

Zofia Rzeźnicka

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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

¹ On the physician and his professional activities, cf. L. Thordike, *Galen. The Man and his Times*, ScM 14.1, 1922, p. 83–93; D.E. Eichholz, *Galen and his Environment*, GR 20, 1951, p. 60–71; G. Sarton, *Galen of Pergamon*, Lawrence 1954, *passim*; V. Nutton, *The Chronology of Galen's Early Career*, CQ 23.1, 1973, p. 158–171; J. Scarborough, *The Galenic Question*, SuA 65.1, 1981, p. 1–31; *idem*, *Early Byzantine Pharmacology*, DOP 38, 1984, p. 215–221; H.F.J. Horstmannshoff, *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. van der Eijk, H.F.J. Horstmannshoff, P.H. Schrijvers, Amsterdam 1995, p. 83–99; J. Wilkins, *The Contribution of Galen, De Subtiliante Diaeta (On the Thinning Diet)*, [in:] *The Unknown Galen*, ed. V. Nutton, London 2002, p. 47–55; V. Nutton, *Ancient Medicine*, London–New York 2005, p. 222–235; R. Flemming, *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,

Imperial Order of Knowledge, [in:] *Ordering Knowledge in the Roman Empire*, eds. J. K ö n i g, T. W h i t m a r s h, Cambridge 2007, p. 241–277; R. J. H a n k i n s o n, *Galēn of Pergamon (155 – 215 CE)*, [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. 335–339; i d e m, *The Man and his Work*, [in:] *The Cambridge Companion to Galen*, ed. R. J. H a n k i n s o n, Cambridge 2008, p. 1–33; *Galen and the World of Knowledge*, eds. Ch. G i l l, T. W h i t m a r s h, J. W i l k i n s, Cambridge 2009, *passim*; G. C o s m a c i n i, M. M e n g h i, *Galeno e il galenismo. Scienza e idee della salute*, Milano 2012, *passim*; S. P. M a t t e r n, *The Prince of Medicine: Galen in the Roman Empire*, Oxford 2013, *passim*; T. R a i o l a, *Nel tempo di una vita. Studi sull'autobiografia in Galeno*, Pisa–Roma 2015, *passim*; D. L e h o u x, *The Authority of Galen's Witnesses*, [in:] *Authority and Expertise in Ancient Scientific Culture*, eds. J. K ö n i g, G. W o o l f, Cambridge–New York 2017, p. 260–282; R. M. R o s e n, *Anatomy and Aporia in Galen's On the Construction of Fetuses*, [in:] *Authority...*, p. 283–305; S. X e n o p h o n t o s, *Galen's Exhortation to the Study of Medicine: An Educational Work for Prospective Medical Students*, [in:] *Greek Medical Literature and its Readers: From Hippocrates to Islam and Byzantium*, eds. P. B o u r a s - V a l l i a n a t o s, S. X e n o p h o n t o s, London–New York 2018, p. 67–93, etc.

² Cf. chapters devoted to their teachings.

³ About the physician and his professional activities, cf. B. B a l d w i n, *The Career of Oribasius*, *AClas* 18, 1975, p. 85–97; i d e m, *Beyond the House Call: Doctors in Early Byzantine History and Politics*, *DOP* 38, 1984, p. 17–18; J. S c a r b o r o u g h, *Early Byzantine...*, p. 221–224; M. G r a n t, *Oribasios and Medical Dietetics or the Three Ps*, [in:] *Food in Antiquity*, eds. J. W i l k i n s, D. H a r v e y, M. D o b s o n, Exeter 1999, p. 371–379; K. G e ö r g a k o p o u l o s, *Archaioi hellēnes iatroi*, Athenai 1998, p. 62–63; A. C h r. E f t y c h i a d i s, *Renal and Glomerular Circulation According to Oribasius (4th Century)*, *AJNe* 22.1, 2002, p. 136–138; J. L a s c a r a t o s, E. P o u l a k o u - R e b e l a k o u, *Oribasius (Fourth Century) and Early Byzantine Perinatal Nutrition*, *JPGN* 36.2, 2003, p. 186–189; R. d e L u c i a, *Oreibasios v. Pergamon*, [in:] *Antike Medizin. Ein Lexikon*, ed. K.-H. L e v e n, München 2005, cols. 660–661; M. K o k o s z k o, *Ryby i ich znaczenie w życiu codziennym ludzi późnego antyku i Bizancjum (IV–VII w.)*, Łódź 2005, p. 14–15; V. N u t t o n, *Ancient Medicine...*, p. 295–296; G. K l a n t z ē s, K. T s i a m ē s, E. P o u l a k o u - R e b e l a k o u, *Oreibasios kai Paulos Aiginētēs. Dyo Byzantinoi iatroi, prōtoporoi stēn plastikē cheirurgikē*, *AHM* 23.5, 2006, p. 537–539; R. d e L u c i a, *Oribasio di Pergamo*, [in:] *Medici bizantini. Oribasio di Pergamon. Aezio d'Amida. Alessandro di Tralle. Paolo d'Egina. Leone medico*, eds. A. G a r z y a, R. d e L u c i a, A. G u a r d a s o l e, A. M. I e r a c i B i o, M. L a m a g n a, R. R o m a n o,

