

## VIEWPOINT

# The 2015 US Dietary Guidelines

## Lifting the Ban on Total Dietary Fat

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**Every 5 years**, the US Department of Agriculture and Department of Health and Human Services jointly release the *Dietary Guidelines for Americans*. These guidelines have far-reaching influences across the food supply, including for schools, government cafeterias, the military, food assistance programs, agricultural production, restaurant recipes, and industry food formulations. An accurate revision of the *Dietary Guidelines* is crucial to the health of millions of people. Integral to this process is the Dietary Guidelines Advisory Committee (DGAC) report, just released,<sup>1</sup> prepared by appointed scientists who systematically review the literature and provide evidence-based recommendations to the secretaries of Agriculture and Health and Human Services. In the coming months, the secretaries will review the DGAC recommendations; consider comments from the public, academics, advocacy groups, and industry; and finalize the *Dietary Guidelines*.

In the new DGAC report, one widely noticed revision was the **elimination of dietary cholesterol as a "nutrient of concern."** This surprised the public, but is concordant with more recent scientific evidence reporting no appreciable relationship between dietary cholesterol and serum cholesterol<sup>1</sup> or clinical cardiovascular events in general populations.<sup>2</sup>

A less noticed, but more important, change was the absence of an upper limit on total fat consumption. The **DGAC report neither listed total fat as a nutrient of concern nor proposed restricting its consumption.** Rather, it concluded, "Reducing total fat (replacing total fat with overall carbohydrates) does not lower CVD [cardiovascular disease] risk.... **Dietary advice should put the emphasis on optimizing types of dietary fat and not reducing total fat.**" Limiting total fat was also not recommended for obesity prevention; instead, the focus was placed on healthful food-based diet patterns that include more vegetables, fruits, whole grains, seafood, legumes, and dairy products and include less meats, sugar-sweetened foods and drinks, and refined grains.

With these quiet statements, the DGAC report **reversed nearly 4 decades of nutrition policy** that placed priority on reducing total fat consumption throughout the population. In 1980, the *Dietary Guidelines* recommended limiting dietary fat to less than 30% of calories. This recommendation was revised in 2005, to include a range from 20% to 35% of calories. The primary rationale for limiting total fat was to lower saturated fat and dietary cholesterol, which were thought to increase cardiovascular risk by raising low-density lipoprotein cholesterol blood concentrations. But the campaign against saturated fat quickly generalized to include all dietary fat. Because fat contains about twice the calories per gram as carbohydrate or protein, it was also rea-

soned that low-fat diets would help prevent obesity, a growing public health concern.

The complex lipid and lipoprotein effects of saturated fat are now recognized, including evidence for beneficial effects on high-density lipoprotein cholesterol and triglycerides and minimal effects on apolipoprotein B when compared with carbohydrate.<sup>3</sup> These complexities explain why substitution of saturated fat with carbohydrate does not lower cardiovascular risk.<sup>1,2</sup> Moreover, a global limit on total fat inevitably lowers intake of unsaturated fats, among which nuts, vegetable oils, and fish are particularly healthful.<sup>1,2</sup> Most importantly, **the policy focus on fat reduction did not account for the harms of highly processed carbohydrate (eg, refined grains, potato products, and added sugar)—consumption of which is inversely related to that of dietary fat.**

As with other scientific fields from physics to clinical medicine, nutritional science has advanced substantially in recent decades. Randomized trials confirm that diets higher in healthful fats, replacing carbohydrate or protein and exceeding the current 35% fat limit, reduce the risk of cardiovascular disease.<sup>4,5</sup> The 2015 DGAC report tacitly acknowledges the lack of convincing evidence to recommend low-fat-high-carbohydrate diets for the general public in the prevention or treatment of any major health outcome, including heart disease, stroke, cancer, diabetes, or obesity.<sup>1,2</sup> This major advance allows nutrition policy to be refocused toward the major dietary drivers of chronic diseases.

