

Nutritionism, Revisited

IN 1968, ANTHROPOLOGIST MARGARET Mead testified before the US Senate Committee on Nutrition and Human Needs. Criticizing the lack of action in the face of growing rates of starvation and malnutrition worldwide, she insisted that “it was important to realize that people don’t eat nutrition. They eat food” (Select Committee on Nutrition and Human Needs 1969: 153). Mead’s punchy utterance is rarely quoted fully or accurately today, but a slightly altered version has made its way into science commentary, wellness blogs, and even the promotional and educational material of the UN Food and Agricultural Organization: the admonition that “people don’t eat *nutrients*, they eat food” (Kirby 1996; Association for Dietetics in South Africa 2015; Food and Agriculture Organization of the United Nations 2015).

Mead’s (mis)quote captures a sentiment that has been growing in the decades since *Gastronomica* first appeared in print in 2001: that our way of researching and relating to food in relation to health has focused too much on nutrients, on the minute constituents of what we cook and ingest, and not enough on everything else that is conveyed in the word “food.” In 2008, *Gastronomica* published an article that captured this sentiment and gave it a memorable name: nutritionism. Written by Science and Technology Studies (STS) and food studies scholar Gyorgy Scrinis, the article would go on to become *Gastronomica*’s most cited article of all time (Dimensions 2025). It argued that meals and ingredients, dietary patterns, the role of taste and pleasure, the religious and cultural functions of eating, the social and economic distribution of accessible and affordable staples, and the environmental implications of certain forms of producing and consuming food, had all been left out of the one-dimensional, nutrient-centric approach that had come to dominate not only the nutrition sciences but our everyday relationship with nourishment (Scrinis 2008).

The article, in short, reflected the multi-dimensional approach to the study of food that the journal in which it appeared represented. You might say (I certainly would) that *Gastronomica* was then one of only a few journals in which

the article could have appeared and made the impact that it did. At the time, *Gastronomica* was unique among academic journals in that it included a range of perspectives well beyond the bounds of food studies as a field and even beyond the realm of academic disciplines more broadly. The Winter 2008 issue alone featured contributions from a chef, a fine artist, a cookbook author, and several scholars. Then and now, *Gastronomica* publishes poems, creative writing, and photo essays side by side with book reviews and academic articles. *Gastronomica* was also unique among food writing venues in that it provided space for deeply researched, long-form articles proposing specialist scholarly interventions. This combination of professional, academic, and artistic voices made for a uniquely diverse readership and ensured that the article achieved broad resonance.

Those of us who have lived a little longer than this journal have seen specific nutrients go in and out of fashion. We have been variously worried about vitamin C, cholesterol, omega-3-fatty acids, protein, and antioxidants. Cereal boxes, TV ads, and changing nutritional guidelines have reminded us to get enough of them or not too much of them. Product packaging told us how many nutrients were in certain foods and how much of a constituent we’d need for a “balanced diet” and a healthy life. The longstanding ubiquity of nutrients might make growing critiques of our nutrient-centric science and eating lives seem obvious in retrospect. But putting a finger on precisely what was wrong with our nutritional culture was neither self-evident nor uncontested at the time Scrinis first coined the concept nutritionism in 2002, and before he laid out the full implications of nutritionism as an “ideology” in his 2008 article, titled “On the Ideology of Nutritionism” (Scrinis 2002, 2008).

There were certainly rumblings of various aspects of nutritionism before the article crystallized and laid them out in detail. Nutritionism was articulated amidst mounting critiques of the US food system and the close ties between the food industry and nutrition science. In 2002 (the same year Scrinis first wrote about nutritionism), Marion Nestle had