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

Torino 2006, p. 21–29; J. Scarborough, *Oreibasios of Pergamon (ca 350 – ca 400 CE)*, [in:] *The Encyclopedia of Ancient Natural Scientists...*, p. 595–596; M. López Pérez, *Ginecología y patología sexual femenina en las Colecciones Médicas de Oribasio*, Oxford 2010, p. 44–70; K. Jagusia, M. Kokoszko, *Życie i kariera Orybazjusza w świetle relacji źródłowych*, PNH 10.1, 2011, p. 5–21; i idem, *Pisma Orybazjusza jako źródło informacji o pożywieniu ludzi w późnym Cesarstwie Rzymskim*, VP 33, 2013, p. 339–357; A. Kompa, M. J. Leszka, T. Wolinińska, *Mieszkańcy stolicy świata. Konstantynopolitańczycy między starożytnością a średniowieczem*, Łódź 2014, p. 21–22, etc.

⁴ About the physician and his professional activities, cf. M. Wellmann, *Aëtios (8)*, [in:] *RE*, vol. I, Stuttgart 1894, cols. 703–704; H. Lehmann, *Zu Aëtius Amidenus*, *SuA* 23, 1930, p. 205–206; P. Diepgen, *Zur Frauenheilkunde im byzantinischen Kulturkreis des Mittelalters*, Wiesbaden 1950, p. 4–5; A. Guillou, *La civilisation byzantine*, Paris 1974, p. 357; H. Hunger, *Die hochsprachliche profane Literatur der Byzantiner*, vol. I, München 1978, p. 294–296; V. Nutton, *From Galen to Alexander. Aspects of Medicine and Medical Practice in Late Antiquity*, *DOP* 38, 1984, p. 6–7; J. Scarborough, *Early Byzantine...*, p. 224–226; K. Geōrgakopoulos, *Archaioi...*, p. 24–26; M. Kokoszko, *Ryby...*, p. 9–10; A. Garzya, *Aëtios v. Amida*, [in:] *Antike Medizin...*, cols. 19–20; V. Nutton, *Ancient Medicine...*, p. 295; R. Romano, *Aezio Amideno*, [in:] *Medici bizantini...*, p. 255–261; J. Scarborough, *Aëtios of Amida (500 – 550 CE)*, [in:] *The Encyclopedia of Ancient Natural Scientists...*, p. 38–39; D. P. Lazaris, F. J. Laskaratos, G. J. Laskaratos, *Surgical Diseases of the Womb According to Aëtius of Amida (6th Century A.D.)*, *WJS* 33.6, 2009, p. 1310–1317; J. Scarborough, *Theodora, Aëtius of Amida, and Procopius: Some Possible Connections*, *GRBS* 53, 2013, p. 742–762; Ph. van der Eijk, M. Geller, L. Lehmann, M. Martelli, Ch. Salazar, *Canons, Authorities and Medical Practice in the Greek Medical Encyclopaedias of Late Antiquity and in the Talmud*, [in:] *Wissen in Bewegung: Institution – Iteration – Transfer*, eds. E. Cancik-Kirschbaum, A. Traninger, Wiesbaden 2015, p. 198–204; R. Gäbel, *Mental Illnesses in the Medical Compilations of Late Antiquity: The Case of Aëtius of Amida*, [in:] *Mental Illness in Ancient Medicine: From Celsus to Paul of Aegina*, eds. Ch. Thumiger, P. N. Singer, Leiden–Boston 2018, p. 315–340, etc.

