

History of Dietetics

History of Science 153

Fall 2008

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From Antiquity into the 19th century, dietetics (also called regimen or hygiene) was considered one of the most important parts of medicine. Dietetics was not just about food and drink; it was about the proper management of your life: how to act so as to maintain health, avoid disease, and live as long as possible. As such, dietetics combined elements of the technically scientific-- theorizing about what sort of stuff your body and its aliment were made of and how digestion proceeded-- with the prescriptive and moral: the widely commended temperate life was not only good for you, but good. Dietetics, that is, was a body of knowledge, and a set of recommended behaviors, belonging both to medicine and to practical ethics, to the world of 'is' and the world of 'ought.' This folding together of the scientific and the moral is the central theme of the course. We will follow dietetic expertise from Greek and Roman Antiquity through the Scientific Revolution and into the present. We will show that dietetics represents a perspicuous site for understanding the changing scope and character of scientific expertise, the changing boundaries between is and ought, and changing conceptions of the self.

Assessment:

(i) There will be a short, take-home exam (**to be handed out 22 October and due 29 October**): 30% of final grade.

(ii) There will be a final essay of 12-15 pages, on a topic to be agreed between the student and either (or both) me and the TF Funke Sangodeyi (**due 9 January**): 50% of final grade.

(iii) Class and section participation and evidence of preparation will count for 20% of the final grade.

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Course readings:

Course readings are on the course website as pdfs.

We will **not** always read all the material listed for each session, and I will indicate in the preceding week what items, or what portions of listed items, student ought to pay special attention to, and what may be skimmed or used as background. If you miss a class, you should get this information from another student or the teaching fellow.

Students should **purchase** one book to be read late in the course:

Michael Pollan, In Defense of Food: An Eater's Manifesto (New York: Penguin, 2008).

I have not ordered this book for the Coop. You will have plenty of time to get copies from on-line sources, and cheap used copies should be easily available.

17 September: Introduction

Purpose of the course: what is dietetics? what has been its place in medicine and in everyday life from Antiquity to the present? how has it functioned to fold together the technical

and the moral? what relationship does it have to views of the self? what changes has dietetics undergone in recent years?

No required reading

24 September: Ancient Dietetics

Dietetics was central to ancient medical thinking and practice, and writers in Greek and Roman Antiquity forged schemes for thinking about aliment, body function, and disease that persisted with great stability in Western culture for over two millennia. We identify some central features of ancient dietetics. How did the human body fit in an overall scheme of nature? How were health and disease accounted for? What was it thought right and proper that you should do to preserve health and extend life?

Readings:

Hippocrates, "Regimen in Acute Diseases" and "A Regimen for Health," in Hippocratic Writings, ed. G. E. R. Lloyd, trans. J. Chadwick and W. N. Mann (Harmondsworth: Penguin, 1978), pp. 186-205, 272-276.

Galen, Galen's Hygiene (De sanitate tuenda), trans. Robert Montraville Green (Springfield, IL: Charles C. Thomas, 1951), pp. 3-48, 235-236.

Galen, Galen on Food and Diet, ed. and trans. Mark Grant (London: Routledge, 2000), pp. 14-18, 68-78.

Celsus, De medicina, trans. W. G. Spencer (Cambridge, Mass.: Harvard University Press, 1935), Vol. I, pp. 43-81.

Ludwig Edelstein, "The Dietetics of Antiquity," in Edelstein, Ancient Medicine: Selected Papers of Ludwig Edelstein, eds Owsei Temkin and C. Lilian Temkin (Baltimore, MD: The Johns Hopkins Press, 1967), pp. 303-316.

Michel Foucault, "Dietetics," in Foucault, The Use of Pleasure: The History of Sexuality, Volume 2, trans. Robert Hurley (New York: Vintage, 1990), pp. 95-116.

1 October: The Non-Naturals: Dietetics Normalized

We will already have noted that dietetics traditionally encompassed not just the management of food and drink but also a wide range of volitionally-controlled transactions between you and your environment. The list of those types of transactions became known as the Six Things Non-Natural, and we will note how great a portion of one's everyday life was encompassed within this list. Especially noteworthy is the fact that "the passions of the soul" (or "emotions") were among the Non-Naturals, and we will discuss the implications of this for traditional understandings of the relationship between body and soul, between the natural and the moral.