published her influential *Food Politics*, an exposé of food industry tactics to influence nutritional guidelines and co-opt nutritional scientific inquiry (Nestle 2002). The same *Gastronomica* issue that housed the 2008 nutritionism article also featured a review by Krishnendu Ray of lawyer Michelle Simon's *Appetite for Profit: How the Food Industry Undermines Our Health and How to Fight Back*, a record of her history of litigation with Big Food companies and their dubious advertising tactics. In a previous issue, geographer Julie Guthman had begun to articulate her critique of calorie-centric models of obesity and reductionist measurement tools of the so-called obesity epidemic such as the Body Mass Index (Guthman 2007b; see also Guthman and DuPuis 2006; Guthman 2007a; for Guthman's full critique of obesity science and politics, see 2011). Historians and STS scholars had charted the discovery or "invention" of certain nutrients, analyzed their popularization and commercialization, and described the subsequent medicalization of eating (Apple 1988; 1996; Carpenter 1994; Horrocks 1995; Ackerman 2005). And various popular books and films—from *Fast Food Nation* and *Super Size Me* to *The Omnivore's Dilemma*—held up the environmental and health effects of our modern industrial food system to a large audience (Schlosser 2001; Spurlock 2004; Pollan 2006).

But the concept of nutritionism did more than simply organize these disparate complaints into a comprehensive diagnostic of an increasingly pressing scientific and societal condition. It provided, at once, a coherent system of analysis, a layered analytical terminology, and an innovative framework for problem-solving entrenched nutritional issues. Nutritionism drew on Science and Technology Studies, the history and philosophy of science, and social theory to identify a paradigm within nutritional research and thinking. Nutrients, the concept suggests, structure nutritional scientific research. They organize patterns of citation by centering nutrient-based analyses as the dominant form of scientific inquiry. Scientific cultures of measurement and experimentation are geared toward the isolation and quantification of nutrients in our food and the detection of nutritional biochemicals in our bodies. Science communication about nutrition has mirrored this tendency, prioritizing discrete claims about individual nutrients (e.g., "Vitamin D prevents illness," or "avoid saturated fats") rather than addressing whole foods or systems of eating. In the commercial sphere, the nutritionism of scientific research facilitated marketing strategies that emphasized nutrient content as health claims: cereals promoted for their fiber, beverages for added vitamins, snack foods for protein content. This made nutrients a powerful advertising language, enabling companies to rebrand or

reposition products as healthy through the manipulation of their constituent parts, rather than through changes to overall quality. Nutrients also infuse conceptions of the body and the self. As eaters, we worry about getting enough of the right nutrients and avoiding the wrong ones. We connect our state of health to the amount of vitamins in our salads and of cholesterol in our blood and blame ourselves and others for exceeding or falling short of our recommended daily allowances.

Nutritionism's radical as well as rapid departure from previous ways of thinking about food and nutrition could not be overstated. Pre-eighteenth-century dietetics was about what foods were *like*—hot, cold, moist, dry—and not what they *contained*. It was about individual bodies in local environments who required tailored diets rather than large populations whose nutrient intakes could be measured, compared, and standardized. And it was about ways of reasoning grounded in analogy, cosmological hierarchy, and sensory experience rather than chemical laboratory apparatus and quantitative measurement. A variety of historical factors played a role in pushing the nutrition sciences toward an increasingly nutrient-based approach between the eighteenth and twentieth centuries. New professional contexts of chemical inquiry, new chemical techniques of analysis, the growing role of science in the organization of emerging nation states, the expansion of empires and the growing number of edible materials bioprosected from imperial territories, and wartime food rationing needs,—all contributed to reinforcing a preference for reductionist models that could be quantified, measured, and communicated in mass campaigns (Holmes 1987, 1989; Albala 2002; Spary 2012; Mudry 2009; Veit 2013; Spary 2014; Shapin 2014; Haushofer 2022; Frohlich 2023; Shapin 2024).

Clear and concise at the surface, the concept of nutritionism encompasses a rich vocabulary and captures many layers of meaning. It is characterized, above all, by *nutritional reductionism*. Out of a myriad of possibilities of evaluating the qualities of food—its freshness, agricultural mode of production, degree of processing, animal or vegetable nature, socioeconomic and taste profile—nutritionism chooses to equate foods' nourishing properties with its biochemical constituents. This reductionism comes with a kind of *nutritional determinism*, the assumption that isolated nutrients alone are responsible for certain bodily processes and health functions, regardless of the form in which they are ingested. Together, reductionism and determinism create an illusion of control, or what the article names as the *myth of nutritional precision*. Cracking the nutrient code, it seemed to many nutrition scientists in the past, might be the crucial step toward unraveling and controlling nutritional health.

