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Hirschman

Jay Hirschman, M.P.H., C.N.S.

received  
10/24/03

KT

October 26, 2003

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion

**Dear CNPP Colleagues and Other Readers:**

Thank you for the opportunity to comment on the *Proposed Food Guide Pyramid Daily Food Intake Patterns and Technical Support Data*, as referenced in the Federal Register notice of September 11, 2003. Please note that the comments contained in this letter and the attachment represent my **personal** views on the subject. Many of you may know me in my capacity at USDA's Food and Nutrition Service where I serve as Staff Director for the Special Nutrition Staff within the Office of Analysis, Nutrition and Evaluation. I also serve as one of the USDA representatives on the Federal Steering Committee for the Dietary Reference Intakes, and am the chair-elect of the Food and Nutrition Section of the American Public Health Association. However, *the views presented in this paper are my own, were written at home on my own time, and do not necessarily reflect the opinion of any of the above mentioned organizations.*

My comments contained on the enclosed pages focus exclusively on the issue of the nutrient profiles for the food groups and subgroups. To summarize, I believe that USDA/CNPP should discontinue use of a system relying upon foods "***in their lowest fat and sugar form***". As an alternative, I recommend use of a system such as that used for the Thrifty Food Plan (without pyramid servings constraints) in order to maximize use of the data on consumer preference in conjunction with DRI- and Dietary Guideline-base standards. This approach should enable development of a new USDA food guidance system and graphic that are more likely to assist the population in achieving improved energy balance and overall nutrition with less resistance, as it would require less change in eating pattern and food selection.

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State of New Jersey  
DEPARTMENT OF AGRICULTURE  
BUREAU OF CHILD NUTRITION PROGRAMS

received  
10/24/03

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JAMES E. MCGREEVEY  
Governor

CHARLES M. KUPERUS  
Secretary of Agriculture

October 24, 2003

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive, Room 1034  
Alexandria, VA 22302

To Whom It May Concern:

Below are a compilation of comments from various personnel from the New Jersey Department of Agriculture, Division of Food and Nutrition.

General comments, not specific to the proposed changes:

- Need to differentiate between good and bad fats.
- Beans and nuts should be separated out from the meat group because of positive benefits for these sources of protein on weight loss and heart disease.
- Need to emphasize whole grains in the bread & cereal group.
- Physical activity/exercise should be included in the new pyramid to emphasize its importance.
- Increased intake of vegetables, poultry, fish and dairy should be incorporated in the recommendations.
- Emphasize greater intake of fruits, vegetables, and protein; less emphasis on "carbs": suggestion to place fruits and vegetables at the base of the pyramid and pasta and whole grain breads near the top.
- Emphasize the importance of fiber intake; i.e. through more whole grains, etc.

Comments more specific to proposed daily food intake patterns:

- There is agreement to using sedentary, low active and active categories in assigning calorie intake levels, and also agreement to using the sedentary levels for the target pattern...this will help to discourage over-eating. However...there needs to be a prominence somewhere in the proposal regarding the necessity and extreme importance of combining proper eating with physical activity...the two must go hand in hand.
- Under "Additional Fats", a suggestion was made to discourage use of margarine due to the trans fatty acid content; also there needs to be a clear differentiation between "good" and "bad" fats.
- Table 1:
  - Some feel that the recommend intake level of grains is still too high...especially the "other grains" category. Dr. Walter Willett from the

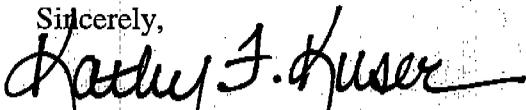
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Kuser

Harvard School of Public Health, in his book *Eat, Drink, and Be Healthy*, cites in great detail the detrimental effects of certain carbohydrates that have high glycemic index levels... where they are broken down into sugars at a very rapid rate, causing swift high spikes in blood sugar, followed by similar surges in insulin. The surge in insulin then forces glucose into muscle and fat cells, causing blood sugar levels to then plummet, resulting in signals of hunger that trigger the person to eat more... thus into a pattern of over eating. These extreme surges in blood sugars have been related to part of the "perilous pathway to heart disease and diabetes... and are especially serious for people who are overweight" (p.19). Suggestions are to give greater differentiation between whole grains (recommend higher intake levels) and high starch items, such as white bread, white rice, potatoes, pasta (recommend lower intake levels).