Readings:

Sir John Harington, The School of Salernum: Regimen Sanitatis Salerni (Salerno: Ente Provinciale per il Turismo, 1957; orig. publ. 1607).

William Vaughan, Approved Directions for Health, both Naturall and Artificiall ..., 4th ed. (London, 1612; orig. publ. 1600), pp. 12-57, 143-150.

L. J. Rather, "The 'Six Things Non-Natural': A Note on the Origins and Fate of a Doctrine and a Phrase," Clio Medica 3 (1968), 337-347.

Antoinette Emch-Dériaz, "The Non-Naturals Made Easy," in The Popularization of Medicine 1650-1850, ed. Roy Porter (London: Routledge, 1992), pp. 134-159.

8 October: The Dietetics of Eternal Life

How long can human beings live? While promises of vastly extended life are a notable feature of present-day culture, such hopes are not at all new. Early modern physicians and other commentators took it as a matter of fact that people in the distant past-- notably Patriarchs and philosophers-- lived much longer than they now did, and many attributed primitive longevity to primitive dietetics. What was the natural diet of humankind and how did it contribute to long life? What dietetic changes had been brought about by civilization and with what effects? Could human beings extend their life-span either by recovering the ancient dietetics or by new science?

Readings:

Luigi Cornaro, The Art of Living Long (Milwaukee, WI: William F. Butler, 1917; orig. publ. 1558).

Francis Bacon, "History of Life and Death," in The Works of Francis Bacon, eds James Spedding, Robert Leslie Ellis and Douglas Denon Heath, 5 vols. (London: Longman and Co., 1857-1858), Vol. V, pp. 213-335 [selections: pp. 213-219, 241-268, 283-288, 293-304].

Gerald J. Gruman, A History of Ideas about the Prolongation of Life: The Evolution of Prolongevity Hypotheses to 1800, Transactions of the American Philosophical Society, n.s. Volume 56, part 9 (Philadelphia: American Philosophical Society, 1966), pp. 5-10, 68-74.

15 October: Table Manners: Civilizing Appetite

It's said that you are what you eat, but it might also be said that you are how you eat. Since dining is-- or, at least, was-- a public act, your manner of refection counted as a powerful display of the kind of person you were. This means that temporally and socially varying table manners-- from one point of view a matter of mere etiquette-- are an interesting site for understanding far-reaching historical shifts in conceptions of the self and of social order. Here, the key writer is the great historical sociologist Norbert Elias, and we will explore his

views on manners and notions of self-control in what he called "the civilizing process."

Readings:

[Antoine de Courtin], The Rules of Civility; or, the Maxims of Genteel Behaviour ... (London, 1703; orig. publ. 1671), pp. 85-102.

Norbert Elias, The History of Manners: Vol. I of The Civilizing Process, trans. Edmund Jephcott (New York: Pantheon, 1978), pp. 51-129.

Stephen Mennell, All Manners of Food: Eating and Taste in England and France from the Middle Ages to the Present (Oxford: Basil Blackwell, 1985), pp. 20-39.

22 October: Dietetics and the Life of the Mind

Traditional dietetics was not "one size fits all." It was understood that different ways of life called for different regimens. What was right and proper for the manual laborer was not for the soldier, and the recommended dietetics of civic gentlemen often stood in contrast with that of people whose way of life was sedentary or intellectual. Accordingly, there was a historical appreciation of the dietetics of knowledge, both secular and sacred, and we will explore how the special dietetics of thinkers helped vouch for the status, value, and authenticity of knowledge.

Readings:

Robert Burton, The Anatomy of Melancholy, ed. Holbrook Jackson (New York: New York Review of Books, 2001; orig. publ. 1621), Second Part, pp. 15-29.

Bernardino Ramazzini, "Of the Diseases of Learned Men," in idem, A Treatise of the Diseases of Tradesmen (London, 1705), pp. 246-274.

Steven Shapin, "The Philosopher and the Chicken: On the Dietetics of Disembodied Knowledge," in Science Incarnate: Historical Embodiments of Natural Knowledge, eds Christopher Lawrence and Steven Shapin (Chicago: University of Chicago Press, 1998), pp. 21-50.

