Milk and Dairy Products in the Medicine and Culinary Art of Antiquity and Early Byzantium (1st–7th Centuries AD)

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Introduction

1. Some comments on the book and its structure

This publication is the fruit of many years’ research into the diets, dietetics, pharmacology and gastronomy of antiquity and early Byzantium, for which it draws extensively on Greek medical treatises from the 1st to the 7th c. AD.

With regard to the ancient and Byzantine teachings the research is based on, those of Galen of Pergamum (2nd/3rd c. AD)1 serve as the reference point.

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1 On the physician and his professional activities, cf. L. T h o r n d i k e, Galen. The Man and his Times, ScM 14.1, 1922, p. 83–93; D.E. E i c h h o l z, Galen and his Environment, GR 20, 1951, p. 60–71; G. S a r t o n, Galen of Pergamon, Lawrence 1954, passim; V. N u t t o n, The Chronology of Galen’s Early Career, CQ 23.1, 1973, p. 158–171; J. S c a r b o r o u g h, The Galenic Question, SuA 65.1, 1981, p. 1–31; i d e m, Early Byzantine Pharmacology, DOP 38, 1984, p. 215–221; H.F.J. H o r s t m a n s h o f f, Galen and his Patients, [in:] Ancient Medicine in its Socio-Cultural Context. Papers Read at the Congress Held at Leiden University, 13–15 April 1992, vol. I, eds. Ph.J. v a n d e r E i j k, H.F.J. H o r s t m a n s h o f f, P.H. S c h r i j v e r s, Amsterdam 1995, p. 83–99; J. W i l k i n s, The Contribution of Galen, De Subtiliante Diaeta (On the Thinning Diet), [in:] The Unknown Galen, ed. V. N u t t o n, London 2002, p. 47–55; V. N u t t o n, Ancient Medicine, London–New York 2005, p. 222–235; R. F l e m m i n g, Galen’s
and are juxtaposed with the writings of the medical authors who preceded him (e.g. Celsus and Dioscorides [1st c. AD]²), and those who penned their works posterior to his lifetime (Oribasius [4th c. AD]³.

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² Cf. chapters devoted to their teachings.

Aëtius of Amida [6th c. AD]\(^4\), Anthimus [6th c. AD]\(^5\), Paul of Aegina

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[7th c. AD] and the anonymous author of the treatise De cibus⁷). At times, however, the treatises have been supplemented with thematically applicable non-medical literature (mostly agronomical, encyclopaedic, lexicographic but also with belles lettres) in both Greek as well as Latin. This serves to trace and demonstrate the centuries-long process of the Greek dietetic-pharmacological theory and practice gradually permeating the entire Mediterranean world. This phenomenon resulted in one universal medical doctrine that was observed in all areas where Greek and Roman culture prevailed.

In this volume, milk and milk-based products are discussed. The subject is broad. The research should be viewed through the context of our previous undertakings and is an addition to our previously-published material. Thus, the present discussion of dairy is a logical continuation of the chapter entitled Rola mięsa w okresie pomiędzy II a VII w. w świetle źródeł medycznych (The Role of Meat in the Period of the 2nd to 7th Centuries, in the Light of Medical Sources), included in the book Dietetyka i sztuka kulinarna antyku i wczesnego Bizancjum (II–VII w.), Część II, Pokarm dla ciała i ducha (Dietetics and Culinary Art of Antiquity and Early Byzantium [2nd–7th Centuries], Part II, Food for the Body and Soul), ed. Maciej Kokoszko, Łódź 2014. This fact has its reflection in the struc-

p. 99–110; J. Scarborough, Anthimus (of Constantinople?) (ca 475 – 525 CE), [in:] The Encyclopedia of Ancient Natural Scientists..., p. 91–92, etc.


ture of the present publication. As the book has been based primarily on sources which have already been discussed at length, both in the above-mentioned volume and in the book which constituted the first part of this series, we decided not to include in the present book another detailed review of the said sources.

We started our work on this publication with a view to translating the results of our research into eggs and dairy which were published back in 2016 in Polish (Z. Rzeźnicka, M. Kokoszko, *Dietetyka i sztuka kulinarna antyku i wczesnego Bizancjum (II–VII w.), Część III, Ab ovo ad γάλα. Jajka, mleko i produkty mleczne w medycynie i w sztuce kulinarnej [I–VII w.](Dietetics and Culinary Art of Antiquity and Early Byzantium [2nd–7th Centuries AD]), Part III, *Ab ovo ad γάλα. Eggs, Milk and Other Dairy Products in Dietetics and Culinary Art [1st–7th Centuries AD], Łódź 2016). Soon, however, we found out that the undertaking was not as easy and straightforward as we had thought. Accordingly, we decided to focus on milk only, and rework the material published in Polish in terms of its content and structure, introducing new findings, correcting mistakes and misinterpretations, adding an appendix on the term *pyrīephtha* as well as supplementing the bibliography with the latest published works. Eventually, we had penned an entirely new book, which will hopefully turn out to be of value for those interested in the medicine and gastronomy of antiquity and Byzantium.

As our goal was for the book to be addressed not only to the circle of Polish language speakers but also ventured to present our research

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9 These were possible, *inter alia*, thanks to two research stays in London, which were financed by the De Brzezie Lanckoronski Foundation (Maciej Kokoszko – 2017; Zofia Rzeźnicka – 2018).
to an international public, we gathered a group of collaborators who have helped to translate our thoughts into English (Konrad Brzozowski and Iza Michalak), and, subsequently, those that proofread the outcome (Benjamin Brewer, Derrick Cook and Mark Muirhead). We fully appreciate the results of their work.