- It was also suggested to differentiate types of protein source foods, rather than lumping everything together as "meat and beans". It is felt that red meat should be separated out from poultry and fish, having it's own recommended level of intake (which should be less because of the high saturated fat content) and that beans/nuts should be separated out, also (with higher recommended levels because of the additional advantages of fiber, vitamins, minerals and healthy unsaturated fats and a host of phytochemicals that research is documenting more and more as protection against several chronic diseases).
- Serving sizes versus cups or ounces: general consensus is that it would be much more advantageous for the consumer to indicate recommended food intake levels in cups and ounces, rather than "servings". This makes it much clearer to understand... there is currently too much confusion about what a serving size is.
- For the development of consumer materials it was suggested to include an easily identified way to choose foods from the food groups in conjunction with choosing them at the supermarket... for example the 5 A Day Color Way campaign by the Produce for Better Health Foundation is a very easy way for the average consumer to understand the selection of a variety of fruits and vegetables for better health. The message needs to be kept as simple as possible! Too much information is as detrimental and not enough information. Please include physical activity and weight control as part of educating consumers for general healthy eating behavior.

Thank you for the opportunity to comment.

Sincerely,



Kathy F. Kuser, Director  
Division of Food and Nutrition

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Calves



STATE OF NEW YORK  
DEPARTMENT OF HEALTH

received  
10/24/03  
KJ

Antonia C. Novello, M.D., M.P.H., Dr. P.H.  
Commissioner

Dennis P. Whalen  
Executive Deputy Commissioner

October 24, 2003

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive  
Room 1034  
Alexandria, VA 22302

Dear Sir or Madam:

Thank you for the opportunity to provide comments on the proposed revisions to the daily food intake patterns that serve as the technical basis for the Food Guide Pyramid. As Director of the Child and Adult Care Food Program I would like to submit the following comments:

**1. Appropriateness of using sedentary, referenced sized individuals in assigning target calorie levels:**

- When looking at Table 2 and Table 3 in an overall view, three distinct calorie levels become apparent using a 600 calorie range:
  - Level 1 – Children 2-8 = 1000-1600 calories
  - Level 2 – All females and older Americans (>50) = 1600 – 2200 calories
  - Level 3 – Males 14-50 = 2200 – 2800 calories

These three levels could be subsets of the food patterns and could be used to develop consumer materials. All people usually fit into one of the three but if you are very active or pregnant, you might add 200-400 Calories.

**2. Appropriateness of the selection of nutritional goals for the daily food intake patterns:**

- It is important that these goals be communicated in language people will understand. If foods that are high in desired nutrients are the ones given the major emphasis, the message that they are contributors to a more healthful diet will come across.
- Consumer materials should be focused on balance and variety with special emphasis on the best food choices during times of growth, such as childhood. Specific recommendations for consumer materials include:
  - A separate Food Guide Pyramid for children.
  - Pictures of foods used in consumer materials should represent recommended portion sizes.
  - Include some reference to trans fats to reflect new labeling requirements.
  - There should be a clear understanding that the range of number of servings is based on age, gender, and physical activity level.

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Culver

3. **Appropriateness of the proposed food intake patterns for educating Americans about healthful eating patterns:**

- Educating Americans is the primary purpose for having this information, the translation to consumers is critical. The Groups should be more nutrient -based. The increased amounts of whole grains, dark-green leafy vegetables, legumes and fruits are consistent with chronic disease prevention. The translation of these food intake patterns to Americans is critical. Emphasis should be on low-fat choices in each food group.

**The Fruit/Vegetable group** giving high emphasis on more nutritious fruits and vegetables. Recommend that all consumption should be of this type in the lower calorie groups.

**The Protein-Rich Foods Group** giving emphasis to low fat choices, beans, fish, eggs and meat is last, eliminating the "MEAT" group.

