



February 24, 2004

Kathryn McMurry, M.S.
Department of Health and Human Services
Office of Disease Prevention and Health Promotion, Room 738-G
200 Independence Avenue, SW
Washington, D.C. 20201

Dear Ms. McMurry:

The Sugar Association, Inc. (Association) is pleased to provide these comments to the Dietary Guidelines Advisory Committee (Committee) for its consideration.

The Association previously submitted written comments dated September 11, 2003 and January 16, 2003 to the Committee. In those comments, the Association summarized the body of scientific evidence pertaining to sugars. The following synopsis is provided for Committee convenience.

1. Every major scientific review completely exonerates the direct involvement of sugars in lifestyle diseases, including obesity.^{1,2,3,4}
2. The National Academy of Sciences, Institute of Medicine (IOM) Macronutrient Report concludes that current scientific data are insufficient to support evidence of any major health impact from sugars intake, including obesity.
3. Authoritative scientific bodies including the US Food and Drug Administration conclude that “added” and “naturally occurring” sugars are indistinguishable and therefore consumers could be misled into believing that food containing no refined sugar is superior to food containing refined sugar.⁵
4. In the matter of sugars consumption and nutrient displacement, the IOM Report found that the threshold percentage for the displacement of some micronutrients by some subpopulation groups is well above the current average consumption level of sugars in the US population.
5. The current emphasis on the so-called “added sugars” could have a similar outcome to the simplistic emphasis on low-fat by obscuring the importance of the energy balance message.

6. The Committee was asked to consider the potential long-term repercussions from an increased use of sugar replacers on satiety, metabolism and taste preference, especially for children.

These comments are devoted to the Association's concerns regarding the role of the Food Guide Pyramid (FGP) in the Dietary Guidelines process.

The Association would like to acknowledge the dedication and hard work of the Center for Nutrition Policy and Promotion in their efforts to revise the current FGP. However, the Association is troubled by the DGAC discussion during its January 2004 meeting. The Committee seems to be moving toward establishing dietary guidance that is consistent with the proposed revisions to the FGP and not recommending revisions to the Dietary Guidelines for Americans based solely on the Committee's critical analysis of the current body of science.

Food Guide Pyramid driving Dietary Guidelines

The National Nutrition Monitoring and Research Act of 1990 mandates the Dietary Guidelines for Americans to be the cornerstone of all Federal Nutrition Policy. Public Law 101-445 further requires a transparent independent review process which ensures that the information and guidelines contained in the Committees report to the Secretaries are based on the preponderance of the scientific and medical knowledge which is current at the time the report is prepared.

The Food Guide Pyramid was developed in the early 1990s as a visual representation and tool to help consumers interpret the Dietary Guidelines. The 1995 Dietary Guidelines Advisory Committee emphasized this sequence in its report to the Secretaries.⁶

“The pyramid was published by USDA and HHS in 1992 as implementation guide to the 1990 Guidelines. The committee views this publication as a helpful educational tool to be used in conjunction with the Dietary Guidelines and recommends that the pyramid graphic replace the former representation of the recommended Daily Food Guide. This recommendation is made with an understanding that the purpose of this graphic is to explain and interpret rather than to determine the Guidelines. Thus, revisions to the pyramid in accordance with revisions to the Guidelines are considered appropriate.” (Emphasis Added)

The Food Guide Pyramid has not undergone external, independent peer review.

Neither the technical methods used in the development of the FGP nor the merits of its nutrition advice has undergone the rigors and scientific thoroughness of an independent, external peer review. The FGP process lacks the transparency required of such a nutrition education tool. Suggested serving sizes and number of servings are derived from mathematical formulas, not scientific consensus. In fact, the vast majority of articles on the FGP have been authored by USDA employees and published in USDA periodicals, not independently published journals.⁷ National nutrition policy must be constructed on evidence-based scientific consensus of consequential health impacts.

The use of recommended nutrient intakes and calories to develop the FGP.