No wonder this thinking was soon taken up by governments and industry alike. The former created nutritional guidelines with seemingly straightforward prescriptive formulas for changing the fate of nations through the plates of citizens. The latter used nutritionism to create a *nutritional façade*—an illusion of healthfulness—around existing (but perhaps slow-selling) products and to devise new *nutritionally-engineered foods* through endless *nutritional tinkering*. Butter was replaced with cholesterol-lowering margarine while orange juice suddenly became a favorite vehicle for ingesting Vitamin D.

But the effects of nutritionism were felt more broadly, as the article laid out. Nutritionism seeped into ordinary people's relationship with food and reshaped their perception of their own bodies and their sense of self according to the logic of nutritionism. The *nutricentric person* with a *nutritional gaze* and a *functional approach to their own body* was the result. This was a very different way of being in the world than what had come before and what would follow. The functional body came with an optimizing imperative that was distinct from the harmonizing logic of the pre-eighteenth-century humoral body. It is also different from later frameworks that make sense of the relationship between ourselves and our food. Nutrient-centric notions of the body coexist with what Tripp Rebrovick has termed an “eco-dietetic” outlook, which places eating and digesting in the context of the ecological conditions in which food is produced (Rebrovick 2015). Nutritionism thinking is also distinct from Hannah Landecker's notion of “exposure,” a model of the relationship between food and the self based on nutritional epigenetics, where food becomes a “conditioning environment” that impacts our genes and metabolism across generations (Landecker 2011). Though eco-dietetic and exposure frameworks might have provided new registers for eaters to construct their eating selves, nutritionism's technologies of embodiment—counting calories, tracking vitamins, avoiding bad nutrients—still inform most people's relationship to food in a considerable way.

One of the most insidious consequences of the nutritionism paradigm was its success in “displacing and undermining” other ways of knowing food. It cast assessments of food according to origin, taste, quality, and cultural significance as ignorant, romantic, naive, unenlightened, and fundamentally un-modern. Because of this, the article called for both the creation of new meaningful distinctions between various food qualities and an integration of different levels of approaching and assessing foods: on the molecular level but also on the level of whole foods, dietary patterns, and the larger socioeconomic, cultural, and environmental contexts in which foods are produced and consumed.

A crucial driving force in popularizing the concept of nutritionism was the work of journalist and author Michael Pollan. His bestselling 2008 book *In Defense of Food: An Eater's Manifesto* made a simplified understanding of nutritionism accessible to an even broader readership and ensured that foodies, *New York Times* subscribers, and nutrition scientists alike took note (Pollan 2008). Though criticized for its lack of attention to the racialized and socioeconomic constraints that affect food systems, the book's brevity and aphoristic flair appealed to common sense and assured eaters that knowing what was good for you to eat was not very complicated at all (Guthman 2007b).

In 2013, Scrinis elaborated on the nutritionism framework articulated in the *Gastronomica* article in a book-length exploration of the concept, its applications, its periodization, and its implications. *Nutritionism: The Science and Politics of Dietary Advice* examined in detail the various historical manifestations of nutritionism (which also overlap and coexist), from a concern with nutrient quantities to an emphasis on harmful nutrients and, finally, a notion of functional components of food that enhance certain bodily functions (Scrinis 2013). It also provided a more detailed discussion of an alternative framework to replace nutritionism. This “food quality paradigm” offered new ways of thinking about the notion of “nutritiousness.” It integrated micro- and macro-levels of food—nutrients, whole foods, and dietary patterns—and placed the degree of processing at the center of assessments of nourishment.

Within academia, nutritionism was taken up by a diverse range of scholars and inspired new concepts and new directions of study. Food studies scholars and food geographers welcomed nutritionism as a productive analytical category that made visible the limitations placed on ways of knowing food through modern nutritional scientific inquiry (Guthman 2011; Mudry 2009; Biltekoff 2013, 2024). With its critique of reductionism, nutrient-centrism, and quantification, the vocabulary of nutritionism became a key component of the new sub-field of critical nutrition studies (also discussed in this anniversary issue by Garrett M. Broad) (Biltekoff 2012; Guthman 2014; Mudry et al. 2014). Beyond food studies and critical nutrition studies, the concept has been useful in sociology, development studies and global health, anthropology, gender studies, and the history and philosophy of science. Nutritionism informed the influential concept of *charismatic nutrients* coined by sociologist Aya Kimura, a term that captures the ability of certain nutrients to garner attention and bundle resources (Kimura 2013). Development practitioner, historian, and anthropologist Tom Scott-Smith drew on nutritionism to characterize periods of reductionist nutrition