**The Calcium-Rich Foods Group** giving emphasis to low fat/no fat choices, i.e., calcium enriched soy, yogurt, and milk and cheese (maybe list only low fat cheese as a choice)

**The Whole Grains Group** giving little recommendation to not choosing whole grains

**Eliminate the Added or Additional Group.** Putting additional fats and added sugars in a group on their own is misleading and may appear to some as recommending the use of "additional" items. Consumer may get the message to add butter to a potato or add sugar to coffee. If coffee, candy, soda and butter are not going to appear as "foods in the groups" then leave this "Added" group out. Common cooking practices, processing practices and seasoning practices are going to exceed these "added or additional" recommendations.

4. **General Comments:**

- The nutritional goals for the proposed daily food intake patterns are appropriate for professional use. These goals must be communicated in language that people will understand. If foods that are high in desired nutrients are given the most emphasis, the message that they are important contributors to a more healthful diet will come across.
- We recommend the use of cups and ounces, rather than "servings" to suggest daily amounts from each food group. There is tremendous confusion between "serving" and "portion." When cups or ounces are not appropriate, portion sizes should be related to common object sizes, such as the palm of a hand or deck of cards.

Meeting the dietary needs of Americans is clearly a challenge. With the rise in obesity in all age groups we must strive to shift the current eating and physical activity patterns contributing to this rise. We appreciate the opportunity to contribute to this process and anxiously await the final product.

Sincerely,



Jeanne Culver, R.D.  
State Director, New York State  
Child and Adult Care Food Program

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Phelps

# AMERICAN MUSHROOM INSTITUTE



October 27, 2003

received  
10/24/03

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Eric J. Hentges, Ph.D.  
Executive Director  
Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive, Room 1034  
Alexandria, VA 22302

Dear Dr. Hentges:

On behalf of the American Mushroom Institute, the national trade association that represents American mushroom growers and processors, I would like to wholeheartedly support the comments filed by Mary Jo Feeney, nutrition consultant to the Mushroom Council, regarding the Food Guide Pyramid Daily Food Intake Patterns and Technical Support Data. The Mushroom Council operates the federally authorized research and information program for the mushroom industry.

As noted in her comments, "Now is the time to capitalize on forecasted food trends and customize the Food Guide Pyramid to include a greater variety of food choice options based not only on food group nutrient profiles, but also on how consumers choose to use foods to help them meet the Dietary Guidelines. Mushrooms are a "bridge" food - a food consumers can and do use to transition to food patterns that help lower their intake of calories, total fat, saturated fat and cholesterol."

We urge you as you update the Food Guide Pyramid to seriously consider the suggestions included in the Feeney letter for the Reassessment Team:

- Review nutrient profiles of foods such as mushrooms that do not neatly fit into existing food grouping systems.
- Discuss and develop a mechanism for mushrooms to be better recognized/used in food grouping systems. A precedent has been established for legumes in the Food Guide Pyramid. Legumes can be counted either as vegetables (in the legumes subgroup) or in the meat and beans group once the 2 to 7 ounce equivalents of all meat, poultry, fish, eggs, nuts and seeds has been met. Perhaps similar consideration - or a distinctively different consideration - might be given to mushrooms.
- Include and reference mushrooms in the illustrative and supplemental consumer educational materials developed to interpret and help Americans implement the Dietary Guidelines.

Sincerely,

*Laura Phelps*  
Laura Phelps  
President

Mary Jo Feeney MS, RD, FADA

Consultant to the Food and Health Care Industries

10/23 Feeney

received  
10/24/03

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October 24, 2003

Eric J. Hentges, Ph.D. Executive Director  
USDA Center for Nutrition and Policy Promotion  
Food Guide Pyramid Reassessment Team  
3101 Park Center Drive, Room 1034  
Alexandria, VA 22302

Re: Proposed Daily Food Intake Patterns for the Food Guide Pyramid

Dear Dr. Hentges:

As the Reassessment Team evaluates the derivation and use of the Daily Food Guide Intake Patterns to identify the types and variety of foods suggested that Americans eat for health, I urge the Team to give serious consideration to foods such as mushrooms that do not fit into neat food grouping systems, but nevertheless play an important role in helping consumers meet the Dietary Guidelines. Although typically used as a vegetable [USDA's Economic Research Service (ERS)], and occasionally as an alternative to meat (see discussion below) mushrooms are fungi — in a class of their own, nutritionally speaking.