The Association acknowledges that nutrient adequacy is the fundamental goal of nutrition advice and appreciates that this objective is an important consideration for the DGAC.

In a recent review article, Dr. Cutberto Garza wrote the following about the process used in the development of the revised dietary reference intakes.⁸

“It was clear that scientific, healthcare practitioners and consumer communities had moved beyond focused interest in the prevention of classical nutrient deficiencies.”

“Related to this consideration was an appreciation of the unprecedented ability to manipulate nutrient intakes over wide ranges by increasingly common voluntary fortification of foods, increasing and expanding uses of nutrient supplements and nutrient-related botanicals, and the growing likelihood of expanded capabilities to alter the nutritional characteristics of food crops and animals by genetic modification. These on-going and anticipated changes in food supply raised concerns regarding the evidence base justifying the putative benefits of intake levels higher than necessary to prevent classical deficiency diseases and to possibilities of more easily reaching toxic levels of nutrients in diets easily accessible to the public.” (Emphasis Added)

The nutrient profiles of each proposed FGP food group and subgroup recommended for the revised FGP⁹ were calculated from a weighted average of food amounts reported in the 1994 – 1996 Continuing Survey of Food Intakes by Individuals. The Association is concerned that the nutrient profiles used in the development of the daily food intake patterns proposed for the revised FGP represent food composition values^{10,11} determined before 1990.

The nutrient profiles used in the development of the revised FGP do not reflect the fortification levels of today’s foods, particularly grains¹ This means that more servings than necessary of many FGP food categories, particularly grains, are required to meet nutritional goals. This, in turn, means that more calories than necessary are required, which automatically minimizes the number of calories consumers can apply to discretionary fats and sugars.

When the overall nutrient composition of the proposed food intake patterns¹² is examined, the majority of the proposed micronutrient intake levels are well over 100% of their RDA levels. If the overall nutrient intakes had been calculated with the food composition values of today’s foods, these estimated micronutrient intake levels would be even higher. The precautionary advice proffered by Dr. Garza must be considered when daily food intake patterns are determined solely by calculation.

This mathematical approach also makes dietary guidance inflexible. For example, if the Committee chose to recommend increasing the percentage of fat from 30% to 35% of energy, or decreasing the number of daily servings of grains, or making fruits and

vegetables as the base of the FGP, any of these actions would have profound effects on current FGP patterns including discretionary sugars intake. At the 1600-calorie level, for example, the proposed FGP recommendation of 6 teaspoons of added sugars would make it hard for a child to enjoy a bowl of cold cereal or oatmeal, a fruit-containing yogurt and a glass of chocolate milk in the same day. Such a severe restriction of added sugars could compromise nutrient intake.

A recent study¹³ showed that the consumption of sweetened dairy foods and beverages and presweetened cereals had a positive impact on the quality of children's and adolescent's diet, particularly for calcium, folate and iron. The frequency and amount of certain food choices may be the real issue, not whether a child consumes sugars.

While the Association believes that discretionary sugars should be placed at the top of the FGP, our disagreement is with the overly prescriptive intake levels suggested in the FGP. People eat foods, not individual macronutrients, and sugars are an important ingredient in many healthy foods. This is why the IOM could find no evidence to support establishment of an upper intake level for added sugars. The fact remains that the FGP suggested levels of added sugars intake are not based on a scientific recommendation or a defined, verifiable health impact as is the case with dietary fat.

Furthermore, current criticism of the FGP centers on the number of suggested servings, especially in the grain category. Not only are the recommended serving sizes much smaller than what is commonly consumed, a fact noted by the 1995 DGAC, but the number of servings are viewed by many as excessive. Some consumers might consider a large salad as a serving of vegetables, when in fact it could be as many as 5 servings. The FGP well-intentioned but overly prescriptive advice tends to confuse more than educate.

