## IV

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# Cheese in Dietetics, Pharmacology, Therapeutic Procedures and Culinary Art: Galen and his Followers



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# 1. Galen and later medical authors on the dietetic properties of cheese

n the basis of the dietetic characteristics of cheese (*tyrós*; plural: *tyroí*) within *De alimentorum facultatibus*, we may conclude that Galen was not particularly fond of this product, though his lack of appreciation seems to have especially concerned its mature varieties<sup>1</sup>. It should, however, be admitted that he explains the reasons

Galen, De alimentorum facultatibus, 696, 7 – 699, 9, vol. VI. On the impact of the consumption of cheese on health – E. Craik, Hippocratic diaita, [in:] Food in Antiquity, eds. J. Wilkins, D. Harvey, M. Dobson, Exeter 1999, p. 346–347. Cheese in Greek and Roman antiquity – J. André, L'alimentation et la cuisine à Rome, Paris 1961, p. 155–158; R.W. Davies, The Roman Military Diet, Brit 2, 1971, p. 124–125, 127–128, 132, 135; S. Isager, J.E. Skydsgard, Ancient Greek Agriculture. An Introduction, London–New York 1992, p. 91; M.-C. Amoureti, Willes et campagnes grecques, [in:] Histoire de l'alimentation, eds. J.L. Flandrin, M. Montanari, Paris 1996, p. 139; M. Corbier, La fève et la murène: hiérarchies sociales des nourritures à Rome, [in:] Histoire..., p. 218, 224, 227–228; A. Dalby, Siren Feasts. A History of Food and Gastronomy in

for such negative opinion. Notably, he maintains that, due to the rennet used in cheesemaking and the process of ripening, the final product loses too much of its moisture content to be easily digested and tastes pungent

*Greece*, London–New York 1996, p. 66, 108; G. S a s s a t e l l i, *L'alimentation des Etrusques*, [in:] Histoire..., p. 188; M. To u s s a i n t-S a m a t, Histoire naturelle et morale de la nourriture, Paris 1997, p. 150-151; A. D a v i d s o n, Cheese, [in:] The Oxford Companion to Food, ed. A. Davidson, Oxford-New York 1999, p. 159; P. Garnsey, Food and Society in Classical Antiquity, Cambridge 1999, p. 13, 125; J.P. Alcock, Milk and its Products in Ancient Rome, [in:] Milk. Beyond the Dairy. Proceedings of the Oxford Symposium on Food and Cookery 1999, ed. H. Walker, Totnes 2000, p. 34-37; J. Auberger, «Du prince au berger, tout homme a son content de fromage...» Odyssée, 4, 87–88, REG 113, 2000, p. 1-41; C.A. Déry, Milk and Dairy Products in the Roman Period, [in:] Milk..., p. 118–120, 122–123; R.I. C u r t i s, Ancient Food Technology, Leiden–Boston–Köln 2001, p. 315–316, 400–402; A. D a l b y, Food in the Ancient World from A to Z, London–New York 2003, p. 80–81; G. Malinowski, Zwierzęta świata antycznego. Studia nad Geografia Strabona, Wrocław 2003, p. 51; P. F a a s, Around the Roman Table. Food and Feasting in Ancient Rome, transl. S. Whiteside, Chicago 2005, p. 168–170; J.P. Alcock, Food in the Ancient World, Westport-London 2006, p. 83-84, 154, 159; J.M. Wilkins, S. Hill, Food in the Ancient World, Malden, Mass.-Oxford 2006, p. 18, 41, 64, 105, 162-163; W. C a v a n a g h, Food Preservation in Greece during the Late and Final Neolithic Periods, [in:] Cooking Up the Past: Food and Culinary Practices in the Neolithic and Bronze Age Aegean, eds. C. Mee, J. Renard, Oxford 2007, p. 115-116; A. Dalby, Cheese, [in:] *The Oxford Companion to Italian Food*, ed. G. R i d l e y, Oxford 2007, p. 114–116; L. Civitello, Cuisine and Culture. A History of Food and People, Hoboken 2008, p. 27, 33-34, 40, 45-46, 48; A. D a l b y, *Cheese. A Global History*, London 2009, p. 39-45, 54-58, 98-100, 103-104, 109-110; B. Santillo Frizell, Lana, carne, latte. Paesaggi pastorali tra mito e realtà, Firenze 2010, p. 129-136; P.S. K i n d s t e d t, Cheese and Culture. A History of Cheese and its Place in Western Civilization, White River Junction 2012, p. 63-115; F. McCormick, Cows, Milk and Religion: The Use of Dairy Produce in Early Societies, AZ00 47.2, 2012, p. 105-107; A. Dalby, The Flavours of Classical Greece, [in:] Flavours and Delights. Tastes and Pleasures of Ancient and Byzantine Cuisine, ed. I. Anagnostakis, Athens 2013, p. 18-22; J. Paulas, Cheese, [in:] The Encyclopedia of Ancient History, vol. III, eds. R.S. Bagnall, K. Brodersen, C.B. Champion, A. Erskine, S.R. Huebner, Oxford 2012, p. 1445–1446; Ch. Ch and ezon, Animals, Meat, and Alimentary By-Products: Patterns of Production and Consumption, [in:] A Companion to Food in the Ancient World, eds. J. W i l k i n s, R. N a d e a u, Malden, Mass.-Oxford-Chichester 2015, p. 137, 140, 142--143; J.F.D o n a h u e, Roman Dining, [in:] A Companion..., p. 261; S. H i t c h, Sacrifice, [in:] A Companion..., p. 344; M. Leigh, Food in Latin Literature, [in:] A Companion..., p. 48; N. Monteix, Baking and Cooking, [in:] A Companion..., p. 220; O. Murray, (which, in turn, reveals its warming properties – dangerous for some temperaments). As a result, the foodstuff increases thirst, grows stodgy, and stimulates the production of harmful and thick juices. Therefore, Galen advised the reader against consuming (especially mature) cheese, arguing that it does not provide the body with nutrients that are easily absorbed. Neither does it stimulate the body to excrete urine and non-liquefiable remnants of the process of digestion. As a result, cheese tends to upset the humoral balance of the body and contributes to the formation of kidney stones<sup>2</sup>.

Galen has a slightly higher opinion of fresh cheese which is not pungent in taste, and even recommended the so-called *oksygaláktinos* made in Pergamum. In his opinion, when compared to other types, this one was not only tasty, but also rather light to digest and relatively easy to excrete. That is why it was believed to be healthy because it does not generate thick juices. Another cheese appreciated by Galen was the so-called *bathysikós*, which – as the physician emphasised – was particularly popular among wealthy Romans, and thus quite expensive<sup>3</sup>.

Alluding to the presence of a variety of cheeses on the market of his time, Galen argues that what generally differentiated cheeses from one

Athenaeus the Encyclopedist, [in:] A Companion..., p. 41; M. R o b i n s o n, E. R o w a n, Roman Food Remains in Archaeology and the Contents of a Roman Sewer at Herculaneum, [in:] A Companion..., p. 110; D.F. S m i t h, Food and Dining in Early Christianity, [in:] A Companion..., p. 364; J. W i l k i n s, Medical Literature, Diet and Health, [in:] A Companion..., p. 64; C. C e r c h i a i M a n o d o r i S a g r e d o, Fiori per prima l'età dell'oro... fiumi di latte scorrevano (Ov. Met., I, 89;111), [in:] Latte e latticini. Aspetti della produzione e del consume nella società miditerranee dell'Antichità e del Medioevo. Atti del Convegno Internazionale di Studio promosso dall'IBAM – CNR e dall'IRS – FNER nell'ambito del Progetto MenSALe Atene, 2–3 Ottobre 2015, eds. I. A n a g n o s t a k i s, A. P e l l e t t i e r i, Lagonegro 2016, p. 21–30; A. D a l b y, R. D a l b y, Gifts of the Gods. A History of Food in Greece, London 2017, p. 49.

 $<sup>^2</sup>$  G a l e n, *De alimentorum facultatibus*, 696, 8 – 697, 7, vol. VI. Analogical data on the harmful impact of cheese on the liver and its functioning, cf. G a l e n, *De rebus boni malisque suci*, 768, 6–10, vol. VI. Cheese as a foodstuff causing health problems, cf. G a l e n, *De victu attenuante*, 114, 3 – 115, 1.

<sup>&</sup>lt;sup>3</sup> Galen, *De alimentorum facultatibus*, 697, 8–16, vol. VI. The Latin name of this cheese is *caseus Vatusicus*. It is discussed in the section devoted to the culinary application of cheese.

another was the type of milk they were made from, the applied technology of production, and freshness. Additionally, the quality of individual types of cheese was also determined by their texture and flavour<sup>4</sup>. As for the latter two criteria, he claims that soft cheeses were better than hard ones, while spongy (i.e., porous) ones and those of a looser consistency were superior to thick and firm ones. Furthermore, the author also advises the reader to avoid either sticky or crumbly cheeses, stating that the best products were somewhere in between. While discussing the flavour, Galen recommends the consumption of sweeter cheeses or those which contain moderate amounts of salt. At the end of the disussion, he also indicates the relationship between the smell and the digestion time, explaining that a long-lasting aroma (coming from the consumer's mouth) meant that the consumed cheese was stodgy<sup>5</sup>.

Galen's teachings on cheese constituted a theory which survived antiquity and still held true in the early Byzantine period. That is why Oribasius, in order to give the dietetic characteristics of the foodstuff in his *Collectiones medicae*, quotes Galen's deliberations on milk and cheese, presenting them in a single coherent chapter<sup>6</sup>. In his typical fashion, the

<sup>&</sup>lt;sup>4</sup> More on the subject, cf. the section devoted to the culinary application of cheese.

<sup>&</sup>lt;sup>5</sup> Galen, *De alimentorum facultatibus*, 698, 1 – 699, 9, vol. VI. Information on the dietetic properties of cheese, depending on the type of milk used to produce it – Galen, *De rebus boni malisque suci*, 765, 3–7, vol. VI. This extract also contains the most important information on the dietetic properties of cheese.

<sup>6</sup> O r i b a s i u s, Collectiones medicae, II, 59, 1, 1 − 14, 5 (cheese − II, 59, 11, 1 − 14, 5). Cheese in late antiquity and Byzantium − A. D a l b y, Siren Feasts..., p. 190, 196; S. D a r, Food and Archaeology in Romano-Byzantine Palestine, [in:] Food..., p. 333; I. A n a g n o s t a k i s, Trofikes dēlētēriaseis sto Byzantio. Diatrofikes antilēpseis kai symperifores (60s−110s ai.), [in:] Byzantinōn diatrofē kai mageireiai. Praktika ēmeridas "Peri tes diatrofēs sto Byzantio". Thessalonikē Mouseio Byzantinou Politismou 4 Noembriou 2001. Food and Cooking in Byzantium. Proceedings of the Symposium "On Food in Byzantium". Thessaloniki Museum of Byzantine Culture 4 November 2001, ed. D. P a p a n i k o l a-B a k i r t z i, Athena 2005, p. 89, 90−91; J.-C. C h e y n e t, La valeur marchande des produits alimentaires dans l'Empire byzantin, [in:] Byzantinōn diatrofē..., p. 40; A.A. D e m o s t h e n o u s, The Scholar and the Partridge: Attitudes Relating to Nutritional Goods in the Twelfth Century from the Letters of the Scholar John Tzetzes, [in:] Feast, Fast or Famine. Food and Drink in Byzantium, eds. W. M a y e r, S. T r z c i o n k a, Brisbane 2005, p. 30; L. G a r l a n d, The Rhetoric of Gluttony and Hunger in Twelfth-Century Byzantium, [in:] Feast..., p. 49; J. H a l d o n, Feeding the Army: Food and Transport in Byzantium,

author also lists the most important properties of cheese in dietetic catalogues, and the qualities therein follow the line of Galen's reasoning. For instance, he notices that the consumption of a fresh product facilitates