As consumers learn more about the relationship between their food choices and health, food use and consumption patterns change. According to USDA's ERS, consumption of mushrooms has been on the rise in the United States over the past several decades. Per capita consumption of the cultivated fungus crop has quadrupled since 1965. Per capita use of mushrooms (on a fresh weight basis) totaled about 3.94 pounds in 2001 compared to about 0.69 pounds in 1965.<sup>i</sup> According to this ERS report that cites CSFII data, on any given day, 10 percent of Americans eat mushrooms in some form. Trend commentator Faith Popcorn noted that the portabella mushroom went from "produce section obscurity to near ubiquity in culinary record time."<sup>iii</sup>

Now is the time to capitalize on forecasted food trends and customize the Food Guide Pyramid to include a greater variety of food choice options based not only on *food group nutrient profiles*, but also on how consumers *choose to use foods* to help them meet Dietary Guidelines. Mushrooms are a "bridge" food — a food consumers can and do use to transition to food patterns that help lower their intake of calories, total fat, saturated fat and cholesterol. According to foodservice reports, restaurants are offering patrons meatless entrée options and portabella burgers are popular. According to the Chain Account Menu Survey from June 2002 to June 2003 portabella usage on the Top 200 chain menus increased 40 percent in entrees and 33 percent in sandwiches. When compared to total

mushrooms, portabellas remain strong in vegetarian and multi-protein entrees and have gained 64 percent in beef entrees.

A series of simulations conducted by Block Dietary Data Systems (Berkeley, CA) demonstrated the potential benefits of using mushrooms to replace foods higher in calories, fat and cholesterol. The analysis used NHANES III data to determine the potential calorie savings, weight loss, and fat and cholesterol savings if individuals were to substitute mushrooms for specific meats (ground beef, meat on pizza, or for a portion of steak) every time they ate these foods for one year. Assuming no caloric compensation from other foods, if males substituted a 4-ounce grilled portabella mushroom for a 4-ounce grilled beef patty every time that they ate a grilled beef patty for one year, they would experience an annual calorie savings of 18,400 calories, or a potential weight loss of 5.3 pounds. Such a substitution could also result in a reduction of 2,725 grams of fat and 13,336 milligrams of cholesterol. If female pizza eaters substituted a quarter cup of sautéed mushrooms for one ounce of pepperoni and/or sausage on pizza, they would save 5,914 calories, 496 grams of fat and 2,989 mgs of cholesterol a year, with a potential weight loss of 1.7 pounds.<sup>iii</sup> These simulations illustrate the potential impact of small changes over time – certainly an encouraging message for consumers.

In addition to helping consumers “bridge” to lower calorie food patterns, mushrooms provide nutrients that bridge more than one food group. According to USDA's National Nutrient Databank for Standard Reference Release 16 (based on a Nutrition Facts serving, 85 grams, raw) white button mushrooms are a “good source” (10% Daily Value) of niacin, pantothenic acid, copper and selenium; and an excellent source (20% Daily Value) of riboflavin. Mushrooms contain “meat-associated” nutrients: selenium, copper and niacin, and provide more selenium, an antioxidant nutrient, than other fruits and vegetables in the produce category. The National Cancer Institute is investigating the role of selenium in prostate health in a randomized, double blind, placebo-controlled prevention trial involving 32,000 men at 400 sites.

Like some other fruits and vegetables, mushrooms provide potassium (about 270 mgs per 85 gram Nutrition Facts serving) and have compounds that may reduce the risk of cancer. Studies conducted over the past 30 years — mostly in Asia — have provided data suggesting that mushrooms or substances extracted from mushrooms may aid in the treatment of certain types of cancer, boost the immune system and reduce the risk of coronary heart disease. Mushrooms contain a wide variety of bioactive molecules including terpenoids, steroids, phenols, nucleotides, glycoproteins and polysaccharides. Much of the work on the anti-tumor activity of mushrooms has concerned the polysaccharides, which appear to be potent anti-tumor-active compounds.<sup>iv</sup>

Studies at the City of Hope National Medical Center and Beckman Research Institute, Duarte, CA, suggest that white button mushrooms contain substances that *in vitro* inhibit aromatase, an enzyme used in the production of estrogen, believed to have breast cancer-promoting effects in post-menopausal women<sup>v</sup>. Recently, an NCI clinical trial was halted early because of the positive results of