versus “social nutrition” in global health, and developed his own analytical categories of nutritional *high* and *low modernism* (Scott-Smith 2020). The reductionist tendencies at the heart of nutritionism are also a feature of anthropologist Emily Yates-Doerr’s *nutritional black-boxing*, a term that captures the abstracting impulses of nutritional scientific inquiry. Nutritional black-boxing, according to Yates-Doerr, can produce harmful levels of opacity in nutritional knowledge production and obscure other dimensions of food and health (Yates-Doerr 2012). For gender studies scholar Karen Throsby, nutritionism is at the center of a particular conceptualization of food and health that divorces sugar from its socioeconomic contexts of consumption and enables the continued demonization of the fat body (Throsby 2023). Historians of science have investigated the historical development of nutritionism, and examined, for example, the rise of the nutrition facts label, the gendered nature of nutrient-centric advertising, and the implications of nutritionism for historical conceptions of the self (Frohlich 2023; Contois 2020; Shapin 2024). In my own work, nutritionism has been indispensable to thinking through the historical evolution of the eating and digesting body, and to understand the driving forces—colonialism, capitalism, industrialization, and white supremacy—behind the turn toward nutrient-centric logics (Haushofer 2022).

The clarity of nutritionism has also allowed disparate discontent with the food system and the workings of nutrition science to crystallize into a powerful critique of existing food classifications that produced real change. The importance of the nutritionism concept is evident in the notion of ultra-processed foods (UPFs), a term articulated by Brazilian epidemiologist Carlos Monteiro (Monteiro 2009). For Scrinis’ critique of nutritionism, the degree of processing of a food had played a central role, and the *Gastronomica* article introduced the category of a “reconstituted processed food” which echoes the main tenets of UPFs. Through studies of Brazilian dietary patterns (instead of single nutrients), Monteiro and his team showed the importance of UPFs in Brazil’s transition from undernutrition to obesity. Together with his colleagues, Monteiro then translated these insights into a new system of food classification based on the level of food processing, the so-called NOVA classification. The NOVA classification system (from the Portuguese *nova classificação* meaning new classification) focused on the degree, extent, and purpose of processing rather than nutrient content alone. It reoriented dietary assessments toward food environments and industrial formulation (Monteiro et al. 2019).

The NOVA classification, in turn, provided the basis for a complete rehaul of the Brazilian Dietary Guidelines, articulated in 2014. The guidelines began with a set of principles,

the first of which stated that diet “was more than intake of nutrients” (Monteiro et al. 2015). They emphasized the importance of meals and dietary patterns, the cultural, social, and environmental dimensions of food, and the need to tie nutritional recommendations to principles of sustainability. And for the first time, a set of national guidelines put processing at the center of its recommendations. Scrinis’s 2013 book was listed at the top of a section for further reading accompanying the guidelines, with a note that outlined its importance to the guidelines’ development as a “comprehensive approach to the relationship between food, diet, nutrition and health” (Ministry of Health of Brazil 2015: 131). Since then, a growing number of countries have followed Brazil’s example. Whereas in 2016, only three other countries (Sweden, Germany, and Qatar) had integrated considerations of sustainability and food processing into their dietary guidelines, the FAO recorded a total of twenty-seven countries who had taken a food systems approach to their national nutritional recommendations in late 2024, albeit to varying degrees (Fischer and Garnett 2016; James-Martin et al. 2022; Food and Agriculture Organization of the United Nations: n.d.; UN Nutrition 2024).

The NOVA classification and the new focus on ultra-processed foods (UPFs) promised to usher in a new era of thinking and studying food that would break free of the nutritionism paradigm and transform entrenched ways of eating, knowing, and relating to food. But the lure of nutrient-centric thinking infiltrated and undermined even this seemingly innovative approach. As nutrition scientists struggled to translate cultural anxieties around processing into measurable differences between edible consumables, they once again defaulted to characterizing foods according to their chemical constituents, this time markers of extreme industrial processing. Instead of unraveling the impact of particular kinds of processing, researchers strive to identify “ingredients that are characteristic of ultra-processed foods,” such as high-fructose corn syrup, hydrogenated oils, and emulsifiers, and then embark on finding the “mechanisms” by which these substances harm our health (Monteiro et al. 2019; Juul et al. 2021).