⁵ About the physician and his professional activities, cf. G. M. Messing, *Remarks on Anthimus De observatione ciborum*, *CP* 37.2, 1942, p. 150–158; G. Bader, *Early Medieval Latin Adaptations of Byzantine Medicine in Western Europe*, *DOP* 38, 1984, p. 251–252; E. Kisslinger, *Anthimus*, [in:] *Antike Medizin...*, col. 56; Y. Hen, *Food and Drink in Merovingian Gaul*, [in:] *Tätigkeitsfelder und Erfahrungshorizonte des ländlichen Menschen in der frühmittelalterlichen Grundherrschaft (bis ca. 1000): Festschrift für Dieter Hägermann zum 65. Geburtstag*, ed. B. Kastén, München 2006,

[7th c. AD]⁶ and the anonymous author of the treatise *De cibis*⁷). 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. S c a r b o r o u g h, *Anthimus (of Constantinople?) (ca 475 – 525 CE)*, [in:] *The Encyclopedia of Ancient Natural Scientists...*, p. 91–92, etc.

⁶ On the physician and his professional activities, cf. H. D i l l e r, *Paulus* (23), [in:] *RE*, vol. XVIII, 4, Stuttgart 1949, cols. 2386–2397; J. S c a r b o r o u g h, *Early Byzantine...*, p. 228–229; Ch. F. S a l a z a r, *Getting the Point; Paul of Aegina on Arrow Wounds*, *SuA* 82.2, 1998, p. 170–187; R. G u r u n l u o g l u, A. G u r u n l u o g l u, *Paul of Aegina: Landmark in Surgical Progress*, *WJS* 27.1, 2003, p. 18–25; P. E. P o r m a n n, *Paulos v. Aigina*, [in:] *Antike Medizin...*, cols. 681–682; M. L a m a n g a, *Paolo di Egina*, [in:] *Medici bizantini...*, p. 683–695; G. K l a n t z ē s, K. T s i a m ē s, E. P o u l a k o u - R e b e l a k o u, *Oreibasios...*, p. 539–540; P. E. P o r m a n n, *Paulos of Aigina (ca 630 – 670 CE?)*, [in:] *The Encyclopedia of Ancient Natural Scientists...*, p. 629; Ch. S a l a z a r, *Continuity and Innovation in Paul of Aegina's Chapters on Headaches and Migraines*, [in:] *Collecting Recipes. Byzantine and Jewish Pharmacology in Dialogue*, eds. L. L e h m h a u s, M. M a r t e l l i, Boston–Berlin 2017, p. 175–193, etc.

⁷ The treatise was dedicated to emperor Constantine IV, who ruled between 668 and 685. Cf. F. Z. E r m e r i n s, *L.S. (Introductio)*, [in:] *Anecdota medica Graeca*, ed. F. Z. E r m e r i n s, Leiden 1963, p. XI–XII; A. D a l b y, *Flavours of Byzantium*, Blackawton–Totnes 2003, p. 18; i d e m, *Tastes of Byzantium. The Cuisine of a Legendary Empire*, London–New York 2010, p. 18.

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 series⁸, 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 findings⁹, correcting mistakes and misinterpretations, adding an appendix on the term *pyriepitha* 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

⁸ M. Kokoszko, K. Jagusiak, Z. Rzeźnicka, *Dietetyka i sztuka kulinarna antyku i wczesnego Bizancjum (II–VII w.)*, Część I, *Zboża i produkty zbożowe w źródłach medycznych antyku i wczesnego Bizancjum (II–VII w.)* (*Dietetics and Culinary Art of Antiquity and Early Byzantium [1st–7th Centuries]*), Part I, *Cereals in Medical Sources of Antiquity and Early Byzantium [2nd–7th Centuries]*), Łódź 2014, p. 5–26; i i d e m, *Wstęp. Dietetyka, farmakologia i sztuka kulinarna w źródłach medycznych* (*Introduction. Dietetics, Pharmacology and Culinary Art in Medical Sources*), [in:] *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. M. Kokoszko, Łódź 2014, p. 55–66.

⁹ These were possible, *inter alia*, thanks to two research stays in London, which were financed by the De Brzezcie 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 literature¹⁰.

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 volume¹¹.

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.

