Comments regarding
Nutrition and Your Health: Dietary Guidelines for Americans

Submitted to the
Dietary Guidelines Advisory Committee,
U.S. Department of Health and Human Services, and
U.S. Department of Agriculture

March 18, 2004

Submitted to:
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Office of Disease Prevention and Health Promotion
Office of Public Health and Science
200 Independence Avenue, SW, Room 738-G
Washington, DC 20201
The Center for Science in the Public Interest (CSPI) respectfully submits to the Dietary Guidelines Advisory Committee (DGAC), the U.S. Department of Health and Human Services (DHHS), and the U.S. Department of Agriculture (USDA) recommendations regarding the bulletin Nutrition and Health: Dietary Guidelines for Americans.

CSPI is a non-profit consumer education and advocacy organization that since 1971 has been working to improve the public’s health through better nutrition and safer food. CSPI’s work is supported primarily by its 800,000 members and subscribers to its Nutrition Action Healthletter, the nation’s largest circulation health newsletter. CSPI does not accept any government or corporate funding.

CSPI’s work was instrumental in passage of the Nutrition Labeling and Education Act of 1990 and the Alcoholic Beverage Labeling Act of 1988. Other initiatives include studies of the nutritional quality of restaurant foods, advocating trans fat labeling on packaged foods, and campaigns to promote low-fat milk consumption, improve school foods, stop misleading food and alcohol advertising, enforce food safety laws, and improve alcoholic-beverage labeling.

Enclosed are eight sets of comments regarding the following guidelines:

- Weight
- Grains
- Fruits and Vegetables
- Fats
- Sugars
- Sodium
- Alcohol
- Food Safety

Our comments are summarized in the oral testimony we presented to the committee on January 28, 2004, which is enclosed.

For more information or questions regarding these comments please contact Margo G. Wootan, D.Sc., at 202-777-8352 or mwootan@cspinet.org.
Dietary Guidelines for Americans (DGA) – 2005 Revision

Since HHS and USDA are asking for input on the DGA and many industry groups will provide comments, CSPI needs to carefully follow the process and comment at several points in the process. However, over the last 20 years, even with all the food industry lobbying, the DGA have changed very little. While few consumers read the DGA, they do form the basis for all federal food programs, policies and nutrition education efforts.

I think we should try to keep our comments briefer than the last time around. Last time around we wrote several hundred pages of comments – though the committee clearly read and used our comments, referring to them often in their deliberations. We will need Bonnie and David’s help, since they know the science best.

To have a real influence on the next edition of the DGA, our comments should be turned in to HHS and USDA by the first week in December. The committee is expected to make their suggestions for changes to the guidelines by their next meeting, which will be in January.

- **Timeline:**
  - January meeting – will review proposed changes to the guidelines from each of the working groups, public testimony, hear from experts on areas they need more info on
  - March meeting – review recommendations and rationale, consensus building on key recommendations
  - Report due from the DGAC in June 2004

- **Overarching questions:**
  - How do new DRI’s affect the DGA and our recommendations? The recommend ranges for macronutrient intakes especially?

- **Weight:**
  - Seems especially important to stress given rising obesity rates. Current guideline and supporting text seems good and should be maintained.
  - Continue to stress choosing sensible portions, especially of restaurant foods. Keep Box 3.
  - Several committee members seem to think that PA is a more important contributor to obesity than diet (Clydesdale, Nicklas, Pi-Sunyer, Caballero). We should clarify that diet is contributing to the rising obesity rates. **Margo** has already been writing a piece on this that we could adapt and include.
  - The committee asked if they should emphasize loosing weight or preventing weight gain. The current DGA seems to have a good balance of both. Continue to state that even modest weight loss can be beneficial.
  - **Who** wants to take the lead to write?

- **Physical activity:** Don’t comment.
• **Pyramid guideline:** This guideline and the supporting text provide useful advice and should be kept. Primarily comment through the FGP revision process. State that it is a good idea to have the FGP as a part of the DGA to link the two. It is also a good idea to address using the food label to make healthier food choices. Keep the section on having plant foods as base of diet.
  - **Bonnie/David** – can you read the section on supplements to see if it needs any changes?

• **Grains:**
  - Urge that half of grains be whole grains (important to health, good source of fiber). Is there a strong basis to make a quantitative recommendation for whole grains (so that school meals would have to follow it)?
  - Is there too much emphasis on grains in the DGA and FGP?
  - Should they address low CHO diets?
  - Provide clear tips about choosing healthy grain options – stress choosing options lower in calories, saturated and trans fat, and added sugars. The statement “Grains products are low in fat, unless fat is added in processing, in preparation or at the table” is misleading and should be removed. Much of the grains people eat are processed with added fat, salt or sugar.
  - Do we want to say anything about glycemic load? Pi-Sunyer said deal with glycemic index by dealing with fiber.
  - **Bonnie** – could you write the grains comments?

• **Fruit and vegetable guideline:** We are working with others from the National 5 A Day partnership on strengthening the fruit and vegetable guideline. Ideas include:
  - The guideline should be “Eat at least 5 to 10 servings of fruits and vegetables every day.” The DGA should stress eating more F&V in the guideline (rather than variety as in the current edition). The top priority is to get people to eat more fruits and vegetables. The guideline should urge people to eat a specific number of servings. Five to 10 servings would cover the needs of most Americans (based on the new Food Guide Pyramid recommendations for 1,600 to 2,600 calories which covers most Americans’ caloric needs).
  - The variety message in the current text should focus mostly on encouraging people to eat nutrient rich fruits and vegetables. Box 12 could use the concept of choosing different colored vegetables and fruits as a way to communicate the message of choosing different F&V varieties (PBH’s communications research has found this to be a good communications approach with consumers). The “Aim for Variety” and “Find ways to include plenty of different fruits and vegetables” should be combined to give people tips about ways to include more fruits and vegetables and help guide people toward healthier choices.

Tips should remind people that 1) French fries are often high in calories and saturated and trans fat and should be limited, 2) limit juice drinks, which often are marketed to look like juice, but contain few nutrients, 3) frozen, canned
and dried are good choices but read labels and limit added salt and sugars, 4) eat fruits and vegetables at every meal or snack.

- **Margo** could write, working with NCI, ACS and PBH.

- **Food Safety:** Does **Caroline** have comments?

- **Fats:**
  - Add trans fat to the guideline to read, “Choose a diet that is low in saturated and trans fat and cholesterol and moderate in total fat.” Kris-Etherton said they would need to address trans.
  - How do the new DRIs affect recommendations for saturated fat and cholesterol?
  - Continue to apply fat advice to children 2 years and older.
  - Continue to recommend limiting cholesterol (egg industry is geared up to fight this as usual).
  - How should they address omega 3 fats?
  - **Bonnie:** Do you want to write these comments? **Margo** could draft a section on trans fat.

- **Sugars:**
  - Theresa Nicklas is a real problem on this issue, but is not on the work group. Given how much the food industry is on the defensive about sodas, it seems we need to fight to keep this guideline strong.
  - Continue to address importance of limiting added sugars intake.
  - Weaver said the displacement of milk by soft drinks is an important issue (Nicklas said not enough evidence).
  - How should DGA address the UL from DRI report? What should the DGA recommend?
  - **Mike** – do you want to write comments on this one?

- **Sodium:**
  - We are good shape with sodium. Appel strong. Weaver talked about sodium assoc with urinary Ca loss.
  - Continue to stress importance of watching sodium in processed and restaurant foods.
  - **Bonnie** – could you write something short just stating how evidence is even stronger now than it was 5 years ago that people should limit sodium intake (mention Dash, but don’t need much detail since Appel heads up this work group)?

- **Alcohol:**
  - Camargo is very strong and is heading up the alcohol work group. He supports current guidelines but said they should be reorganized. Said DGA need to clarify that 2/1 drink limits are upper limits and not goals and that older Americans (65 and older) should have no more than 1 drink a day.
  - **George/Kim** write comments.
Comments by the Center for Science in the Public Interest on: "Choose a Variety of Grains Daily, Especially Whole Grains"

I. Change the title to “Choose whole grains whenever possible.”

The current title, “choose a variety of grains daily, especially whole grains” could mislead consumers.

A. Americans do not need to consume a greater variety of grains.

Grains include not just breads, rice, pasta, and cereals, but cookies, cakes, doughnuts, pies, muffins, and other sweet baked goods. The current guidelines might encourage people to increase their intake of those foods. Sweet baked goods are the fourth largest source of saturated fat and the second largest source of added sugars in the average American’s diet. They are also typically high in calories, trans fat, and refined flour and low in fiber, vitamins, and minerals (See Appendix A, Restaurant Confidential, chapter 15). As the previous Dietary Guidelines committee acknowledged, greater variety often leads to greater intakes. The guideline should clarify that most Americans should reduce their consumption of sweet baked goods.

B. Americans need to consume different grains, not more grains.

The current guideline implies that Americans are at risk of consuming too few kinds of grains. In fact, it is far more important that people switch from unhealthy grains (high in saturated or trans fat, added sugars, and refined flours) to healthier grains (high in whole grains and fiber). Although the current guideline encourages people to choose whole grain foods, it says that people should “aim for at least 6 servings of grain products per day…and include several servings of whole grain foods” without explaining why all 6 servings shouldn’t be whole grain. The guideline should clarify that whole grains are the healthiest choice, but when whole grains are not available or acceptable, enriched grains are a reasonable alternative because they contain iron, folate, and other B-vitamins.

Many of the health benefits associated with grain consumption are actually based on an association with the consumption of whole grains. The Surgeon General’s Report on Nutrition and Health specifically recommends increasing the consumption of whole grain and cereal products. Given the low consumption of whole grains in the U.S. and their benefits, the 2005 edition of the Dietary Guidelines should place greater emphasis on whole grains.
II. Inform consumers that fiber-rich whole grains may reduce the risk of heart disease.

The current guideline omits any reference to the evidence that people who consume more fiber, chiefly from whole grains, have a lower risk of heart disease. The Institute of Medicine relied on that evidence to reach its recommended fiber intakes. The current guideline (p. 20) is vague about fiber, citing only proper bowel function and (possibly) satiety as its potential benefits. Grains are a chief source of fiber in the average American’s diet and the evidence linking heart disease risk and fiber cites studies in which people consumed fiber from grains.

III. Clarify advice about which grains to choose.

The Dietary Guidelines should provide consumers with clearer advice about which grains are healthiest. Specifically, the grain guideline should address the following points.

A. Choose whole grains instead of refined grains whenever possible.

The guideline should advise people to replace refined breads, cereals, pasta, and crackers with whole grain versions whenever they are available and acceptable. The guideline should emphasize that whole grains are a richer source of vitamins, minerals, and phytochemicals than refined grains.