ca 600–1100, [in:] Feast..., p. 86; E. K i s l i n g e r, Trōgontas kai pinontas ektos spitiou, [in:] Byzantinōn diatrofē..., p. 20–21; A.N.J. L o u v a r i s, Fast and Abstinence in Byzantium, [in:] Feast..., p. 197; K. Parry, Vegetarianism in Late Antiquity and Byzantium: The Transmission of a Regimen, [in:] Feast..., p. 183–184; Ch. Bourbou, M.P. Richards, The Middle Byzantine Menu: Palaeodietary Information from Isotopic Analysis of Humans and Fauna from Kastella, Crete, IJOa 17, 2007, p. 65; M. Grünbart, Store in a Cool and Dry Place: Perishable Goods and their Preservation in Byzantium, [in:] Eat, Drink and Be Merry (Luke 12:19). Food and Wine in Byzantium. In Honour of Professor A.A.M. Bryer, eds. L. Brubaker, K. Linardou, Aldershot 2007, p. 48–49; J. Koder, Stew and Salted Meat - Opulent Normality in the Diet of Every Day?, [in:] Eat, Drink and Be Merry..., p. 64-65, 71; A.-M. Talbot, Mealtime in Monasteries: The Culture of the Byzantine Refectory, [in:] Eat, Drink and Be Merry..., p. 114-115; A. Dalby, Tastes of Byzantium. The Cuisine of a Legendary Empire, London–New York 2010, p. 72–74, 98; Ch. Bourbour, Fasting or Feasting? Consumption of Meat, Dairy Products and Fish in Byzantine Greece. Evidence from Chemical Analysis, [in:] Zōa kai periballon sto Byzantio (705–1205 ai.), eds. I. Anagnostakis, T.G. Kolias, E. Papadopoulou, Athena 2011, p. 100–101; Ch. Bourbou, B.T. Fuller, S.J. Garvie-Lok, M.P. Richards, Reconstructing the Diets of Greek Byzantine Populations (6th-15th Centuries A.D.) Using Carbon and Nitrogen Stable Isotope Ratios, AJPA 146, 2011, p. 571; M. Gerolymatou,  $\bar{E}$  ktēnotrofia sto Byzantio: apo tēn epibiōsē stēn emporeumatopoiēsē (80s–120s ai.), [in:] Zōa..., p. 423, 431–432; M. K o k o s z k o, Rola nabiału w diecie późnego antyku i wczesnego Bizancjum (IV-VII w.), ZW 16, 2011, p. 15-21; i d e m, Smaki Konstantynopola, [in:] Konstantynopol – Nowy Rzym. Miasto i ludzie w okresie wczesnobizantyńskim, eds. M.J. Leszka, T. Wolińska, Warszawa 2011, p. 487-489; I. Anagnostakis, Byzantine Delicacies, [in:] Flavours and Delights..., p. 86–87, 101, 103; i d e m, Byzantine Diet and Cuisine. In between Ancient and Modern Gastronomy, [in:] Flavours and Delights..., p. 52-53; Ch. Bourbou, All in the Cooking Pot. Advances in the Study of Byzantine Diet, [in:] Flavours and Delights..., p. 67; J. K o d e r, Everyday Food in the Middle Byzantine Period, [in:] Flavours and Delights..., p. 139, 144-145, 148; i d e m, Natural Environment and Climate, Diet, Food, and Drink, [in:] Heaven & Earth. Art of Byzantium from Greek Collections, eds. A. Drandaki, D. Papanikola--Bakirtzi, A. Tourta, Athens 2013, p. 215; ide m, Cuisine and Dining in Byzantium, [in:] Byzantine Culture. Papers from the Conference "Byzantine Days of Istanbul" Held on the Occasion of Istanbul Being European Cultural Capital 2010. Istanbul, May 21–23 2010, ed. D. Sakel, Ankara 2014, p. 427, 429, 431, 433; Ch. Bourbou, S. Garvie--L o k, Bread, Oil, Wine and Milk: Feeding Infants and Adults in Byzantine Greece, [in:] Archaeodiet in the Greek World. Dietary Reconstruction from Stable Isotope Analysis, eds. A. P a p a t h a n a s i o u, M.P. R i c h a r d s, S.C. F o x, Princeton 2015, p. 174; B. C a s e a u, Byzantium, [in:] A Companion..., p. 365, 371; C. Angelidi, I. Anagnostakis,

the generation of black bile<sup>7</sup>, whereas eating a mature cheese triggers the production of juices which he terms harmful<sup>8</sup>. Additionally, he places both types of cheese on the list of foodstuffs that are difficult to digest, indicating that old cheeses are worse, whereas fresh ones, such as *oksygaláktinos*, are easier for the body to assimilate<sup>9</sup>. For the same reason, the author also classifies both as foodstuffs generating thick juices and stresses that, in that matter, *oksygaláktinoi* appear to be slightly better<sup>10</sup>. He also notes that the consumption of fresh cheese with the addition of honey facilitates the work of the digestive system, and thus accelerates the excretion of undigested materia<sup>11</sup>. Furthermore, Oribasius writes that mature cheeses have warming properties that increase thirst<sup>12</sup>, and fresh ones he attributes with a moderate cooling effect<sup>13</sup>. Finally, he also lists

La concezione bizantina del ciclo del latte (X–XII secolo), [in:] Latte e latticini..., p. 155–157; M. Le ontsini, G. Merianos, From Culinary to Alchemical Recipes. Various Uses of Milk and Cheese in Byzantium, [in:] Latte e latticini..., p. 205–222; Z. Rzeźnicka, Milk and Dairy Products in Ancient Dietetics and Cuisine According to Galen's De alimentorum facultatibus and Selected Early Byzantine Medical Treatises, [in:] Latte e latticini..., p. 56–58, 61–64, 69–70; A. Dalby, R. Dalby, Gifts..., p. 95–97, 108.

<sup>&</sup>lt;sup>7</sup> O r i b a s i u s, *Collectiones medicae*, III, 9, 1, 1 – 2, 5 (cheese – III, 9, 2, 4); O r i b a s i u s, *Synopsis*, IV, 8, 1, 1 – 2, 5 (cheese – IV, 8, 2, 4); O r i b a s i u s, *Libri ad Eunapium*, I, 25, 1, 1 – 2, 4 (cheese – I, 25, 2, 3).

<sup>&</sup>lt;sup>8</sup> O r i b a s i u s, *Collectiones medicae*, III, 16, 1, 1 – 18, 3 (cheese – III, 16, 7, 3); O r i b a s i u s, *Synopsis*, IV, 15, 1, 1 – 18, 4 (cheese – IV, 15, 6, 2); O r i b a s i u s, *Libri ad Eunapium*, I, 33, 1, 1 – 16, 4 (cheese – I, 33, 5, 2 this line contains an evident mistake by the scribe, who instead of the adjective *palaiós*, i.e., 'old', wrote the word *hapalós*, which means 'delicate', 'fresh').

<sup>&</sup>lt;sup>9</sup> O r i b a s i u s, *Collectiones medicae*, III, 18, 1, 1-13, 1 (cheese – III, 18, 7, 2-8, 1); O r i b a s i u s, *Synopsis*, IV, 17, 1, 1-12, 1 (cheese – IV, 17, 5, 2-6, 1); O r i b a s i u s, *Libri ad Eunapium*, I, 35, 1, 1-8, 2 (cheese – I, 35, 5, 2).

<sup>&</sup>lt;sup>10</sup> O r i b a s i u s, *Collectiones medicae*, III, 3, 1, 1 – 7, 3 (cheese – III, 3, 6, 4–5); O r i b a s i u s, *Synopsis*, IV, 2, 1, 1 – 5, 3 (cheese – IV, 2, 4, 5–6); O r i b a s i u s, *Libri ad Eunapium*, I, 19, 1, 1 – 5, 4 (cheese – I, 19, 4, 5–6).

<sup>&</sup>lt;sup>11</sup> O r i b a s i u s, *Collectiones medicae*, III, 29, 1, 1 – 22, 2 (cheese – III, 29, 12, 2); O r i b a s i u s, *Synopsis*, IV, 28, 1, 1 – 27, 2 (cheese – IV, 28, 15, 2); O r i b a s i u s, *Libri ad Eunapium*, I, 45, 1, 1 – 17, 1 (cheese – I, 45, 11, 3).

<sup>&</sup>lt;sup>12</sup> O r i b a s i u s, *Collectiones medicae*, III, 31, 1, 1 – 8, 4 (cheese – III, 31, 7, 1 – 8, 1); O r i b a s i u s, *Synopsis*, IV, 31, 1, 1 – 8, 4 (cheese – IV, 31, 7, 1 – 8, 1); O r i b a s i u s, *Libri ad Eunapium*, I, 47, 1, 1–9 (cheese – I, 47, 1, 5).

<sup>&</sup>lt;sup>13</sup> O r i b a s i u s, *Collectiones medicae*, XIV, 19, 1, 1-22 (cheese – XIV, 19, 1, 21-22); O r i b a s i u s, *Synopsis*, II, 7, 1, 1-14, (cheese – II, 7, 1, 13-14); O r i b a s i u s, *Libri ad Eunapium*, II, 4, 1, 1 – 4, 2 (cheese – II, 4, 1, 14 – 2, 1).

cheeses among the foodstuffs which induce the production of gases<sup>14</sup> and generate raw humours<sup>15</sup>. A similar approach is adopted by Aëtius of Amida, who, apart from a detailed description of the dietetic properties of cheese derived from Galen's output<sup>16</sup>, accentuates its most typical features in his materia medica<sup>17</sup>. The same century also brought the deliberations by Anthimus, which generally correspond to the aforementioned opinions and beliefs<sup>18</sup>. What is worth mentioning, however, is the fact that the author of *De observatione ciborum* expands the discussed discourse with his observations on baked and boiled cheeses, surely addressing his own experiences. The physician objects to both these methods of cheese processing, arguing that they made the foodstuff exceptionally firm and salty, which, we can assume, rendered them particularly unfit for consumption<sup>19</sup>. Last but not least, it should be concluded that the already presented theory on cheese changed little in the later period, which is visible both in a brief and yet substantive passage compiled by Paul of Aegina<sup>20</sup> as well as in dietetic catalogues included in *De cibis*<sup>21</sup>.

<sup>&</sup>lt;sup>14</sup> O r i b a s i u s, *Synopsis*, IV, 22, 1, 1 – 10, 1 (cheese – IV, 22, 1, 1).

<sup>&</sup>lt;sup>15</sup> Or i b a s i u s, Collectiones medicae, III, 6, 1, 1 - 2, 7 (cheese - III, 6, 2, 6).

<sup>16</sup> Aëtius of Amida, II, 101, 1–23.

<sup>&</sup>lt;sup>17</sup> A ë t i u s of A m i d a, II, 199, 1–3 (cheese – II, 199, 3) – cheese (unspecified type) as a foodstuff with mildly warming properties; II, 203, 1–13 (cheese – II, 203, 13–14) – soft and fresh cheese as a foodstuff with moderately cooling properties; II, 241, 1–21 (cheese – II, 241, 13–14) – cheese as a foodstuff generating thick juices; II, 246, 1–9 (cheese – II, 246, 8–9) – soft cheese as a foodstuff generating black bile; II, 253, 1–37 (cheese – II, 253, 12) – mature cheese as a foodstuff generating harmful humours (again, this line contains the same mistake, as the scribes uses the word *hapalós* instead of *palaiós*); II, 255, 1–25 (cheese – II, 255, 12–13) – mature and fresh cheese as a stodgy foodstuff; II, 265, 1–39 (cheese – II, 265, 23–24) – cheese with the addition of honey as a foodstuff facilitating the functioning of the digestive system, and accelerating the excretion of undigested material by the body; II, 267, 1–9 (cheese – II, 267, 6) – mature cheese as a foodstuff with warming properties.

<sup>&</sup>lt;sup>18</sup> Anthimus, 79; 80.

<sup>19</sup> Anthimus, 81.

<sup>20</sup> Paul of Aegina, I, 89, 1, 1-4.

 $<sup>^{21}</sup>$  De cibis, VII, 1–23 (cheese – VII, 11–12) – mature and fresh cheese as a stodgy foodstuff; XII, 1–37 (cheese – XII, 19) – fresh cheese with honey as a foodstuff accelerating digestion; XIV, 1–40 (cheese – XIV, 19) – mature cheese as a foodstuff generating harmful humours; XVIII, 1–16 (cheese – XVIII, 11) – mature cheese as a foodstuff generating sticky humours; XX, 1–14 (cheese – XX, 9) – cheese as a foodstuff generating sour juices.

#### Zofia Rzeźnicka

# 2. Galen and later medical authors on the pharmacological properties of cheese and its applications in therapeutics

In order to learn about the pharmacological theory on cheese adhered to by Galen and later medical doctors, one must refer first to *De simplicium medicamentorum temperamentis ac facultatibus*<sup>22</sup>. Therein, the teachings are divided into three sections. The first part forms a rather cursory introduction. The second passage includes somewhat disorganised pieces of information on the curative properties of cheese. The third, in turn, provides us with specific examples of the therapeutic application of cheese taken from Galen's personal experience and practice.

By way of introduction, the author quotes the already presented fact that cheeses were made from the thick element of milk, which was isolated once the whey had been separated<sup>23</sup>.

As for data typical of the ancient *materia medica* discourse, one can only find the statement that a mature cheese was characterised by strong diaphoretic properties<sup>24</sup>, while all types of fresh cheese possessed the ability to prevent the influx of harmful juices and to stimulate the body

<sup>&</sup>lt;sup>22</sup> G a l e n, De simplicium medicamentorum temperamentis ac facultatibus, 269, 16 – 272, 8, vol. XII. Cheese in ancient and Byzantine therapeutics – H. K i n g, Food and Blood in Hippokratic Gynaecology, [in:] Food..., p. 355–356; J. A u b e r g e r, Du prince..., p. 31–35; M. C h r o n ē, Therapeies astheneiön me zõikēs proeleuseõs yles sta byzantina iatrika keimena. Symbolē stēn meletē tõn antilēpseõn gia tis astheneies kai tis therapeies tous sto Byzantio, BSym 20, 2010, p. 153, 157, 161; C.A. D é r y, Milk..., p. 123; M. C h r o n ē, Ē panida stēn diatrofē kai stēn iatrikē sto Byzantio, Athenai 2012, p. 217–227; M. K o k o s z k o, Galaktologia terapeutyczna (γαλακτολογία ἱατρική) Galena zawarta w De simplicium medicamentorum temperamentis ac facultatibus, PNH 14.2, 2015, p. 14–15, 20; i d e m, Galen's Therapeutic Galactology (γαλακτολογία ἱατρική) in De simplicium medicamentorum temperamentis ac facultatibus, [in:] Latte e latticini..., p. 40–42, 45–46; Z. R z e ź n i c k a, Mleko i przetwory mleczne w medycynie wczesnego Bizancjum na przykładzie pism Orybazjusza, [in:] Leki i choroby odzwierzęce, eds. L. W d o w i a k, B. P ł o n k a-S y r o k a, A. S y r o k a, vol. I, Wrocław 2016, p. 60–62.

<sup>&</sup>lt;sup>23</sup> G a l e n, De simplicium medicamentorum temperamentis ac facultatibus, 269, 16 – 270, 10, vol. XII.