Certainly, more studies have focused on whole foods and dietary patterns, and more researchers, especially those working in the field of public health nutrition, have taken a broader approach to dietary health. But integrating the various levels of nutritional analysis—nutrients, foods, dietary patterns—has proven difficult, as has placing such nutritional scientific investigations in their broader social and economic context (Penders et al. 2017; Scrinis and Monteiro 2022). A 2005 initiative by a group of public health nutritionists and

other scholars and practitioners working in the field of nutrition, the so-called *New Nutrition Science Project*, set out to integrate social and economic dimensions into nutritional scientific enquiry. But it also insisted that nutrition science fundamentally remain a biological science and never fully succeeded in reaching even its comparatively modest goals (Cannon and Leitzmann 2005; Beauman et al. 2005; Schubert et al. 2012). Nutritionism is alive and well in global health, where nutritionally-reductive definitions of, and approaches to, malnutrition continue to sideline more structural approaches to hunger and poverty (Street 2015; Scrinis 2020a; Yates-Doerr 2024). And despite the seemingly radical departure from conventional ways of nutritional thinking promised by the framework of UPFs, a reductive and constituent-centric logic has once more infused research and science communication and has opened up the ultra-processed food movement to the same industry tactics that plagued nutrient-centric approaches to food in the first place. The focus on harmful markers of industrial processing, for instance, has allowed food producers to pretend the solution lies merely in reformulating their products to avoid certain constituents, rather than making meaningful changes to overall quality or production methods (Scrinis and Monteiro 2018; Scrinis 2020b). This is why Scrinis has recently teamed up with Monteiro to emphasize that understandings of UPFs must operate not just on the level of nutritional biochemistry, but also on the level of foods and dietary patterns. (Scrinis and Monteiro 2022).

Margaret Mead may have advocated for a more multidimensional approach to nutrition in the late 1960s, and her quest has certainly found broader resonance since then, not least because of the persuasive analytical framework articulated by “nutritionism.” But her testament before the Select Committee on Nutrition and Human Needs also serves as a stark reminder of the resilience of the nutritionism paradigm. Read in context, her assertion was not so much a dismissal of reductionist approaches to food but a temporary concession, a preamble to a more important point: that regardless of how much food could be made available, what mattered was its nutritional value, which in turn was determined by its nutrient content. Americans ate too much, but not the right foods, in Mead’s opinion, and only a deep knowledge of foods’ nutritional composition, together with a food procurement program, could guarantee a well-nourished population. It is an irony of history that one of the few ways we remember one of the few women in nutrition completely misrepresents her point.

The social sciences and humanities are often maligned for their “jargon,” but exercises in naming and ordering serve an

indispensable function in the production of knowledge. They can help us recognize the kinds of intellectual path-dependencies—in this case, the professional, epistemological, methodological, and cultural centering of nutrients—that those working within scientific fields often seem to find so hard to shake. They can clarify the nature, extent, and genealogy of a problem, render it concrete and perceptible, and therefore make it easier to solve. They can help us think ourselves out of ways of thinking that no longer serve us. With its apposite terminology and deep theoretical grounding, the concept of nutritionism made visible a seemingly fixed and self-evident way of approaching nourishment that was deeply specific to its historical context and had long outlived its time and utility. Through its wide reach, it opened up alternative conversations about food and enabled scientists and eaters alike to view the nutrient-centric entanglement of our food system, our food industry, and our nutrition sciences as less inevitable.

Knowledge production requires a diverse set of thinkers and equally diverse mediums of knowledge diffusion. *Gastronomica*’s role in cultivating transdisciplinary and critical reflections remains vital. As our food systems continue to elude easy taming through single-disciplinary approaches, we need not only new scientific models but also new rhetorical and conceptual tools—tools that draw from the humanities and social sciences as much as the sciences. A future beyond nutritionism may depend on our ability to not only name the limits of our paradigms, but to imagine and communicate alternatives across registers. 

