The familiar face of official, government-approved nutrition guidelines, the American Food Guide Pyramid, was trotted out by the U.S. Department of Agriculture (USDA) in 1992 to replace the careworn “basic four” grid that was criticized for placing too great an emphasis on artery-clogging fatty foods like meats and cheeses. The Food Guide Pyramid was meant to provide the public with a readily understood graphic representation of not only what they should be eating, but how much and how often.

Soon after its inauguration, the standard American Food Guide Pyramid spawned unofficial offspring, none endorsed by the USDA, including the Arabic, Asian, Latin, Indian, and Mediterranean pyramids. There were pyramids for vegans and vegetarians, and pyramids for children and septuagenarians.

The Pyramid became as diverse and changeable as the American public, and yet was touted as a sound guide for nutritional choices. It came on the heels of several landmark studies that suggested that people were getting fatter because they ate too much fat. In 1988, the World Health Organization Regional Office for Europe, the National Academy, and the U.S. Department of Health and Human Services all issued reports that identified fats as the major culprit in the rise of obesity and its attendant diseases. Reduction of fat in the American diet was one of the mandates of the new food guidelines.

The 1992 Pyramid relegated fat and fat-containing food to the smallest of its component bricks to address the growing problem of America’s increasingly corpulent waistline. But although it is true that Americans ate too much fat at the time the Food Guide Pyramid was introduced, since its inception, the number of overweight Americans has risen by 61%.

“They exonerated sugar and identified [overall] fat reduction as a surrogate for reducing saturated fat and calories,” says Marion Nestle, professor and chair of New York University’s Department of Food Studies and author of Food Politics, which explores the connection between the food industry and food guide recommendations.

Nestle is also quick to point out the strengths of the Pyramid, and describes herself as “the last remaining nutritionist who thinks it’s good.”

Pyramid Origins
Government recommendations for healthy diets can be traced back to 1894, when the first director of the Office of Experiment Stations under the USDA, W. O. Atwater, developed food tables that provided data on the dietary composition of commonly available foods. Although specific vitamin and mineral requirements were not then known, Atwater pioneered the concept that food composition, dietary intake, and health were related. In 1902, he stated that “unless care is exercised in selecting food, a diet may result which is one-sided or badly balanced.” With unknowing prescience, he also warned against “the evils of overeating . . . that are sure to appear, perhaps in an excess of fatty tissue, perhaps in general disability, perhaps in actual disease.”

Since that time, the government has issued no less than six official food guides. Each guide responded not only to nutritional needs, but to the social and economic milieu of the nation at the time of its issue. The first actual food buying guide came out in 1916 and had five food groups—meat, cereals, vegetables and...
fruits, fatty foods, and sugars. That was followed by the Depression-era 1930s recommendations that emphasized economical choices and distinguished between “protective” foods—those high in vitamins and minerals—and “high-energy” foods. In fact, one of the lower-cost food plans developed at that time is the basis of today’s food stamp program.

The wartime “Basic Seven” was designed to allow families to shift their diets according to what was available under rationing. The Basic Seven eventually gave way to the familiar “Basic Four”, which was unveiled in 1956 and contained more specific information about serving sizes. The Basic Four was the first guide to use what was known about the necessary nutrients, making its recommendations based on getting the essential amounts. It was not meant to be an exhaustive guide—it only showed the minimum required servings, but assumed that people would make up the deficiencies in calories and nutrients by eating more foods. Further clarification came in 1979, when fats, sweets, and alcohol were given their own food group, which was the first step toward an official warning to moderate intake of those items. But the 1979 “Hassle-Free Guide” was still only a foundation diet, not venturing to go beyond the minimal requirements to suggest a whole-diet strategy.

One of the main goals of the current Food Guide Pyramid was to provide the American public with a whole-diet guideline, a major break from the foundation diets of the past. The USDA conceived of the Pyramid by taking the sources of necessary vitamins and minerals, combined with data about the dietary habits of Americans, to develop a visual representation of eating well—stacking commonly eaten and available foods in order of nutritional priority to create the final Pyramid. The image of the pyramid itself came out of extensive focus group testing to ensure that it was understandable and informative.

“The shape of the Pyramid reflects how we eat and where we get our nutrients. We looked at quantities of nutrients we get from different foods and developed a logical visual image of where those nutrients are in our diets,” says John Webster, director of the USDA’s Public Information and Government Affairs department.

Caloric Conundrum
But the pyramid can be broadly interpreted, especially when used, as it most often is, without the accompanying booklet, which explains that the single serving size from the 6–11 “grains” servings suggested has 72 calories—about three-quarters of a slice of ordinary supermarket bread. Most people would consider a New York bagel—weighing in at 350–500 calories—a serving, but the Food Guide Pyramid would consider it 5–7 servings.

That, according to Nestle, is one of the biggest problems with the pyramid—without the accompanying pamphlet, it doesn’t talk about calories, nor does it distinguish between whole grains and processed grains.

“Calories are the most important problem for most people these days,” she says. And while the Pyramid suggests limiting fat, “if you’re overeating calories, it doesn’t matter where they come from.”

But one of the ongoing issues with the Pyramid is the delicate position the USDA holds between the food industry and the public. When the Pyramid was first scheduled for release in 1991, it was pulled at press time because of a flap from the meat industry. Although it was rereleased shortly after, the Pyramid’s image was tarnished by a deluge of news stories accusing the USDA of being unduly influenced by the American cattle industry.

Recently, a study in the American Journal of Clinical Nutrition by Walter Willett, chair of the Department of Nutrition at the Harvard School of Public Health, and colleague Marjorie McCullough (now an epidemiology researcher at the American Cancer Society) went as far as to suggest that the Food Guide Pyramid might actually be harmful to health.

Willett and McCullough looked at heart disease and cancer rates among people who followed the governmental nutrition guidelines and compared the rates to those of people who ate a Harvard-designed diet with fewer carbohydrates and more “healthy” fats.

Willett, who claims that the prevailing wisdom of “fats beget fat” is largely responsible for America’s obesity problem, found that those who ate the Harvard diet had a significantly reduced risk for major chronic disease.

The study found no link between the lower-carbohydrate Harvard diet and preventing cancer, but suggests that official advice to minimize fat as a whole category is obsolete, and that it is necessary to distinguish between healthy and unhealthy fats.

Nestle believes that the Food Guide Pyramid has been exploited by the food industry, which has had a bonanza in the business of promoting reduced-fat and fat-free products. “People were buying [fat-free cookies] by the boxcar load, but the difference in calories is less than 10%,” she says. “The food industry deliberately misleads the public and is taking advantage of the federal guidelines.”

What Nestle, Willett, and other nutritionists would like to see is a greater emphasis on whole, unprocessed foods, and the inclusion of recommendations for caloric intake and exercise. At this time, 64.5% of adults in the United States are overweight, as are 15% of children between the ages of six and nine. Despite the critiques, however, a drastic overhaul of the guide does not appear to be imminent.

“There’s no indication that it’s obsolete,” says Webster. “It still meets all the recommendations of the Institute of Medicine’s (under the National Academy) Recommended Daily Allowances.” The USDA is mandated under federal guidelines to reassess their recommendations every five years, and is in the process of reviewing the Food Guide Pyramid and its accompanying literature. The revised version is due out in 2005.

Suggested Reading
Nestle, M. Food Politics: How the Food Industry Influences Nutrition and Health (California Studies in Food and Culture); University of California Press, Berkeley, CA 2002.


Keely Savoie is a writer living in Rockaway Park, NY. Send your comments or questions about this article to twaw@acs.org or to the Editorial Office address on page 3. ◆