MARION NESTLE on the EARLY NUTRITIONISTS

Cookbooks have always aimed to keep readers happy and healthy, but basing them on concepts of nutrition is a twentieth-century phenomenon. Although the origins of nutrition science can be traced to Hippocrates in ancient Greece and the work of eighteenth- and nineteenth-century chemists and physiologists, most of what is known about nutrients and their functions in the body was discovered in the last century. Scientists identified the role of calories in energy production, "micronutrients" (vitamins and minerals) in deficiency diseases, and "macronutrients" (proteins, fats, and carbohydrates) in chronic diseases. Cookbook authors quickly translated these discoveries into dietary advice and recipes.

Calorie science begins with the USDA (United States Department of Agriculture) scientist Wilbur Atwater in the 1890s. Atwater measured the number of calories provided by macronutrients in hundreds of foods, and those needed by people of different occupations. His discoveries made Atwater the most famous scientist in America.

Knowing nothing about nutrition, however, his contemporaries had strong opinions about diet and health. Horace Fletcher, the "Great Masticator," insisted that food must be chewed until it liquefied. The Seventh-day Adventist Kellogg brothers, John Harvey and W.K., ran a sanitarium in Battle Creek, Michigan, where they fed the rich and famous vegetarian diets, nut butters, and early versions of Com

Flakes, accompanied by yogurt enemas.

Nutrition science entered diet books in 1918 when a California doctor, Lulu Hunt Peters, published Diet and Health with Key to the Calories. Her title echoed Mary Baker Eddy's Christian Science text of 1875, Science and Health with Key to the Scriptures, but Peters based her book firmly on Atwater. She divided the food world into 100calorie portions and 1,200-calorie reducing diets. That the book went through seventeen editions by 1922 surprised Peters, who had gone to work with the Red Cross in Bosnia during World War I and returned to find herself famous. Her advice was sensible and recognized the need for foods containing the newly discovered but not yet named "vital elements" (micronutrients), and the book was illustrated with charming stick figures drawn by her tenyear-old nephew. Peters continued the Fletcherist

tradition: "If there is one thing more important than another, it is through mastication" [her emphasis].

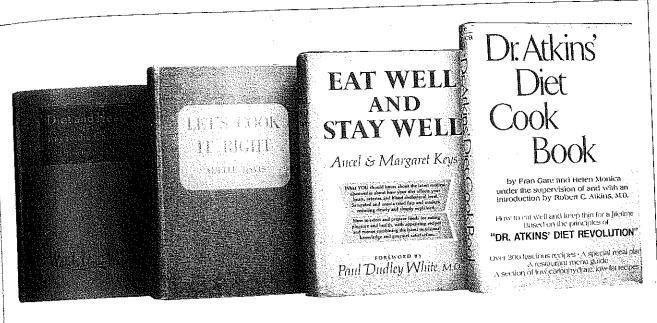
Until the early 1900s, scientists understood that diseases such as scurvy, beriberi, and pellagra were caused by diet but did not know how. As they identified vitamins and minerals one after another, government agencies and cookbook writers enthusiastically embraced these discoveries. In 1917 the USDA issued How to Select Foods, a pamphlet that organized the principal food sources of micronutrients in groups: fruit, vegetables, meat, dairy, cereals, and so forth. Balanced diets were to include foods

from all groups.

J. I. Rodale and other proponents of organic farming and sustainable agriculture argued that vital nutrients were destroyed by industrial farming and processing methods. White bread, they said, offered nothing but "empty calories." Clive McCay, a professor of animal nutrition at Cornell University, thought the nutritional deficiencies of white bread could be solved by adding soy flour, dry milk solids, and wheat germ to the dough. He demonstrated that laboratory rats survived splendidly when fed nothing but his bread topped with butter or margarine, and bread baked according to his formula was served to great acclaim at a state dinner in Albany in 1943.

The nutritionist Adelle Davis seized on the importance of micronutrients in her 1947 Let's Cook It Right, a book that ruined the childhoods of many of my friends whose parents packed every meal with whole-grain bread, wheat germ, cod liver oil, brewers' yeast, blackstrap molasses, peanut flour, chopped-up green vegetables, and as much protein as possible. "Serve eggs and cheese daily," Davis insisted, but vitamins mattered most. Her Let's Eat Right to Keep Fit (1954) attributed allergies, poison ivy, fatigue, leg cramps, heart disease, and even polio to vitamin deficiencies.