REFERENCES

- Ackerman, Michael. 2005. “Interpreting the ‘Newer Knowledge of Nutrition’: Science, Interests, and Values in the Making of Dietary Advice in the United States, 1915–1965.” PhD diss., University of Virginia.
- Albala, Ken. 2002. *Eating Right in the Renaissance*. University of California Press.
- Apple, Rima. 1988. “‘They Need It Now’: Science, Advertising and Vitamins, 1925–1940.” *Journal of Popular Culture* 22.3.
- . 1996. *Vitamania: Vitamins in American Culture*. Health and Medicine in American Society. Rutgers University Press.
- Association for Dietetics in South Africa. 2015. “People Don’t Eat Nutrients, They Eat Food.’ Meet the Dietitian” Nutrition Confidence Blog. May 22, 2015. Accessed August 12, 2025. <https://nutritionconfidence.wordpress.com/2015/05/22/people-dont-eat-nutrients-they-eat-food-meet-the-dietitian/>.
- Beauman, Christopher, Geoffrey Cannon, Ibrahim Elmadfa, Peter Glasauer, et al. 2005. “The Giessen Declaration.” *Public Health Nutrition* 8.6a: 783–86.
- Biltekoff, Charlotte. 2012. “Critical Nutrition Studies.” In *The Oxford Handbook of Food History*, edited by Jeffrey Pilcher. Oxford University Press.
- . 2013. *Eating Right in America: The Cultural Politics of Food and Health*. Duke University Press.