29 October: Dietetics, Expertise and Civil Society

If the holy man or the philosopher was understood rightly to lead an ascetic way of life, civic actors were almost universally counseled to follow a life of moderation, neither to eat too much nor too little, to adapt their bodies to the vicissitudes, and to reject the rigid discipline of any particular diet, including those promising greater health and extended life. This tension between the expectations of civic life and the disciplines deemed necessary for health was endemic in early modern culture, affecting the relationships between patients' desires and the instrumental expertise of their physicians. It set a prudential limit on how far medical expertise could go.

Readings:

Michel Yquem de Montaigne, "Of Experience," in The Essayes of Michael Lord of Montaigne, trans. John Florio, 3 vols. (New York: E. P. Dutton, 1928; orig. publ. 1581-1588), Vol. III, pp. 322-386.

Francis Bacon, "Of Regiment of Health," in idem, The Essayes or Counsels, Civill and Morall, ed Michael Kiernan (Cambridge, Mass.: Harvard University Press, 1985; orig. publ. 1625), pp. 100-102.

Steven Shapin, "How to Eat Like a Gentleman: Dietetics and Ethics in Early Modern England," in Right Living: An Anglo-American Tradition of Self-Help Medicine and Hygiene, ed. Charles E. Rosenberg (Baltimore, MD: The Johns Hopkins University Press, 2003), pp. 21-58.

5 November: Vegetarianism: Meat, Mind, and Morality

Present-day vegetarianism has many justifications. Probably the most prominent have to do with animal rights and feelings, though concern for the environment and effects on human health are also important. Yet the historical career of vegetarianism is long and the range of considerations that bore upon decisions not to eat animal flesh has been very varied. From the point of view of deep history, religious issues were key, as were Galenic conceptions of the relationship between what you ate and who you were-- mentally and morally as well as physiologically. For these reasons, a consideration of vegetarian (and anti-vegetarian) thought is a way of adding texture to our understanding of traditional dietetics as a self-making culture. How did eating meat, and refraining from meat, relate to human mental, moral, and political constitutions? We will have something to say about vegetarian thought in Antiquity and in its modern forms, but our reading will focus on a seventeenth-century English vegetarian-pacifist, Thomas Tryon.

Readings:

Thomas Tryon, A Way to Health, Long Life and Happiness ... (London, 1691), pp. 249-382.

Tristram Stuart, The Bloodless Revolution: A Cultural History of Vegetarianism from 1600 to Modern Times (New York: W. W. Norton, 2007), pp. 60-77.

12 November: Dietetics Revolutionized?

Francis Bacon said that "knowledge is power," specifically claiming that a reformed philosophy of nature would enable medicine to break out of its impotent rut and produce healthier and longer-lived human bodies. Descartes maintained much the same thing: one of the proofs of the scientific pudding would be vastly extended life. Natural philosophy revolutionized was natural philosophy mechanized, and it was widely considered that a mechanical and corpuscular understanding of aliment and the

human body would lead to radically improved medical practice, including dietetics. We will look at some aspects of 17th- and 18th-century "iatromechanism" and will explore the nature of the relationship between new forms of scientific expertise and new forms of dietetic advice.

Readings:

George Cheyne, An Essay on Health and Long Life (London, 1724), pp. 220-226.

George Cheyne, An Essay on Regimen (London, 1740), pp. 53-62.

Steven Shapin, "Trusting George Cheyne: Scientific Expertise, Common Sense, and Moral Authority in Early Eighteenth-Century Dietetic Medicine," Bulletin of the History of Medicine 77 (2003), 263-297.

Steven Shapin, "Descartes the Doctor: Rationalism and Its Therapies," The British Journal for the History of Science 33 (2000), 131-154.

19 November: The Decline of the Dietetic Tradition: From Qualities to Constituents

There was never a particular moment at which the language of qualities, humors, and temperament disappeared, and at which one could say that the Galenic dietetic tradition disappeared. Indeed, it is worthwhile thinking whether that language has disappeared, at least in lay sensibilities. Nevertheless, from about the middle of the eighteenth century, official medical writing used these notions less and less, and in their place a rather different language emerged for talking about aliment and the body, a language which spoke not of qualities (hot, cold, moist, and dry) but of constituents (proteins, fats, starches, and eventually of things like vitamins) and which by the very late nineteenth century and early twentieth century conceived of the body and its aliment as an energetic system (in which the calorie emerged as a standard measure of the energetic content of food). The German chemist Justus von Liebig (1803-1873) was

the most influential nineteenth-century writer on the chemical make-up and physiological role of food, and we will also read some earlier work by the Scottish physician William Cullen (1710-1790) whose Lectures on Materia Medica offer insight into a culture transitional between the old dietetic tradition and the developing science of nutrition. We will explore some differences between old and new vocabularies for dietetics as a self-making culture and for the nature and sources of expertise about aliment and the body.

