

## Introduction: Food as Medicine, Medicine as Food

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The history of food is "well and truly out of the academic wilderness." Long a marginalized area of inquiry in both food studies programs and history departments, food history has moved into the historical mainstream since the early 2000s, and found institutionalization in conferences, journals, anthologies, and programs of study. The publication of companion guides to food history perhaps signaled this move most of all. In addition to being at the center of an increasingly well-demarcated field, food has also become a useful category of analysis in political, social, and environmental histories. Food has been recognized, for example, as a particularly illuminating way of examining empire and globalization. At the opposite end of the scale, food forms part of local and national history. Changing technologies of food production in the home have been linked to shifts in gender roles and particularly to increasingly housebound women. Environmental historians

- 1 Thanks are due to the Edward Worth Library Trust and Dublin City Library and Archive for supporting the conference from which these papers originated. Kyri W. Claflin, "Recent Trends in Food History Research in the United States: 2013-2016," Food & History 13, no. 1-3 (2015): 291-301; quotation, 301.
- 2 On the mainstreaming of food history see John C. Super, "Food and history," *Journal of Social History* 36, no. 1 (2002): 165-178; Warren Belasco, "Food history as a field," in *Food in Time and Place*, ed. Paul Freedman, Joyce E. Chaplin, Ken Albala (Berkeley: California University Press, 2014), 1-17.
- 3 On the mainstreaming of food history see John C. Super, "Food and history," *Journal of Social History*, 36, no. 1(2002): 165-178.
- 4 For a pioneering study by an anthropologist see Sidney Mintz, Sweetness and Power: The Place of Sugar in Modern History (London: Penguin Books, 1985). More recently see Rachel Laudan, Cuisine and Empire: Cooking in World History (Berkeley: University of California Press, 2013).
- 5 An interesting recent example linking national identity and food is Helen O'Connell, "'At our potatoes': recipes for normality in post-Union Ireland," *Eire-Ireland* 48, no. 3 and 4 (2013): 49-78. See also Hasia Diner, *Hungering for America: Italian, Irish and Jewish Foodways in the Age of Migration* (Cambridge, MA: Harvard University Press, 2001).
- 6 The classic study is Ruth Schwartz Cowan, More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave Oven (New York: Basic Books, 1985).

have used food to raise issues around resource management, economic development, and the configurations of notions such as purity and the natural.<sup>7</sup>

Many of the problems examined in food histories intersect with the commitments of the histories of science and medicine. Science and medicine are crucial influences on past and modern conceptions of food, and historians of those fields have worked towards unraveling these influences with increasing intensity. They have examined how nutrition scientists asked their questions, arranged their experiments, and interpreted their results, often in dialogue with prevailing social and political problems. 8 They have investigated the increasing prominence of "nutritionism" and a reductive conception of food and the eating body. They have also explored what is usually described as a growing "medicalization" of eating and food, for example in the case of anorexia or obesity, or in the contested construction of discourses of risk around specific nutritional components. 10 And they have examined the attempts of different professional and nonprofessional groups to assert authority over questions of healthy eating. <sup>11</sup> While many of these works were sensitive to the historical contingency of *scientific* and *medical* ideas, some tended to assume a more historically stable character for food. Some accounts that can be located broadly within the theme of food as medicine, then, understood the task to be an investigation of moments when food became a scientific concern or a