<sup>&</sup>lt;sup>24</sup> The physician does not, however, express it directly.

to regenerate tissue. The fresh ones, however, could also contribute to diaphoresis (which Galen shows using the example of *oksygaláktinos*), though only to a slight degree<sup>25</sup>.

The physician devotes the largest part of the analysed text to illustrating the practical applications of both mature and fresh cheeses in medical procedures he once performed. The first case is somewhat anecdotal and is included presumably to underscore the doctor's medical intuition. From his account, we learn that one day Galen received cow milk cheese that gave off an exceptionally intense smell. Having considered it unfit for consumption, he gave it to one of the slaves among his servants, who put the foodstuff in the pantry. After a longer period of time, the servant brought the cheese back to his master, asking him what he should do with it. Judging from the pungency of the foodstuff, the physician concluded that it was even more unfit for consumption. The story has it that, having made the judgement, Galen grabbed a mortar, put the cheese into it, and began to grind with a pestle, adding a decoction of boiled ham bones. Then, he applied the resultant mixture to the joints of an arthritic man, whose condition was so serious that he had to be carried on a stretcher into Galen's surgery. In almost no time he learnt that the medicament had proved to be exceptionally effective. The application of the medicament to the areas of skin above the affected organs facilitated the self-acting removal of hardenings from the joints, which had previously led to the patient being bed-ridden. According to the author's account, the man was also instructed how to prepare the aforementioned medication for personal use, and, in time, he began to share the formula with other people suffering from the same condition<sup>26</sup>.

When writing about the therapeutic application of fresh cheese, Galen equally used retrospection. In his account, he indicated that fresh cheese is characterised by properties opposite to those typical of mature cheese. Therefore, he used it to heal large and open wounds, which – as he recollected – he had learnt while curing a certain peasant. We

<sup>&</sup>lt;sup>25</sup> G a l e n, De simplicium medicamentorum temperamentis ac facultatibus, 272, 5–8, vol. XII.

 $<sup>^{26}</sup>$  G a l e n, De simplicium medicamentorum temperamentis ac facultatibus, 270, 11 – 271, 13, vol. XII.

may only assume that this was still in Galen's youth, when he was acquiring his professional experience by helping residents in Asia Minor (mainly Mysia, where his hometown was located). The physician adds that, later on, he would regularly use compresses made up of grated fresh cheese, secured to the surface with dock leaves, as such medication was considered to induce cicatrisation of the wounds<sup>27</sup>. Galen argues that *oksygaláktinos* was exceptionally effective in such cases<sup>28</sup>.

As can be learned from later medical treatises, early Byzantine cheese therapeutics was also grounded on ancient findings. Galen's successors simply quoted his disquisition, usually narrowing the range of information to the most crucial pieces of his cheese-oriented *materia medica*. This approach was taken, for instance, by Oribasius<sup>29</sup>, who, on top of Galen's words from *De simplicium medicamentorum temperamentis ac facultatibus*, listed the uses of fresh cheese in his collective paragraphs devoted to grouping individual medical substance by their most distinguishing property<sup>30</sup>. On the other hand, Aëtius of Amida completely ignored any medical description of cheese, and restricted himself only to listing *oksygaláktinos* within the catalogue of moderately diaphoretic substances<sup>31</sup>. More details on fresh cheese can be found in the work by Paul of Aegina, who, in a short paragraph, repeated the most important information from Galen's treatise<sup>32</sup>. Similarly, the two anecdotes on the use of mature and fresh cheese in very effective

<sup>&</sup>lt;sup>27</sup> G a l e n, De simplicium medicamentorum temperamentis ac facultatibus, 270, 13 – 272, 2, vol. XII.

 $<sup>^{28}</sup>$  G a l e n, De simplicium medicamentorum temperamentis ac facultatibus, 272, 2–5, vol. XII.

<sup>&</sup>lt;sup>29</sup> Oribasius, Collectiones medicae, XV, 2, 5, 1 – 8, 1.

<sup>&</sup>lt;sup>30</sup> O r i b a s i u s, Collectiones medicae, XIV, 60, 1, 1 – 2, 49 (oksygaláktinos – XIV, 60, 2, 41–42); O r i b a s i u s, Synopsis, II, 50, 1, 1–18 (oksygaláktinos – II, 50, 1, 15–16); O r i b a s i u s, Libri ad Eunapium, II, 23, 1, 1–32 (oksygaláktinos – II, 23, 1, 26). Cf. O r i b a s i u s, Collectiones medicae, XIV, 10, 53, 1–2. On the ability to adhere, typical of fresh cheese and milk curd, cf. O r i b a s i u s, Collectiones medicae, XIV, 40, 6, 1–2.

<sup>&</sup>lt;sup>31</sup> A ë t i u s o f A m i d a, II, 235, 1–17 (cheese – II, 235, 15).

<sup>&</sup>lt;sup>32</sup> Paul of Aegina, VII, 3, 19, 95–101.

medicaments made their way into Byzantine medical literature<sup>33</sup>.

The Byzantine medical writers did not, however, focus exclusively on Galen's output but also borrowed a cornucopia of information from other sources. A couple of examples will suffice to prove this. For instance, Oribasius recommends a compress made from salted cheese to patients suffering from the stings of scorpions, venomous spiders, wasps or bees<sup>34</sup>, while fresh cheese applied in the same manner was believed to be an effective medicament in the early therapy of the ailment called *hypópia* (i.e., black eyes)<sup>35</sup>. Paul of Aegina, in turn, warned patients with kidney stones against consuming any food that generates thick juices, e.g., cheese, milk and its derivatives, etc<sup>36</sup>. One can argue that, though neither the former nor the latter specify that these pieces of medical advice were borrowed from Galen's teachings, they are perfectly compatible with the doctrine he formulated.

<sup>&</sup>lt;sup>33</sup> Cataplasms made from old cheese in treating arthritis – O r i b a s i u s, *Synopsis*, IX, 58, 1, 1 – 4, 3 (formula – IX, 58, 1, 1 – 2, 6; cheese – IX, 58, 2, 1); O r i b a s i u s, Libri ad Eunapium, IV, 116, 1, 1-22 (formula - IV, 116, 12, 1 - 13, 1; cheese - IV, 116, 12, 1); A ë t i u s o f A m i d a, II, 102, 1–10 (cheese – II, 102, 4; II, 102, 8). The same disease was also treated by means of another pharmaceutical agent, compiled from old cheese, ham, etc. - Oribasius, Synopsis, VII, 34, 1, 1 - 5, 1 (formula - VII, 34, 4, 1 – 5, 1; cheese – VII, 34, 4, 4–5); Paul of Aegina, VII, 17, 74, 1–5 (cheese – VII, 17, 74, 2–3). On both medicaments, cf. Z. R z e ź n i c k a, Rola mięsa w diecie w okresie pomiędzy II a VII w. w świetle źródeł medycznych, [in:] Dietetyka i sztuka kulinarna antyku i wczesnego Bizancjum (II–VII w.), Część II, Pokarm dla ciała i ducha, ed. M. K o k o s z k o, Łódź 2014, p. 243–246. Compresses made from fresh cheese, applied to injuries – O r i b a s i u s, *Synopsis*, VII, I, I, I – I3, 4 (compress – VII, I, 5, 4–6; cheese – VII, 1, 5, 4; VII, 1, 5, 5); O r i b a s i u s, Libri ad Eunapium, III, 13, 1, 1 – 11, 2 (compress – III, 13, 5, 4–6; cheese – III, 13, 5, 4; III, 13, 5, 6); A ë t i u s of A m i d a, II, 103, 1-7 (cheese – II, 103, 2; II, 103, 6); Paul of Aegina, IV, 37, 1, 1 – 2, 9 (compress - IV, 37, 1, 6-8; cheese - IV, 37, 1, 6-7).

<sup>&</sup>lt;sup>34</sup> O r i b a s i u s, *Eclogae medicamentorum*, 119, 1, 1 − 7, 6 (list of cataplasms − 119, 2, 1 − 3, 1; cheese − 119, 2, 5).

 $<sup>^{35}</sup>$  O r i b a s i u s, *Libri ad Eunapium*, IV, 50, 1, 1 – 3, 3 (quoted extract – IV, 50, 1, 1–2; cheese – IV, 50, 1, 1).

<sup>&</sup>lt;sup>36</sup> Paul of Aegina, III, 45, 1, 1 – 3, 22 (diet – III, 45, 3, 4–11; cheese – III, 45, 3, 6).

## Zofia Rzeźnicka, Maciej Kokoszko

#### 3. Cheese in cuisine

Though, in all likelihood, cheese was important as a foodstuff, we have only a hazy picture of its role in gastronomy of antiquity and Byzantium. That is why, in order to make it clearer, it is advisable to consult sources whose period of composition goes beyond the general chronological framework of the present book.

According to Aristotle (4th c. BC), the milk of sheep and goats was more commonly used in cheesemaking than that of cows<sup>37</sup>. Though the philosopher gives no justification for this statement, his words can be better understood in the light of medical sources. In order to fully comprehend this gradation, one needs to take a closer look at the data regarding the properties of milk from various domestic animals, and especially the information provided by Galen. As has been already demonstrated in this book, Galen narrowed down the list of milk animals to pigs, goats, horses, cows, donkeys and sheep, at the same time indicating that donkey milk is not suitable for cheesemaking due to its thin consistency. What is more, Galen also described pig's milk as watery, which allows us to assume that it was also unfit for cheesemaking<sup>38</sup>. In order to systematise the remaining types of milk, we should order them by the amount of curd present in the liquid, i.e., by thickness. As a result, we learn that cow milk, in this respect, was considered the best, followed by the milk of sheep, goats and mares<sup>39</sup>. However, since the latter is listed by Galen immediately before donkey milk, we may assume that it was only sporadically used to make cheese<sup>40</sup>. On the other hand, the high

<sup>&</sup>lt;sup>37</sup> A r i s t o t l e, 522 a, 25–28. It is worth emphasising, however, that – even if less popular – cow cheeses were still used in gastronomy, cf. A p i c i u s, IV, 1, 1; IV, 1, 3.

<sup>&</sup>lt;sup>38</sup> G a l e n, *De simplicium medicamentorum temperamentis ac facultatibus*, 265, 13 – 266, 2, vol. XII.

<sup>&</sup>lt;sup>39</sup> G a l e n, De alimentorum facultatibus, 681, 14 – 682, 1, vol. VI.

 $<sup>^{4\</sup>circ}$  On the cheese made from mare's milk, cf. a later part of the text.

efficiency of cow milk in cheesemaking can be corroborated if we make another recourse to Aristotle, who maintained that cow milk is significantly more productive than the milk of goats<sup>41</sup>.

What calls for an explanation is why cow milk cheese was considered by Aristotle as less common than that of sheep and goats, even though it was produced from milk characterised by the highest content of curd. To fully comprehend the issue, one must view it through the prism of the natural conditions which prevailed in the eastern parts of the Mediterranean world, where the prevailingly high-altitude pasture-lands were inaccessible to cows. Whereas, this was not the case with sheep and goats, which could easily reach mountain clearings. What is more, the costs of breeding (low-maintenance) sheep and goats were incomparably lower than the expenses related to the husbandry of cows (requiring the construction of barns and the provision of appropriate fodder)<sup>42</sup>. Accordingly, in the Mediterranean, cows were generally fewer than sheep and goats and that is why the volume of cow milk for the purpose of producing cheese was on average lower than that of the former two species.

Following this line of reasoning, and, first and foremost, due to their lower fodder requirements, one may conclude that during the analysed period, it was goats that were the most commonly bred dairy livestock, and thus, goat milk cheeses were produced on the largest scale (an opinion expressed, for instance, by Andrew Dalby<sup>43</sup>). Nevertheless, it must also be borne in mind that even if the vast majority of farmers at that time kept goats (which give slightly more milk) rather than sheep, the milk of the latter contains more curd, which makes Dalby's conclusion

<sup>&</sup>lt;sup>41</sup> According to Aristotle's account, nineteen cheeses (the worth of one obol) were produced from one amphora of goat milk, whereas the same amount of cow milk returned thirty units, cf. A r i s t o t l e, 522 a, 29–32. Modern practice shows that five litres of goat milk is enough to produce half a kilo of cheese (D. J a m r o z, B. N o w i c k i, Kozy. Chów i hodowla, Warszawa 1994, p. 110).

<sup>&</sup>lt;sup>42</sup> Cf. Z. R z e ź n i c k a, *Rola mięsa...*, p. 258, 268.

<sup>&</sup>lt;sup>43</sup> A. D a l b y, *Food...*, p. 160. On the domination of goat cheeses in ancient Greece, cf. W.H. K e u l e n, *Significant Names in Apuleius: A 'Good Contriver' and his Rival in the Cheese Trade ("Met." 1, 5) (Apuleiana Groningana X)*, Mn 53.3, 2000, p. 313; J.P. A l c o c k, *Food...*, p. 67.

only a supposition, since there is no specific data that would allow us to prove – beyond all doubt – the thesis on the higher production of goat milk cheese in comparison with that made from sheep milk<sup>44</sup>. Regardless of how this issue is settled, the milk of goats and sheep undoubtedly remained the most basic staple from which cheeses were made in antiquity. And this ratio did not undergo any changes into the early Middle Ages – as shown by analyses of later medical treatises<sup>45</sup>.

