a large amount of salt. This salt meant they could be exported as salt facilitated effective preservation, but on the other hand, it deprived cheeses of moisture, which made them hard and strong in flavour. Therefore, such cheeses were considered heavy, conducive to kidney stones as well as intensifying thirst. The freshness of cheese was a decisive factor behind its use in therapeutic procedures. Freshly produced cheeses had mild medicinal properties and could be applied directly on wounds. Medicaments based on mature cheese were considered powerful enough to be recommended as an effective remedy for arthritis.

Due to its great popularity and wide accessibility, cheese had various applications in culinary art. Depending on the needs and circumstances, it was served fresh, mature, raw, with or without additions (herbs, nuts or fruit), baked, boiled, fried or smoked. Thanks to the sources available, basic differences can be observed with regard to the frequency of cheese consumption as well as the most popular types and the amounts in which they were eaten in rural and urban areas. Although the product was easily available both cities and in the country, it can be assumed that, as was the case with milk, cheese (especially the quark type) was consumed in the highest quantities in rural areas. Farmers practised the craft of cheesemaking, therefore they had large quantities of fresh quark at their disposal, which, combined with herbs, constituted the main *ópson* of their daily diet. Eaten with bread (in the form of a spread or as an ingredient in the dough), it satisfied hunger and provided energy for hard work. In urban areas, a great variety of cheeses were offered, including expensive gourmet cheeses from distant regions. Most probably, mature

cheeses prevailed, which, owing to the high degree of hardness and high salt content, were most likely consumed in small quantities. It also needs stressing that affluent urban residents followed a more varied diet than their rural counterparts. They could afford other foodstuffs, e.g., meat, which was rarely the case with the inhabitants of rural areas. It can be inferred therefore that in urban areas the percentage of cheese in a diet was lower than in rural regions, although the amount of the product in absolute numbers could be the same or even higher. Generally, cheeses could also be used for flavouring other dishes, or serve as an ingredient of *haute cuisine* dishes, such as *kándaulos*, or as a basis of desserts. And it must not be forgotten that cheese was an important Lenten food among the clergy and Christian laity.

Butter was the least popular (or even marginal) dairy foodstuff. The lack of interest in this food was the result of centuries-long Mediterranean culinary tradition which was based on using olive oil. Butter was considered to be a poorer substitute, used mainly by barbaric peoples who inhabited colder areas and were not familiar with the cultivation of the olive tree. Despite this, the authors of the analysed medical texts demonstrate a relatively extensive knowledge of this foodstuff. They are aware of the fact that butter is made from the fat element of milk, the best being that obtained from cows. It is worth noting that (with regard to milk and milk products), this is the only case when the choice of the best milk for the production of butter depended on its physical properties, and not on the prevalence of a particular animal species (although butter made from sheep or goat milk was known, too).

The analysed sources also provide information on the methods of butter production. The data, however, does not come from either agronomic or culinary literature, which points to a limited demand for this foodstuff. References to butter production in the description of milk products can be found in the writings of Pliny as well as ancient and Byzantine physicians. While the former most probably wanted to draw his readers' attention to this slightly exotic foodstuff, the medical circles were interested mainly in the practical application of butter. Butter was commonly used in therapeutic procedures as a remedy contributing to the concoction of harmful humours and to the softening of calluses (and

swellings) of different aetiology. Owing to its consistency, butter was applied in a solid or liquid form, and due to its mild action, it was administered both externally and internally. In the latter case, non-salted butter was to be used, and the mention of salt denotes the way the fat was usually preserved. In the light of butter being considered primarily as an effective pharmaceutical, there is nothing unusual about the lack of specific data concerning its consumption, i.e., in other words, its use in culinary art. This lack of references to the dietary properties of butter in medical writings is indicative of the minimal butter consumption.