- On food and environmental history generally see Nicolaas Mink, "It begins in the belly," Environmental History 14, no. 2 (2009): 312-322. For recent examples of histories at the intersection of food and environment, see Kendra Smith Howard, Pure and Modern Milk: An Environmental History Since 1900 (Oxford: Oxford University Press, 2013); and Eugene N. Anderson, Food and Environment in Early and Medieval China (Philadelphia: University of Pennsylvania Press, 2014); George Colpitts, Pemmican Empire: Food, Trade, and the Last Bison Hunts in the North American Plains, 1780-1882 (Cambridge: Cambridge University Press, 2015).
- 8 See for example, Harmke Kamminga and Andrew Cunningham, The Science and Culture of Nutrition, 1840-1940 (Amsterdam; Atlanta, GA: Rodopi, 1995); David Smith, ed., Nutrition in Britain: Science, Scientists and Politics in the Twentieth Century, Studies in the Social History of Medicine (London; New York: Routledge, 1997); David Smith and Jim Phillips, eds., Food, Science, Policy and Regulation in the Twentieth Century: International and Comparative Perspectives (London: Routledge, 2000); Elizabeth Neswald, David F. Smith, and Ulrike Thoms, eds., Setting Nutritional Standards: Theory, Policies, Practices (University of Rochester Press, 2017).
- 9 For example, Gyorgy Scrinis, Nutritionism: The Science and Politics of Dietary Advice (New York: Columbia University Press, 2013); Michael Pollan, In Defense of Food: An Eater's Manifesto (London: Penguin, 2008).
- For example, Jeffery Sobal, "The Medicalization and Demedicalization of Obesity," in Eating Agendas: Food and Nutrition As Social Problems, ed. Donna Maurer and Jeffery Sobal (New York: Aldine De Gruyter, 1995), 67–90; Robin Jane Marie Vogler, The Medicalization of Eating: Social Control in an Eating Disorders Clinic (Stamford, CT: JAI Press, 1993). Also: Mark Bufton and Virginia Berridge, "Post-War Nutrition Science and Policy Making in Britain, 1945-1994: the Case of Diet and Heart Disease," in Food, Science, Policy and Regulation in the Twentieth Century: International and Comparative Perspectives, ed. D. Smith and J. Phillips (London: Routledge, 2000), 207-22.
- 11 The role of expertise and competing professional authorities are explored, for example, in Steven Shapin, "Expertise, Common Sense, and the Atkins Diet," in Public Science in Liberal Democracy, ed. Peter W.B. Phillips (Toronto: University of Toronto Press, 2007), 174–93; Rima Apple, Vitamania: Vitamins in American Culture, Health and Medicine in American Society (New Brunswick, N.J.: Rutgers University Press, 1996); Michael Ackerman, "Interpreting the 'Newer Knowledge of Nutrition': Science, Interests, and Values in the Making of Dietary Advice in the United States, 1915–1965" (Ph.D. dissertation, University of Virginia, 2005).

medically approached problem. Yuriko Akiyama's study of national training schools of cookery in Britain, for example, charted how cookery and diet became central issues of medicine in the nineteenth century. <sup>12</sup> More recently, Matthew Smith has examined the history of food allergies as a history of changing medical knowledge and contests over expertise. <sup>13</sup>

On the other end of the spectrum are histories that seek to explore the impact of a relatively fixed science on food. The mental image evoked is often a process of diffusion or popularization of scientific and medical ideas into the cultural realm of food and eating. Trudy Eden, for instance, has demonstrated how seventeenth- and eighteenth-century Galenic ideas shaped American colonists' conceptions of themselves and their place in the world. Analyses of popular uses of nutritional scientific language were provided by, for example, Jessica Mudry in her study of USDA and federal food guidelines, and Helen Zoe Veit in her investigation of nutritional recommendations during the Progressive Era. Mudry and Veit showed how scientific concepts of nutrition based on a quantitative, energy-based approach to food gradually found application in everyday language. <sup>14</sup>

The essays in this special issue explore the relationship between food and medicine through time. The authors begin with the notion that food, medicine and science are not fixed or self-evident historical categories. Instead, we seek to understand how food and medicine have been considered separate or overlapping spheres in the past. We further ask how and why the relationship between food and medicine has assumed different configurations. As Lisa Haushofer writes in her essay the "intersection between food and medicine is not an unchanging and self-evident spillover of one realm into another, but the result of a historically specific process of creation and management." This selection of essays cannot provide a comprehensive answer to these questions, but it does offer a range of perspectives, including those of differing times and places, from early modern Europe to nineteenth-century India to twentieth-century Britain.

Existing scholarship on the historical dimensions of food as medicine is scarce. A recent virtual issue of *Social History of Medicine* addressed the problem through a survey of previous work in the journal, but mainly ascertained the need for more scholarship on the topic. <sup>15</sup> Existing works often fall into one of two characteristic ways of evaluating the historical trajectory of food as medicine. One emphasizes past connections between foods and medicines, often accompanied by a certain nostalgia for a less disenchanted

<sup>12</sup> Yuriko Akiyama, Feeding the Nation: Nutrition and Health in Britain before World War One (London; New York: Tauris Academic Studies, 2008).

<sup>13</sup> Matthew Smith, Another person's poison: a history of food allergy (New York: Columbia University Press, 2015).

<sup>14</sup> Jessica J. Mudry, Measured Meals: Nutrition in America (Albany: SUNY Press, 2009); Helen Veit, Modern Food, Moral Food: Self-Control, Science, and the Rise of Modern American Eating in the Early Twentieth Century (Chapel Hill: University of North Carolina Press, 2013), especially 44-50.