The nutrition community has called for harmony between the serving sizes of the FGP and the Nutrition Facts Panel. The USDA's answer as to "why the difference" is that the FGP and Nutrition Facts Panel serve different purposes.¹⁴ At this time when consistent messages are so important, the question is does the American public benefit more from a FGP that promotes rigid eating patterns or more from a FGP that is the visual representation of the advice and messages of the evidence-based Dietary Guidelines.

The Association respectfully asks the DGAC to consider the following when deciding whether or not to incorporate the Food Guide Pyramid and its prescriptive intakes into the Dietary Guidelines for Americans:

- People eat foods, not individual nutrients.
- Sugar is used as a food ingredient not only to add sweet flavor but also to provide many necessary functional purposes.
- There is no scientifically verifiable negative health impact ascribable to sugar intake, including obesity or nutrient displacement, at current consumption levels.
- The Institute of Medicine did not set a UL for total or added sugars intake only a threshold.

- This continued see-saw demonizing of macronutrients may have unforeseen consequence for overall good health and well-being by taking the focus off of the import message of energy balance.

Thank you for your consideration of these comments,

Respectfully,

Cheryl Digges
Director Public Policy & Education

[The Association submitted comments per USDA's calls for public comments on the Food Guide Pyramid on October 22, 2003. These comments are attached for your review.]

¹ Glinsmann, W.H., et. al. Evaluation of health aspects of sugars contained in carbohydrate sweeteners. *J. Nutr* 116(11S):S1-S216, 1986.

² National Research Council. *Food and Nutrition Board. Diet and Health: Implications of Reducing Chronic Disease*. Washington, D.C.: National Academy Press, 1989.

³ World Health Organization and Food and Agriculture Organization of the United Nations. *Carbohydrates in human nutrition*. Report of a Joint FAO/WHO consultation. FAO Food and Nutrition Paper 66, Rome, 1998.

⁴ National Academy of Sciences, Institute of Medicine, Food and Nutrition Board. *Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids*. National Academy Press, 2002. pg. 6-42.

⁵ Federal Register Vol. 58. No. 3 page 2098 January 6, 1993/ Rules and Regulations section b.54.

⁶ Department of Agriculture, Agricultural Research Service, Dietary Guidelines Advisory Committee. Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 1995. <http://www.health.gov/dietaryguidelines/dga95/pdf/DGREPORT.PDF>.

⁷ Bibliography of Pyramid Related Publications <http://www.usda.gov/cnpp/pyramid-update/FGP%20docs/Bibliography%20of%20Pyramid-related%20publications.pdf>.

⁸ Cutberto Garza, M.D., Ph.D., Moving Beyond the RDA's to Dietary Reference Intakes(DRIs) <http://www.cce.cornell.edu/food/expfiles/topics/garza/garzaoverview.html>.

⁹ United States Department of Agriculture. Food, Nutrition, and Consumer Services; Center for Nutrition Policy and Promotion. Table 4: Nutrient Profiles¹ of Food Guide Pyramid Food Groups and Subgroups. <http://www.usda.gov/cnpp/pyramid-update/FGP%20docs/TABLE%204.pdf>.

¹⁰ United States Department of Agriculture. Human Nutrition Information Service. Agriculture Handbook Number 8, 1990 Supplement.

¹¹ United States Department of Agriculture. Human Nutrition Information Service. Home Economics Report Number 48, 1987.

¹² United States Department of Agriculture. Food, Nutrition, and Consumer Services; Center for Nutrition Policy and Promotion. Table 5: Nutrients in Proposed Food Intake Patterns.
<http://www.usda.gov/cnpp/pyramid-update/FGP%20docs/TABLE%205.pdf>.

¹³CD Fray, RK Johnson, MQI Wang. Children and Adolescents' Choices of Foods and Beverages High in Added Sugars Are Associated with Intakes of Key Nutrients and Food Groups. *Journal of Adolescent Health* **34(1)**: 56 – 63, 2004.

¹⁴ Serving Sizes in the Food Guide Pyramid and on the Nutrition Facts Label: What's Different and Why?
<http://www.usda.gov/cnpp/Insights/Insight22.PDF>.