The foregoing disquisition does not mean, however, that milk obtained from other animal species was not used in ancient and early Byzantine cheesemaking. From Pliny and Dioscorides<sup>46</sup>, we learn, for instance, that the milk of mares was used to produce a cheese called *hippace*, which Oribasius describes as a foodstuff characterised by an intense smell and a nutritional value equal to cow milk cheese<sup>47</sup>. Furthermore, Aristotle claims that the so-called Phrygian cheese was made through a combination of the milk of mares and donkeys<sup>48</sup>. However, the remark is so brief that it makes it difficult to unequivocally conclude

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<sup>&</sup>lt;sup>44</sup> To prove this thesis, we would need to know the ratio of the volume of milk curd produced from goat milk versus sheep milk, which would allow us to determine the final amounts of both types of cheese.

<sup>&</sup>lt;sup>45</sup> O r i b a s i u s, *Collectiones medicae*, II, 59, 1, 1 – 2, 1; A ë t i u s o f A m i d a, II, 87, 9–11. On the dominance of goat husbandry over sheep breeding in the Byzantine period, and thus, also on the primacy of cheese made from both types of milk, cf. Ch. B o u r b o u, M.P. R i c h a r d s, *The Middle Byzantine Menu...*, p. 65; Ch. B o u r b o u, B.T. F u l l e r, S.J. G a r v i e-L o k, M.P. R i c h a r d s, *Reconstructing...*, p. 570–571, 573–575; J. K o d e r, *Paratērēseis gia te chrēsē booeidōn sto Byzantio*, [in:] *Zōa...*, p. 38; i d e m, *Cuisine...*, p. 433.

<sup>&</sup>lt;sup>46</sup> On the term in Pliny's and Dioscorides' writings cf. the chapter of the present book devoted to Dioscorides' theory on milk.

<sup>&</sup>lt;sup>47</sup> Oribasius, *Collectiones medicae*, XII, tau, 23, 1-2. Cf. Hippocrates, 18, 18-20.

<sup>&</sup>lt;sup>48</sup> A r i s t o t l e, 522 a, 28–29. Cf. M. K o k o s z k o, K. G i b e l-B u s z e w s k a, Termin kandaulos/kandylos (KANΔΑΥΛΟΣ/KANΔΥΛΟΣ) na podstawie Lexeōn Synagōgē Focjusza oraz Commentarii ad Homeri Iliadem Eustacjusza z Tessaloniki, VP 30, 2010, p. 368, 370; i i d e m, Kandaulos. The Testimony of Selected Sources, SCer 1, 2011, p. 18, 20; i i d e m, The Term Kandaulos/Kandylos in the Lexicon of Photius and the Commentarii ad Homeri Iliadem of Eustathius of Thessalonica, BZ 104, 2011, p. 133, 138–139, 142.

whether this product was made exclusively from these two types of milk, or if they were used as an additive to the milks of sheep and goats, which were most probably even more popular in upland Phrygia.

Cheese was produced both for personal or household use and for trading (which also included long-distance export). The former option is discussed, for instance, by Longus (2<sup>nd</sup> c. AD), who mentions small round pieces of home-made cheese which were given as a gift<sup>49</sup>. There is no direct information on the type of milk they were made from but the text has a useful clue allowing a likely conclusion – according to Longus, the present came from a cowherd named Dorco (accordingly, in all probability, the cheese was obtained from cow milk)<sup>50</sup>.

As for commerce, it cannot be denied that farms where large herds of animals were kept must have produced amounts of milk that exceeded their individual needs. Therefore, it comes as no surprise that whenever milk could not be sold immediately, Columella advised farmers to use the remainder for cheesemaking<sup>51</sup>, this surplus, in turn, could be easily warehoused and then exported. This must have been a common practice in antiquity, since it is mentioned by both agronomical and medical writers. The author of *De re rustica* and Celsus wrote about the shipping of cheeses, implying that their production sites and the target markets were far away from each other<sup>52</sup>. We are able to comprehend how long these distances were from the accounts by Pliny, who in *Historia naturalis* refers to a cheese made in Bithynia, which was then transported (most likely) to the heart of the *Imperium Romanum*<sup>53</sup>.

Accordingly, from the aforementioned source texts, we can surmise that from the early 1<sup>st</sup> c. AD, target markets for certain types of cheese had developed in a considerable number of areas (or perhaps even in the entirety) of the Mediterranean region. Such products were likely to be made based on uniform local recipes, and that is why they

<sup>&</sup>lt;sup>49</sup> L o n g u s, I, 19, 1, 5.

<sup>&</sup>lt;sup>50</sup> Longus, I, 19, 1, 1 – 2, 5.

<sup>&</sup>lt;sup>51</sup> Columella, VII, 8, 1.

<sup>&</sup>lt;sup>52</sup> C o l u m e l l a, VII, 8, 6; C e l s u s, II, 30, 2.

<sup>53</sup> Pliny, XI, 242, 1. We will return to the fragment later in the present text.

had their own *appellation d'origine*, as is signalled by Pliny with regard to, for instance, *caseus Luniensis*. We might not be familiar with the details of its manufacture, yet we can conjecture that the technology did not entirely correspond with methods used in other Mediterranean regions, since it was only in the vicinity of Luna that a unique method was used to form milk curd into blocks of a considerable size, whose exceptional weight (1000 pounds) was considered noteworthy by the encyclopaedist<sup>54</sup>. *Historia naturalis* is full of evidence which certifies the existence of other local cheesemaking techniques, listing regions famous for the most valued types of the foodstuff<sup>55</sup>.

Knowing that cheeses had to be shipped, we may also assume that their purchase/selling price was relatively high, as it would have to cover not only the costs of transportation but also leave the merchants with a reasonable profit. The enterprise must have been financially rewarding since – as confirmed by Galen, who maintained that wealthy cheese aficionados were willing to pay a premium for the most expensive product as long as it was a recognised brand that guaranteed exceptional properties and quality<sup>56</sup>. Accordingly, we can also conclude that the trading of cheese within the Mediterranean basin was a fairly common practice in the first centuries AD<sup>57</sup>.

In all likelihood, however, the origins of the phenomenon date back to much earlier times. We know, for instance, that in the 5<sup>th</sup> c. BC, there was a fair in Athens specialising in cheese trading (open on the last day of each month), which proves that, at that time, there was already a well-developed market for this dairy product<sup>58</sup>. Undoubtedly, imported goods were offered there, alongside local products. Although

<sup>&</sup>lt;sup>54</sup> Pliny, XI, 241, 2–4. The cheese is also mentioned in poetry, for instance, by Martial (XIII, 30). Cf. T.J. Leary, *Martial Book XIII: The Xenia. Text with Introduction and Commentary*, London 2001, p. 80–81.

<sup>&</sup>lt;sup>55</sup> Pliny, XI, 240, 1 – 242, 1. We will return to the fragment later in the present text.

<sup>&</sup>lt;sup>56</sup> G a l e n, De alimentorum facultatibus, 697, 15, vol. VI.

<sup>&</sup>lt;sup>57</sup> A Greek cheesemonger was, for instance, portrayed by Apuleius in his *Metamorphoses*, cf. Apuleius, I, 5, 1–19. On this subject, cf. W.H. Keulen, *Significant...*, p. 310–321.

<sup>&</sup>lt;sup>58</sup> Lysias, 6, 7. Cf. A. Dalby, *Cheese. A Global...*, p. 76; idem, *The Flavours of Classical...*, p. 22; J. Paulas, *Cheese...*, p. 1445.

we do not have information on similar cheese fairs in Rome, the author of *Historia naturalis* clearly states that there were numerous gourmets in the capital who had their favourite types of the foodstuff<sup>59</sup>. From the accounts by Pliny and Galen, we can conclude that one such cheese was *caseus Vatusicus*<sup>60</sup>, imported from the *Alpes Ceutronicae*, more precisely, from what is today the region of Tarentaise in Savoy<sup>61</sup>. What is more, due to the efficiently managed trade exchange, cheese connoisseurs had access to delicacies produced in the majority of the famous cheese-making regions. Among Eastern Mediterranean products, the best-known ones included the aforementioned Phrygian cheese and the fresh and delicate *oksygaláktinos*<sup>62</sup> produced in Mysia. In Greece, the city of *Tromilea* was renowned for the best goat milk cheeses<sup>63</sup>, while highly valued sheep milk cheeses came from the islands of *Ceos*<sup>64</sup> and Sicily, where the animals gave such thick milk<sup>65</sup> that it had to be diluted with the milk of goats<sup>66</sup>. Meanwhile, Martial (1st c. AD) writes about

<sup>&</sup>lt;sup>59</sup> Pliny, XI, 240, 1–2. On the practice of importing cheese to Rome – R.I. Curtis, *Storage and Transport*, [in:] *A Companion...*, p. 173.

<sup>60</sup> G a l e n, De alimentorum facultatibus, 697, 15-16, vol. VI.

<sup>&</sup>lt;sup>61</sup> Pliny, XI, 240, 4-5.

<sup>&</sup>lt;sup>62</sup> G a l e n, *De alimentorum facultatibus*, 697, 10–11, vol. VI. In accordance with *Edictum de Pretiis Rerum Venalium*, a pound-mass (327 g) of this type of cheese (*caseus recens*) cost eight denarii, cf. *Edictum Diocletiani*, VI, 1, 96.

<sup>&</sup>lt;sup>63</sup> Athenaeus of Naucratis, XIV, 658 b-c (76, 9-24; cheese - 76, 9; 76, 11-13; 76, 18-19).

<sup>&</sup>lt;sup>64</sup> Claudius Aelianus, XVI, 32. Cf. S. Isager, J.E. Skydsgaard, *Ancient...*, p. 103.

<sup>&</sup>lt;sup>65</sup> Sheep milk contains more dry mass in comparison to cow milk, cf. J. W ó j t o w s k i, Użytkowanie mleczne z elementami przetwórstwa, [in:] Hodowla, chów i użytkowanie owiec, ed. R. N i ż n i o w s k i, Warszawa 2011, p. 182–183; S. R a s h e e d, I.M. Q a z i, I. A h m e d, Y. D u r r a n i, Z. A z m a t, Comparative Study of Cottage Cheese Prepared from Various Sources of Milk, PPAS.LES 53.4, 2016, p. 271–272.

<sup>66</sup> As seen from Aristotle's text, this practice was also applied in other regions of the Mediterranean world (Aristotle, 522 a, 21–25). On Sicilian cheeses, cf. Aristophanis vespas, 838 b, 2; Scholia in Aristophanis vespas, 838 b, 2; Scholia in Aristophanis pacem, 250 b, 1–2; Athenaeus of Naucratis, I, 27 d (49, 6); I, 27 f (49, 17); XIV, 658 a-b (76, 1–5; cheese – 76, 1; 76, 5). On the subject, cf. K. Bartol, J. Danielewicz, Komedia grecka od Epicharma do Menandra. Wybór fragmentów, Warszawa 2011, p. 124.

cheeses made in *Tolosa* (today's Toulouse)<sup>67</sup>, in the district of Rome known as *Velabrum*<sup>68</sup>, and in the Sabine city of *Trebula* (most likely today's Monteleone Sabino)<sup>69</sup>.

Most details regarding ancient cheesemaking centres are provided by Pliny, who writes about a highly valued fresh cheese with a short expiry date which was made in Narbonne province, and more precisely in Lesurae pagus (close to Mont Lozère) and in Gabalicus pagus (today's Gévaudan). The mountainous areas of Dalmatia named Alpes Delmaticae (today's Velika Kapela) were famous for their Doclean cheese (caseus Docleas), Alpes Ceutronicae (located near the Little St Bernard Pass, on today's border of France and Italy) for the aforementioned caseus Vatusicus, Liguria for caseus Cebanus, which was made from sheep milk and owed its name to the city of Ceba (today's Ceva), and in Umbria, near the town of Sarsina/Sassina (today's Sarsina), the locals made a cheese named after the town itself. The aforementioned Lunean cheese was produced in the vicinity of today's Luna, on the border with Liguria and Etruria<sup>70</sup>. There was also Vestinian<sup>71</sup> cheese, made near Rome, the best of which – according to Pliny – was from campus Caedicius<sup>72</sup>. The passage discussed above suggests that the transportation of some types of cheese must have been already well organised and, therefore, fast, a conclusion that stems from the fact that Rome even had access to fresh Gallic products (for instance, from the Narbonne province), which were known for their short expiry date. They may

 $^{67}$  Cheeses produced there were pressed in square moulds, cf. M a r t i a l, XII, 32, 18.

 $<sup>^{68}</sup>$  These cheeses were smoked, cf. M a r t i a l, XI, 52, 10; XIII, 32. Cf. J.P. A l c o c k, Milk..., p. 37; T.J. L e a r y, Martial Book XIII..., p. 82–83.

<sup>&</sup>lt;sup>69</sup> Martial, XIII, 33. Cf. J.P. Alcock, *Milk...*, p. 37; T.J. Leary, *Martial Book XIII...*, p. 83–84.

<sup>&</sup>lt;sup>70</sup>Pliny, XI, 240, 2 – 241, 3. Cf. M. To ussaint-Samat, *Histoire...*, p. 151.

<sup>&</sup>lt;sup>71</sup> Cf. Martial, XIII, 31; Apicius, IV, 1, 2. On this cheese, cf. T.J. Leary, *Martial Book XIII...*, p. 81–82.

<sup>&</sup>lt;sup>72</sup> Pliny, XI, 241, 4–5. On the regions of the Mediterranean world famous for cheesemaking – A. Dalby, *Siren Feasts...*, p. 136; A. Dalby, *Empire of Pleasures. Luxury and Indulgence in the Roman World*, London–New York 2002, p. 58, 62, 68, 70, 75, 81, 91, 114, 141, 213, 253; Ch. Chandez on, *Animals...*, p. 137; M. Gobbetti, E. Neviani, P. Fox, *The Cheeses of Italy: Science and Technology*, Cham 2018, p. 14, 27.

have been shipped, although we cannot rule out the existence of inland trade routes. Logically, some types of cheese must have been transported over land, e.g., the products from Umbria, or Vestinian cheeses made in the vicinity of Rome.