<sup>15</sup> Sara Pennell and Rachel Rich, "Food, Feast, and Famine," Virtual Issue: Social History of Medicine, June 2016, https://academic.oup.com/shm/pages/virtual\_issue\_2.

view of food and eating. 16 The other approach stresses the degree to which recent scientific advances have increased our awareness of the medicinal potential of previously underappreciated foods. Nancy Chen's Food, Medicine, and the Quest for Good Health is a good example of the first way. Chen combined a historical and anthropological perspective on the development of eating and medicating as distinct cultural practices. 17 While the book emphasizes the ways in which food and dietary prescriptions are shaped by culture, it also at times upholds a false dichotomy of science and culture. Science and medicine are seen as impacts on the cultural practices of eating, but the development of nutritional knowledge and scientifically informed dietary prescriptions are of course inseparable from particular or historically specific cultural forces. Through a historical survey of dietetic ideas in Ancient Greek, Chinese and Ayurvedic medicine, Chen argues that the boundary between science and medicine used to be much less blurred than it is at present. She adds that "[w]e may have something to learn from cultures that blur the boundaries between these categories." An example of the second way is the work of anthropologist and ethnopharmacologist Nina Etkin. In her book Edible Medicines she states that "until the recent and rapidly escalating interest in functional foods and supplements. . . , foods were regarded as virtually chemically inert, thus of no salience to disease processes." These two approaches to food as medicine are not mutually exclusive, of course; in fact, many accounts combine nostalgia for the past with enthusiasm for current nutritional science. The continued appearance of the famous misquotation falsely attributed to Hippocrates, "Let thy food be thy medicine, let thy medicine be thy food," in current works on medicinal foods (including in Etkin's book) illustrates the desire to view recent nutritional science as a confirmation of past wisdom, and past dietetic practices as intuitive anticipations of modern knowledge. 20

Historians have lately provided a more nuanced account of the chronology involved in the separation (or not) of food from medicine. David Gentilcore, for example, has demonstrated that enthusiasm for preventive medicine, and therefore for the use of food to prevent and treat disease, waxed and waned in the sixteenth and seventeenth centuries.<sup>21</sup> Gentilcore and other historians of food and science including Emma Spary, Steven Shapin, and Ken Albala, have drawn attention to changing conceptions of food and its relationship to the body at different historical periods. Rather than

- 16 Examples include Bernard Jensen, Foods That Heal: A Guide to Understanding and Using the Healing Powers of Natural Foods (New York: Penguin, 1993); Andrea Pieroni and Lisa Leimer Price, Eating and Healing: Traditional Food As Medicine (Binghampton, NY: Haworth Press, 2006).
- 17 Nancy N Chen, Food, Medicine, and the Quest for Good Health: Nutrition, Medicine, and Culture (New York: Columbia University Press, 2009).
- 18 Chen, Food, Medicine, and the Quest for Good Health, 1.
- 19 Nina Etkin, Edible Medicines: An Ethnopharmacology of Food (Tucson: University of Arizona Press,
- 20 On the misquotation of Hippocrates, see Diana Cardenas, "Let Not Thy Food Be Confused with Thy Medicine: The Hippocratic Misquotation," E-SPEN Journal 8, no. 6 (December 1, 2013): e260-62; for examples of usages of the quote in recent books on food as medicine, see Pieroni and Price, Eating and Healing, 359; Jensen, Foods That Heal; Kathleen Hefferon, Let Thy Food Be Thy Medicine: Plants and Modern Medicine (New York: Oxford University Press, 2012).
- 21 David Gentilcore, Food and Health in Early Modern Europe: Diet, Medicine and Society, 1450-1800 (London: Bloomsbury, 2016).

seeking to understand whether food was considered more medical in the past or in the present, their work highlighted the need to take into account changing conceptual frameworks of *how* food and medicine were thought to act on the body. The essays in this special issue build on their work, exploring changes and continuities in the frameworks used to relate food and medicine to bodies. For example, Steven Shapin's essay locates the success of Luigi Cornaro's famous book on longevity within the particular logic of Galenic dietetics, but also within emerging seventeenth-century fashions of a more quantitative understanding of food and the body. In his examination of diaries in British colonial India, Sam Goodman connects the medicinal and non-medicinal uses of alcohol to competing conceptual frameworks of nourishment in the nineteenth century. And Haushofer argues that the existing relationship between food and medicine became unsettled due to a changing understanding of the mechanism of digestion in the nineteenth century.