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the use of the drug letrozole in reducing the risk of cancer recurrence when taken after five years of tamoxifen therapy. Letrozole works by limiting the ability of the enzyme aromatase to produce estrogen.<sup>vi</sup>

In summary, based on mushrooms' unique nutrient composition and increasing use as a simple and practical way to transition to lower calorie, low fat food choices, I request that the Reassessment Team:

- Review nutrient profiles of foods such as mushrooms that do not neatly fit into existing food grouping systems.
- Discuss and develop a mechanism for mushrooms to be better recognized/used in food grouping systems. A precedent has been established for legumes in the Food Guide Pyramid. Legumes can be counted either as vegetables (in the legumes subgroup) or in the meat and beans group once the 2 to 7 ounce equivalents of all meat, poultry, fish, eggs, nuts and seeds has been met. Perhaps similar consideration - or a distinctively different consideration - might be given to mushrooms.
- Include and reference mushrooms in the illustrative and supplemental consumer educational materials developed to interpret and help Americans implement the Dietary Guidelines.

For more information on mushroom nutrition research, please feel free to contact me.

Sincerely,

Mary Jo Feeney

Mary Jo Feeney, MS, RD, FADA  
Nutrition Consultant, Mushroom Council

<sup>i</sup> Lucier G, Allshouse J, Lin BH. Factors affecting U.S. mushroom consumption. United States Department of Agriculture Economic Research Service Electronic Outlook Report. [www.ers.usda.gov](http://www.ers.usda.gov). VGS 295-01, March, 2003; 1-11.

<sup>ii</sup> Popcorn F, Hanft A. *Dictionary of the Future*. Hyperion, NY, 2001, 177.

<sup>iii</sup> Block Dietary Data Systems. *Mushrooms: More than just another fungus*, February 2003. Unpublished report to the Mushroom Council, Dublin CA.

<sup>iv</sup> Borchers AT, Stern JS, Hackman RM, Keen CL, Gershwin ME. Mushrooms, tumors, and immunity. *Proc Soc Exp Biol Med*. 1999;221:281-93.

<sup>v</sup> Grube BJ, Eng ET, Kao Y-C, Kwon, A, Chen S. White button mushroom phytochemicals inhibit aromatase activity and breast cancer cell proliferation *J Nutr*. 2001; 131:3288-3293.

<sup>vi</sup> New Treatment Significantly Improves Long-term Outlook for Breast Cancer Survivors. [www.nci.nih.gov](http://www.nci.nih.gov) posted Thursday, October 9, 2003.

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10/29/03

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ROSALYN FRANTA KULIK, MS RD FADA

22 October, 2003

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive  
Room 1034  
Alexandria, VA 22302

Dear Reassessment Team:

As a nutrition educator and an adjunct nutrition faculty member at the University of Tampa, I teach both adults and traditional college students the fundamentals of normal human nutrition. The current Food Guide Pyramid is an obvious, although impractical, teaching aid.

During a hands-on evaluation of this graphic tool, students quickly discover serious limitations when they try to apply the Food Guide Pyramid for their own use. I ask students to translate one day's food diary into the language of the Food Guide Pyramid. Initially, the exercise sounds sophomoric. But invariably, a student asks, "What about pizza?" Others wonder about iced tea, coffee, or water. Occasionally, students ask where they should categorize beans. Vegan students complain about the dairy group. Still others argue that, based on their nutritional profile, potatoes belong in the "grain" group rather than the "vegetable" group. Through the years, the list of specific questions and concerns grows longer. To that end, I recommend six concepts that would necessitate changes to the Pyramid. I chose to substantiate my suggestions with references that are readily available to my students, even though most are secondary sources.

1. **Give fluids a place of predominance in the Food Guide.** Water is one of the six classes of essential nutrients. We live longer without food than we can without water because the body's ability to conserve water is poor.<sup>1</sup> Too little emphasis is placed on the importance of proper hydration. The Reassessment Team must not miss this opportunity to stress the importance of adequate fluid consumption.