Cheese trading continued in the Middle Ages<sup>73</sup>. On the basis of the preserved sources, we can state that in the times of Byzantium, the most valued were Vlach (*vláchos*, plural: *vláchoi*), Cretan and Paphlagonian cheeses<sup>74</sup>. Brief remarks on the first two can be found, for instance, in the poetry of Ptochoprodromos (12<sup>th</sup> c. AD), who – in one of his works – recounts that the Cretan cheese was imported to Constantinople by the Venetians<sup>75</sup>. In his interpretation of the narrative, Johannes Koder

<sup>73</sup> Cheese on the Constantinopolitan market, cf. Liber praefecti, 13, 1.

<sup>&</sup>lt;sup>74</sup> Cf. A. K a r p o z i l o s, *Realia in Byzantine Epistolography X–XII c.*, BZ 77.1, 1984, p. 25–26. It is worth mentioning that cheesemaking tradition in Crete presumably dates back to the 5<sup>th</sup> c. BC (cf. A. D a l b y, R. D a l b y, *Gifts...*, p. 18–19). According to David Jacoby, between the 13<sup>th</sup> and 15<sup>th</sup> c. AD, Cretan cheeses were delivered to Constantinople. The scholar also believes that in the 14<sup>th</sup> c. AD, cheeses from Apulia and Sicily appeared on the Constantinopolitan market. During the same century, the residents of the capital city could also purchase hard ripening cheese of an unknown origin known as 'Muslim', and a kashar-like cheese from Crete (D. J a c o b y, *Mediterranean Food and Wine for Constantinople: The Long-Distance Trade, Eleventh to Mid-Fifteenth Century*, [in:] *Handelsgüter und Verkehrswege. Aspekte der Warenversorgung im östlichen Mittelmeerraum* (4. bis 15. Jahrhundert). Akten des Internationalen Symposions Wien, 19.–22. Oktober 2005, eds. E. K i s l i n g e r, J. K o d e r, A. K ü l z e r, Wien 2010, p. 128–129).

<sup>75</sup> Ptochoprodromos, IV, 121–122. On the export of Cretan cheese to Constantinople and other regions of the Mediterranean basin, cf. D. Jacoby, Cretan Cheese: A Neglected Aspect of Venetian Medieval Trade, [in:] Medieval and Renaissance Venice, eds. E.E. Kittel, T.F. Madden, Urbana-Chicago 1999, p. 49-68; H. K alligas, Monemvasia, Seventh-Fifteenth Centuries, [in:] The Economic History of Byzantium. From the Seventh through the Fifteenth Century, ed. A.E. L a i o u, vol. I–III, Washington 2002, p. 893; A.E. L a i o u, Exchange and Trade, Seventh-Twelfth Centuries, [in:] The Economic..., p. 748-749; C. Morrisson, J.-C. Cheynet, Prices and Wages in the Byzantine World, [in:] The Economic..., p. 842; D. Jacoby, Venetian Commercial Expansion in the Eastern Mediterranean, 8th-11th Centuries, [in:] Byzantine Trade, 4th-12th Centuries. The Archaeology of Local, Regional and International Exchange. Papers of the Thirty-Eighth Spring Symposium of Byzantine Studies, St John's College, University of Oxford, March 2004, ed. M.M. Mango, Aldershot 2009, p. 377-378, 384; i dem, The Venetians in Byzantine and Lusignan Cyprus: Trade, Settlement, and Politics, [in:] Ē galēnotatē kai ē eugenestatē. Ē Benetia stēn Kypro kai ē Kypro stēn Benetia. La serenissima and la nobilissima. Venice in Cyprus and Cyprus in Venice, ed. A. Nicolau-Konnari,

concludes that the cheese was characterised by a sharp taste that irritated the throat, and thus it was unsuitable to be eaten with bread (though it did constitute a component of multi-ingredient dishes)<sup>76</sup>. On the basis of the source text it is difficult to pinpoint the reason for this sensation, but it can, in all likelihood, be assumed that it was caused by salt permeating the cheese from the brine in which it was stored, as suggested by Andrew Dalby<sup>77</sup>. What is more, the English scholar contrasts this foodstuff with the *vláchos* cheese (which was also mentioned in the analysed Greek text<sup>78</sup> and was most likely made from sheep milk, since Vlachs would primarily pasture this species of animals<sup>79</sup>). Thus, from the registry provided by the aforementioned researcher, we may conclude that this second type of cheese was not stored in brine and, in all probability, used to be delivered to Constantinople as a relatively fresh product. Although it is virtually impossible to find evidence to prove this thesis, an argument which speaks in its favour is the fact that in the

Nicosia 2009, p. 66, 68; M.M. M a n g o, Byzantine Trade: Local, Regional, Interregional and International, [in:] Byzantine Trade..., p. 14; D. Jacoby, Mediterranean Food..., p. 128-129, 136, 145-146; i d e m, Thirteenth-Century Commercial Exchange in the Aegean: Continuity and Change, [in:] Change in the Byzantine World in the Twelfth and Thirteenth Centuries. First International Sevgi Gönül Byzantine Studies Symposium, 25-28 June, 2007, eds. A. Ö d e k a n, E. A k y ü r e k, N. N e c i p o ğ l u, Istanbul 2010, p. 190; i d e m, Commercio e navigazione degli Amalfitani nel Mediterraneo Orientale: sviluppo e declino, [in:] Interscambi socio-culturali ed economici fra le città marinare d'Italia e l'Occidente dagli osservarorî mediterranei. Atti del Convegno Internazionale di Studi in memoria di Ezio Falcone (1938–2011). Amalfi, 14–16 Maggio 2011, eds. B. F i g l i o u l o, P.F. S i m b u l a, Amalfi 2014, p. 100–101; i d e m, The Byzantine Social Elite and the Market Economy, Eleventh to Mid-Fifteenth Century, [in:] Essays in Renaissance Thought and Letters. In Honour of John Monfasani, eds. A. Frazier, P. Nold, Leiden-Boston 2015, p. 71, 74; M. G e r o l y m a t o u, Tyrin krētikon, tyrin tourkikon, tyrin apo Benetias. Concerning the Cheese Trade in the 14<sup>th</sup> Century, [in:] Latte e latticini..., p. 173–184; M. Gobbetti, E. Neviani, P. Fox, The Cheeses of Italy..., p. 29.

<sup>&</sup>lt;sup>76</sup> J. K o d e r, *Everyday Food...*, p. 145. The extract interpreted by Johannes Koder, cf. P t o c h o p r o d r o m o s, IV, 110. This cheese is listed, for instance, as one of the ingredients of the dish known as *monókythron*. On the dish cf. further part of this text.

<sup>&</sup>lt;sup>77</sup> A. D a l b y, *Cheese. A Global...*, p. 101.

<sup>&</sup>lt;sup>78</sup> Ptochoprodromos, III, 118.

<sup>&</sup>lt;sup>79</sup> J. Lefort, The Rural Economy, Seventh-Twelfth Centuries, [in:] The Economic..., p. 265.

times of Ptochoprodromos, Vlachs lived, *inter alia*, in the territory of today's Macedonia<sup>80</sup>, i.e., a comparatively short distance from the capital, which allowed a relatively swift delivery of this cheese to the recipients in Rome. More information which leads us to conclude that the 'Vlach cheese' brand was associated with being a fresh product is the fact that it was also sold to monks from Mount Athos, where it could be delivered almost immediately after its production. Most probably, it was exactly this line of reasoning that was followed by Anthony Bryer, when he called the said foodstuff 'white'<sup>81</sup>. What we can also assume is that Vlach dairy was offered at more affordable prices than Cretan cheese<sup>82</sup>, since the Vlachs lived closer to the borders of the Empire, and the delivery was conducted without intermediary agents (such as the Venetians in the case of Cretan cheese).

During the Byzantine period, Paphlagonia was another famous cheesemaking region. Interestingly, its cheeses were highly popular not only among wealthy gourmets, but also in medical circles. Presumably, these foodstuffs owed their exceptional nature to the local method of production, which is mentioned by Michael Psellos (11th c. AD) in one of his letters<sup>83</sup>. According to his account, Paphlagonian shepherds applied a technology which allowed them to obtain a tasty and valued

 $<sup>^{80}</sup>$  I. C z a m a ń s k a, Vlachs and Slavs in the Middle Ages and Modern Era, RHis 41, 2016, p. 12.

<sup>&</sup>lt;sup>81</sup> A. Bryer, *The Means of Agricultural Production: Muscle and Tools*, [in:] *The Economic...*, p. 103.

<sup>82</sup> D. J a c o b y, Venetian Commercial Expansion..., p. 377; J. K o d e r, Everyday Food..., p. 145. However, Vlach cheese must have still been expensive, since it is mentioned by Chryssi Bourbou as a luxurious foodstuff, cf. Ch. B o u r b o u, Are We What We Eat? Reconstructing Dietary Patterns of Greek Byzantine Populations (7th-13th Centuries AD) Through a Multi-Disciliplinary Approach, [in:] Diet, Economy and Society in the Ancient Greek World. Towards a Better Integration of Archaeology and Science. Proceedings of the International Conference Held at the Netherlands Institute at Athens on 22–24 March 2010, eds. S. V o u t s a k i, S.M. V a l a m o t i, Leuven–Paris–Walpole, Mass. 2013, p. 217.

<sup>83</sup> On the subject – I. A n a g n o s t a k i s, Les trous dans le fromage: la description de Michel Psellos et la recherche contemporaine, [in:] Latte e latticini..., p. 129–146; C. A n g e l i d i, I. A n a g n o s t a k i s, La concezione..., p. 152, 154–155; C. M e s s i s, Au pays des merveilles alimentaires: invitation à la table paphlagonienne, [in:] Latte e latticini..., p. 164–171.

cheese characterised by holes. The uniqueness of the technique lay in the somewhat imprecise separation of the whey from the milk curd (which was not exposed to thorough mechanical draining through squeezing)84. Additionally, the content of Psellos' letter demonstrates that the author possessed at least a rudimentary knowledge of cheesemaking. First of all, he correctly distinguished between the various constituents of milk. Secondly, he was well aware that the milk curd later used to produce cheese, can be obtained either by the spontaneous coagulation of milk or by adding appropriate ingredients. Finally, he also indicated that the physical properties of cheese depended on the applied method of milk curd processing, explaining that the less thick it was, the more likely one was to produce a cheese with holes, which, as Psellos put it, were the effect of gases emitted in the process of maturing. One can even conjecture that the aforementioned text reveals Psellos' familiarity with medical literature, as is suggested by the fact that, using appropriate terminology, he alluded to the non-uniform composition of milk as a substance. Another telling clue is his professional remark on the carminative nature of milk. Moreover, the analysed letter is not the only text in which Psellos demonstrated this type of competence<sup>85</sup>.

His account also enables us to add some more details to the already cited catalogue of data on Paphlagonian cheese. Thus, we can conclude that the food was not consumed immediately after the separation of the whey, but was exposed to the process of dry ageing, which is when its characteristic holes were formed. Most likely, its final characteristics were achieved by the optimum conditions being maintained within ripening chambers. Even though the scholar does not refer directly to their layout and equipment, it seems that the conditions inside must have been of low humidity so that the formed milk curd would lose excess whey through evaporation (as is *expressis verbis* emphasised by

<sup>&</sup>lt;sup>84</sup> Psellos, *Epistulae*, 206. Cf. I. An agnostakis, *Byzantine...*, p. 86-87.

<sup>85</sup> P s e l l o s, *Epistulae*, 9, 7–8; P s e l l o s, *Poemata*, 208–210. On Psellos' interest in medicine, cf. R. V o l k, *Der medizinische Inhalt der Schriften des Michael Psellos*, München 1990, *passim*; A.R. L i t t l e w o o d, *Imagery in the Chronographia of Michael Psellos*, [in:] *Reading Michael Psellos*, eds. Ch. B a r b e r, D. J e n k i n s, Leiden–Boston 2006, p. 34–38.

Psellos). Naturally, the cheese could not have been stored outdoors; nor could the temperature indoors have been too high, as it would have made the cheese dry rapidly, which, in turn, would have obstructed the internal production of gasses in the cheese responsible for the formation of the holes. The foodstuff could not have been kept in brine either, since the cheese would not have lost any moisture, preventing the aforementioned process completely. One can further conclude that Psellos' epistolography proves that the inhabitants of the Mediterranean region in the 11th c. AD still, exactly as they did in antiquity, associated particularly valued types of cheese with the places where they were produced, which was often reflected in their names. Therefore, the term 'Paphlagonian cheese' is yet another typical example of an appellation d'origine, which would refer to a precisely identified brand, distinguished by particular recipes consistently followed in a given region<sup>86</sup>. Incidentally, the analysed letter reveals that Psellos was well aware of this phenomenon.

Even more details on the appearance, composition and popularity of the analysed cheese are provided by Symeon Seth (11<sup>th</sup> c. AD) in his treatise *Syntagma de alimentorum facultatibus*<sup>87</sup>, who – just like ancient and Byzantine physicians – focuses primarily on determining its dietetic properties. He describes it as spongy, porous and pleasant in taste. What we also discover from his account is that it was classified neither as quark nor as a long ripening cheese (i.e., thick and hard). The term *eriómenos* that Symeon Seth uses to refer to Paphlagonian cheese also proves the already emphasised presence of holes in it, which made the foodstuff 'spongy' in two meanings of the word, i.e., it was both full of openings

<sup>&</sup>lt;sup>86</sup> Cf. D. Jacoby, Mediterranean Food..., p. 128–129.