B. Give examples of unhealthy grains.

The current guideline recommends that consumers “prepare or choose grain products with little added saturated fat and a moderate or low amount of added sugars.” This advice omits trans fat, which is often prevalent in baked goods. Furthermore, the advice would be far more useful if it listed specific foods. For example, the guideline could state that:

“Many grain products, including doughnuts, cakes, cookies, pies, pastries, and muffins, are often high in saturated or trans fat, added sugars, and refined flour. These grain products should be limited in the diet.”

C. Alert consumers to look for whole grain health claims on labels.

The Food and Drug Administration allows foods to make health claims – that is, claims that mention a disease like cancer or heart disease – only if the claim is approved and the food meets specific criteria. The FDA has approved a health claim for foods that are at least 50 percent whole grain and that meet other nutrient requirements (e.g., the foods must be low in fat, saturated fat, and cholesterol and not high in sodium). The whole grain claim, which is showing up on a growing number of breads and cereals, typically states that:
Diets rich in whole grain foods and low in total fat, saturated fat, and cholesterol, may help reduce the risk of heart disease and certain cancers.

The *Dietary Guidelines* should help people to take advantage of this way to identify whole grains by encouraging them to look for these health claims on foods.

**D. Advise consumers to treat bran cereals as whole grains.**

Even though bran cereals do not always include the whole grain, they supply the fraction of grains – the bran – that is missing in refined grains.

**E. Give examples of mixed dishes.**

The current guidelines advise people to “combine whole grains with other tasty, nutritious foods in mixed dishes.” The committee should clarify this vague advice. For example, the advice could recommend that people “try whole grain tortillas, whole grain pasta, whole wheat pizza crust, and similar foods in mixed dishes.”

**IV. Address popular questions about low-carbohydrate diets and grains.**

Millions of people now follow diets that are low in all carbohydrates or in carbohydrates that have a high glycemic index (GI). The *Dietary Guidelines* should address some key issues about those diets.

**A. Warn consumers that low-carbohydrate diets may be low in fiber.**

Although some popular diets recommend high-fiber whole grains, others limit all carbohydrates, which could lead to inadequate fiber intakes.

**B. Inform consumers that low-carb foods can still contribute to weight gain.**

Many diet books advise people to limit carbohydrates that raise blood sugar levels in order to lose weight. Food labels often list “net carbs” or “impact carbs,” which omit carbohydrates that purportedly have no impact on blood sugar levels. The *Guidelines* should advise dieters that these foods can still contribute to weight gain. Dieters should consider a food’s overall impact on health – including calories, saturated and trans fat, added sugars, sodium, fiber, etc.
C. Inform consumers that only limited evidence supports popular claims for low-GI foods as the key to weight loss.

Diets that have a low glycemic index may benefit people with diabetes, and reducing glycemic load may reduce the risk of diabetes and heart disease. However, there is little evidence from long-term, well-controlled studies that show that low-GI diets promote weight loss (see Appendix B, Nutrition Action Healthletter, Jan/Feb 2004). Although some popular books encourage dieters to eat only whole grains, others recommend potato chips, pound cake, sponge cake, Twix Chocolate Caramel Cookie custard, sourdough bread, and other less-healthy foods that purportedly have a low GI.

V. Rationale

A. Americans are consuming too few servings of whole grains.

According to the Healthy People 2010 Objectives: Draft for Public Comment,

> "Although grain product consumption has increased since the start of this decade, consumption of whole-grain products remains low. In 1994-96 for the population aged 2 years and older, the mean average daily intake of grain products was 6.8 servings; only an estimated 14 to 15 percent of grain servings were whole grain."\(^3\)

In 1993, Americans consumed approximately 52 pounds of bread per person, which is approximately equivalent to 2.3 slices per day.\(^4\) White bread accounts for approximately two-thirds of packaged bread sales in the U.S. Multi-grain bread consumption has been increasing at a rate of about 2.2 percent per year over the past 6 years, but it accounted for only 11 pounds per capita in 1993. Moreover, while it accounted for about 20% of bread sales, multi-grain bread often is not whole grain.

An even smaller percentage of the rice consumed in the U.S. is whole grain. In 1994, Americans consumed 19.0 pounds of raw milled rice per person.\(^5\) Brown rice accounts for only 2% of the table rice sold in the U.S.\(^6\)

B. Whole grain consumption is associated with health benefits.

Whole-grain consumption is linked to lower risk of heart disease. A prospective study of 43,000 male health professionals found that those eating an average of 29 grams of fiber (largely cereal fiber) a day had a 41 percent lower risk of heart attack than those who consumed an average of 12 grams a day.\(^7\) The risk of heart disease was 31 percent lower for Finnish men who consumed approximately 35 grams of fiber a day (much of it from whole-grain rye bread) compared to men who ate an average of 16 grams a day.\(^8\)
Whole grains are rich in fiber, which helps prevent constipation. Constipation, while often a minor health problem, causes discomfort and can affect quality of life. In addition, Americans spend approximately $760 million a year on laxatives. As a result of a four-month Australian intervention that encouraged the consumption of whole-grain bread by the residents of a small retirement community, whole-grain bread sales increased 58% while sales of laxatives decreased 49% in the intervention community with no change in the sales of either in the control communities.

Diverticular disease affects approximately a third of people over the age of 45 and two-thirds of those over 85. While the majority of those affected have no symptoms, some experience constipation, diarrhea, flatulence, pain, bleeding, or inflammation (diverticulitis). A study of 48,000 male health professionals found that men who consumed an average of 32 grams of fiber a day were 42 percent less likely to report symptoms of diverticular disease than men who consumed an average of 13 grams a day. Although fruits and vegetables appeared to offer more protection than fiber from grains in this study, it did find that bran was associated with a decrease in the risk of diverticular disease. (Because refined grains were consumed in such large quantities, they provided a substantial amount of the cereal fiber consumed by the study participants.)

A study of 65,000 nurses found that diets low in fiber from grain and cereal products were associated with an increased risk of non-insulin-dependent diabetes. Similar results were found in a study of more than 42,000 men.

A study of 74,000 nurses found that women who consumed more whole grains consistently weighed less than did women who consumed less whole grains. Furthermore, over 12 years, women in the highest quintile of fiber intake had a 49% lower risk of major weight gain than did women in the lowest quintile.

A number of factors make it difficult to assess the role of whole grains in reducing disease risk. One is that it is difficult for study subjects to identify and dietary questionnaires to assess which grain and cereal products are actually whole grain. In addition, grain consumption often is confounded by fruit and vegetable intake. Nevertheless, a growing body of evidence indicates that whole grains and other fiber-rich foods may reduce the risk of heart disease, constipation, diverticular disease, and diabetes.

C. Whole grains are more nutrient-rich than refined grains.

It is still unclear which of the constituents of whole grains play a role in reducing disease risk. Much of the attention has focused on fiber. However, whole grains also contain antioxidants and the components of antioxidant enzymes, such as selenium, copper, manganese, and phenolic acids. They also contain compounds with possible anti-cancer activity, such as phytoestrogens and lignin.
The average American consumes only 12 grams of fiber a day,\textsuperscript{15} which is about half of the Daily Value for fiber (25-30 grams per day) or the level recommended by the National Cancer Institute (20-30 grams per day).\textsuperscript{16} Current intakes are also roughly half of the levels recommended for women (21 to 25 grams per day) and a third of levels recommended for men (30 to 38 grams a day), according to the Institute of Medicine.\textsuperscript{17} An increase in whole-grain consumption would help Americans increase their fiber intake.

Whole wheat bread is more nutritious than white bread. Whole wheat bread usually has about three times more fiber than bread made from refined white flour.\textsuperscript{18} Whole wheat bread also is higher in vitamin E, vitamin B-6, magnesium, manganese, potassium, zinc, and copper. The following table provides a comparison of white and whole-wheat breads for selected nutrients:

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>White bread (25 gram slice)</th>
<th>Whole wheat bread (28 gram slice)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories (kcal)</td>
<td>67</td>
<td>69</td>
</tr>
<tr>
<td>Fiber (g)</td>
<td>0.6</td>
<td>2</td>
</tr>
<tr>
<td>Magnesium (mg)</td>
<td>6</td>
<td>24</td>
</tr>
<tr>
<td>Potassium (mg)</td>
<td>30</td>
<td>71</td>
</tr>
<tr>
<td>Copper (mg)</td>
<td>0.03</td>
<td>0.08</td>
</tr>
<tr>
<td>Zinc (mg)</td>
<td>0.16</td>
<td>0.54</td>
</tr>
<tr>
<td>Vitamin E (ATE)</td>
<td>0.09</td>
<td>0.24</td>
</tr>
<tr>
<td>Vitamin B-6 (mg)</td>
<td>0.02</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Brown rice contains about six times more fiber than white rice.\textsuperscript{18} While enriched white rice has added iron and some B vitamins, it has lower levels of magnesium, vitamins E and B-6, copper, zinc, and phytochemicals.

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Enriched white rice (1 cup, cooked)</th>
<th>Brown rice (1 cup, cooked)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy (kcal)</td>
<td>205</td>
<td>216</td>
</tr>
<tr>
<td>Dietary fiber (g)</td>
<td>0.6</td>
<td>3.5</td>
</tr>
<tr>
<td>Magnesium (mg)</td>
<td>19</td>
<td>84</td>
</tr>
<tr>
<td>Zinc (mg)</td>
<td>0.77</td>
<td>1.22</td>
</tr>
<tr>
<td>Copper (mg)</td>
<td>0.11</td>
<td>0.20</td>
</tr>
<tr>
<td>Manganese (mg)</td>
<td>0.75</td>
<td>1.77</td>
</tr>
<tr>
<td>Vitamin B-6 (mg)</td>
<td>0.15</td>
<td>0.28</td>
</tr>
<tr>
<td>Vitamin E (ATE)</td>
<td>0.08</td>
<td>1.40</td>
</tr>
</tbody>
</table>

**VI. Summary**

The Dietary Guidelines Advisory Committee should strengthen the guidance to eat whole grains in the *Dietary Guidelines for Americans* and provide clearer advice to consumers about how and why to identify and choose whole-grain
products. That advice is important because 1) Americans are eating too few servings of whole grains, 2) whole grains may reduce the risk of heart disease, constipation, and other health problems, and 3) whole grains are more nutrient-rich than refined grains.