For decades, carbohydrates were considered a foundation of a healthful diet, as evidenced by placement of grain products (including many highly processed items) at the base of the Food Guide Pyramid of 1992. However, by 2005, the *Dietary Guidelines* called for restriction of refined grains and added sugars due to growing evidence that refined carbohydrates increase metabolic dysfunction, obesity, and cardiovascular disease. Presently, US consumption of sugar-sweetened beverages is declining, likely related to both scientific research and associated publicity confirming their adverse health effects. Yet added sugar in other foods and, perhaps more importantly, refined grain products—including white bread, white rice, chips, crackers, cereals, and bakery desserts—continue to represent major sources of calories in the US food supply.

**The DGAC report highlights that more than 70% of the US population consumes too many refined grain products.** Many of these foods enjoy a lingering health halo or at least a benign reputation, based on years of government guidelines and industry promotion. Recognizing this widespread misunderstanding, the 2015 DGAC report specifies that, "consumption of 'low-fat' or

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'nonfat' products with high amounts of refined grains and added sugars should be discouraged." The elimination of the upper limit on total fat would make it easier for industry, restaurants, and the public to increase healthful fats and proteins while reducing refined grains and added sugar.

In finalizing the 2015 *Dietary Guidelines*, the US Department of Agriculture and Department of Health and Human Services should follow the evidence-based, scientifically sound DGAC report and remove the existing limit on total fat consumption. Yet this represents only one action that may influence people's diets; other policies should follow suit. For example, the Nutrition Facts Panel, separately regulated by the US Food and Drug Administration (FDA), lists percentage daily values for several key nutrients on packaged foods. Remarkably, the Nutrition Facts Panel still uses the older 30% limit on dietary fat, already obsolete for more than a decade.<sup>6</sup> The Nutrition Facts Panel should now be revised to eliminate total fat as well as dietary cholesterol from among the listed nutrients and instead add refined grains and added sugar. Including only added sugar, a change currently under consideration, would insufficiently acknowledge the harms—and implicitly encourage the intake—of refined grains. Similarly, the US Department of Agriculture should modernize its *Smart Snacks in School* standards,<sup>7</sup> removing the 35% restriction on total fat from the criteria. The Institute of Medicine should update its report, now nearly 15 years old, on dietary reference intakes for energy and macronutrients.<sup>6</sup>

The current restriction on total fat has implications for virtually all aspects of the US diet, including government procurement for offices and the military, meals for the elderly, and guidelines for food assistance programs that together provide 1 in 4 meals consumed in the United States. The focus on total fat also affects other policies and guidelines. For example, the National School Lunch Program recently banned whole milk, but allows sugar-sweetened non-fat milk. Current National Institutes of Health guidelines on healthy diets for families and children recommend "eat[ing] almost

anytime" fat-free creamy salad dressing, trimmed beef or pork, and extra-lean ground beef. Yet it recommends being cautious about eating any vegetables cooked with added fat, nuts, peanut butter, tuna canned in oil, vegetable oils, and olive oil. Furthermore, it recommends minimizing whole milk and "eggs cooked with fat," both of which are listed in the "once in a while" eating category along with candy, chips, and regular soda.<sup>8</sup> Along the same line, the FDA recently issued a warning letter to a manufacturer of minimally processed snack bars, stating that these products could not be marketed as healthy in part due to FDA health claim limits on total and saturated fat, even though the fats in these bars derive predominantly from healthful nuts and other vegetable sources. The restriction on fat also drives food industry formulations and marketing, as evidenced by the heavy promotion of fat-reduced desserts, snacks, salad dressings, processed meats, and other products of questionable nutritional value. Based on years of inaccurate messages about total fat, a 2014 Gallup poll shows that a majority of US residents are still actively trying to avoid dietary fat, while eating far too many refined carbohydrates.

The limit on total fat presents an obstacle to sensible change, promoting harmful low-fat foods, undermining attempts to limit intakes of refined starch and added sugar, and discouraging the restaurant and food industry from providing products higher in healthful fats. It is time for the US Department of Agriculture and Department of Health and Human Services to develop the proper signage, public health messages, and other educational efforts to help people understand that limiting total fat does not produce any meaningful health benefits and that increasing healthful fats, including more than 35% of calories, has documented health benefits. Based on the strengths of accumulated new scientific evidence and consistent with the new DGAC report, a restructuring of national nutritional policy is warranted to move away from total fat reduction and toward healthy food choices, including those higher in healthful fats.

#### ARTICLE INFORMATION

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