

Review of:

***Cook, Taste, Learn: How the Evolution of Science Transformed the Art of Cooking***

Guy Crosby. New York: Columbia University Press, 2019. Pp. xi +185, preface, bibliography, index.

Review by: Jacqueline Thursby

In this text, Guy Crosby proposes to “...explore the evolution of science and how it has transformed the art of cooking right up to the present” (xi). He presents an informed and accessible work of art in itself, with the purpose of raising consciousness about healthy and consistent scientific food preparation for today’s home and professional cooks. Crosby, who is affiliated with Harvard’s School of Health as well as a science editor for several popular food-related magazines, has assembled another work for serious culinary readers and cooks as well as providing clear writing for the less experienced. He has revealed basic nutritional history and methods in an understandable and friendly discussion, not without an occasional touch of light humor.

To this reviewer, his discussion is as gripping as a good novel—a page turner, but one that clearly informs. Historically, food and the process of bringing it to its peak perfection before serving and consuming is ongoing. Discoveries for culinary improvement have been both accidental and deliberate, lost and found, created and recreated; in the present day, many long-asked questions about food are being answered. These questions include: “What is really going on here?” or “Why was this so good last time but not this time?” Answers are being pursued and answered in culinary science laboratories and gourmet kitchens around the world and answers are disseminated through a variety of food-related media.

Crosby begins with a frontispiece reproduction of the painting, *The Marvelous Sauce* (circa 1890) by Georges Vibert (French, 1840-1902). It visualizes a moment in time when delight in a flavor was shared—a gift to the senses across social and cultural boundaries. Cooking, tasting, and learning about foods are universal pleasures, and the author is one among many food scientists helping all serious cooks, amateur or professional, to learn consistently to produce excellent dishes.

The text unfolds with divisions of chronological history, discoveries and development of various foods, and scientific, biological, anthropological, and culinary investigation into what preparation methods consistently succeed. Using text pages of varied but consistent colors, the reader can easily choose their order of reading. Some pages delve more deeply into science and technical discoveries, others are lighter and discuss contemporary and past practices. Several chapters include illustrative recipes through which the just-discussed scientific principles can be tested.

In less than 200 pages, Crosby leads the reader from the discovery of fire and cooking, and the evolution of human culinary skills, to the final paragraphs of the text which remind us that, “The science driven changes in the way we cook will help reduce the risk of

developing chronic diseases such as heart disease, stroke obesity, types of diabetes, dementia, and many forms of cancer” (166).

Chapter 1 (2 million-12,000 years ago): Discussing the evolution of humans and food, Crosby tells us that “Both taste and smell appear to have evolved for survival and may be among the earliest senses developed although not all modern-day species react to the same tastes and smells” (2). This leads to an informative discussion of the multiple tastes we humans can discern, and why.

Chapter 2 (12,000-1499): Crosby discusses the Agricultural Revolution, but goes beyond referenced history. It includes a cogent explanation of gluten: What is it? How is it formed? How can those sensitive to its presence in the body enjoy wheat and other grains without becoming ill?

Chapter 3 (1500-1799): Early scientific experiments begin to lead to creativity in cooking. Presently, food science departments and classes are appearing in more colleges and universities. These are rooted in the home-centered classes of the past, but the recognition of food as a legitimate science began was beginning to emerge in this period. Experiments, both successful and unsuccessful, are described, and progress continued regardless scientific setbacks. Crosby explains that there are many necessary and unnecessary steps taken today in daily food preparation. Knowing the basic common chemical structure of such common foods of waxy potatoes and mealy potatoes, for instance, and their behavior under varied temperatures and variations, teaches the cook about optimal choice and procedure.

Chapter 4 (1800-1900): The discovery and science of atoms led to a new understanding of the basic elements that underlie our food. In the preface of this text (xii), Crosby mentions the impact of the William Blake poem “Auguries of Innocence” on him, and how it opened the realization that atoms upon atoms are what build the structure of matter. The concept, he explains, enhances using the ingredients with the understanding of how they are acting and interacting upon one another.

Chapter 5 (1901-Present): Here, Crosby reminds the reader that taste and flavor are different responses to food. Taste, for instance, may give the sensation of sweet or salty, but that neglects the fragrance or aroma which gives the sensation of flavor its full impact. This chapter also includes a discussion of *terroir*, French for a “taste of place.” Foods grown in one region may taste and look different because of variations in soil and climate. “For this reason,” Crosby writes, “French wines are named for the area grapes are grown rather than for the variety of grape, as is done in the United States” (98). This extends to other foods such as honey, cheese, and olive oil.

Chapter 6: This chapter recognizes key figures and well-received books and publications concerning developing and practicing culinary science that have helped set healthy cooking principles on fire. It includes clear explanations concerning the health impact of various ingredients and tips for how to choose the best foods at the market.

Chapter 7: Crosby contrasts good and bad carbohydrates, fats, and proteins, including various oils. This chapter continues to provide information and insights helpful to home and professional cooks.

I would highly recommend this text to those serious cooks interested in consistency and optimum nutrition in food preparation. It is not so scientific as to be opaque, but does reference more detailed studies for the reader to pursue if desired.