VII. References


4 Information from the Wheat Foods Council. Englewood, CO.


6 Information from the USA Rice Federation. Houston, Texas.


Comments by the
Center for Science in the Public Interest
“Aim for a Healthy Weight”

I. 2000 Edition of Weight Guideline Should Be Maintained

The “Aim for a Healthy Weight” guideline in the 2000 edition of the Dietary Guidelines for Americans provides good information and should be largely maintained as currently written.

As members of the Dietary Guidelines Advisory Committee (DGAC) are well aware, obesity is one of the most pressing health problems facing the nation. Rates are rising rapidly. Obesity rates among U.S. adults increased by 75% between 1991 and 2001¹ and rates doubled in children and tripled in teens over the last two decades.² In writing the weight guideline and the rest of the Dietary Guidelines, the Committee should keep in mind that the majority (65%) of Americans are either overweight or obese³ and thus, need to decrease their calorie intake, increase their physical activity level, or both.

At the first meeting of the DGAC, Committee members discussed whether the weight guideline should emphasize loosing weight or preventing weight gain. CSPI believes that both are important. The 2000 edition of the guideline provides an appropriate balance of both. The weight guideline should continue to state that even modest weight loss can be beneficial.

II. Continue to Stress Sensible Portion Sizes

The weight guideline should continue to provide strong advice about why and how to choose sensible portion sizes, especially for restaurant foods (such as in Box 3 in the 2000 edition of the weight guideline). The guideline should include a chart comparing recommended serving sizes with actual serving sizes (and the calorie content) of popular restaurant foods. If a chart cannot be included, the text should explain that most restaurant portions are far larger than recommended and provide examples. The guideline also should encourage people to ask for calorie and other nutrition information at restaurants or check restaurant Internet sites (some fast food and other chain restaurants provide nutrition information on web sites).

Portion sizes have grown over time. In the 1950s, a “family size” bottle of Coca-Cola was 26 ounces, while now a single-serve bottle is 20 ounces. McDonald’s original hamburger, fries, and 12-ounce Coke provided 590 calories. Today, a large Value Meal that includes a Quarter Pounder with Cheese, large fries, and a large Coke delivers 1,380 calories. A typical bagel used to weigh 2 to 3 ounces, compared to 4 to 7 ounces today.⁴
Although portion sizes started to increase in the 1970s, they grew sharply in the 1980s and have continued to increase since then.\(^5\) This trend has occurred in parallel with increases in overall calorie intake, available calories in the food supply, and the prevalence of overweight and obesity.

Large portions are a concern not only because they provide more calories, but also because studies show that when adults and children are served more food, they eat more food.\(^5,6,7,8,9\)

Foods and beverages packaged in single serve containers or served at restaurants are often larger than food labels list as a standard serving. A Double Gulp from 7-Eleven contains six servings, meaning it provides six times as many calories as a standard serving size of soft drink. A porterhouse steak from a typical steak house restaurant weighs more than a pound. According to USDA serving sizes, that is enough meat to serve a family of six. A typical pastry from a sit-down restaurant is often twice as big as the Food and Drug Administration’s (FDA) standard serving size. Larger portions mean higher calorie, saturated fat, and sodium contents.

It is not uncommon for restaurant entrees to provide a half a day’s worth of calories. A large Schlotzsky’s Light and Flavorful chicken breast sandwich (1,010 calories), spaghetti with meatballs (1,160 calories), or French toast (910 calories) each provide about a thousand calories, before adding side dishes.\(^10\) The calorie contents of whole meals are higher. A fried seafood platter or a king-size Burger King Double Whopper with Cheese Value Meal each provides about 2,200 calories – more than a day’s worth of calories for many people and two days’ worth of heart-damaging fat.

Large portion sizes are especially a concern in restaurants, given the lack of nutrition information. People have complete and consistent nutrition information on most packaged foods in supermarkets. However, two-thirds of the largest chain restaurants do not provide any nutrition information to their customers,\(^11\) making it more difficult for people to make informed choices about a significant and growing part of their diets. Americans are eating out about twice as often as in 1970.\(^12,13\) Adults and children now obtain about a third of their calories from away-from-home foods.\(^12\)

III. Include Information about the Calorie Content of Alcoholic Beverages

Since few alcoholic beverages come with calorie labeling (in restaurants or retail stores) and alcoholic beverages can contain far more calories than consumers might think, the weight guideline should include information about the calorie content of alcoholic beverages.
IV. The *Dietary Guidelines* Should Not Overemphasize Activity Over Diet as the Primary Cause of Overweight and Obesity

Several members of the Dietary Guidelines Advisory Committee suggested at the first committee meeting that physical activity is a larger contributor to the rising obesity rates than diet. However, the evidence does not support that conclusion.

Both unhealthy eating and physical inactivity are important contributors to the nation’s skyrocketing obesity rates, and both must be addressed to reduce overweight and obesity. However, existing data and societal trends suggest that activity levels were already low by 1980, when obesity rates started to increase. The evidence that further declines in physical activity have occurred since then is equivocal. In contrast, stronger data and societal trends indicate that increased caloric intake is driving the rise in obesity rates.

According to self-reported, national food-consumption surveys and food supply data, adults and children in the U.S. are consuming more calories than they did in the 1980s.\(^{14,15,16,17}\) For example, the USDA estimates from food supply data that average daily per capita calorie consumption increased by 12 percent, or roughly 300 calories (adjusted for cooking losses, plate waste, and spoilage), between 1985 and 2000.\(^{16}\) The increase in calorie intake coincides with the increase in obesity rates.

Food portion sizes have grown over time, as discussed above.\(^{5}\) The number of calories children consume from snacks increased by 30% between 1977 and 1996,\(^{19}\) and per capita soft drink intake doubled between 1970 and 1997.\(^{17}\) Americans are eating out twice as often as they did two decades ago,\(^{12}\) and studies have found a positive association between eating out and higher caloric intakes and higher body weight and body fatness.\(^{20,21,22,23}\)

Currently, physical activity levels are low; about one in four American adults engage in almost no physical activity in either leisure time or at work.\(^{24}\) However, data do not clearly show that activity levels have declined substantially since 1980. Behavioral Risk Factor Surveillance System (BRFSS) data indicate that physical activity levels increased slightly between 1990 and 2002. The percent of the population that is not active during leisure time decreased from 29% to 24%.\(^{25}\) The BRFSS survey data are limited in that they measure leisure time physical activity and do not gauge activity that occurs as a part of work or daily life.

The United States has had a physical inactivity crisis since the Eisenhower administration. In response to those concerns, the President's Council on Physical Fitness and Sports was established in 1956 (under the name of the "President's Council on Youth Fitness").\(^{26}\)
Many societal trends that reduced physical activity in the U.S. occurred prior to 1980, when obesity rates began to rise steeply. Between 1980 (37%) and 1990 (38%), the percentage of Americans living in the suburbs was unchanged. In addition, the emergence of the car culture began well before obesity rates started to increase. In 1980, 84% of commuters drove to their jobs, 6% used public transportation, and 6% walked. That changed only slightly by 2000, when 87% of commuters drove, 5% used public transportation, and 3% walked. Although the percentage of trips made by walking has decreased, the average annual number of walking and biking trips made by 5 to 15 year olds increased from 144 trips in 1977 to 181 trips in 1995. (The percentage decreased because the total number of trips increased.)

The major shifts in occupations from farms, manufacturing, and manual labor to information-oriented desk jobs also occurred before 1980. The percentage of people in highly active jobs, such as farm workers, fell from 68 to 49 percent between 1910 and 1970. Between 1980 and 1990, the percentage of people highly active at work fell only slightly, from 45 to 42 percent. In addition, while children and the elderly are more obese today than in 1980, they are not part of the workforce.

Many labor-saving household devices were introduced in the first half of the twentieth century, reducing the amount of physical activity expended on cleaning and meal preparation. Beginning in the 1920s, electric and gas ranges replaced wood and coal stoves, refrigerators replaced ice boxes, and timesavers such as electric vacuum cleaners, irons, and washing machines became commonly used. While in 1900, the average woman spent 44 hours per week preparing for and cleaning up after meals, by 1975 the average family spent only ten hours per week on such tasks.

Some physical activity trends are coincident with the rise in obesity rates. Between 1991 and 1999, the percent of high school students attending daily physical education classes decreased from 42% to 29%.

Household television viewing time is higher than it was in 1981. The connection between television viewing and overweight has been well-documented. However, television viewing may promote weight gain not only because it is a sedentary activity, but because it exposes viewers to commercials that encourage the consumption of calorie-dense foods and because people snack while watching television.

Both physical activity and healthy eating are important to maintaining a healthy weight. However, the ubiquitous availability of inexpensive, tasty, calorie-dense foods and large portion sizes bear a greater responsibility for rising obesity rates. The following chart illustrates how much exercise it would take to compensate for increased calorie intakes:
<table>
<thead>
<tr>
<th>Food</th>
<th>Calories</th>
<th>Activity Requirement (for average-sized woman)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quarter Pounder with Cheese + Large Fries + Large Coke</td>
<td>1,380 cal</td>
<td>1 hour and 50 minutes of running</td>
</tr>
<tr>
<td>Starbucks’s White Chocolate Mocha with Whole Milk and Whipped Cream, Grande (16 oz.)</td>
<td>480 cal</td>
<td>2 hours and 10 minutes of biking</td>
</tr>
<tr>
<td>Cheese Fries with Ranch Dressing</td>
<td>3,010 cal</td>
<td>10 hours and 40 minutes of brisk walking</td>
</tr>
</tbody>
</table>

*152 pounds, 5’ 4”

Increasing caloric intakes and decreasing levels of physical activity both contribute to the nation’s rising obesity rates. However, the increase in food intake – increased calorie, soft drink, and snack consumption; larger portion sizes; and more eating out – are clearly coincident with the rising obesity rates. The trends on the physical activity side are less clear, with many changes occurring primarily before 1980, when obesity rates began their steep rise.


Personal communication with Dr. Todd Gardner, Population Division, U.S. Census Bureau, October 10, 2003.


Personal communication with Susan Liss, Federal Highway Administration, U.S. Department of Transportation, April 8, 2002.


Comments by the Center for Science in the Public Interest on “Choose a Variety of Fruits and Vegetables Daily”

I. Continue to have a separate fruit and vegetable guideline.

The Center for Science in the Public Interest strongly supports a separate guideline for fruits and vegetables in the 2005 edition of the *Dietary Guidelines for Americans*. Eating a sufficient amount of fruits and vegetables is important for providing essential nutrients, fiber (for healthy bowel function), and for preventing cancer, heart disease, high blood pressure, stroke, and other diseases.

II. The guideline itself should stress the quantity of fruits and vegetables to consume rather than stressing variety. The guideline should read “Eat at Least 5 to 10 Servings of Fruits and Vegetables Every Day.”