Readings:

William Cullen, A Treatise of the Materia Medica, 2 vols. (Edinburgh, 1789; from lectures given in early 1760s), Vol. I, pp. 160-174; pp. 175-312 are Cullen's treatments of particular aliments: these should be skimmed to give you a sense of how general principles relate to particular foods.

R. Passmore, "William Cullen and Dietetics," in William Cullen and the Eighteenth Century Medical World, eds A. Doig, J. P. S. Ferguson, I. A. Milne, and R. Passmore. (Edinburgh: Edinburgh University Press, 1993), pp. 167-185.

Justus von Liebig, Familiar Letters on Chemistry, ed. John Gardner (New York: D. Appleton, 1843), pp. 64-112.

26 November: Holiday

Eating:

Turkey, Stuffing, Cranberry Sauce

3 December: The Modern Politics of Dietary Expertise

The new dietetics-- which described food and the bodies it fed in terms of discrete-- and measurable-- constituents developed during the course of the 19th and early 20th centuries into the science of nutrition. This new science was mobilized as a resource for government at a time when population thinking and management practices became increasingly central to the modern

state. Optimization of resources-- including human and agricultural resources-- included attempts at rationalizing national diets. The most important new metric that the new dietary science provided was the calorie, and it was the calories, more than any other item in the vocabulary of nutrition science, that linked governmental concerns to the food supply and individual diets. The new nutrition science had social, legal, and cultural implications for the production and consumption of food; it provided the basis for government intervention in dietary practices and in expert contributions to the definition of a healthy diet.

We focus here on the United States in the Gilded Age through the Second World War, beginning with the work of the chemist Wilbur Olin Atwater (1844-1907), whose research on human nutrition and metabolism for the US Department of Agriculture had broad implications for both American nutrition science and the American diet. Atwater's work on the caloric content of foods laid the groundwork for much that followed in the 20th century-- the governmental setting of nutritional standards and the politics of food treated by Marion Nestle and William Cullather, including the creation of Recommended Dietary Allowances and the advent of food labeling.

Readings:

Wilbur O. Atwater, "The Chemistry of Food and Nutrition: The Composition of Our Bodies and Our Food," Century Illustrated Magazine 34 (May 1887), 59-74.

Caroline L. Hunt and Helen W. Atwater, How to Select Foods I: What the Body Needs (Washington, DC: US Department of Agriculture, 1917), pp. 1-14.

Marion Nestle, "From 'Eat More' to 'Eat Less,' 1900-1990," in her Food Politics: How the Food Industry Influences Nutrition and Health (Berkeley: University of California Press, 2002), pp. 31-50.

William Cullather, "The Foreign Policy of the Calorie," American Historical Review 112 (2007), 337-364.

10 December: The Quality and Credibility of Modern Dietary Expertise

Present-day nutritional expertise has, of course, a very different scientific base than that of traditional dietetics, and, as we have seen, the sense in which contemporary expertise in what we eat and drink is a self-making culture in a different way than traditional dietetics, if, indeed, it is a self-making culture at all. Our focus here will be on the authority of present-day nutritional expertise. On the one hand, we might say that this authority is very great: look at the prominence of expert voices in the media and the volume of books on the subject in the book-stores. On the other hand, a notable feature of our culture is what's been called "the cacophony of expertise": there seems to be little stability and coherence in what a range of experts have to say about what we should eat. Michael Pollan is a journalist, not a nutritional scientist, yet he is one of this country's most influential voices in contemporary dietary debates. That is interesting in its own right: nutritional advice is an area where non-professionals have not been rendered mute. The content of Pollan's advice is also interesting, as he, like some others, is skeptical of the quality of professional expertise. Tellingly, he recommends "common sense" over academic expertise, specifically the forms of nutrition science that seek to build up a healthy diet from an analysis of the known constituents of specific foods.

Reading:

Michael Pollan, In Defense of Food: An Eater's Manifesto (New York: Penguin, 2008).

