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# Americans Consume Too Many Calories From Solid Fat, Alcohol, and Added Sugar

## Nutrition Insight 33

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The 2005 Dietary Guidelines for Americans (DGA) (1) introduced a new concept in nutrition guidance, the discretionary calorie allowance. This is defined as the “balance of calories remaining in a person’s food energy allowance after accounting for the number of calories needed to meet recommended nutrient intakes through consumption of foods in lowfat or no added sugar forms.” The USDA food guidance system, MyPyramid (2), translates the DGA into recommended eating patterns. It includes recommended amounts of foods to consume from several food groups and a discretionary calorie allowance for each of 12 calorie levels.

The nutrient profiles for MyPyramid food groups are based on foods that are in their fat-free or lowest fat form and contain no added sugars. The DGA and MyPyramid refer to these as “nutrient-dense forms” of foods. Use of nutrient-dense foods in developing MyPyramid’s food intake patterns allows the calculation of a discretionary calorie allowance for each pattern. This allowance may be consumed in a variety of ways:

- As additional amounts of food from a food group in a nutrient-dense form, such as an additional piece of fruit beyond the amount recommended in the pattern;
- As additional amounts of oils beyond the amount recommended in the pattern;
- As solid fats, such as butter and hard margarine;
- As sugars, such as granulated sugar and honey;
- As the extra calories that come from foods that are not in their lowest fat form or contain added sugars, such as the calories from the fat in lowfat milk or in a croissant or the calories from the added sugar in fruit canned in syrup or presweetened cereal (but not the naturally occurring sugar in fruit or milk); and
- For those who choose to drink alcoholic beverages, as beer, wine, and distilled spirits.

The food intake patterns include recommended amounts of oils, including those found in fish, nuts, and seeds, because they are high in vitamin E and polyunsaturated fatty acids, including the essential fatty acids. Therefore, oils are not counted as discretionary calories unless they are consumed in excess of the amounts recommended in the food intake pattern. A person’s discretionary calorie allowance is determined by the food intake pattern that meets his or her nutrient and energy needs. A very active teenage boy, for example, who should follow the 3,200-calorie intake pattern, will have a discretionary calorie allowance of 20 percent of his energy requirement. A sedentary woman, on the other hand, whose needs are met by the 1,600-calorie pattern, will have an allowance of only 8 percent of energy requirements.

This *Nutrition Insight* describes the amounts of discretionary calories consumed by Americans from all the sources listed above except for the intakes of nutrient-dense forms of foods from the MyPyramid food groups and oils beyond recommended amounts. The percentage of these discretionary calories from all sources of solid fat, alcohol, and added sugar (SoFAAS) was used as a proxy for discretionary calories and represents a lower bound estimate for the total discretionary calories consumed.

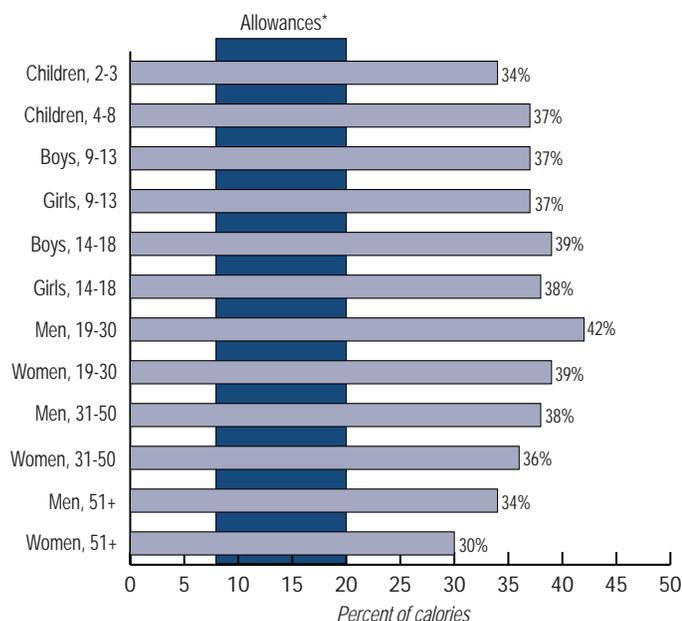
### Data

The percentage of calories from SoFAAS in the diets of various age-gender groups of Americans was estimated by using data from the 2001-2002 National Health and Nutrition Examination Survey (NHANES). In the 2001-2002 NHANES, information on dietary intake was collected by trained interviewers using the 24-hour dietary recall method. NHANES 2001-2002 is a complex, multistage probability sample of the civilian noninstitutionalized population of the United States. Individuals of all ages were sampled. Statistical weights were used so that the results represent the U.S. population. For this *Nutrition Insight*, only people age 2 years and over were included in the sample. Pregnant and lactating women and people who reported no caloric intake were also excluded. The analytical sample size was 8,650 people.

## All Age-Gender Groups Exceeded Their Discretionary Calorie Allowance

In MyPyramid, the most generous of the discretionary calorie allowances is 20 percent of energy needs. This is the allowance for people whose daily energy need is approximately 3,200 calories. For many adults, the discretionary calorie allowance is 13 to 17 percent. Figure 1 shows that the average percentage of calories people of different age-gender groups consume from solid fat, alcohol, and added sugar is much higher than that: between 30 and 42 percent of total calorie intake.

**Figure 1. Percentage of calories consumed as solid fat, alcohol, and added sugar, by age-gender groups**



\*All discretionary calorie allowances across age, gender, and activity levels fall within this range.

All age-gender groups exceeded their discretionary calorie allowance. Women over the age of 50 years had the lowest percentage (30 percent) of calories from solid fat, alcohol, and added sugar; and men age 19 to 30 years had the highest (42 percent). The other age-gender groups consumed 34 to 39

percent of their calories from these sources, nearly double the maximum allowance of 20 percent. Overall, women consumed a somewhat lower percentage of calories from these discretionary sources than did men.

## Summary

The 2005 Dietary Guidelines for Americans and MyPyramid have introduced a new concept—the discretionary calorie allowance, which is the remaining number of calories a person can consume to meet energy needs after the recommended amounts of nutrient-dense forms of foods in each food group are consumed. Depending on one’s age, gender, and activity level, no more than 8 to 20 percent of total calories should be consumed from discretionary sources, such as solid fat, alcohol, and added sugar (SoFAAS) or additional amounts of nutrient-dense foods beyond recommended levels. All age-gender groups exceeded this percentage. Because calories from SoFAAS are a lower bound of discretionary calories, the true discretionary calorie intake is likely higher.

In light of the current rates of obesity, these results indicate that nutrition professionals should pay special attention to helping people reduce their intake of discretionary calories. In addition, the concept of “SoFAAS,” introduced here, may be used to determine the relative nutrient density of foods that consumers can choose. Future research will focus on creating profiles of age-gender groups at different levels of SoFAAS intake, examining the sources of these calories, and applying the concept of SoFAAS to identify the nutrient density of various foods.

## References

1. U.S. Department of Health and Human Services and U.S. Department of Agriculture (January 2005). *Dietary Guidelines for Americans, 2005*. Washington, DC: U.S. Department of Health and Human Services and U.S. Department of Agriculture.
2. U.S. Department of Agriculture (2005). MyPyramid.gov. <http://www.mypyramid.gov>.

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