Five to ten daily servings coincides with the recommendations for fruit and vegetable intake for the middle calorie ranges recently proposed by the U.S. Department of Agriculture (USDA) as part of the reassessment of the scientific basis of the *Food Guide Pyramid*.[1] That amount would cover the recommended intakes for most Americans (leaving out the recommended levels at the very low and very high ends of the range). Furthermore, the DASH (Dietary Approaches to Stop Hypertension) study found that eight to ten servings of fruits and vegetables a day lowered blood pressure, a problem that ultimately affects an estimated 90% of Americans.

The supporting text of the 2000 edition of the fruit and vegetable guideline emphasizes eating a variety of fruits and vegetables over increasing intake. Making healthy, nutrient-rich choices within the fruit and vegetable groups is important and should be discussed in the text. However, all of the subheadings of the 2000 edition of the fruit and vegetable guideline and the supporting text of three of four subsections (including the text box) focus on variety. Instead, the 2005 edition of the guideline should primarily urge Americans to eat more fruits and vegetables. It should encourage a variety of fruits and vegetables and choosing healthful options as secondary messages.

Fruits and vegetables are two of the most under-consumed food groups in Americans’ diets. Seventy-seven percent of Americans do not eat the recommended amount of fruits and vegetables each day.[2] Three out of four high school students do not eat even the minimum recommended amount of fruits and vegetables a day (five servings a day).[3]
This proposed change to the fruit and vegetable guideline would also make it more consistent with the primary message and focus of the National 5 A Day Program, a program conducted and coordinated by a national partnership that includes USDA and the U.S. Department of Health and Human Services (HHS). USDA and HHS signed a Memorandum of Understanding in March 2002, in which the departments committed to work together to encourage all Americans to eat five to nine servings of fruits and vegetables each day (that target is likely to change to 5 to 10 servings if the recommendations change to those proposed in the Food Guide Pyramid revision).

The supporting text of the fruit and vegetable guideline should continue to include a section with tips on how to incorporate more fruits and vegetables into one’s diet. However, the Committee should collapse, update and revise the tips in the 2000 edition’s sections entitled “Aim for variety” and “Find ways to include plenty of different fruits and vegetables in your meals and snacks.” The text could also provide the tip “Eat at least 1 to 3 servings of fruits or vegetables at every meal or snack.”

III. Encourage variety and the most healthful choices of fruits and vegetables.

Although the guideline should be strengthened to encourage people to eat more fruits and vegetables, it should retain two key secondary messages: 1) choose a variety of fruits and vegetables and 2) make healthful choices within the fruit and vegetable groups.

A. Variety. Americans consume a limited variety of fruits and vegetables. Three vegetables (potatoes, iceberg lettuce, and canned tomatoes) accounted for half (48%) of vegetable consumption in the United States in 2000.4 Just three fruits (oranges, apples, and bananas) contributed one-half of total daily fruit servings in 2000.

Each fruit and vegetable has a unique assortment and different amounts of vitamins, minerals, phytochemicals, and fiber. Consumption of a variety of fruits and vegetables can help to ensure that people get the variety of nutrients and phytochemicals available from these food groups.

The guideline could encourage variety by advising people to eat fruits and vegetables of different colors. Consumer research by the Produce for Better Health Foundation has found this to be an effective communications approach. We encourage the Committee to look at that research.

B. Nutritional quality. Although most fruits and vegetables are naturally low in fats, salt, and calories, the levels can rise with food processing and preparation. The supporting text of the fruit and vegetable guideline should include tips that encourage people to 1) choose canned fruit packed in juice
or light syrup, 2) choose canned and frozen vegetables low in salt/sodium, and 3) make juice only one of your fruit or vegetable servings each day, given its higher caloric density and low fiber content compared to whole fruit or vegetables.

It is especially important to include a tip encouraging people to eat fewer fried vegetables such as potato chips and French fries. The guideline should encourage people to eat French fries less often, replace fries with salad or fruit, and choose smaller portions of fries (the large fries have more than twice the calories of a small order at McDonald's, 210 versus 540 calories), given their usual high content of saturated and trans fats and calories.

The supporting text of the fruit and vegetable guideline also should include a tip regarding juice drinks that are not 100% juice and contain added sugars. Many brands are available and are marketed in ways that lead consumers to believe they are 100% fruit juice. Names like Fruitopia and Fruitworks, packaging, and ads full of images of fruit blur the distinction between juices and juice "drinks." The guideline should point out that sweetened fruit "drinks" are calorically dense and provide few naturally occurring nutrients. A tip also should encourage people to check the percent juice on the food label.

Finally, the supporting text of the fruit and vegetable guideline should encourage people to choose fruits and vegetables in place of calorically dense foods. For example, it could advise people to choose fruit as a snack instead of chips, cookies, snack cakes, or candy or choose the vegetable of the day (60 calories) instead of French fries (590 calories) when eating out.

IV. References

Comments by the Center for Science in the Public Interest on “Choose a Diet That Is Low in Saturated Fat and Cholesterol and Moderate in Total Fat”

The Center for Science in the Public Interest suggests the following changes to make this guideline more accurate and more useful to consumers.

I. The guideline should motivate the public to eat healthier diets.

This guideline is critical to the public’s health. Considering that saturated and trans fat are among the biggest problems in Americans’ diets, it deserves greater emphasis. The guideline could motivate people to cut back on saturated and trans fat by explaining that these fats raise LDL (“bad”) blood cholesterol, a major risk factor for coronary heart disease, the leading cause of deaths among American men and women. For example, the text could note these statistics from the American Heart Association:¹

- About every 26 seconds an American will suffer a coronary event, and about every minute someone will die from one.
- 50 percent of men and 64 percent of women who died suddenly of coronary heart disease had no previous symptoms.
- Roughly 45 percent of American adults have “high” or “borderline high” LDL (“bad”) cholesterol levels, a major risk factor for heart disease.
- Less than half of the people who need treatment to lower their cholesterol are receiving it.

Statistics like these add urgency to this guideline and may help persuade the public to follow the guideline’s advice.

II. The guideline should expand its advice to help people find foods that are low in saturated fat.

The guideline does not adequately explain which foods are low in saturated fat. It should cite the Institute of Medicine’s recent conclusion that a UL (Upper Tolerable Intake Level) “is not set for saturated fatty acids because any incremental increase in saturated fatty acid intake increases CHD risk.”²
The guideline advises consumers to “choose foods low in saturated fat and cholesterol,” but fails to explain that foods can have no more than 1 gram of saturated fat to be considered “low in saturated fat” by the FDA and USDA. A food with “only” 3 or 4 grams of saturated fat per serving may appear low to most people but such a food would use up a sizeable fraction of the Daily Value for saturated fat.

Similarly, the text should explain that any food with 4 or more grams is high in saturated fat. The FDA prohibits health claims on any food with at least 4 grams of saturated fat. For example, whole milk labels cannot make a health claim about calcium and osteoporosis because whole milk exceeds that level.

III. The guideline should clarify the confusion about cholesterol.

The fat guideline should note that the Institute of Medicine recently concluded that “a Tolerable Upper Intake Level is not set for cholesterol because any incremental increase in cholesterol intake increases CHD risk.” The guideline should recommend that people consume no more than the Daily Value for cholesterol, which is 300 mg. In addition, the guideline should point out that Nutrition Facts labels include a %DV that tells consumers how much of a day’s worth of cholesterol a serving of food contains.

Furthermore, the fat guideline should help to clear up the public’s confusion about dietary cholesterol. That confusion has been heightened by misleading advertisements by the American Egg Board claiming that eggs do not raise cholesterol. It is particularly important that the Dietary Guidelines clear up this confusion because USDA’s marketing division approved those ads.

A meta-analysis of well-controlled clinical studies indicate that adding two egg yolks to a daily diet would raise blood cholesterol by 10.8 mg/dL. Since the average blood cholesterol level among American adults is now 205 mg/dL, a 10.8 mg/dL rise represents a 5.3 percent rise in blood cholesterol. And since a one-percent rise in blood cholesterol translates into at least a two-percent rise in the risk of heart disease, adding two eggs a day to the average person’s diet would raise his or her risk of heart disease by 10.6 percent. Even the lower-quality meta-analysis financed by the egg industry shows that two egg yolks a day would raise blood cholesterol by 9.5 mg/dL. Furthermore, studies in primates indicate that dietary cholesterol may promote atherosclerosis by mechanisms other than raising blood cholesterol.

IV. The guideline to “Choose a diet that is low in saturated fat and cholesterol and moderate in total fat” should be changed to “Choose a diet low in saturated and trans fat and cholesterol and moderate in total fat.” The Dietary Guidelines should include trans fat in the guideline itself and provide clear advice in the text about how and why to limit trans fat consumption.
CSPI urges the Committee to provide the public with clear advice about how and why to limit trans fat consumption. The 2000 edition of the Dietary Guidelines contains only a few mentions of trans fat (a description of trans fat in Box 15 and advice to cut back on trans on page 30).

A. New Scientific Developments

Even when the last edition of the Dietary Guidelines was written, there was strong evidence that trans fat in partially hydrogenated oil increases plasma LDL-cholesterol levels in humans compared to non-hydrogenated oil. However, since the last edition of the Guidelines was written, there have been several important developments which should spur the Dietary Guidelines Advisory Committee to strengthen the advice regarding trans fat.

The Food and Drug Administration (FDA) has finalized regulations to require quantitative disclosure of trans fat on food labels.\(^8\) Trans fat labeling will be an important new tool to help protect the public’s health and reduce consumption of heart-unhealthy fats and the risk of heart disease. Although trans fat is not required to be listed on food labels until January 2006, companies are already starting include trans fat on food labels. The Dietary Guidelines should help people to better understand what trans fat is and how to reduce their intake.

The FDA has provided a review of the science regarding trans fat in the trans fat labeling proposed regulations and final rule.\(^8,9\) It concluded that “scientific evidence shows that trans fatty acids increase LDL-C (LDL-cholesterol), a primary risk factor for CHD (coronary heart disease).”\(^8\)

The Institute of Medicine report, Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids, also provides a review of the science and an another authoritative scientific conclusion that trans fat increases LDL cholesterol levels and the risk of coronary heart disease.\(^2\) The IOM “recommended that trans fatty acid consumption be as low as possible while consuming a nutritionally adequate diet.” Further, it found that any incremental increase in intake increases LDL cholesterol and the risk of heart disease. IOM also concluded that there is no known requirement for trans fat for specific physiologic functions.