The present study begins with a short introduction which outlines the role the above foods played in the Mediterranean region. It is followed by a chapter which discusses the origin of the medical theory on milk, which we term ‘galactology’, comprising Celsus’ and Dioscorides topical teachings, both of whom were active in the 1st c. AD, i.e., before the critical era of Galen of Pergamum, who is credited with unifying the canon of medical science. The subsequent parts of the volume have been organised thematically and they discuss the dietetics of dairy, its *materia medica*, examples of uses in medical procedures and culinary data on milk and its derivatives.

The appendix deviates from the above pattern of organizing the material and shows how medical treatises may become useful not only when analysing the history of medicine but also the history of ancient literature.10

In the concluding chapter, general observations have been made on the significance and usage of each of the mentioned foods in diets and therapeutic procedures.

Last but not least, the book includes a glossary of the Greek terminology that occurs throughout the text as well as a comprehensive bibliography.

## 2. Humoral theory – an outline

A brief outline of the humoral theory, which constituted a pillar of ancient and medieval medicine for several centuries, is necessary to better introduce the reader to the considerations presented in this volume.11

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10 We are aware of the fact that the appendix is a mere sketch, and we intend to develop it into a full picture of the research problem in a separate article.

Credited with this theory, Hippocrates of Kos (5th/4th c. BC) posited that illnesses resulted from the distorted balance in organic fluids circulating in the body (*chymoi*). He is generally believed to have identified four dominant humours, namely blood, yellow bile, black bile and phlegm, each with its own unique characteristics. Blood was hot and wet, bile – hot and dry, black bile – cold and dry, and phlegm – cold and wet. Given this theoretical assumption, the most important challenge that medical practitioners of those days faced was maintaining a relative balance (*eukrasía*) between these humours. This was by no means a simple endeavour as, according to the prevailing belief, their proportions varied (which is even today referred to as an individual temperament, i.e., *krásis*) and was subject to change at different stages of life.

The imbalance of humours (*dyskrasía*) was considered to be a direct cause of all diseases and manifested itself through marked changes in

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a patient’s well-being and appearance. Restoring the balance occurred through observing a particular diet, i.e., a particular lifestyle congruent with an individual’s specific needs – one that comprised physical activity, regular baths, defaecation and ingesting healthy foodstuffs. The latter was given special prominence as food was believed to provide the body with the substances which, as a result of effective digestion, were transformed into a particular bodily juice. Therefore, physicians placed a great deal of emphasis in their treatises on the dietary characteristics of various foodstuffs. While diagnosing the patient’s condition, they identified the cause of the loss of humoral balance and prescribed a suitable diet and physical activity that were intended to redress the equilibrium.

The choice of foodstuffs required a broad knowledge of physiology, medicine and culinary art. Offering the same product to individuals who differed in terms of *krásis* would be beneficial to some patients but harmful to others. For instance, elderly people were discouraged from consuming foodstuffs which generated thick juices. Nutritious as they were, for the elderly they could be too heavy and therefore likely to block internal organs. This contraindication did not concern young people, who did not suffer such digestive problems and who, due to their high degree of physical activity, ought to consume high-energy foods. The quality of the product itself was no less important (and in the case of milk the freshest possible product was usually recommended, as it was best

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absorbed by the body). Other vital factors to be considered included using (or not) the right heat treatment of food, and additives (herbs, spices, etc.). The same products prepared in different ways could be conducive to generating good or bad juices. The former were classified as *eúchyma* and the latter *kakóchyma*. Oribasius, befriended by Emperor Julian the Apostate, offered a clear classification of such dietary data in the form of dozens of comprehensive catalogues in which foodstuffs were categorised based on their dominant characteristics. This perspective gained the approval of medical circles and was drawn on by subsequent generations of physicians, such as Aëtius of Amida and the anonymous author of the treatise *De cibis*. 
In investigating the importance of milk and its derivatives in the dietetics, pharmacology, therapeutics and gastronomy of antiquity and the early Byzantine period may, at very first glance, cause slight wonderment. After all, in the Mediterranean region, initially influenced by Greek, later by Roman and still later by Byzantine cultures, it was wine, not milk, that had – for centuries – been the most prevalent drink, and it was olive oil, not butter that was the most significant source of fat. This does not mean, however, that the range of dairy products in which we take an interest played a marginal role in the diet of the people of that time. Quite the contrary: since time immemorial, milk and its derivative foods – alongside cereal products – constituted an important element of the peasantry diet (shepherds, in particular) in the territories around the Mediterranean Sea. What is more, dairy also played a similar role in the life of nomadic tribes. And that is why, in all likelihood, milk and cheese

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1 Cf. S t r a b o, IV, 6, 2 (milk as an important constituent of the diet of Ligurian shepherds); C o l u m e l l a, VII, 2, 1–2 (milk as the base of nomads’ diet); G a l e n, Ad Glauconem de medendi metodo, 142, 7, vol. XI (milk as the food of the Scythians);
became synonymous with the simple rustic and pastoral food of the time, or – like butter – a food for barbarians, who were strangers to the achievements of European antiquity². Presumably, this link to these particular groups of consumers is the reason why the products of our interest have often been presented as somewhat unexceptional foodstuffs eaten, as a rule, by simple and uncultured people³.


² For instance, cf. Galen’s opinion expressed in his dietetic characteristics of butter. It is not inconceivable, however, that butter was produced in some Greek regions, cf. J.M. Wilkins, S. Hill, Food..., p. 162.

³ This is expressed, for instance, by Euripides who – when referring to a peasant – uses the phrase galaktótpotas anér, i.e., ‘a man who feeds on milk’, cf. Euripides, 169. Another meaningful example in classical literature is the extract from The Odyssey