The moving boundary between food and medicine suggests a complex chronology for changing perceptions of a dichotomous relationship between culture and science. This perceived dichotomy has implications also for how the story of food as medicine is expressed as one of power. Where food is seen as belonging to a cultural realm that is separate from a medical realm, the relationship between food and medicine is often conceived as a relationship of power. Power is the dominant metaphor in narratives of "takeover" of one realm through another, describing for example the bioprospecting of medicinal foods, the reclaiming of lay authority over expert dietary prescriptions, or the supposedly democratizing effect of nutraceuticals. The chronological distinction between food as culture or science also tends to map onto a geographical separation between Western, industrialized, "civilized," scientifically informed approaches to food, and non-Western, indigenous, empirical foodways. Whether they are nostalgic for or dismissive of the past, accounts about the medicinal uses of substances such as herbs, garlic, ginger, chocolate, or coffee, continue to contrast past food and healing cultures with contemporary food and medical science. 23 Such a division – though often implied rather than made explicit – recalls the long history of imperial power relationships with regard to foods and the knowledge of their medicinal use.<sup>24</sup> Rather than assuming a

- 22 Ken Albala, Eating Right in the Renaissance (Berkeley and Los Angeles: University of California Press, 2002); Ken Albala, Food in Early Modern Europe (Westport: Greenwood, 2003); Steven Shapin, "How to Eat Like a Gentleman: Dietetics and Ethics in Early Modern England," in An Anglo-American Tradition of Self-Help Medicine and Hygiene, ed. Charles E. Rosenberg (Baltimore: Johns Hopkins University Press, 2003), 21–58; Steven Shapin, "You Are What You Eat': Historical Changes in Ideas about Food and Identity," Historical Research 87, no. 236 (2014): 1–16; Emma Spary, Eating the Enlightenment: Food and the Sciences in Paris (Chicago; London: University of Chicago Press, 2012); Emma Spary, Feeding France: New Sciences of Food, 1760–1815 (Cambridge: Cambridge University Press, 2014); Gentilcore, Food and Health in Early Modern Europe.
- 23 Pieroni and Price, Eating and Healing; Jack N. Losso, Fereidoon Shahidi, and Debasis Bagchi, eds., Anti-Angiogenic Functional and Medicinal Foods (Boca Raton: CRC Press, 2007); Hefferon, Let Thy Food Be Thy Medicine; Philip K. Wilson and W. Jeffrey Hurst, Chocolate as Medicine: A Quest over the Centuries (Cambridge: Royal Society of Chemistry, 2012).
- 24 Londa L. Schiebinger, Plants and Empire (Cambridge: Harvard University Press, 2009); James Delbourgo, "Sir Hans Sloane's Milk Chocolate and the Whole History of the Cacao," Social Text 29, no. 1 106 (March 20, 2011): 71–101; Kathleen S. Murphy, "Translating the Vernacular: Indigenous and

separation between the cultural and the medical realm, uncritically adopting the metaphor of power, and perpetuating imperial binaries, the essays in this special issue seek to rediscover exactly how power operates within the relationship between food and medicine. For example, Shapin argues that the system of Galenic dietetics, with its emphasis on self-knowledge and its aspiration to make sense both medically and morally, supplied not only the tools for the assertion of authority, but also for its contestation. Moore describes how patients reasserted themselves in the face of dietary prescriptions, which they considered incompatible with their lifestyle. And Goodman's article asks how usages of food as medicinal reproduced imperial power relationships. He demonstrates how British diarists in India reasserted claims of British resilience and superiority through their medicinal application of foods.

As historians of food and empire have shown, the colonial dimension of the relationship between food and medicine crucially relied on valuations and devaluations of particular forms of expertise. The food/medicine boundary also corresponds to a division of professional versus lay discourse, of theoretical versus tacit knowledge, of experiment versus experience. The essays in this issue, therefore, contribute to historical debates over the construction of expertise in science and medicine.<sup>25</sup> Expertise in the realm of food was contested not only among specialists, but also by consumers and preparers of food in a variety of roles from patients and nurses to homemakers, chefs, and servants. Shapin asks directly whether Cornaro, a self-medicating lay person, can be considered a dietary expert. Cornaro claimed expert understanding of his own dietary needs even against the advice of physicians. This push-back is also present in Moore's study of diabetes patients, where medical advice was often tempered by the practical realities and tastes of the patients. While outpatient clinics attempted to extend medical expertise into the home, its reach was not always what physicians hoped. Goodman notes the variation between widely propagated medical advice and the actual practices of British colonialists under siege in India. Alcohol, generally out of favor with British medical men by the time of the Indian mutiny in 1857, was relied upon and seen to have health benefits in a situation of particular stress. Haushofer points out that chemically processed foods moved readily between the home and the laboratory, although these two realms of expertise were often seen as sharply separated. Adelman also notes this blurring of the boundaries between spheres of expertise as nurses, housewives, and domestic servants were all offered similar training on the preparation of foods for the sickroom.