- Proper hydration is a key to health and peak performance.<sup>1,2</sup> Performance and endurance parameters begin to decline when fluid loss represents only 1% of a person's body weight.<sup>2</sup> Too often, students are surprised to learn that the urine of a properly hydrated person is no darker than the color of straw.<sup>1</sup>

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Kulik

- The sense of thirst is a lagging indicator of proper hydration.<sup>1,2</sup> One starts feeling thirsty when fluid loss nears 2% of the body's weight.<sup>2,3</sup> Already, performance is deteriorating.
- Seniors have the potential to become dehydrated as bladder control weakens, urine output increases, and the sense of thirst diminishes.<sup>4,5</sup> Too often, elders and their caregivers fail to recognize the importance of proper hydration.
- Complications associated with dehydration are ongoing concerns among the physically active and the elderly.<sup>6</sup>
- Low-calorie or non-caloric fluids can help persons who are trying to maintain or lose weight feel satiated.<sup>7</sup>
- If a person confuses the sense of thirst for hunger, the person may overeat, which can contribute to the increased energy intake that has been documented in recent decades.<sup>8,9</sup>

## 2. **Establish portions that are realistic and compatible with nutrition**

**labeling.** Portion distortion is one factor that may contribute to the nation's overweight condition. The Food Guide Pyramid servings are not always realistic.

- Servings of grain-based foods are particularly small, apparently so the base of the pyramid would have the greatest number of servings.<sup>10</sup>
- Conversely, students react negatively when they measure a huge 2-cup "serving" of cottage cheese into a bowl!<sup>11</sup>
- The suggestion in the September 11, 2003 *Federal Register* Notice of using cups/ounces instead of servings has merit. Unless the Pyramid "servings" align with those that the Food and Drug Administration requires on Nutrition Facts panels, consumers will be confused.<sup>12</sup>
- The Notice posed the question about translating slices of bread into cups. A change of nomenclature is in order. Perhaps a "point" or "unit" system – or a variation of an "exchange" list – could be implemented.<sup>13</sup> One "unit" could be the equivalent of ½ cup or 4 fl. oz., 1 piece, or other logical household unit. Importantly, the precise language must differ from the Nutrition Facts labeling so the terminologies would not conflict with one another.

3. **Acknowledge health-promoting fats.** Ever since the "anti-fat" Food Guide Pyramid was first conceived, researchers continue to elucidate diverse qualities of dietary fat.<sup>14</sup> Not all lipids need to be avoided.

- No longer should a person minimize dietary fat as if it were "poison." Experts currently recommend that at least 20% (and up to 35%) of one's food energy should be from fat.<sup>14</sup>
- Foods containing monounsaturated and omega-3 fatty acids are considered health-promoting. However, beneficial fats like olive and flax seed oils appear on the "use sparingly" apex of the current Food Guide Pyramid.
- Spreads that are fortified with plant sterol or stanol esters also sit at the top of the present Pyramid. Suggesting that such fats be eaten only occasionally conflicts with the Food and Drug Administration's health claim acknowledging the fortified spreads' role in helping reduce one's risk of heart disease.<sup>15</sup>

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4. **Encourage diets rich in color and texture.** Menus with varying colors and textures contribute more than eye-appeal to mealtime.

- Many pigments are phytochemicals that impart health benefits beyond basic nutrition.<sup>16,17</sup>
- Incorporating foods with varied textures – such as whole grain foods, nuts, and fresh produce – add phytochemicals and dietary fiber to the diet.
- Menus with diverse colors and textures reinforce variety, a basic tenet of a sound, nourishing diet.

5. **Highlight foods with high nutrient densities.** Regardless of age or stage of life, persons should be encouraged to choose foods that deliver important levels of micronutrients when compared with the foods' caloric contributions.<sup>18</sup>

- Since Americans' caloric needs continue to dwindle in response to our less active lifestyle, it becomes a greater challenge to ingest adequate micronutrients without becoming overweight.
- It is difficult to get adequate levels of vitamins and minerals when one's energy intake falls below 1,600 kcal per day.<sup>19</sup> Partially for this reason, experts now recommend that we get at least 60 minutes of moderately intense activity daily in order to ingest adequate micronutrients from food without gaining excess weight.<sup>14</sup>