¹¹ On humoral theory and the ancient and Byzantine dietetics, cf. A. D r y g a s, "Soki" (*humory*) w *teorii Hipokratesa*, FP 51.15, 1995, p. 671–676; M. G r a n t, *Introduction*,

Credited with this theory, Hippocrates of Kos (5th/4th c. BC)¹² 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 (*eukrasia*) 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 (*dyskrasia*) was considered to be a direct cause of all diseases and manifested itself through marked changes in

[in:] M. Grant, *Dieting for an Emperor. A Translation of Books 1 and 4 of Oribasius' Medical Compilations with an Introduction and Commentary*, Leiden–NewYork–Köln 1997, p. 4–12; M. Bujalková, S. Straka, A. Jurecková, *Hippocrates' Humoral Pathology in Nowadays' Reflections*, BrLL 102.10, 2001, p. 289–492; P. Demont, *About Philosophy and Humoural Medicine*, [in:] *Hippocrates in Context. Papers Read at the XIth International Hippocrates Colloquium. (University of Newcastle upon Tyne, 27–31 August 2002)*, ed. Ph.J. van der Eijk, Leiden–Boston 2005, p. 271–286; J. Joanna, *The Legacy of the Hippocratic Treatise The Nature of Man: Theory of the Four Humours*, [in:] *Greek Medicine from Hippocrates to Galen. Selected Papers by Jacques Jouanna*, ed. Ph. van der Eijk, transl. N. Allie, Leiden–Boston 2012, p. 335–359; Z. Rzeźnicka, *Procedury dietetyczne w kuracji gorączki ciągłej (sýnochos pyretós [σύννοχος πυρετός]) na podstawie wybranych traktatów medycznych antyku i wczesnego Bizancjum*, [in:] *Historia diety i kultury odżywiania*, vol. I, eds. B. Płonka-Syroka, H. Grajeta, A. Syroka, Wrocław 2018, p. 43–55, etc.

¹² On the physician and his activity, cf. H. Gossen, *Hippokrates (16)*, [in:] *RE*, vol. VIII, Stuttgart 1913, cols. 1801–1852; L. Edelstein, *Hippokrates*, [in:] *RE*, Supplementband VI, Stuttgart 1935, cols. 1290–1345; F.P. Retief, L. Cilliers, *Hippocrates: Facts and Fiction*, [in:] *Health and Healing, Disease and Death in the Graeco-Roman World*, eds. F.P. Retief, L. Cilliers (AThe: Supplementum 7), Bloemfontein 2005, p. 1–13; R. Wittern, *Hippokrates*, [in:] *Antike Medizin...*, cols. 414–416; J. Joanna, *Hippokratés of Kōs (ca 440 – ca 370 BCE)*, [in:] *The Encyclopedia of Ancient Natural Scientists...*, p. 404–405; M. Wesoły, *Po co nam dziś Hippokrates?*, [in:] *Hippokrates, Wybór pism*, transl. M. Wesoły, vol. I, Warszawa 2008, p. 11–42; E. Tsionpanou, S.G. Marketos, *Hippocrates: Timeless Still*, JRSM 106.7, 2013, p. 288–292, etc.

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 foodstuffs¹³. 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

¹³ On the relationship between pharmacology and dietetics, cf. J. Stannard, *Aspects of Byzantine Materia Medica*, DOP 38, 1984, p. 210; V. Nutton, *Ancient Medicine...*, p. 96–98; J. Joanna, *Dietetics in Hippocratic Medicine: Definition, Main Problems, Discussion*, [in:] *Greek Medicine...*, p. 137–153; M. Kokoszko, K. Jagusiak, Z. Rzeźnicka, *Zboża i produkty zbożowe...*, p. 5–26; H. Bartoš, *Philosophy and Dietetics in the Hippocratic On Regimen. A Delicate Balance of Health*, Leiden–Boston 2015, *passim*; L. Totelin, *When Foods Become Remedies in Ancient Greece: The Curious Case of Garlic and Other Substances*, JEthn 167, 2015, p. 30–37; A. Touwaide, E. Appetiti, *Food and Medicines in the Mediterranean Tradition. A Systematic Analysis of the Earliest Extant Body of Textual Evidence*, JEthn 167, 2015, p. 11–29; J. Wilkins, *Good Food and Bad: Nutritional and Pleasurable Eating in Ancient Greece*, JEthn 167, 2015, p. 7–10; A. Lapoujade Lejavitzer, *Dieta saludable, alimentos puros y purificación en el mundo grecolatino. Healthy Diet, Pure Food and Purification in the Greco-Roman World*, NTe 34.1, 2016, p. 109–121, etc.

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*.