The National Cholesterol Education Program of the National Institutes of Health concluded that “trans fatty acids raise serum LDL cholesterol levels” and “increase risk for CHD.”\(^10\) The report recommends that “intakes of trans fatty acids should be kept low.”
V. The fat guideline should encourage people to consider saturated and trans fat together and should provide quantitative advice about how much to consume.

A. The fat guideline should encourage people to consider -- and lower -- saturated and trans fat together to reduce their risk of heart disease.

Discussing the health effects of either fat separately might lead some consumers to lose concern about the other. For example, publicity about trans fat over the past few years has led some people to switch from margarine back to butter, yet butter contains more saturated plus trans fat than most margarines. It would be counterproductive if people increased their saturated fat intake while attempting to reduce their consumption of trans fat, or vice versa. The Dietary Guidelines should avoid a discussion of which fat -- trans or saturated -- is worse (though it might be worth pointing out that the U.S. diet contains far more saturated than trans fat).

B. The Dietary Guidelines should provide quantitative advice to the public about the amount of saturated plus trans fat to consume.

Vague, qualitative advice is less useful to consumers. Consumers cannot put into practice vague advice such as “limit trans fat intake” or “keep trans fat intake low.” How are people to know what “low” is? Importantly, numbers that sound low for saturated and trans fat can be large in terms of their contribution to recommended limits. For example, 5 grams of saturated fat might seem low to a consumer but is a quarter of the daily recommended limit for many people.

The IOM recently concluded that saturated and trans fat be combined together into a common Daily Value on food labels, providing a combined recommended level of intake. Since there is no DRI for saturated or trans fat to use as a basis for a DV, the IOM recommended that one be established using food composition data, menu modeling, and dietary survey data to determine minimum intakes while providing nutritionally adequate diets.

The American Heart Association reached a similar conclusion in 2000, when it issued a revised set of dietary guidelines that recommended that consumers try to limit their total intake of trans and saturated fatty acids to 10 percent of energy.

Health Canada's new food labeling format also groups trans fat with saturated fat. Health Canada explained that it “is justifiable in view of the fact that the two dietary components have the same effect on LDL cholesterol, a risk factor for CHD. The DV for the sum of saturated and trans fat is 20 g based on approximately 10% of energy for a 2000 calorie diet.” In its 1999 proposed regulations on trans fat labeling, the FDA explained that “Evidence has accumulated that trans fatty acids have physiologic effects similar to saturated fats and trans fatty acids in food are used functionally to
replace saturated fat....If trans fatty acids are not considered, consumers who make food choices on the basis of saturated fat content with the intention of reducing their risk of CHD may be misled. The regulations proposed using a DV of 20 grams for saturated plus trans fat for a 2000 calorie diet.

VI. The fat guideline should give advice about how to choose foods to limit trans fat consumption.

The guideline should provide specific advice on how to choose foods to limit trans fat intake. Such advice is important since many food labels will still not include information about trans fat in 2005 (labeling is required by January 2006). For example, it should explain that trans fat is often found in French fries, fried chicken, and other fried foods found in supermarkets and fast-food and other restaurants, as well as in crackers, cookies, snack cakes, pastries, and other baked goods. The guideline also should advise the public to choose lower-fat tub margarines which contain little or no trans fat instead of stick margarine, full fat tub margarines, or butter.

Box 18 might be revised to compare foods’ saturated plus trans fat content in the context of a 20 gram per day limit, include restaurant foods, which often contain high levels of saturated plus trans fat, and list more realistic portions.

VII. CSPI urges the Committee to use the term trans fat, rather than trans fatty acids, in the Dietary Guidelines for Americans.

The term trans fatty acid should not be used in the Guidelines. The term trans fatty acid is more technical and is inconsistent with the terms used for other fatty acids in the Guidelines. Although the technical term for saturated fat is saturated fatty acids, the Guidelines use the easier-to-understand term “fat” rather than “fatty acid.” The Committee should keep the term for trans fat consistent with the terms used for other fatty acids and make it easier for people to understand. In addition, the use of multiple terms (switching back and forth between fat and fatty acids) for the same nutrient or group of nutrients could be confusing to consumers.

VIII. The guideline should retain advice to eat a diet that is moderate in total fat.

While some fats raise the risk of heart disease and others lower the risk, it would be unwise to eliminate the current advice on total fat. Omitting all mentions of total fat in the guideline might lead some consumers to eat unlimited quantities of fat. Despite the committee’s best intentions, millions of people may misinterpret the absence of a fat limit as a license to eat foods that are high in saturated or trans fat. Furthermore, the average American who decides that it is fine to consume more fat is likely to indulge in the fatty foods that are part of our culture—hamburgers, pizza, ice
cream, nachos, pastries—which are high in saturated or trans fat and cholesterol. It is unrealistic to expect the U.S. population to interpret that advice to mean that it is okay to eat more nuts, avocados, or (non-tropical) vegetable oils.

Furthermore, it would be foolish to eliminate the advice to eat a moderate-fat diet just as the incidence of obesity is rising to unprecedented levels. In a largely sedentary society, where most people—especially women—can afford to eat only a limited number of calories, it is extremely difficult to meet nutrient needs without limiting fat intake. The small percentage of Americans who consume the recommended number of servings from each of the food groups in USDA's Food Guide Pyramid eats less fat than others. 14

Moreover, fatty foods are calorie-dense. Long-term studies indicate that people who are advised to eat a low-fat diet lose roughly 2 to 7 pounds without even trying. 15 Some researchers suggest that it is not less fat, but the lower calorie density of most low-fat diets, that leads to weight loss. 15 If so, the committee should advise people to limit both fat and other calorie-dense foods.

However, most people do not know which foods contain which fatty acids. Perhaps the best way to convey this advice is to recommend specific amounts of vegetable oils, mayonnaise, nuts, and other sources of unsaturated fats. (For example, the DASH study allowed 2 to 3 servings of fats and oils a day. 16) However, it is important to emphasize that the goal is to add these foods to a low-fat diet—that is, to a diet that is based primarily on fruits, vegetables, whole grains, beans, and low-fat versions of meat, dairy, and other sources of saturated or trans fat.

IX. The guideline should encourage consumers to eat less red meat.

Beef is one of the largest sources of saturated fat in the average American's diet. 17 In addition to meat's role in promoting heart disease, a number of studies have found a higher risk of colon or prostate cancer in people who frequently consume red meat. 18,19,20,21,22,23,24,25 Furthermore, Zheng found a higher risk of breast cancer among women who consume their red meat well-done. 26

In view of the growing body of evidence linking red meat to cancer, the American Cancer Society advises the public to “Limit consumption of red meats, especially those high in fat and processed.” 27 The World Cancer Research Fund and the American Institute for Cancer Research recommend the following advice to individuals: “If eaten at all, limit intake of red meat to less than 80 grams (3 ounces) daily. It is preferable to choose fish, poultry or meat from non-domesticated animals in place of red meat.” 28

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a. Examples of 1 serving: 1 teaspoon of oil or regular mayonnaise; 1 tablespoon of salad dressing or low-fat mayonnaise; 2 tablespoons of light salad dressing.
The Dietary Guidelines should include a similar recommendation. Current advice to consume lean meats is not sufficient because in some studies the consumption of red meat—whether lean or fatty—was associated with a higher risk of cancer.  

X. The guideline should clarify how to identify “lean” meats.

The current edition of the Dietary Guidelines recommends choosing lean meats. Thanks to USDA’s failure to require Nutrition Facts labels on fresh meat and poultry and to regulate claims on ground beef, advice to choose lean meats is not a guarantee that consumers will end up with lean meat, especially lean ground beef, which accounts for a large fraction of the meat consumed by Americans.

“Lean” and “extra lean.” In 1994, USDA implemented regulations defining “lean” and “extra lean” for most meat and poultry products. “Lean” meats can contain no more than 10 grams of fat, 4.5 grams of saturated fat, and 95 mg of cholesterol per 100-gram serving. “Extra lean” meats can contain no more than 5 grams of fat, 2 grams of saturated fat and 95 mg of cholesterol per 100-gram serving. However, the Department exempted ground beef from those definitions. Therefore, in some supermarkets, ground beef that contains up to 22.5 percent fat can be labeled “lean” or “extra lean,” as permitted by USDA’s rules prior to 1994.

Percent lean. Adding to the confusion, many supermarkets label their ground beef as “75 (or 80, 85, etc.) percent lean.” No other food can make a “percent lean” or “percent fat-free” claim unless it meets the definition of “low fat” because USDA and FDA agree that a “percent lean” or “percent fat-free” claim is an implied “low-fat” claim. However, ground beef is exempt from that regulation. (Only 97-percent-lean ground beef would meet the definition of “low fat.”)

Therefore, many consumers who purchase ground beef labeled “75 percent lean,” “80 percent lean,” etc. may assume that they are following advice to buy lean meat. In fact, very little of the ground beef that is regularly sold in supermarkets is “lean” (10 percent fat) and none is “low fat” (3 percent fat).

Recommendations in the Dietary Guidelines. Beef is the second largest source of saturated fat in the average American’s diet, and ground beef accounts for about 40 percent of the beef sold in the U.S. Until USDA finalizes regulations on lean claims for ground beef, advice to “choose lean meats” will be hard to follow and potentially misleading for one of the most popular types of meat.

This guideline should warn consumers that labels for ground beef may be misleading. It should advise the public that almost all ground beef—regardless of claims such as “lean” or “80 percent lean”—is high in saturated fat. Even a 3-ounce serving of cooked
ground beef that is 10 percent fat supplies 4 grams of saturated fat—a fifth of a day’s worth.

XI. The guideline should report realistic figures for the fat content of lean beef.

The current guideline states that “three ounces of cooked lean beef...provides about 6 grams of fat.” It is not clear from where this figure comes. According to USDA’s database, a 3-ounce cooked serving of a composite of beef cuts contains 8.4 grams of fat. Even “select” grade beef contains 7.4 grams.

Furthermore, those numbers are based on what USDA calls “separable lean.” Separable lean refers to meat that has been methodically trimmed by technicians with scalpels, not necessarily what meat trimmed by ordinary consumers might contain. To be more precise and realistic, the guideline should identify the cut of meat and use USDA figures for a 1/4-inch trim (the most popular trim). If the guideline includes numbers for both untrimmed and trimmed meat, it should use figures for 0-inch trim—that is, for meat that has been trimmed around the outside, but not inside, the cut.

XII. The guideline should emphasize the high levels of fats in many restaurant foods.

The guideline’s advice about specific foods fails to acknowledge that a third of all calories is consumed away from home. The tips in Box 16 do not give readers sufficient warning that many restaurant foods have very high levels of fat, saturated fat, trans fat, and cholesterol (see Restaurant Confidential). For example:

- A grilled cheese sandwich from a typical sandwich shop has 510 calories and 17 grams of saturated or trans fat.