<sup>&</sup>lt;sup>87</sup> On the author, cf. J. N i e h o f f-P a n a g i o t i d i s, Seth, Symeon, [in:] Antike Medizin. Ein Lexikon, ed. K.-H. L e v e n, München 2005, cols. 799–800. Petros Bouras-Vallianatos confirms that, in his description of dietetic properties of foodstuff, Symeon Seth referred to Galen's findings, however, the researcher noted two cases where the Byzantine author questions Galen's opinions in this field, cf. P. B o u r a s-Vallian at o s, Galen's Reception in Byzantium: Symeon Seth and his Refutation of Gallenic Theories on Human Physiology, GRBS 55.2, 2015, p. 443; i d e m, Galen in Byzantine Medical Literature, [in:] Brill's Companion to the Reception of Galen, eds. P. B o u r a s-Vallian at o s, B. Zipser, Leiden-Boston 2019, p. 98–99.

and springy, meaning it was neither hard nor dry enough to be easily crumbled. This conclusion is additionally corroborated by the fact that the description is in stark contrast to Symeon's characteristics of mature cheese, which - having lost all its moisture - would become brittle, and also harmful from the dietetic perspective. As a result, one can argue that Paphlagonian cheese, though firm on the outside, was fairly moist inside. Undoubtedly, the foodstuff was also characterised by a low salt content; otherwise, it would not have been recommended by the author. This supposition is also grounded in the fact that Psellos never mentioned this product to be particularly salty in taste. To conclude, all the aforementioned properties and values made this foodstuff practically harmless from the dietetic point of view, and it allowed Symeon Seth to recommend it even if the prevailing doctrine of his time still recognised the consumption of large amounts of cheese as damaging to the body<sup>88</sup>. Neither can one escape the conclusion that the content of Symeon's chapter on cheese is a perfect illustration of how persistent the dietetic doctrines of early antiquity were in Byzantine medicine, and thus, it also specifically proves that scholars in the Middle Byzantine period derived their knowledge from the output of ancient medicine. The recipients of such theories were found among the social elite (as indicated by Psellos' competence in the field) and even at the imperial court, since the author of the treatise evidently expected to interest emperor Michael VII Doukas (11th c. AD) with his disquisitions<sup>89</sup>. Last but not least, Symeon would have never included Paphlagonian cheese in his study of dietetics, had it not been popular enough to make himself deviate from tradition.

The already presented data can be complemented with information regarding cheesemaking technologies, as preserved in ancient and Byzantine agronomical source texts<sup>90</sup> and with yet another recourse to medical writings. According to the accounts provided by Roman

<sup>&</sup>lt;sup>88</sup> Symeon Seth, 104, 12 – 105, 25.

<sup>&</sup>lt;sup>89</sup> Symeon Seth, 18, 3.

<sup>9°</sup> Columella, VII, 8, 1–7; Varro, *De re rustica*, II, 11, 3–4; Palladius, VI, 9, 1–3; *Geoponica*, XVIII, 19, 1–8. On cheesemaking, cf. D.L. Thurmond, *A Handbook of Food Processing in Classical Rome. For her Bounty no Winte*r, Leiden–Boston 2006, p. 193–207; M. Gobbetti, E. Neviani, P. Fox, *The Cheeses of Italy...*, p. 4–6.

agronomists cheeses were made mainly in spring and early summer<sup>91</sup>. As we can surmise, this pattern was conditioned by the abundance of fresh grass, stimulating animals to produce large amounts of milk. The resulting surplus of milk led to the necessity to process it for curdling. Columella reports that the tastiest cheeses are those prepared with a minimum amount of animal rennet<sup>92</sup>, and the most valued are made from milk coagulated by means of fig sap. On the other hand, medical texts inform us that the addition of coagulants was not always necessary, since milk curd could be obtained exclusively by heat processing, when a vessel with milk was placed over hot coals<sup>93</sup>. In *De alimentorum facultatibus*, we can read that Greek comic playwrights called this type of fresh cheese *pyriáte*, and in Asia Minor (in the second half of the 2<sup>nd</sup> c. AD) it was known as *pyriefthon*<sup>94</sup>.

From Columella's narrative, we are unable to determine whether he himself applied the heat-induced method of obtaining milk curd. We are capable, however, of being certain that he was aware that high temperature facilitates the separation of curd from whey because, in order to accelerate the process (regardless of the coagulant used to curdle the milk), he advised the reader to put a pail with milk near the fireplace. Next, he recommended putting the obtained substance into small wicker baskets or wooden moulds for the whey to drain away, and then to form it into

 $<sup>^{91}</sup>$  Va r r o (*De re rustica*, II, 11, 4) explains that the best time is the period from the rising of the spring Pleiades to the summer ones ( $7^{th}$  May to mid-June). According to Palladius ( $4^{th}/5^{th}$  c. AD), it should take place in May and June (P all adius, VI, 9, 1; VII, 6), whereas Columella points out that milk obtained in summer contains a relatively small amount of whey, cf. Columella, XII, 10, 1 (recommended season of the year); XII, 13, 1 (cheesemaking).

 $<sup>^{92}</sup>$  As an appropriate dose, he recommends an amount of rennet equalling the weight of one silver denarius (3.41 g) per milk-pail, cf. C o l u m e l l a, VII, 8, 2. Varro claims that for two vats of milk, the amount of rennet should be the size of an olive, cf. V a r r o, De re rustica, II, 11, 4.

<sup>&</sup>lt;sup>93</sup> On the methods of coagulating milk in antiquity, cf. A. D a l b y, *Cheese. A Global...*, p. 71.

<sup>&</sup>lt;sup>94</sup> G a l e n, *De alimentorum facultatibus*, 694, 14–17, vol. VI. On the subject, cf. appendix included in the present publication.

the required shape<sup>95</sup>. Once the cheese became satisfactorily solid, it was sprinkled with powdered salt and subsequently stored in a cool and shaded place. The moment it had hardened enough, it would be squeezed, rubbed with salt and weighted down. After nine days, the cheese was washed with fresh water and left to dry (with its separate portions never touching one another) in an airy place. Later, to prevent excessive hardening, it would be arranged on shelves in a closed room, unexposed to draughts. As seen from the analysed extract, meticulously following Columella's recommendations made it possible to produce a good cheese, i.e., a product which, in time, would become neither porous nor excessively salty or desiccated<sup>96</sup>. What is more, the product was so effectively preserved that it could easily be shipped.

In the quoted chapter from *De re rustica*, we can also find an extract on the preparation of a fresh and delicate cheese. According to the author's recommendations, the quark was to be removed from the small baskets, salted or immersed in brine, and then dried in the sun. Additionally, the author mentions the possibility of enriching its flavour by mixing milk with ground and sieved thyme or other selected herbs<sup>97</sup>. Such fresh cheese was known as *chlorós tyrós* in Greek, which means 'green cheese'. This term should not, however, be understood literally, since the analysis of the collected material proves that the epithet 'green' did not refer to its colour, but it was more likely a metaphor for food which is not fully mature (analogical to unripe green fruit). The term was popular with ancient Greek authors, who used it quite frequently without providing a more specific definition<sup>98</sup>. We are, however, positive of the meaning due to lexicographical writings. For instance, the author of the scholia to Aristophanes' *Ranae*, when explaining the term *tálaros*, indicated that it

<sup>&</sup>lt;sup>95</sup> At times, the whey was removed and the cheese, which had gained the appropriate hardness, was weighted down (C o l u m e l l a, VII, 8, 4).

<sup>&</sup>lt;sup>96</sup> Cheese becomes porous if it was insufficiently squeezed; too salty when too much salt was rubbed into it; too dry if it was exposed to sunlight (C o l u m e l l a, VII, 8, 5).

 $<sup>^{97}</sup>$  C o l u m e l l a, VII, 8, 1–7. Analogical information, cf. P a l l a d i u s, VI, 9, 1–3.

<sup>&</sup>lt;sup>98</sup> Source references to *tyrós chlorós*, cf. A r i s t o p h a n e s, *Ranae*, 559; A t h e n a e u s o f N a u c r a t i s, IV, 139 a (16, 22); VIII, 331 e (3, 18); IX, 402 e (66, 30); XII, 516 e, (12, 28).

was a wicker basket in which *chlorós tyrós* was placed to drain the whey<sup>99</sup>. Another precise indication can be found in *Lexicon* by Hesychius of Alexandria (6<sup>th</sup> c. AD)<sup>100</sup>, who construes the term as *hapalós* (*tyrós*), i.e., delicate (cheese), which to the ancient Greeks was always a synonym of a fresh foodstuff of this kind<sup>101</sup>.

To conclude, lets us systematize the information on cheeses. From a dietetic point of view, it was most advisable to consume fresh, soft and delicate varieties, as opposed to salt-preserved and ripened cheeses, whose hardness and aroma greatly depended on the length of maturation, as it intensified both properties<sup>102</sup>. Thus, depending on the level of maturity, cheeses were divided into soft and hard, thick or thin textured, sticky or prone to crumbling. As for flavours, they were categorised as piquant and salty, spicy, and with a note of sweetness. They could also be differentiated by the amount of fat<sup>103</sup>. Rennet-free cheeses were milder. On the other hand, cheese flavour could be intensified by coagulating the milk by means of a variety of rennets, for instance, by using fig-tree sap<sup>104</sup>. A change in aroma could also be achieved with the addition of herbs, or by smoking<sup>105</sup>, where the latter method would also make the

<sup>&</sup>lt;sup>99</sup> Scholia in Aristophanis ranas, 560, 1–3 (tyrós chlorós – 560, 3). Cf. C o l u m e l l a, VII, 8, 4.

<sup>&</sup>lt;sup>100</sup> Cf. the appendix included in the present publication.

<sup>&</sup>lt;sup>101</sup> Hesychius of Alexandria, khi, 554, 1 (s.v. chlōron tyron). Modern interpretations of this term, cf. A. Dalby, Siren Feasts..., p. 66; idem, Cheese. A Global..., p. 76–77, 120.

The properties of fodder could be another factor intensifying the saltiness of cheeses, which Pliny illustrates with the example of Bithynian cheeses. He explains that the salt contained in the fodder influenced the taste of milk and, consequently, the cheese, cf. Pliny, XI, 242, 1-2.

<sup>&</sup>lt;sup>103</sup> Galen, *De alimentorum facultatibus*, 698, 7–11, vol. VI. Cf. Oribasius, *Collectiones medicae*, II, 59, 11, 1–14, 5; Aëtius of Amida, II, 101, 18–23. On the salty taste of mature cheeses, cf. Pliny, XI, 242, 2–3. From the account of Pliny, who – when discussing the taste of goat cheeses from Gaul – uses the term *sapor medicamenti*, we can conclude that they were long-maturing cheeses with an intense taste (and aroma), like the ones used in ancient and Byzantine medicine, cf. Pliny, XI, 241, 8.

<sup>104</sup> Cf. Athenaeus of Naucratis, XIV, 658 c (76, 20–22).

<sup>&</sup>lt;sup>105</sup> Columella writes about cheeses smoked in the fumes of apple tree or straw (C o l u m e l l a, VII, 8, 7). On smoked cheeses, cf. P l i n y, XI, 241, 6–8; *Geoponica*, XVIII, 19, 7.

final product more durable<sup>106</sup>. From the extant source texts, we also learn about the sizes and appearance of cheese, which could take the form of relatively large blocks<sup>107</sup> or smaller portions<sup>108</sup> in various shapes, e.g., elongated, spherical<sup>109</sup>, conical, or resembling a pine cone<sup>110</sup>. Depending on the consistency, specific needs and the cook's imagination, the cheeses could be used to sprinkle over dishes (crumbled) or served in the form of thin flakes (scraped) or thicker slices<sup>111</sup>.

Extant ancient texts contain a range of information on the strictly culinary application of cheese. They usually imply that it was especially consumed with bread (i.e., as *ópson*)<sup>112</sup>. For instance, Galen and Oribasius report the practice of eating fresh and still warm bread with freshly produced *oksygaláktinos*<sup>113</sup>.

Cheese, however, could also be used in multi-ingredient recipes, according to which, for instance, relishes were produced. A cheese-based paste is described, for instance, in *Moretum* included by Macrobius (5<sup>th</sup> c. AD) in his *Saturnalia*<sup>114</sup>. From the recipe preserved in

<sup>&</sup>lt;sup>106</sup> On methods to extend (or to restore) the freshness of cheeses, cf. Pliny, XI, 242, 2–4; *Geoponica*, XVIII, 19, 5–8.

<sup>&</sup>lt;sup>107</sup> P l i n y, XI, 241, 3–4. Such a cheese was most probably sold by unit or by weight. The latter is reported by Aristophanes (*Ranae*, 1369). Also cf. *Scholia in Aristophanis ranas*, 1369, 1–3; *Suda*, tau, 1199, 1–2 (*s.v. tyropōlēsō*).

<sup>&</sup>lt;sup>108</sup> L o n g u s, I, 19, 1, 5. On the subject, cf. A. D a l b y, *Food...*, p. 81.

<sup>109</sup> Moretum, 115. The general term trofalis was often used in reference to oval or spherical pieces of cheese, cf. Pollux, VI, 48. The author of the scholia to Aristophanes' Vespae explains that this term stood both for elongated (discussed by Martial) and round (mentioned by the author of Moretum) pats of cheese, cf. Scholia in Aristophanis vespas, 838 b, 1.

 $<sup>^{\</sup>mbox{\tiny 110}}$  Cf. M a r t i a l, I, 43, 7; III, 58, 35. Special moulds may have been used for this purpose.

<sup>111</sup> Athenaeus of Naucratis, IX, 402 e (66, 31-32).