- . 2024. *Real Food, Real Facts: Processed Food and the Politics of Knowledge*. University of California Press.
- Cannon, Geoffrey, and Claus Leitzmann. 2005. "The New Nutrition Science Project." *Public Health Nutrition* 8.6a: 673–94. <https://doi.org/10.1079/PHN2005819>.
- Carpenter, Kenneth. 1994. *Protein and Energy: A Study of Changing Ideas in Nutrition*. Cambridge University Press.
- Contois, Emily J. H. 2020. *Diners, Dudes, and Diets: How Gender and Power Collide in Food Media and Culture*. University of North Carolina Press.
- Dimensions. 2025. Accessed August 12, 2025. <https://www.dimensions.ai>.
- Fischer, Carlos Gonzalez, and Tara Garnett. 2016. *Plates, Pyramids, Planet. Developments in National Healthy and Sustainable Dietary Guidelines: A State of Play Assessment*. Food and Agriculture Organization of the United Nations and the Food Climate Research Network.
- Food and Agriculture Organization of the United Nations. 2015. "People Don't Eat Nutrients, They Eat Food." Interview with Boitshepo Giyose, Senior Nutrition Officer, FAO. 3:48. YouTube. March 24, 2015. Accessed August 12, 2025. <https://www.youtube.com/watch?v=S6tSujt-SYw>.
- . 2025. "Dietary Guidelines." n.d. Accessed July 10, 2025. <http://www.fao.org/nutrition/education/dietary-guidelines/home/en/>.
- Frohlich, Xaq. 2023. *From Label to Table: Regulating Food in America in the Information Age*. University of California Press.
- Guthman, Julie. 2007a. "Commentary on Teaching Food: Why I Am Fed Up with Michael Pollan et al." *Agriculture and Human Values* 24.2: 261–64. <https://doi.org/10.1007/s10460-006-9053-x>.
- . 2007b. "Can't Stomach It: How Michael Pollan et al. Made Me Want to Eat Cheetos." *Gastronomica* 7.3: 75–79. <https://doi.org/10.1525/gfc.2007.7.3.75>.
- . 2011. *Weighing In: Obesity, Food Justice, and the Limits of Capitalism*. University of California Press.
- . 2014. "Introducing Critical Nutrition: A Special Issue on Dietary Advice and Its Discontents." *Gastronomica* 14.3: 1–4. <https://doi.org/10.1525/gfc.2014.14.3.1>.
- Guthman, Julie, and Melanie DuPuis. 2006. "Embodying Neoliberalism: Economy, Culture, and the Politics of Fat." *Environment and Planning D: Society and Space* 24.3: 427–48. <https://doi.org/10.1068/d3904>.
- Haushofer, Lisa. 2022. *Wonder Foods: The Science and Commerce of Nutrition*. University of California Press.
- Holmes, Frederic. 1987. *Lavoisier and the Chemistry of Life: An Exploration of Scientific Creativity*. University of Wisconsin Press.
- . 1989. *Eighteenth-Century Chemistry as an Investigative Enterprise*. Office for History of Science and Technology, University of California at Berkeley.
- Horrocks, Sally. 1995. "The Business of Vitamins: Nutrition Science and the Food Industry in Inter-War Britain." In *The Science and Culture of Nutrition, 1840–1940*, edited by Andrew Cunningham and Harmke Kamminga. Rodopi.
- James-Martin, Genevieve, Danielle L. Baird, Gilly A. Hendrie, Jessica Bogard, et al. 2022. "Environmental Sustainability in the National Food-Based Dietary Guidelines: A Global Review." *The Lancet Planetary Health* 6.12: e977–86. [https://doi.org/10.1016/S2542-5196\(22\)00246-7](https://doi.org/10.1016/S2542-5196(22)00246-7).
- Juul, Filippa, Georgeta Vaidean, and Niyati Parekh. 2021. "Ultra-Processed Foods and Cardiovascular Diseases: Potential Mechanisms of Action." *Advances in Nutrition* 12.5: 1673–80. <https://doi.org/10.1093/advances/nmab049>.
- Kimura, Aya Hirata. 2013. *Hidden Hunger: Gender and the Politics of Smarter Foods*. Cornell University Press.
- Kirby, Jane. 1996. "New Dietary Guidelines: New Opportunity for Consumer Education." *Journal of the Academy of Nutrition and Dietetics* 96.3: 228. [https://doi.org/10.1016/S0002-8223\(96\)00066-1](https://doi.org/10.1016/S0002-8223(96)00066-1).
- Landecker, Hannah. 2011. "Food as Exposure: Nutritional Epigenetics and the New Metabolism." *Biosocieties* 6.2: 167–94.
- Ministry of Health of Brazil. "Dietary Guidelines for the Brazilian Population." Brasilia-DF. 2015. Accessed August 12, 2025. https://bvsms.saude.gov.br/bvs/publicacoes/dietary_guidelines_brazilian_population.pdf.
- Monteiro, Carlos A. 2009. "Nutrition and Health. The Issue Is Not Food, nor Nutrients, so Much as Processing." *Public Health Nutrition* 12.5: 729–31. <https://doi.org/10.1017/S1368980009005291>.
- Monteiro, Carlos A., Geoffrey Cannon, Mark Lawrence, Maria Laura da Costa Louzada, and Priscila Pereira Machado. 2019. "Ultra-Processed Foods, Diet Quality, and Health Using the NOVA Classification System." Report. Food and Agriculture Organization of the United Nations.
- Monteiro, Carlos A., Geoffrey Cannon, Renata B. Levy, Jean-Claude Moubarac, et al. 2019. "Ultra-Processed Foods: What They Are and How to Identify Them." *Public Health Nutrition* 22.5: 936–41. <https://doi.org/10.1017/S1368980018003762>.
- Monteiro, Carlos A., Geoffrey Cannon, Jean-Claude Moubarac, Ana Paula Bortoletto Martins, et al. 2015. "Dietary Guidelines to Nourish Humanity and the Planet in the Twenty-First Century. A Blueprint from Brazil." *Public Health Nutrition* 18.13: 2311–22. <https://doi.org/10.1017/S1368980015002165>.
- Mudry, Jessica. 2009. *Measured Meals: Nutrition in America*. SUNY Press.
- Mudry, Jessica, Jessica Hayes-Conroy, Nancy Chen, and Aya H. Kimura. 2014. "Other Ways of Knowing Food." *Gastronomica* 14.3: 27–33. <https://doi.org/10.1525/gfc.2014.14.3.27>.
- Nestle, Marion. 2002. *Food Politics: How the Food Industry Influences Nutrition and Health*. University of California Press.
- Penders, Bart, Anna Wolters, Edith F. Feskens, Fred Brouns, et al. 2017. "Capable and Credible? Challenging Nutrition Science." *European Journal of Nutrition* 56.6: 2009–12. <https://doi.org/10.1007/s00394-017-1507-y>.
- Pollan, Michael. 2006. *The Omnivore's Dilemma: A Natural History of Four Meals*. Penguin Books.
- . 2008. In *Defense of Food: An Eater's Manifesto*. Penguin.
- Rebrovick, Tripp. 2015. "The Politics of Diet: 'Eco-Dietetics,' Neoliberalism, and the History of Dietetic Discourses." *Political Research Quarterly* 68.4. Sage Journals. <https://doi.org/10.1177/1065912915605183>.
- Schlosser, Eric. 2001. *Fast Food Nation: The Dark Side of the All-American Meal*. Harper Perennial.
- Schubert, Lisa, Danielle Gallegos, Wendy Foley, and Claire Harrison. 2012. "Re-Imagining the 'Social' in the Nutrition Sciences." *Public Health Nutrition* 15.2: 352–59. <https://doi.org/10.1017/S1368980011001297>.
- Scott-Smith, Tom. 2020. *On an Empty Stomach: Two Hundred Years of Hunger Relief*. Cornell University Press.
- Scrinis, Gyorgy. 2002. "Sorry, Marge." *Meanjin* 61.4: 108–16.
- . 2008. "On the Ideology of Nutritionism." *Gastronomica* 8.1: 39–48.
- . 2013. *Nutritionism: The Science and Politics of Dietary Advice*. Columbia University Press.
- . 2020a. "Reframing Malnutrition in All Its Forms: A Critique of the Tripartite Classification of Malnutrition." *Global Food Security* 26. Accessed August 12, 2025. <https://findanexpert.unimelb.edu.au/scholarlywork/1458505-reframing-malnutrition-in-all-its-forms—a-critique-of-the-tripartite-classification-of-malnutrition>.
- . 2020b. "Ultra-Processed Foods and the Corporate Capture of Nutrition." *BMJ* 371. <https://doi.org/10.1136/bmj.m4601>.
- Scrinis, Gyorgy, and Carlos A. Monteiro. 2018. "Ultra-Processed Foods and the Limits of Product Reformulation." *Public Health Nutrition* 21.1: 247–52. <https://doi.org/10.1017/S1368980017001392>.