When Marion Becker signed on as coauthor of the 1951 edition of the Joy of Cooking, the influence of Adelle Davis was evident, if not acknowledged. The nutrition section that begins on page 931 describes the hazards of vitamin deficiencies and the dangers of incomplete vegetable protein. Joy advised readers to reduce sweets, starchy foods, and sweetened beverages not because of their calories but because they would lead to a "deficiency of vitamin B complex."



The 1962 Joy of Cooking moved nutrition to the front of the book, still echoing Davis. It bemoaned the "devitalizing" effects of additives, chemicals, and preserving methods, and called for protein foods in every meal. It even included a recipe for McCay's Cornell Triple-Rich Flour Formula (which lasted until the 1997 edition). But precepts such as "fill your market basket so that it holds a minimum of 2 fruits and 3 vegetables daily" seem thoroughly modern even though their purpose was to stave off nutrient deficiencies. Today such advice aims to prevent obesity, heart disease, diabetes, and other chronic diseases that have become the leading health problems related to diet.

Following World War II, cardiologists were confronted with rising rates of heart disease. Noting how little heart disease occurred in Italy, the Minnesota cardiologist Ancel Keys judged the cause of the American epidemic as eating too much meat, sugar, and processed foods. In 1959 he and his wife, Margaret, wrote Eat Well and Stay Well. Although by no means the first cookbook aimed at preventing heart disease, this one proposed a Mediterranean approach that seems quite contemporary: Avoid obesity, saturated fats, salt, and refined sugars; eat plenty of fresh vegetables and fruit; and "be sensible about cigarettes, alcohol, excitement, business strain."

During the 1960s and 1970s, public health authorities gradually recognized the relevance of diet to chronic diseases, and diet books flooded the marketplace. In 1967 I. M. Stillman published The Doctor's Quick Weight-Loss Diet (high protein, low fat and carbohydrate). Robert Atkins's Dr. Atkins'

Diet Revolution (high fat and protein, low carbohydrate) followed in 1972. Both sold in the millions.

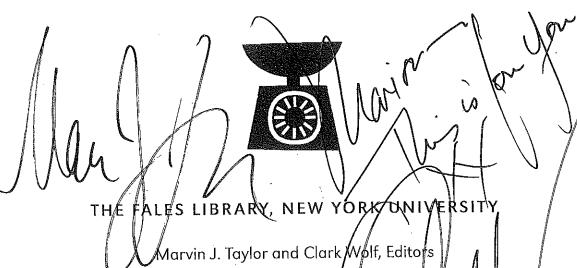
To make sense of conflicting popular advice, a Senate committee chaired by George McGovern issued Dietary Goals for the United States in 1977. This report shifted the focus of dietary advice from "eat more" to prevent nutrient deficiencies to "eat less" (of foods with fat, saturated fat, salt, and sugar) to prevent chronic diseases. Jane Brody's 1981 best-seller, Jane Brody's Nutrition Book, promoted these principles.

I spent two years in Washington, DC, editing the 1988 Surgeon General's Report on Nutrition and Health, which summarized research supporting those ideas and identified eating less fat as the primary nutrition priority. Public health officials assumed that if people reduced overall fat intake, they would automatically reduce calories and saturated fat and eat more carbohydrates from whole grains. It did not occur to us that the food industry would interpret the low-fat message as a license to invent products low in fat but loaded with sugars, refined starches, and calories, thereby taking Americans into the present era of obesity.

Today thousands of "healthy" cookbooks promote diets high or low in protein, fat, or carbohydrate (take your pick), or devoid of animal products, gluten, and anything unnatural. As the wave of the future, the best cookbooks put taste first, call for relatively unprocessed ingredients produced locally, seasonally, and sustainably, and promote age-old nutritional principles of dietary variety and balance—always in moderation, of course.

101 Classic Cookbooks

501 CLASSIC RECIPES



Text by Marvin J. Taylor

RIZZOLI