<sup>&</sup>lt;sup>112</sup> On *ópson*, cf. J. D a v i d s o n, *Opsophagia: Revolutionary Eating at Athens*, [in:] *Food...*, p. 204–213.

<sup>&</sup>lt;sup>113</sup> G a l e n, *De alimentorum facultatibus*, 518, 4 – 519, 2, vol. VI; O r i b a s i u s, *Collectiones medicae*, I, 13, 2, 5 – 4, I. The applied translation was taken from a lecture preserved within Galen's output, cf. *De alimentorum facultatibus*, 518, 12–14, vol. VI. Cheese as *ópson*, cf. P l a t 0, 372 c, 4–6 (cheese – 372 c, 5). On the subject, cf. A. D a l b y, *Siren Feasts...*, p. 22, 24; J.M. W i l k i n s, S. H i l l, *Food...*, p. 195.

The work was penned by a certain Sueius. Cf. Macrobius, III, 18, 11–12.

Appendix Vergiliana we learn that such a delicacy was prepared in a mortar by grinding cheese seasoned with garlic, salt, parsley, rue and coriander. The addition of olive oil and wine vinegar would turn the pulp into a paste which could be hand-formed<sup>115</sup>. As for the *moretum* recipe itself, we know that it had a variety of versions, while extant information allows us to conclude that in each of them cheese, wine vinegar (occasionally aromatised with pepper) and olive oil were used as a base, which – at the cook's discretion – could be seasoned with various (fresh or dried) herbs<sup>116</sup>, green vegetables<sup>117</sup>, nuts<sup>118</sup>, roasted sesame seeds<sup>119</sup>, and sometimes even fruit, e.g., peaches<sup>120</sup>.

Another complex delicacy with cheese was a sauce known as *hypótrimma*. It was an addition going well with bread but also with meat and vegetable. In the account by the author of *De re coquinaria*, the delicacy was made by mixing pepper, lovage, dried mint, pine nuts, dates, unsalted cheese, honey, wine vinegar, fish sauce and boiled wine must (*defritum* or *caroenum*)<sup>121</sup>. We know that cheese was an ingredient of the so-called *myttotón*, which (comes from an extract within Oribasius' treatise) was a variety of *hypótrimma*<sup>122</sup>. It was also included in *sala cattabia*, which we can identify as being similar to a modern salad (made, for

<sup>&</sup>lt;sup>115</sup> Moretum, 92–118. This dish is also mentioned by O v i d (IV, 367–372). On the dish, cf. M. To u s s a i n t-S a m a t, Histoire..., p. 151; S. H i l l, A. B r y e r, Byzantine Porridge Tracta, Trachanás and Trahana, [in:] Food..., p. 48; C.A. D é r y, Milk..., p. 119–120; A. D a l b y, Food..., p. 81; J.P. A l c o c k, Food..., p. 169.

These were, for instance, savory, mint, rue, coriander, thyme, and oregano – C o l u m e l l a, XII, 59, 1; XII, 59, 4.

 $<sup>^{117}</sup>$  These were, for instance, celery, leek, onion, lettuce, and rocket – C o l u m e l l a, XII, 59, 1.

 $<sup>^{118}</sup>$  These could be common walnuts, pine nuts, hazelnuts or almonds – C o l u m e l l a, XII, 59, 2–3.

<sup>119</sup> C o l u m e l l a, XII, 59, 2.

<sup>&</sup>lt;sup>120</sup> Macrobius, III, 18, 11. On the additives to *moretum*, cf. Apicius, I, 35. A contemporised version of the recipe – P. Faas, *Around...*, p. 170–171.

<sup>&</sup>lt;sup>121</sup> A p i c i u s, I, 33. A contemporised version of the recipe, cf. P. F a a s, *Around...*, p. 171–172; S. G r a i n g e r, *Cooking Apicius. Roman Recipes for Today*, Blackawton–Totnes 2006, p. 55.

<sup>&</sup>lt;sup>122</sup> Oribasius, *Collectiones medicae*, IV, 2, 14, 1–3. On *myttotón/myttotós*, cf. A. Dalby, *Siren Feasts...*, p. 107.

instance, from [cow milk<sup>123</sup> or *Vestinus*<sup>124</sup>] cheese, soaked breadcrumbs, chicken meat [or livers], pine nuts and cucumbers, and seasoned with a spicy-sweet dressing<sup>125</sup>).

From the studied source texts, we also learn that cheese could be boiled<sup>126</sup>, fried<sup>127</sup> or baked<sup>128</sup>. The first method profited from heat processing in a lavish dish called a *kándaulos*, which possibly dates back to the 7<sup>th</sup> c. BC<sup>129</sup>. A similar technology is mentioned by Cato (3<sup>rd</sup>/2<sup>nd</sup> c. BC)<sup>130</sup> in his *De agri cultura* in a recipe for *sui generis* cheesecake, which in Latin was referred to as *erneum*. Its crust and topping were made from wheat pastry sandwiched alternately by a cheese and honey mass<sup>131</sup> and *tracta*. Once all the layers had been put together, the whole cake was steamed in a water bath<sup>132</sup>.

<sup>&</sup>lt;sup>123</sup> A p i c i u s, IV, 1, 1; IV, 1, 3.

<sup>124</sup> Apicius, IV, 1, 2.

<sup>&</sup>lt;sup>125</sup> The dressing was prepared from, for instance, celery seeds, dried mint, ginger, fresh coriander, raisins, honey, vinegar, olive oil, and wine, cf. A p i c i u s, IV, 1, 2. Recipes for *sala cattabia*, cf. A p i c i u s, IV, 1, 1–3. On the dish, cf. R. L a u r e n c e, *Roman Passions*. A History of Pleasure in Imperial Rome, London 2010, p. 107.

<sup>&</sup>lt;sup>126</sup> Oribasius, *Libri ad Eunapium*, I, 35, 7, 5; Aëtius of Amida, II, 101, 23; II, 255, 18; Anthimus, 81.

<sup>&</sup>lt;sup>127</sup> Dioscorides, II, 71, 1, 4-5.

Or ib a sius, Collectiones medicae, IV, 3, 6, I - 7, I; Anthimus, 81.

 $<sup>^{129}</sup>$  Cheese as an ingredient of *kándaulos* – Athenaeus of Naucratis, XII, 516 d–e (12, 8–22; cheese – 12, 13). On the subject, cf. J.M. Wilkins, S. Hill, *Food...*, p. 278; M. Kokoszko, K. Gibel-Buszewska, *Termin kandaulos/kandylos...*, p. 368, 370; iidem, *The Term Kandaulos/Kandylos...*, p. 133, 137–139, 142–143; iidem, *Kandaulos. The Testimony...*, p. 13–14, 18, 20.

<sup>130</sup> On the author, cf. I. M i k o ł a j c z y k, Rzymska literatura agronomiczna, Toruń 2004, p. 26–51; Ph. T h i b o d e a u, M. Porcius Cato of Tusculum (185 – 149 BCE), [in:] The Encyclopedia of Ancient Natural Scientists. The Greek Tradition and its Many Heirs, eds. P.T. K e y s e r, G. I r b y-M a s s i e, London–New York 2008, p. 686–688; B. R e a y, Agriculture, Writing, and Cato's Aristocratic Self-Fashioning, CA 24.2, 2005, p. 331–361. On Cato' interest in health and wellbeing, cf. J. D r a y c o t t, Roman Domestic Medical Practice in Central Italy: From the Middle Republic to the Early Empire, London–New York 2019, p. 46–48, 140–141.

<sup>&</sup>lt;sup>131</sup> It should be a fresh cheese, first stored in water, then dried and neatly crumbled, and finally mixed with honey.

<sup>&</sup>lt;sup>132</sup> C a t o, 81. This recipe is one of the variants of the dessert known as *placenta*, cf. further in the text. On the dessert, cf. E.F. L e o n, *Cato's Cakes*, CJ 38.4, 1943,

The same author also writes about frying cheese. The method was used in preparing *globi*, made from cheese kneaded with finely ground flour and formed into small balls that were deep fried in (animal) fat, and eventually drizzled with honey and sprinkled with poppy seeds<sup>133</sup>. Equally, a dough with cheese was used to make *encytum*. In this case, however, it must have been of a thin enough consistency to be placed in a vessel with a hole in its bottom, from which (of course, through the hole) it was poured straight onto hot fat, giving it the shape of a hawser or rope<sup>134</sup>. The dessert was served with honey or *mulsum*<sup>135</sup>.

Last but not least, cheese was included in complex foodstuffs which required baking, like, for instance, *placenta*. From the preserved recipe, we know that the dough was prepared in the same manner as *erneum*, except that it was baked under a clay lid covered by glowing embers<sup>136</sup>.

p. 219–220; P. Berdowski, *Przysmaki Katona, czyli o najstarszych przepisach kulinarnych Rzymian*, NF 3, 1998, p. 173. Cakes on the basis of cheese and honey in Cato's treatise, cf. K.D. White, *Cereals, Bread and Milling in the Roman World*, [in:] *Food...*, p. 41.

<sup>133</sup> Cato, 79. Globi were also fried in olive oil, cf. Varro, *De lingua Latina*, V, 107. On the dish, cf. E.F. Leon, *Cato's...*, p. 219; P. Berdowski, *Przysmaki...*, p. 177; C. Cerchiai Manodori Sagredo, *Fiori...*, p. 30. A contemporised version of the recipe, cf. P. Faas, *Around...*, p. 186–187.

<sup>&</sup>lt;sup>134</sup> C a t o, 77.

<sup>135</sup> Cato, 80. On the recipe, cf. C. Cerchiai Manodori Sagredo, *Fiori...*, p. 30. Cf. Athenaeus of Naucratis, XIV, 644 c-d (52, 1; 52, 6).

<sup>136</sup> Cato, 76. Other source references on the dessert, cf. Petronius, 35; Martial, III, 77, 3; V, 39, 3; VI, 75, 1; VII, 20, 8. Cf. E.F. Leon, Cato's..., p. 217–219; P. Berdowski, Przysmaki..., p. 169–173; S. Hill, A. Bryer, Byzantine Porridge..., p. 46–47; S. Grainger, Cato's Roman Cheesecakes: The Baking Techniques, [in:] Milk..., p. 169–170; A. Dalby, Food..., p. 70; M.J. Wilkins, S. Hill, Food..., p. 127; M. Leontsini, Plakountai, Pies and Pancakes: Festive and Daily Baked Desserts in Byzantium (4th-12th c.), [in:] ...come sa di sale lo pane altrui. Il pane di Matera e i Pani del Mediterraneo. Atti del Convegno Internazionale di Studio promosso dall'IBAM-CNR nell'ambito del Progetto MenSALe Matera, 5–7 Settembre 2014, ed. A. Pellettieri, Foggia 2014, p. 123–131. A contemporised version of the recipe, cf. A. Dalby, S. Grainger, The Classical Cookbook, London 2000, p. 94–96; P. Faas, Around..., p. 184–186. According to other recipes provided by Cato, the ingredients used to make placenta were also utilised in the preparation of such dishes as spira (Cato, 77), scribilita (Cato, 78), or spaerita (Cato, 82). On their basis, we can conclude that these delicacies differed in the manner in which the individual ingredients were combined, as well as

Cheese could also be one of the ingredients of bread dough, as certified by Galen, who describes a rustic practice of kneading unleavened bread with the addition of cheese. At the same time, however, he warns the reader against consuming such foodstuffs as they were considered to be extremely hard to digest, and, consequently, detrimental to health<sup>137</sup>. The lack of details in the description penned by the doctor of Peragmum is compensated for by the recipes for libum<sup>138</sup> and savillum<sup>139</sup>, provided by Cato. A comparative analysis shows that the final products differed mainly in the proportion of ingredients (e.g., savillum required more cheese) and finishing. Both recipes involved careful preparation of the dough, which was kneaded from cheese, finely ground wheat flour and an egg, and - in the case of *savillum* - also honey<sup>141</sup>. The main difference between the two is that *libum* was shaped into a loaf while the dough for *savillum* was placed in an oven-pan while being baked. The latter, at the end of the process, was also drizzled with honey and sprinkled with poppy seeds, and then baked again for a short while.

in the presence of honey, the type of heat processing, and the final shape of the dish. On the aforementioned dishes, cf. E.F. L e o n, *Cato's...*, p. 219–220; P. B e r d o w s k i, *Przysmaki...*, p. 173–174.

<sup>&</sup>lt;sup>137</sup> Galen, *De alimentorum facultatibus*, 486, 3–9, vol. VI. On the subject, cf. J.M. Wilkins, S. Hill, *Food...*, p. 123, 239.

 $<sup>^{138}</sup>$  C a t 0, 75. Other source references, cf. H o r a c e, *Epistulae*, X, 10; H o r a c e, *Sermones*, II 7, 102; O v i d, I, 128; III, 761; IV, 743–744; M a r t i a l, III, 77, 3; A t h e n a e u s of N a u c r a t i s, III, 125 f (100, 1–2). On the dish, cf. E.F. L e o n, *Cato's...*, p. 219; P. B e r d o w s k i, *Przysmaki...*, p. 175; S. G r a i n g e r, *Cato's Roman Cheesecakes...*, p. 170–171; Z. R z e ź n i c k a, M. K o k o s z k o, *Proso w gastronomii antyku i wczesnego Bizancjum*, VP 33, 2013, p. 408–409. Contemporised versions of the recipe, cf. A. D a l b y, S. G r a i n g e r, *The Classical...*, p. 92–94; M. G r a n t, *Roman Cookery. Ancient Recipes for Modern Kitchens*, London 2002, London 2002, p. 59–60.