- An order of stuffed potato skins—a popular appetizer at dinner house chains like Bennigan’s and T.G.I. Friday’s—has 1,120 calories and 40 grams of saturated or trans fat. Those numbers do not include any of the sour cream that is served with the skins.

- An order of fried mozzarella sticks, another popular appetizer, has 830 calories and 28 grams of saturated or trans fat.

- A King-size order of French fries at Burger King has 600 calories and 16 grams of saturated or trans fat, about as much as a Bacon Double Cheeseburger. A Double Whopper with Cheese has 1,020 calories and 27 grams of saturated or trans fat.
Note that those sample foods are all individual items. Figures for total meals are even higher. For example:

- A **mushroom cheeseburger** plus an order of **French fries**—popular items on most dinner house menus—supplies 1,490 calories and 88 grams of fat, 40 of them saturated. That is without an appetizer or dessert.

- A 12-ounce **sirloin steak** (one of the leanest items on steakhouse restaurant menus) plus a **Caesar salad** (a popular side dish offered in unlimited quantities in most steakhouses), and a baked potato supplies 1,100 calories and 58 grams of fat, 24 of them saturated or trans.

- A **fried seafood platter**, a popular meal served at seafood restaurants like Red Lobster, has 2,170 calories and 130 grams of fat, 39 of them saturated or trans.

We urge the committee to carefully review the attached data from CSPI’s book, *Restaurant Confidential*. The calorie, fat, saturated fat, and cholesterol contents of restaurant foods dwarf those on most Nutrition Facts labels because many restaurant foods are both high in fats and served in large portions. For the **Dietary Guidelines** to be useful, it needs to give practical advice for eating in restaurants and other food service establishments.

**XIII. References**


13. Canada Gazette Part II (January 1, 2003) at 394.


30. 59 Federal Register 26,916-26,917 (1994).


Comments by the
Center for Science in the Public Interest on
“Choose Beverages and Foods to Moderate Your
Intake of Sugars”

The Center for Science in the Public Interest strongly supports the current guideline on refined/added sugars. Considering the poor nutritional quality of most Americans diets and the problem of endemic obesity, the guideline should be retained and strengthened.

Appropriately, the guideline distinguishes between naturally occurring and added sugars, even though they may be chemically identical. Naturally occurring sugars, in the form of dairy products, fruits, and vegetables, typically are low in calorie density and are associated with important nutrients, phytochemicals, or fiber. Refined sugars are usually found in foods of low nutrient density, high calorie density, and, in some cases, large amounts of saturated or trans fatty acids. These foods include carbonated soft drinks, fruit drinks, candy bars, hard candy, cookies, cakes, pastries, and other baked goods. The “Advice for Today”--which advises against overconsumption of added sugars--and the several boxes in the guideline are reasonable.

However, the guideline should be strengthened in light of American dietary patterns. Sugar-laden soft drinks have been replacing milk in teenagers’ diets. USDA’s 1977-78 CSFII found that teens consumed almost twice as much milk as soda pop. In contrast, the 1994-96 CSFII found that teens were consuming twice as much soda pop as milk. This trend has serious ramifications, especially for girls, who need to build up their bones to protect against osteoporosis later in life.

The Institute of Medicine’s 2003 report on macronutrients concluded that added sugars at levels of 25% or greater of calories dilutes the nutrient quality of diets. Though the IOM did not make a recommendation for the consumption of added sugars, the 25% figure is certainly an upper boundary based on this one parameter. Contributions to obesity and tooth decay represent additional concerns.

USDA’s September 2003 proposed Food Intake Patterns for the Food Guide Pyramid revision recommend different limits on added sugars for various caloric intakes. The limits range from 8% of calories (for a 1,000 calorie diet) to 13% of calories (for a 3,200 calorie diet). Those recommendations are based on the nutrient adequacy of the diet, a sensible and practical approach. USDA’s advice is probably the most sophisticated in the world. The World Health Organization and many foreign nations have recommended that people limit their refined-sugars intake to 10% of calories, without considering caloric needs.
We have several recommendations for strengthening the guideline:

- The heading uses the ambiguous word moderate. While the dictionary says that to moderate means to lessen, the heading should directly advise consumers to limit their intake of refined sugars or, perhaps more simply, to consume fewer soft drinks and other sweets. The focus on soft drinks is reasonable, considering that that is the largest source of sugar for most Americans.

- It has been increasingly recognized that sugary foods may replace more-healthy foods in the diet. We suggest that more text be added to address that issue.

- A table should be included to list USDA recommendations for how much refined sugars consumers limit themselves to, like the table below:

<table>
<thead>
<tr>
<th>Overall Caloric Requirements</th>
<th>Added Sugars Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,200 calories</td>
<td>5 teaspoons (20 g)</td>
</tr>
<tr>
<td>1,600 calories</td>
<td>6 teaspoons (24 g)</td>
</tr>
<tr>
<td>1,800 calories (average woman)</td>
<td>8 teaspoons (32 g)</td>
</tr>
<tr>
<td>2,000 calories</td>
<td>10 teaspoons (40 g)</td>
</tr>
<tr>
<td>2,200 calories (average man)</td>
<td>12 teaspoons (48 g)</td>
</tr>
<tr>
<td>2,600 calories</td>
<td>16 teaspoons (64 g)</td>
</tr>
<tr>
<td>3,000 calories</td>
<td>20 teaspoons (80 g)</td>
</tr>
</tbody>
</table>

To help put those recommendations into context, the guideline should include the added-sugars content of soft drinks, cakes, cookies, ice cream, and other foods. The box should use typical portion sizes rather than the FDA’s reference serving sizes, which are often smaller than what people typically consume, and should include popular restaurant foods and beverages. For example:

**Added Sugars Content of Foods and Beverages**

<table>
<thead>
<tr>
<th>Food</th>
<th>teaspoons</th>
<th>grams</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs. Fields’ Chocolate Chip Cookie (2 oz.)</td>
<td>6</td>
<td>23</td>
</tr>
<tr>
<td>Reese’s Peanut Butter Cups (2.5 oz.)</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>Nesquik Chocolate Milk (16 oz.)</td>
<td>8</td>
<td>32</td>
</tr>
<tr>
<td>Twizzlers Strawberry Twists (6 oz.)</td>
<td>16</td>
<td>64</td>
</tr>
<tr>
<td>Soft drink (20 oz.)</td>
<td>17</td>
<td>68</td>
</tr>
<tr>
<td>Mrs. Fields’ Double Fudge Brownie (3 oz.)</td>
<td>12</td>
<td>47</td>
</tr>
<tr>
<td>Cinnabon (7.5 oz.)</td>
<td>12</td>
<td>49</td>
</tr>
<tr>
<td>Cheesecake Factory Carrot Cake (1 sl., 14 oz.)</td>
<td>36</td>
<td>143</td>
</tr>
<tr>
<td>Cheesecake Factory Black Out Cake (1 sl., 14 oz.)</td>
<td>38</td>
<td>150</td>
</tr>
</tbody>
</table>
Comments by the
Center for Science in the Public Interest on
“Choose and Prepare Foods with Less Salt”

The salt guideline should do more to alert Americans to the risks of consuming excess
sodium and the most effective means of cutting back on salt. The Institute of Medicine
recently recommended that Americans reduce their sodium intake to no more than
1,500 mg a day.¹ Furthermore, the Institute noted that more than 95 percent of
American men and 75 percent of American women aged 31 to 50 regularly consume
salt in excess of the Upper Tolerable Intake Level (UL), which is 2,300 mg of sodium a
day.

Few, if any, nutrients in the American diet cause as much harm as excess sodium. Yet,
thanks largely to the public relations efforts of the food and salt industries, the public
has been led to believe that the evidence that salt raises blood pressure is weak and
controversial. As noted in an editorial in the British Medical Journal, this is no
coincidence.

Faced with a growing scientific consensus that salt increases blood pressure and
the fact that most dietary salt (65-85%) comes from processed foods, some of
the world’s major food manufacturers have adopted desperate measures to try to
stop governments from recommending salt reduction. Rather than reformulate
their products, manufacturers have lobbied governments, refused to cooperate
with expert working parties, encouraged misinformation campaigns, and tried to
discredit the evidence.²

In the U.S., the industry’s influence has taken many forms. For example, in 1996, the
media widely reported the results of a meta-analysis sponsored by the Campbell Soup
Research Foundation.³ The meta-analysis concluded that cutting sodium intake did not
lower blood pressure in normotensives. However, it reached this conclusion only after
excluding all studies on institutionalized subjects—that is, the best-controlled studies--
and including only those conducted on free-living subjects. The author, Alexander
Logan of Mount Sinai Hospital in Toronto, was a member of the Salt Institute’s advisory
board.

The committee should do its best to counterbalance the industry’s disinformation
campaign by strengthening the sodium guideline.

I. The guideline should discuss the prevalence and consequences of
hypertension.

The 2000 edition of the guideline discusses the consequences of calcium loss, but not
the consequences of high blood pressure. To motivate consumers to cut back on
sodium, the guideline should explain that high blood pressure raises the risk of heart attacks and stroke. Furthermore, the guideline could explain that, according to the National Heart, Lung, and Blood Institute:

- An estimated 29 percent of adults—more than 58 million Americans—have high blood pressure, up from 25 percent in the early 1990s. Half of adults over 60 have hypertension.

- An estimated 45 million Americans have “prehypertension”—blood pressure between 120 to 139 over 80 to 89—which means that they have an elevated risk of heart attack and stroke.

- The risk of high blood pressure rises with age. If a person does not have high blood pressure at the age of 55, his odds of getting it in his lifetime are 90 percent.

- Thirty percent of people with high blood pressure do not know they have it.

These facts should spur readers to cut back on sodium, whether they have high blood pressure or not. Without this information, many readers may mistakenly conclude that the guideline does not apply to them.

II. The guideline should emphasize that most salt is added to foods by manufacturers, not consumers.

An estimated 80 percent of sodium is added to foods by manufacturers, not the consumer. However, the guideline repeatedly suggests that consumers can reduce their sodium intake substantially by adding less sodium in cooking or at the table. Specifically:

- The guideline states that “Most of the salt you eat comes from foods that have salt added during food processing or during preparation in a restaurant or home” (p. 34) This sentence, which is followed by further discussion about salt in recipes, sauces, and the salt shaker, is not sufficient to convey the urgency of reducing sodium in processed and restaurant foods. Although it is worth reminding people to go easy on the salt shaker, it is misleading to imply that doing so will curb sodium intake significantly.