- . 2022. “From Ultra-Processed Foods to Ultra-Processed Dietary Patterns.” *Nature Food* 3.9: 671–73. <https://doi.org/10.1038/s43016-022-00599-4>.
- Select Committee on Nutrition and Human Needs. 1969. *Hearings before the Select Committee on Nutrition and Human Needs*. Vol. 13. US Government Printing Office.
- Shapin, Steven. 2014. “‘You Are What You Eat’: Historical Changes in Ideas about Food and Identity.” *Historical Research* 87.236: 1–16.
- . 2024. *Eating and Being: A History of Ideas about Our Food and Ourselves*. University of Chicago Press.
- Spary, Emma. 2012. *Eating the Enlightenment: Food and the Sciences in Paris*. University of Chicago Press.
- . 2014. *Feeding France: New Sciences of Food, 1760–1815*. Cambridge University Press.
- Spurlock, Morgan (writer and director). 2004. *Super Size Me*. Samuel Goldwyn Films/Roadside Attractions.
- Street, Alice. 2015. “Food as Pharma: Marketing Nutraceuticals to India’s Rural Poor.” *Critical Public Health* 25.3: 361–72.
- Throsby, Karen. 2023. *Sugar Rush: Science, Politics and the Demons of Fatness*. Manchester University Press.
- UN Nutrition. “Dietary Guidelines: The Next Generation Takes on Sustainability.” November 11, 2024. Accessed August 12, 2025. <https://www.unnnutrition.org/news/dietary-guidelines-next-generation-takes-sustainability>.
- Veit, Helen. 2013. *Modern Food, Moral Food: Self-Control, Science, and the Rise of Modern American Eating in the Early Twentieth Century*. University of North Carolina Press.
- Yates-Doerr, Emily. 2012. “The Opacity of Reduction: Nutritional Black-Boxing and the Meanings of Nourishment.” *Food, Culture & Society* 15.2: 293–313. <https://doi.org/10.2752/175174412X13233545145381>.
- . 2024. *Mal-Nutrition: Maternal Health Science and the Reproduction of Harm*. University of California Press.