<sup>&</sup>lt;sup>139</sup> C a t o, 84. Cf. P. B e r d o w s k i, *Przysmaki...*, p. 176.

<sup>&</sup>lt;sup>140</sup> *Libum* was also prepared from millet flour, cf. O v i d, IV, 743-744.

<sup>&</sup>lt;sup>141</sup> It is worth adding that although Cato does not list this additive in the recipe for *libum*, the tradition of its preparation with honey is reported in *Fasti* by Ovid (III, 761). What is more, Athenaeus mentions that the delicacy was also made with milk. We cannot, however, exclude the possibility that in the process of its preparation, the beverage was coagulated and then used to make cheese, which was one of its main components, cf. Athenaeus of Naucratis, III, 125 f (100, 1).

Another culinary application of cheese is discussed by Diocles of Carystus (4th c. BC)<sup>142</sup>, who allows us to conclude that it was considered a seasoning (equal, for instance, to oregano, summer savory, thyme, salt, vinegar and olive oil)<sup>143</sup>, which – as seen from the later part of the text - should be used in moderation, since too much could have a harmful effect on the body<sup>144</sup>. As for details, the physician argued that fresh rennet cheese made from goat milk was the best choice when it came to seasoning dishes prepared by means of baking<sup>145</sup>. And yet from Galen's treatise, we learn that this suggestion was not always followed in practice, since the doctor of Pergamum reports a habit, common among the peasantry, which involved sprinkling a dish made from chickpeas with dry (thus mature and not fresh) grated cheese<sup>146</sup>. Furthermore, contrary to the accepted modern culinary manner, we can also conclude that the ancient experts in culinary art frequently used cheese to aromatise fish dishes<sup>147</sup>, which is aptly illustrated by the following story quoted by Plutarch (1st/2nd c. AD). One day, a Laconian purchased a fish and gave it to a tavern-keeper to prepare. Wishing to season it, the publican replied that he would also need some cheese, vinegar and olive oil, to which the client retorted that if he had had all those ingredients, he would not have needed to buy the fish in the first place<sup>148</sup>. Possibly, the anecdote alludes

<sup>142</sup> On the physician, cf. M. Wellmann, *Diokles (53)*, *RE*, vol. V, Stuttgart 1905, cols. 802–812; V. Nutton, *Diocles (6)*, [in:] *BNP*, vol. IV, Leiden–Boston 2004, cols. 424–426; K.-H. Leven, *Diokles v. Karystos*, [in:] *Antike Medizin...*, cols. 225–227; D. Manetti, *Diokles of Karustos (400 – 300 BCE)*, [in:] *The Encyclopedia of Ancient Natural Scientists...*, p. 255–257.

 $<sup>^{143}</sup>$  O r i b a s i u s, Collectiones medicae, IV, 3, 1, 1 – 13, 3 (cheese – IV, 3, 6, 1).

<sup>&</sup>lt;sup>144</sup> From the text we can assume that the addition of (an excessive amount of) cheese had an unfavourable impact on the dietetic properties of the dish (O r i b a s i u s, *Collectiones medicae*, IV, 3, 6, 1–2).

<sup>&</sup>lt;sup>145</sup> Oribasius, Collectiones medicae, IV, 3, 6, 2 – 7, 1.

<sup>&</sup>lt;sup>146</sup> G a l e n, *De alimentorum facultatibus*, 532, 19 – 534, 7 (cheese – 533, 7–8). A contemporised recipe, cf. M. G r a n t, *Roman...*, p. 148.

<sup>&</sup>lt;sup>147</sup> Cf. M. K o k o s z k o, *Ryby i ich znaczenie w życiu codziennym ludzi późnego antyku i wczesnego Bizancjum (III–VII w.)*, Łódź 2005, p. 387. On combining cheese with fish dishes, cf. J.M. W i l k i n s, S. H i l l, *Food...*, p. 53; A. D a l b y, *Cheese. A Global...*, p. 98–99; J. K o d e r, *Cuisine...*, p. 430.

<sup>&</sup>lt;sup>148</sup> Plutarch, 995 b, 10 - c, 3 (cheese - 995 c, 1).

to a simple way of life typical of the Spartans, and the Spartiate wanting to say that mixing all the aforementioned ingredients with fish would be too refined for him. Whatever the case, more detailed information on combining cheese and fish can be found in the *Deipnosophistae* by Athenaeus of Naucratis  $(2^{nd}/3^{rd} \text{ c. AD})^{149}$ , containing a quotation from Archestratus  $(4^{th} \text{ c. BC})^{150}$ , who claims that cheese was chiefly used to season lean fish such as skate<sup>151</sup>. In all likelihood, this is also the reason why he is so indignant when writing about a common practice applied by Sicilian and Italian Greeks, who would serve the flesh of perch (which was fat by nature) with cheese<sup>152</sup>. To conclude, more information on combining cheese and fish is provided in a collection of recipes attri-

<sup>&</sup>lt;sup>149</sup> Though Athenaeus' writings are not a collection of recipes, the prominence of the role of ancient food culture is stressed even in the title of the work. As a result, the Deipnosophistae is a dialogue full of information on various kinds of foodstuffs and the fashion in which they were prepared and served. Athenaeus of Naucratis often comments on food-related terms, and does it, as a rule, on the basis of an exceptionally high number of literary works of antiquity. The pattern adopted by him in his writings concerns milk, and its derivatives, too. What is more, his interest in foods is inextricably connected with the presence in the Deipnosophistae of numerous remarks related to medicine, and especially to ancient dietetics. Consequently, we can find there a substantial selection of names of physicians of varying degrees of prominence, and especially of those who were exceptionally knowledgeable in the principles of food's properties. So does the work contain a lot of general medical knowledge. This structure of data proves that Athenaeus of Naucratis identified himself with Hippocratic dietetics in its form cultivated by Galen, cf. J.-N. C o r v i s i e r, *Athenaeus, Medicine and Demography*, [in:] Athenaeus and his World: Reading Greek Culture in the Roman Empire, eds. D. Braund, J. Wilkins, Exeter 2000, p. 492-502; R. Flemming, The Physicians at the Feast. The Place of Medical Knowledge at Athenaeus' Dinner-Table, [in:] Athenaeus..., p. 476–482; D. G o u r e v i t c h, Hicesius' Fish and Chips. A Plea for an Edition of the Fragments and *Testimonies of the Peri hylēs*, [in:] *Athenaeus...*, p. 483–491.

<sup>&</sup>lt;sup>150</sup> On the poet, cf. A. D a l b y, *Food...*, p. 23–24.

the fish, cf. M. Kokoszko, Ryby..., p. 46–48. Archestratus also mentions the marbled electric ray stewed in wine, olive oil, and fresh herbs with the addition of cheese, cf. Athenaeus of Naucratis, VII, 314 d (95, 31–32; cheese – 95, 32). On the fish, cf. M. Kokoszko, Ryby..., p. 222–226. Mithaecus (5<sup>th</sup> c. BC) writes about red bandfish sprinkled with cheese and drizzled with olive oil, cf. Athenaeus of Naucratis, VII, 325 f (128, 5–7; cheese – 128, 7).

<sup>&</sup>lt;sup>152</sup> Athenaeus of Naucratis, VII, 311 a-c (86, 16-29; cheese - 86, 28). Cf. J.M. Wilkins, S. Hill, *Food...*, p. 48.

buted to Apicius, where we can find instructions for making a casserole (*patella*) from salted fish and cheese. According to the recipe, fried and cut fish should be stewed on a small fire in an aromatic sauce<sup>153</sup>, together with cooked chicken brains and livers, hard-boiled eggs and fresh cheese. Next, the author recommends thickening the dish with raw eggs and sprinkling it with cumin prior to serving<sup>154</sup>.

It is worth noting that the custom of mixing cheese with fish continued into the Middle Byzantine period, which is reflected in a work by Ptochoprodromos, who writes about *monókythron*, a multi-ingredient dish, containing – besides various species of salted fish and cheese – cabbage, eggs, garlic, etc. For our deliberations, it is interesting to notice the fact that the author distinguishes three types of cheese, i.e., Cretan, *vláchos* and so-called *apótyron*<sup>155</sup>, stating that each gave the dish a specific aroma and a characteristic flavour. Although we do not have an extensive amount of data on the latter ingredient, Phaedon Koukoules associates it with a cheese known as *anthótyron*<sup>156</sup>, which Andrew Dalby identifies as small-sized cheese made from the whey left over from the production of rennet cheeses<sup>157</sup>. What seems to prove its diminutive size is the fact that the author of the poem recommends using as many as twelve *apótyra*.

Meanwhile, from *Cletorologium* by Philotheos (9<sup>th</sup> c. AD) and a short work by Constantine VII Porphyrogennetos (10<sup>th</sup> c. AD)

<sup>&</sup>lt;sup>153</sup> This additive was made from lovage, oregano, rue seeds, wine (dry or sweetened with honey), and olive oil.

 $<sup>^{154}</sup>$  A p i c i u s, IV, 2, 17. Another recipe for a casserole (here, with no fish meat) with cheese, cf. A p i c i u s, IV, 2, 13.

<sup>155</sup> Ptochoprodromos, IV, 204–216. On the dish, cf. F. Koukoules, Byzantinōn bios kai politismos, vol. V, Hai trofai kai ta pota..., Athènes 1952, p. 34, 78; A.-M. Talbot, Mealtime..., p. 119; A. Dalby, Cheese. A Global..., p. 100–101; idem, Tastes of Byzantium..., p. 176; I. Anagnostakis, Byzantine..., p. 87, 101; J. Koder, Everyday Food..., p. 144–145; idem, Natural Environment..., p. 215; idem, Cuisine..., p. 230.

<sup>&</sup>lt;sup>156</sup> F. K o u k o u l e s, *Byzantinōn...*, p. 32. On this type of cheese, cf. *Culinaria Greece: Greek Specialities*, ed. M. M i l o n a, Königswinter 2004, p. 80.

<sup>&</sup>lt;sup>157</sup> A. D a l b y, *Tastes of Byzantium...*, p. 73, 190. Cf. I. A n a g n o s t a k i s, *Byzantine Diet and Cuisine...*, p. 53. This cheese is still produced in Greece. In the 19<sup>th</sup> c., the residents of Paros and Antiparos specialised in its making. The foodstuff is consumed fresh or mature (covered by blue mould). The latter is popular in Lesbos and Heraklion, cf. A. D a l b y, *Tastes of Byzantium...*, p. 73–74.

entitled De ceremoniis 158, we can learn about a Byzantine tradition of consuming a cheese-based soup during Great Lent. Both authors write that – according to the prevailing custom – the period of abstention from meat was preceded by a week known as tyrofágos or tyriné, in which the diet of the worshippers was based on milk and its derivatives<sup>159</sup>. We can also read that during the Sunday that marked the beginning of the period (kyriaké tés apokréas), the emperor would hold a feast for the poor in Constantinople, and his own meal he would share only with the members of his immediate family. Two days later, i.e., on Tuesday, the ruler would visit the patriarchate to attend a banquet organised by the metropolitan bishop, where tyrepsitós dzomós 160 was served as the main course. Even though we do not know the details of its preparation, we can still determine three primary properties of the dish. And thus, in all probability, this was a type of soup or – as suggested by Ilias Anagnostakis – *fondue*, since the noun *dzomós* referred to a dish of a more or less liquid consistency<sup>161</sup>. The term tyrepsitós, in turn, allows us to conclude that the main ingredient of the delicacy was cooked (and thus, melted) cheese 162. And since cheese naturally solidifies following a drop in temperature, it should be concluded that the dish was served hot.

<sup>&</sup>lt;sup>158</sup> On the work, cf. J.B. B u r y, *The Ceremonial Book of Constantine Porphyrogennetos*, EHR 22.86, 1907, p. 209–227; i d e m, *The Ceremonial Book of Constantine Porphyrogennetos (Continued)*, EHR 22.87, 1907, p. 417–439.

<sup>159</sup> On tyrofágos, cf. A.N.J. Louvaris, Fast..., p. 197–198; A.-M. Talbot, Mealtime..., p. 119; A. Dalby, Tastes of Byzantium..., p. 55; B. Caseau, Byzantium, p. 366; eadem, Nourritures terrestres, nourritures célestes. La culture alimentaire à Byzance, Paris 2015, p. 186, 190–191; M. Gobbetti, E. Neviani, P. Fox, The Cheeses of Italy..., p. 17. On attitudes to milk and its derivatives in the society of late antiquity and Byzantium, cf. B. Chevallier-Caseau, Le christianisme byzantin et les produtis laitires, [in:] Latte e latticini..., p. 103–113.

<sup>&</sup>lt;sup>160</sup> Philotheos, 760, 26; Constantine VII Porphyrogennetos, 760, 18. A slightly different interpretation of the circumstances in which the dish was served, cf. I. Anagnostakis, *Byzantine...*, p. 86. On the dish, cf. B. Caseau, *Byzantium*, p. 366; C. Angelidi, I. Anagnostakis, *La concezione...*, p. 154.

<sup>&</sup>lt;sup>161</sup> Cf. A. D a l b y, *Food...*, p. 307; M. K o k o s z k o, *Ryby...*, p. 378.

<sup>162</sup> Cheese was used in a similar way during the preparation of *monókythron*. On similarities between this dish and *tyrepsitós dzomós*, cf. I. A n a g n o s t a k i s, *Byzantine Delicacies...*, p. 87. On *tyrepsitós dzomós*, cf. F. K o u k o u l e s, *Byzantinōn...*, p. 34; I. A n a g n o s t a k i s, *Byzantine...*, p. 86; i d e m, *Byzantine Diet and Cuisine...*, p. 57.