- In Box 24, titled “Salt versus Sodium,” one of the three bullets states: “The best way to cut back on sodium is to cut back on salt and salty foods and seasonings.” This advice implies that the salt shaker, seasonings, and salty foods are major sources of sodium. In fact, many salty-tasting foods, like potato chips and French fries, are surprisingly low in sodium. Potato chips have less salt per ounce than some breakfast cereals. French fries are one of the lowest-
sodium items sold at McDonald’s. Urging people to avoid salty foods reinforces the mistaken impression that only salty foods are high in sodium. In fact, sodium levels are considerably higher in foods like frozen entrees, packaged pasta or rice mixes, canned soups, pasta sauces, pizza, and lunch meats.

- In the box titled “Ways to Decrease your Salt Intake,” three bullets are devoted to reducing salt from the salt shaker or condiments (“Cooking and Eating at Home”), implying that doing so will lower sodium intakes sufficiently. One bullet under “Eating Out,” urges consumers to “ask to have no salt added when the food is prepared,” suggesting that restaurants add all or most of the salt in their kitchens. (In fact, many foods reach restaurant kitchens with salt already added. Many restaurants do not prepare their own sauces, soups, salad dressings, etc.) Another bullet (under “Any Time”) encourages consumers to drink water because it is very low in sodium. Yet, beverages are not a major source of sodium.

- The text equates the Daily Value (2,400 mg) to a teaspoon of salt (p. 35), suggesting that people who add no more than a teaspoon of salt to their food meet the guidelines.

In sum, the committee should revise the text of the sodium guideline to give greater emphasis and more specifics about the sodium content of processed and restaurant foods.

III. The guideline should emphasize the extraordinarily high levels of sodium in many restaurant foods.

The guideline’s advice about specific foods fails to acknowledge that a third of all calories are consumed away from home. The “Eating Out” section of Box 25 should be replaced with more details and advice about restaurant foods. CSPI’s laboratory analyses reveal that many restaurant foods have very high levels of sodium (see Restaurant Confidential). For example:

- Nearly every sandwich we analyzed from a typical deli contained more than 1,000 mg of sodium. Some, like corned beef with mustard, ham with mustard or mayo, or a turkey club--contained closer to 2,000 mg of sodium. A Reuben or an “overstuffed corned beef” sandwich contained close to 3,000 mg of sodium.

- Nearly all of the popular Italian dishes we analyzed had at least 1,000 to 2,000 mg of sodium. Most Chinese dishes and Mexican platters had at least 2,000 to 3,000 mg of sodium. Since these restaurants do not supply nutrition information, the guidelines should alert the public to these high levels of sodium.
- An order of **Buffalo Wings**, a popular appetizer at dinner house chains like Bennigan's and Chili's, has 1,750 mg of sodium. Adding the bleu cheese dressing brings the total to 2,460 mg.

- An order of **fried mozzarella sticks**, another popular appetizer, has 1,890 mg of sodium.

- **A Big Mac at McDonald's** has 1,090 mg of sodium.

Note that these sample foods are primarily individual items. Figures for total meals are much higher. We urge the committee to carefully review the sodium levels reported in CSPI's book, *Restaurant Confidential* (enclosed).

The sodium levels in restaurant foods dwarf those on most Nutrition Facts labels because many restaurant foods are both high in sodium and served in large portions. If the *Dietary Guidelines* is going to provide useful information to consumers, it is essential that it give practical advice for eating in restaurants and other food service establishments.

**IV. The guideline should include a quantitative recommendation for sodium intakes.**

The *Dietary Guidelines* should include a quantitative sodium recommendation that is consistent with the Daily Value (DV) used on food labels. The current guideline states, “the Nutrition Facts Label lists a Daily Value of 2,400 mg of sodium per day.” Instead, the revised *Dietary Guidelines* should recommend that people try to consume no more than 1,500 mg of sodium a day and inform consumers that 2,300 mg a day is the Upper Tolerable Intake Level. An explicit recommendation would be more persuasive and effective than the current text.

The National Heart, Lung, and Blood Institute, the Institute of Medicine’s Dietary Reference Intakes, the American Heart Association’s *Dietary Guidelines for Healthy American Adults*, and other health authorities agree that 2,400 mg of sodium is a reasonable target. The DASH II study indicates that a daily target of 1,500 mg would further reduce the risk of high blood pressure.
V. The guideline should clarify the evidence linking salt to blood pressure.

The current guideline states that “many studies in diverse populations have shown that a high sodium intake is associated with higher blood pressure.” This sentence fails to adequately convey the strength of the evidence on salt and high blood pressure. The wording and strength of the guideline should reflect the vast and compelling evidence from clinical trials showing that a reduction in sodium intake lowers blood pressure.\textsuperscript{4,5,6,7}

VI. The guideline should urge consumers to buy foods labeled “healthy.”

The current guideline advises readers to “look for labels that say “low-sodium.” It should also encourage them to look for soups, frozen dinners, processed meats, and other foods that are labeled “healthy.” These foods—such as those sold under the Healthy Choice or Campbell Soup’s Healthy Request brand names—must contain moderate amounts of sodium because the FDA requires “healthy” products to contain no more than 480 mg of sodium per serving.\textsuperscript{8,a}

Unfortunately, many consumers do not know that “healthy” foods are often substantially lower in sodium than their competitors. The Dietary Guidelines should steer consumers towards these foods. If those brands do not continue to attract customers, sodium levels in the marketplace will return to the unnecessarily high levels used by their competitors.

VII. The guideline should urge consumers to buy unprocessed foods.

An estimated 75 percent of sodium comes from processed foods.\textsuperscript{9} Unprocessed foods, such as fresh fruits and vegetables, unprocessed cereals, beans, and fresh fish, poultry, and meat contain far less sodium than their processed counterparts. For example, fresh vegetables usually contain less sodium than canned vegetables, quick-cooking oatmeal contains less sodium than instant oatmeal, and natural cheeses contain less sodium than processed cheeses. While many Americans rely on processed foods for convenience, the guideline should encourage them to choose unprocessed foods whenever possible to help them lower sodium consumption.

\textsuperscript{a. Frozen dinners, like other “main dishes and meal products,” may contain 140 mg of sodium per 100 grams.}
VIII. References


Comments by the Center for Science in the Public Interest on “If You Drink Alcoholic Beverages, Do So in Moderation”

In CSPI’s view, the current (2000) version of the Dietary Guidelines needs little revision to bring it up to date with recent scientific findings on the role of alcoholic beverages in the diet. Essentially, the current Guidelines provide the appropriate balance of information about 1) the potential risks of excessive consumption; 2) who should avoid alcohol; 3) the potential cardiovascular benefits of moderate drinking for a limited class of consumers; and 4) advice on moderate or low-risk drinking.

CSPI has found no changes in the scientific literature that suggest relaxing the clear message in the guideline that drinking alcohol imposes numerous risks on the user, as well as on society at large. Current research in the alcohol field offers no reason to permit new language providing additional encouragement for consumers to “drink for their health.”

Some elements of the guideline could be improved to provide more information and better guidance for consumers. Those include: 1) drinking by children and adolescents; 2) drinking among older adults and the elderly; and 3) the guideline’s definitions of the alcohol and calorie content of standard drinks.

I. Children and Adolescents

The current guideline lists children and adolescents under the heading “Who should not drink?” However, of all the bullets in that section, that point is the only one without explanation or elaboration. We believe that omission should be corrected to reflect, in part, the comprehensive summary of the consequences of underage drinking that is found in the September 2003 report of the National Research Council of the Institute of Medicine’s, Reducing Underage Drinking, A Collective Responsibility (pages 60 – 66).

Youth who start drinking at an early age are more likely to suffer a variety of problems related to alcohol. Studies by Hingson and Kenkel “reveal that youth who started drinking before the age of 15, compared to those who waited until age 21, were 12 times as likely to be unintentionally injured while under the influence of alcohol, 7 times more likely to be in a motor vehicle crash after drinking and 10 times more likely to have been in a physical fight after drinking” (Hingson R & Kenkel D. “Social and health consequences of underage drinking.” In Reducing Underage Drinking: Issues and Interventions. Committee on Developing a Strategy to Reduce and Prevent Underage Drinking. Washington, D.C.: National Academy Press, in press). Youth who drink are more likely to
experience or commit a sexual assault and are more likely to engage in risky sexual behavior.

New research on adolescent brain development “suggests that early heavy alcohol use may also have negative effects on the actual physical development of brain structure.” (Brown SA & Tapert S. “Health consequences of adolescent alcohol use.” In Reducing Underage Drinking: Issues and Interventions. Committee on Developing a Strategy to Reduce and Prevent Underage Drinking. Washington, D.C.: National Academy Press, in press.) This is especially important because the brain continues to develop physiologically well into adolescence.

In our view, the guideline should spell out as strong a rationale as possible to discourage alcohol consumption among children and adolescents. Including information about the specific risks and new research about the effects of alcohol on the developing brain will help parents and other adults better understand that underage drinking is not simply a “rite of passage.”

II. Alcohol and Older Adults/Elderly

Although the current guideline off-handedly reflects findings that older people may become more sensitive to the effects of alcohol as they age, that information is not included in the “Advice for Today.” We think that it should be.

Research documents a wide variety of risks related to alcohol consumption among older adults: hip fractures and other injuries from falls; traffic crashes; depressive disorders; combining alcohol with various medications; late-stage alcoholism; increased risk of intoxication and adverse effects; and decreased level of tolerance to alcohol (NIAAA Alcohol Alert, No. 40, April 1998). In most instances, risks among older adults exceed those of younger adults.

Therefore, we recommend that the guideline section, “Advice for Today” include the following language: “Older individuals (65+) should limit their consumption of alcohol to no more than one drink per day.” That provision would track the current recommendation of the National Institute on Alcohol Abuse and Alcoholism (10th Special Report to the U.S. Congress on Alcohol and Health, 2000, pages 3, 240).

III. Definitions of Alcohol and Calorie Content of Moderate Drinking

Currently, Box 26 of the alcohol guideline provides summary information that defines a drink as either a 12-ounce regular beer, a 5-ounce glass of wine, or a 1.5-ounce serving of 80-proof liquor. The guideline suggests that a beer has 150 calories, the wine 100, and the shot of liquor also 100 calories. Although that
approximation may be somewhat helpful, it fails to take into account recent trends in alcohol products and in alcohol consumption.