The division between specifically professional and lay forms of expertise inherent in the food/medicine divide also opens up questions about the relationship between the professional and the domestic realm. In the 1980s and 1990s, scholars began to look not only to patients, but to healers in non-traditional spheres, including in the home. Impulses from feminist scholarship and cultural history prompted the examination of

African Knowledge in the Eighteenth-Century British Atlantic," Atlantic Studies 8, no. 1 (March 1, 2011): 29-48.

<sup>25</sup> For example Steven Shapin, Never Pure: Historical Studies of Science As If It Was Produced by People with Bodies Situated in Time, Space, Culture and Society and Struggling for Credibility and Authority (Baltimore: Johns Hopkins University Press, 2010).

domestic health manuals, medical recipe collections, and sick food cookery, as evidence of the continuity between lay and expert medical practices. The same sources were also investigated for evidence of the constitution of separate spheres and the relegation of women to the domestic realm. However, recent scholarship on recipes has challenged both interpretations. For example, Alisha Rankin has argued that while the preparation equipment and spaces for medicinal and culinary recipes often overlapped, German recipe collections showed a clear distinction between recipes intended as cookery and those intended for pharmaceutical purposes. "All food could be medicinal," Rankin writes, "but that did not mean that all medicines were seen as food." Medicinal recipes, she warned, should not be seen merely as an extension of women's household work.<sup>26</sup> Building on Rankin's and others' scholarship, the essays in this special issue reconstruct the work that went into creating divisions or continuities between the medical and the domestic realm. In addition to Moore's essay on diabetic dietary guidelines to be followed at home, Adelman's paper shows how invalid cookery texts contributed to establishing the roles of nurse and housewife as professional identities for women, requiring specialized training and expertise. Haushofer shows that the image of the nurse was used to uphold the ambiguity between food and medicine as well as between the medical and the domestic realm as depicted in health food advertisements of the same period.

Questions of expertise over food and medicine were not only theoretically informed but spatially and materially constituted. What determined at a particular point in time that a food was, in fact, food (and not medicine) depended on the places in which it circulated and the material forms in which it was administered. Historians of science and medicine over the last several decades have been particularly interested in the role of spaces in the creation of knowledge, meaning, and authority. The spatial and material aspects of the changing relationship between food and medicine are examined by Moore, who shows the ways in which the spatial and temporal arrangements of patient-physician encounters shaped dietary regimes as much as theoretical medical considerations. He demonstrates how the establishment of the diabetic outpatient clinic extended physicians' reach into patients' lives and schedules, while conversely the issue of diet was pushed into medical focus. Haushofer uses health food packaging, bottle shapes, and modes of preparation to show that the ambiguity between food and medicine was not only theoretically but materially maintained.

Together, the essays in this special issue provide examples that rethink the broad and complex relationship between food and medicine. Going beyond a narrative of diffusion of scientific knowledge of nutrition and disease into the cultural realm of food

<sup>26</sup> Alisha Rankin, Panaceia's Daughters: Noblewomen as Healers in Early Modern Germany (Chicago: University of Chicago Press, 2013), 71–74.

<sup>27</sup> See for example Beat Kümin and Cornelie Usborne, "At home and in the workplace: a historical introduction to the 'spatial turn," History and Theory 52 (2013): 305-318; David Livingstone, Putting Science in Its Place: Geographies of Scientific Knowledge (Chicago: University of Chicago Press, 2003); Erika Dyck and Christopher Fletcher, eds. Locating Health: Historical and Anthropological Investigations of Place and Health (London: Pickering and Chatto, 2011); Sarah Atkinson, Ronan Foley and Hester Parr, "Introduction: spatial perspectives and medical humanities," Journal of Medical Humanities 36, no. 1 (2015): 1-4.

and eating, these essays show that the relationship between food and medicine emerges, at times, as a process of demarcation, maintenance, and co-construction or renegotiation of existing power dynamics. Since this special issue is written from the perspective of historians of science and medicine, it places at the forefront the roles of scientific cultures and theories in reshaping ideas and practices of food. But the essays are also concerned with the converse influence of food on medicine. For example, Haushofer's paper argues that changing understandings of eating and digesting prompted new approaches to disease in the late nineteenth century. By doing so, the essays invite future work that further denaturalizes seemingly self-evident categories such as food and medicine, and thus contributes to a sophisticated understanding of their interaction.