Books

On Food and Cooking
The Science and Lore of the Kitchen
by Harold McGee
Charles Scribner's Sons......$29.95

This is a splendidly encyclopedic treatment of a subject of direct interest to anyone who eats, drinks, or cooks. The migrations of the earth's crust and the formation of continents, as these relate to the distribution of plants; the anatomy and physiology of taste and smell; the biochemistry of metabolism; the organic chemistry of carbohydrates, fats, and proteins; the physical aspects of emulsions — these are examples of the fundamental aspects of the subject that are presented with a minimum of impenetrable scientific jargon. In general, McGee has got the basic facts and principles right, though the discussion on boiling water (page 584) was not one the author would have been taught during his time as a Caltech undergraduate (at least in chemistry). The book also includes marvelously detailed treatments of the historical origins of modern practices, the derivations of the terminology of the kitchen, and a great many amusing anecdotes. It's all here — including the physiological and biochemical basis of the morning-after hangover.

In a sense the book is like a pleasant dinner with good friends — fine food and drink together with unhurried, interesting, amiable conversation. The progress of the dinner provides some order to the evening, as the various aspects of food — milk, eggs, meats, vegetables, grains, breads, sauces, sugars, wine and spirits — provide order for the book. But during any particular course of the dinner, the conversation roams freely, as in any chapter of the book the treatment is discursive and even at times repetitive. The total information of the book could have been told in far fewer pages but then with far less charm.

This is not a book meant to be read at one time from cover to cover as a detective novel, but one in which the reader can spend an occasional relaxed hour learning, for example, the intricacies of why egg whites produce a particularly firm foam if beaten in a copper bowl. It is also not a book of recipes, nor is it a place to find instantly the remedy for a Bernaise sauce that separates minutes before it's due on the table. Rather, in the latter case, there's an eight-page treatise on the subject, including subheadings such as Double Layers and Vinegar; Vinegar Prevents Protein Coagulation; The Emulsifiers in Egg Yolk. How to keep vegetables green receives a three-page historical discussion, including the chemistry of inorganic cations bound to chlorophyll and a quotation from the Roman, Apicius, "ommis holus smaragdinum fit, si cum nitro coquatur" (all green vegetables will be made emerald green, if they are cooked with soda); this procedure has, however, many unfortunate side effects. Mrs. Lincoln of the Boston Cooking School in 1883 knew the correct remedy (put the vegetables into large amounts of rapidly boiling water and leave the top off the pan for the first few minutes of cooking), a solution that becomes apparent two pages into the discussion.

In short, a reader impatient for quick, terse answers might be frustrated, but one prepared to accept the leisurely, charming pace will be constantly rewarded by this wonderful book.

- John H. Richards, Professor of Organic Chemistry

McGee received his BS from Caltech in 1973 (his wife, Sharon Long, was also class of 1973), and he also holds a PhD in English literature from Yale. A chapter, "Ripeness Is All," from this book appeared in the February 1981 E&S.
The Californian Harold McGee's On Food and Cooking: The Science and Lore of the Kitchen, first published in 1984, has undergone complete reconstruction and significant retitling. He has made the jump from mere author to timeless authority, earning that particular beatification granted Brewer, Roget, Banister Fletcher and Gray (we'll ignore the other current fad evinced by Ainsley Harriott's Friends and Family Cookbook). Chapters on nutrition, physiology and food additives are ditched to make way for greatly expanded sections on the ingredients themselves and to allow McGee room to speculate further on the history of foodstuffs and cookery as well as on the molecular characteristics of food flavours. On Food and Cooking pioneered the translation of technical food science into cook-friendly kitchen science and helped give birth to the inventive culinary movement known as "molecular gastronomy." Though other books have now been written about kitchen science, On Food and Cooking remains unmatched in the accuracy, clarity, and thoroughness of its explanations, and the intriguing way in which it blends science with the historical evolution of foods and cooking techniques. Among the major themes addressed throughout this new edition are: I wanted something that answered a bit more of the Why? This friend suggested that I hunt down something on the topic that approached things from a scientific perspective, and while looking I stumbled upon McGee.