New products, such as Mike’s Hard Lemonade, Smirnoff Ice, Skyy Blue, and Bacardi Silver, have recently gained increasing popularity as substitutes for beer or soft drinks – particularly among younger drinkers, the same consumers who drink most heavily. Those products, although they may contain alcohol derived from spirits sources, are marketed as malt beverages and available where beer is sold. Like beer, they are not required to include alcohol or calorie content information on their labels. Although their alcohol content (approximately 5% by volume) resembles that of beer, they usually contain far more calories due to added sugar. They often contain between 230 and 275 calories, or at least 50% more than a regular beer. Generally, consumers are unaware of the high calorie content of those beverages and think they have fewer — or about the same — calories as a regular beer (see attached poll summary).

Other “high-octane” products, such as malt liquors, which are often consumed from large (32- or 40-oz) containers, also fall outside the definition of “standard” drinks, and would provide considerably more alcohol and calories than a regular beer. The Guidelines’ definitions of “standard” drinks and calorie contents should be revised to take into account these popular, “non-standard” drinks.

Similarly, the guideline’s identification of 100 calories in a serving of distilled spirits may not provide consumers with useful information. As defined in the guideline, the straight liquor drink is certainly a rarity. More and more, distilled spirits are served and consumed as mixed drinks, with fruit juices, soft drinks, multiple sources of alcohol, cream, sugar, and other more exotic ingredients. What begins as a 100-calorie serving can easily become a small meal’s worth of calories, or more. For example, America’s most popular liquor drink, a Margarita (typically a combination of tequila, sweet and sour mix, and triple sec), may have as much as 60 to 65 calories per ounce. An eight-ounce drink would supply 500 calories — and it’s not unusual to find Margaritas that contain 16, 20 or 24 ounces. Often, they’re served in pitchers, along with high-fat foods, such as nachos. Even with a lot of ice, those large drinks could provide a hefty ration of unexpected calories, beyond those contained in the tequila.

Other popular distilled spirits drinks also contain far more calories than consumers might think. For example, a 3.3 oz. serving of a Manhattan (sweet vermouth, bourbon whiskey, angostura bitters, Maraschino cherry, and orange peel) has 206 calories; a rum martini (2.8 oz.) has 180 calories; a 4.5 oz. pina colada has 245 calories; a 7 oz. rum and Coke, perhaps 175 to 200 calories. In addition, many sweet liquor drinks, such as crème de menthe or schnapps, by themselves contain significantly more than 100 calories per serving.

We recommend that the Dietary Guidelines’ information on the calorie content of typical drinks be amended to alert consumers about the additional calories
derived from other ingredients mixed with or in distilled spirits drinks. In addition, calorie information for alcoholic beverages should be made more prominent than in the current version of the guideline, either by highlighting calorie content in a box separate from the moderate drinking box or by some other means.
Comments by the Center for Science in the Public Interest on “Keep Foods Safe to Eat”

The Dietary Guidelines for Americans were revised in 2000 to include a new section on keeping food safe to eat. While food producers have a significant responsibility for assuring that the foods we eat are free from pathogens that can cause foodborne illnesses, consumers need to be aware of their role in keeping food safe from farm to table. However, there are some significant omissions from the discussion in the food safety guideline that weaken the advice given to consumers. The omissions relate both to the current focus of the guideline and to topics that are not covered, such as food allergens, food additives, and toxic contaminants.

I. Revise Box 13 to state that some foodborne pathogens, like *Listeria monocytogenes* and *E. coli* O157:H7, can cause particularly severe illnesses or death in vulnerable groups.

Box 13 explains that foodborne illnesses are caused by eating food containing certain harmful bacteria, including *Campylobacter* and *Salmonella*. However, the discussion fails to mention *Listeria monocytogenes* or *E. coli* O57:H7 as causes of foodborne illnesses. While illnesses caused by *L. monocytogenes* and *E. coli* O157:H7 are rarer than those caused by *Campylobacter*, *Salmonella* and Noro-viruses, they are particularly severe in pregnant women, people with compromised immune systems, and young children, and they are much more likely to have long term and serious outcomes, including death. In its recently released risk assessment for *L. monocytogenes*, FDA notes that, in 2000, of all foodborne pathogens tracked by the Centers for Disease Control and Prevention, *L. monocytogenes* had the second-highest case fatality rate (21%) and the highest hospitalization rate (90.5%).

II. Expand Box 13 to explain that *E. coli* O157:H7-contaminated raw or undercooked ground beef has been the source of serious illnesses in young children and the elderly, that *L. monocytogenes*-contaminated ready-to-eat meat and poultry have been associated with deaths among older consumers and miscarriages in pregnant women, and *Vibrio vulnificus* in oysters is associated with illnesses among older consumers and those with compromised immune systems.

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The information presented in Box 13 would be considerably strengthened if it provided more specific information linking pathogens to foods that are particularly high risk for vulnerable groups.

III. Rather than merely advising consumers to “be very careful,” the guideline should offer specific advice on how to keep food safe.

In the paragraph following Box 13, the guideline advises consumers to: “[f]ollow the steps below to keep your food safe. Be very careful with perishable foods such as eggs, meats, poultry, fish, shellfish, milk products, and fresh fruits and vegetables.” The FDA’s risk assessment for *L. monocytogenes* has found that several factors affect consumer exposure to *L. monocytogenes* at the time of food consumption, including the refrigerated storage temperature and the duration of refrigerated storage of the food before consumption. The risk assessment also predicted that “consumer education and other strategies aimed at maintaining home refrigerator temperatures at 40°F could substantially reduce the risks associated with this food category.”

The paragraph following Box 13 should be followed by a box setting forth general food safety precautions for consumers. These should include:

- Use a refrigerator thermometer to make sure that the refrigerator always stays at 40 degrees F or below and the freezer stays at 0 degrees F or below.
- Use perishable items that are precooked or ready-to-eat as soon as possible after purchase.

IV. The first paragraph of Box 14, which identifies who is at high risk of foodborne illness, should state “pregnant women and their fetuses.”

In Box 14, the guideline identifies subpopulations who are at high risk for foodborne illness and offers them additional precautions for assuring the safety of their food. Although the box identifies pregnant women, it does not mention the risk to their developing fetuses.

V. New language should be added to the second paragraph of Box 14 to provide more complete advice to high risk consumers.

In the second paragraph of Box 14, the guideline advises high risk consumers to take extra precautions and gives precautionary advice concerning certain foods, including not eating or drinking unpasteurized juices and milk, and not eating raw or undercooked

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meat, poultry, eggs, fish and shellfish. However, it fails to provide any warnings concerning the dangers of *L. monocytogenes* in certain ready-to-eat foods.

To be consistent with the FDA’s own risk assessment, this box should include warnings against eating specific foods to reduce the risks related to *L. monocytogenes*. In addition, the guideline offers no warning to vulnerable consumers concerning the danger of eating untreated raw Gulf oysters which are frequently contaminated with *V. vulnificus*.

The following advice should be added to Box 14:

- do not eat hog dogs and luncheon meats unless they are reheated until steaming hot

- do not eat soft cheese such as Feta, Brie, and Camembert cheeses, blue-veined cheeses, queso blanco, queso fresco, and Panela unless it is labeled as made with pasteurized milk

- do not eat refrigerated smoked seafood, unless it is in a cooked dish. Refrigerated smoked seafood, such as salmon, trout, whitefish, cod, tuna, or mackerel, is most often labeled as “nova-style,” “lox,” “kippered,” “smoked,” or “Jerky.” The fish is found in the refrigerator section or sold at deli counters. Canned or shelf-stable smoked seafood may be eaten.

- do not eat raw oysters harvested from the Gulf of Mexico unless they have been treated to eliminate *V. vulnificus*.

**VI. Chemical contaminants should be addressed**

The *Dietary Guidelines* should be amended to address certain omissions relating to chemical contaminants. Certain unintentional contaminants in food pose significant risks, particularly methylmercury and dioxin. In 2000, the National Academies of Science released a report finding that more than 60,000 children are born each year at risk for neurological problems due to low-level methylmercury contamination from seafood eaten by pregnant women.⁴ Methylmercury poses a special risk to pregnant and lactating women, babies and small children. It is most abundant in certain species of fish, including shark, swordfish, king mackerel and tilefish.

Dioxins and dioxin-like compounds are suspected of causing cancer. They are produced by human activities (such as incineration) and contaminate the environment. They enter the human food supply primarily through the fat in beef, milk and fish. A recent report by the National Academy of Sciences discusses risks and risk-

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management strategies. The report identifies certain populations at risk, including breast-feeding babies.

The guideline should include either new text or a box:

- cautioning pregnant women, nursing mothers, women of childbearing age, and young children that they should not eat shark, swordfish, king mackerel, or tilefish because they contain high levels of mercury;

- cautioning that levels of mercury in other fish can vary and advising pregnant women, nursing mothers, and women of childbearing age on how much they can safely consume (explicit advice is needed on canned tuna, differentiating between “safe” consumption of white v. albacore tuna, in light of new test data on canned tuna);

- providing parents with specific advice for parents of young children on canned tuna consumption and guidelines for consumption of other fish;

- stating that dioxins are present in low levels in foods, particularly beef, dairy products, and fish. The FDA recommends that by following the dietary guidelines and increasing consumption of fruits, vegetables, and grain products and reducing their intake of saturated fats, consumers can lower their risk of exposure to dioxin; and

- advising that organic foods are lower in pesticide residues.

VII. The guideline should include a section or box on food allergies and sensitivities

Several million Americans suffer allergies, intolerances, or sensitivities to foods and food additives. The most common allergies are to wheat, corn, soybeans, fish, shellfish, eggs, peanuts, and tree nuts. Some people are sensitive to sulfites (preservatives), carmine (a food coloring), and many other ingredients used in foods. In addition, larger percentages of the population have an intolerance to dairy products that contain the sugar lactose.

Several food additives called “sugar alcohols” cause diarrhea in some people, especially children. They are semi-sweet substances that are poorly absorbed by the body and used primarily in “dietetic” candies and pastries.

The guideline should include a section or box on food allergies and sensitivities. Among other things, consumers should be advised that:

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5 National Academy of Sciences, Institute of Medicine, Dioxins and Dioxin-like Compounds in the Food (2003).
• Because there is no cure for allergies, sensitive individuals must read labels carefully and avoid certain foods when eating out. But even reading labels may not be sufficient, because certain ingredients, such as “natural colorings” and “natural flavorings,” do not identify their specific components.

• The most commonly used sugar alcohols are sorbitol and mannitol. You will always find them listed in ingredient labels. If you are unsure whether you are sensitive, initially you should eat only small amounts of foods containing them.

• If you have intolerance to dairy products, you should eat them in moderation or choose other foods that provide the calcium and other nutrients found in dairy products. Calcium-fortified soy foods, fruit juices, and breakfast cereals are good choices.