A public health approach to our food system

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Food systems are complex, with many components and many connections. We can view the food system through a variety of lenses: flow of product, flow of money, politics of regulations and policies, food security and social justice, impact on public health, impact on the environment, and more. Descriptions of what constitutes the food system vary across these different approaches. Thus a book titled Introduction to the U.S. Food System is sure to be an ambitious volume, and a thick volume. I was daunted by the idea of reading through such a text. Fortunately, it is a good read.

This book is intended to be the text for an introductory course at the upper-division undergraduate or graduate level. I teach upper-division courses in biology, and the level of complexity would be just right for my students. Each of the 18 chapters provides an overview of one aspect of the food system and includes enough depth to anchor the discussion in concrete examples. The chapters are the right length for daily reading assignments for students or for good pacing for readers not taking a class. Each chapter includes a number of “Perspectives,” sidebars that bring in additional

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information and viewpoints. The editor did a nice job of making sure each chapter was written at a similar level of detail and in a similar voice. That’s an especially impressive task with more than 100 authors, including academic researchers, food justice advocates, health-care workers, and others working across the food system. The tone is informative and challenges the status quo without being vehement. Each chapter includes a list of learning objectives, definitions listed to the side throughout the text, a summary, and discussion questions, all of which should help students as they read and think through the information. The graphical layout is uncluttered and appealing. If (though I hope it’s “when,” not “if”) I were to teach an introductory food systems class, I would use this book. I would also recommend it to anyone who wants to get up to speed on the various aspects of our food system.

After an introductory chapter, the next chapters are organized into sections titled Outcomes, which includes health, environment, and equity; Drivers, which includes economics, policy, culture and society, and marketing; Food Supply Chain, which includes plants, animals, and packaging; and Food in Communities and on Tables, which includes consumption, nutrition, food environments, and interventions. I found myself nodding in agreement all the way through the book. Rather than summarize each chapter, I note below what to me were new ideas or new ways of viewing specific aspects of our food system, or that were especially well-stated, but sometimes underappreciated, concepts.

I especially appreciated one of the first Perspective sidebars that describes the need for resilience in the food system—not just efficiency or even “just” sustainability. As a complex, adaptive system, the food system needs to be able to absorb shocks, and even catastrophes. The food system needs redundancies, which may involve some inefficiencies. For example, along with the large commodity producers, we need small and medium-sized farms with the diversity of crops and animals they grow and the skill sets they bring. Small enterprises are not always efficient, but can add resiliency. We also need a food system in which all the participants—from farm owners, farm laborers, those in support businesses, those who work throughout the value chain, and the eaters—have a voice in how the system runs so that the benefits do not go to one group of people while the costs and risks go to another.

A later Perspective reminds readers that advocacy around the food system must be done carefully and with cultural sensitivity, so that it does not sound like we are trying to make everyone eat like an “enlightened” one (who is probably young, middle-class, and white). The book does a nice job of providing viewpoints from a wide range of people all across the food system. One set of sidebars is an excellent point and counterpoint on whether we should restrict SNAP purchases to only “healthy” foods. Such discussions throughout the text will help readers without personal experience of food insecurity gain a new outlook.

Of all the topics in my work in food systems, I have the least amount of training in economics. Thus I found that the chapter on economics in the food system provided the most new information to me. It explained economic aspects in an understandable way and showed useful examples, such as quantifying the effects of taxes and subsidies. The authors also introduce behavioral economics with some ideas about effective interventions, while also pointing out that such interventions can be seen as paternalistic.

The chapter on food, culture, and society reminds us of the social significance of food and the importance of understanding how food is viewed differently in different groups. An interesting, but slightly puzzling, sidebar relates the “dystopian imaginings [related to] industrial agriculture” to zombie books and movies. The chapter on marketing includes information on the vast amount of money spent on advertising sugar-sweetened beverages and the resulting high demand for them.

Another message not often covered in discussions of food systems (and not covered in this text) is that we have fewer farm families because there are so many easier ways to make more money. We’ll have to come up with an effective way to promote the positive aspects of staying in or getting into farming.

I appreciated the chapter on food packaging, a
topic not always covered in discussions of food systems. Packaging can be used to coax consumers to purchase less-than-healthy foods, but as the chapter reminds us, packaging and food processing should not be viewed entirely negatively. Besides its obvious advantage in enhancing food safety, packaging can also help people choose healthier options. Similarly, the chapter on food distribution is a balanced look at the many steps along the value chain between harvest and table. It’s not all just middlemen skimming off their part. Sometimes it is, and sometimes farmers end up being price-takers from the major retailers, but there is also value in the value chain.

The discussion of food environments was written well, too. The look of the neighborhood as well as the displays in the stores and labels on the food packages can help make the healthy choice the more likely choice.

The book concludes with a chapter on interventions for healthy eating, which provides a good overview of health behavior theory (such as theory of planned behavior and social cognitive theory). A sidebar reminds us to use inclusive language in health messaging.

This book represents a view of the food system from the point of view of people working to make it more sustainable, resilient, and just. It’s easy to read and carries the story along smoothly. It does not suppose to provide a recipe for fixing the food system, but rather shows the various pieces and connections involved and explains that while the system needs to be fixed, it won’t be easy. Whether you’re an old hand in food system work and want to see the other pieces with which you may not be as familiar, or are new to food system work and want a good overview, you will do well to read through this text.