6. **Feature foods with low caloric densities.** Foods high in dietary fiber or water content have low caloric densities.<sup>20</sup>

- Foods that are high in dietary fiber are health-promoting that warrant special attention. The dietary fiber intake of the average American consumer is less than half of experts' recommendations, yet evidence indicates that fiber-rich foods help reduce the risk of our population's major chronic diseases.<sup>14,21,22</sup>
- The first recommendation in this letter addresses the importance of water.
- Dietary fiber and water aid satiety without providing energy. Dr. Barbara Rolls' research in this area led to the development of the "volumetrics" weight management approach that now appears in the popular press.<sup>7</sup>

Sincerely,

*Rosalyn Franta Kulik*

Rosalyn Franta Kulik, MS RD FADA

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Kulik

- <sup>1</sup> Wardlaw GM. *Contemporary Nutrition: Issues and Insights*, 5<sup>th</sup> Edition. New York: McGraw-Hill. 2003, p 291. ISBN: 0-07-286530-X.
- <sup>2</sup> Gisolfi CV and DR Lamb, eds. *Perspectives in Exercise Science and Sports Medicine, Volume 3: Fluid Homeostasis During Exercise*. Carmel, IN: Brown & Benchmark. 1990. ISBN: 0-697-14816-5.
- <sup>3</sup> Wardlaw GM. *Contemporary Nutrition: Issues and Insights*, 5<sup>th</sup> Edition. New York: McGraw-Hill. 2003, p 295. ISBN: 0-07-286530-X.
- <sup>4</sup> Boyle MA and SL Anderson. *Personal Nutrition*, 5<sup>th</sup> Edition. Belmont, CA: Wadsworth/Thomson Learning. 2003, p 360. ISBN: 0-534-55868-2.
- <sup>5</sup> USDA. More than one in three older Americans may not drink enough water. In *Nutrition Insights*, September 2002. Accessed from <http://www.usda.gov/cnpp/Insights/insight27.pdf> on October 21, 2003.
- <sup>6</sup> Wardlaw GM. *Contemporary Nutrition: Issues and Insights*, 5<sup>th</sup> Edition. New York: McGraw-Hill. 2003, pp 401-403, 520, 523. ISBN: 0-07-286530-X.
- <sup>7</sup> Barnett RA and BJ Rolls. *The Volumetrics weight-control plan: feel full on fewer calories*. Harpercollins. 2003.
- <sup>8</sup> Plut K. The forgotten nutrient. In *The Tufts Daily*, April 24, 2003. Accessed from <http://nutrition.tufts.edu/consumer/balance/2003-04/water.html> on October 21, 2003.
- <sup>9</sup> Smiciklas-Wright H, Mitchell DC, Mickle SJ, Goldman JD, & Cook A. Foods commonly eaten in the United States, 1989-1991 and 1994-1996: Are portion sizes changing? *J Am Diet Assoc* 103:41-47, 2003.
- <sup>10</sup> USDA. Serving sizes in the Food Guide Pyramid and on the the Nutrition Facts label: What's different and why? In *Nutrition Insights*, December 2000. Accessed from <http://www.usda.gov/cnpp/Insights/Insight22.PDF> on October 21, 2003.
- <sup>11</sup> USDA, Center for Nutrition Policy and Promotion. *The Food Guide Pyramid*. Home and Garden Bulletin Number 252. Accessed from <http://www.usda.gov/cnpp/pyrabklt.pdf> on 21 October, 2003.
- <sup>12</sup> Code of Federal Regulations 21, §101.12. Reference amounts customarily consumed per eating occasion.
- <sup>13</sup> American Diabetes Association. *Meal Planning Exchange Lists*. Accessed from <http://www.diabetes.org/health/nutrition/exchanges/exchangelist.jsp> on 21 October, 2003.
- <sup>14</sup> Institute of Medicine. Food and Nutrition Board. Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids. September 2002. Summary accessed from <http://www.iom.edu/includes/dbfile.asp?id=4154> on October 21, 2003.
- <sup>15</sup> Code of Federal Regulations 21, §101.83. Health claims: plant sterol/stanol esters and risk of coronary heart disease (CHD).
- <sup>16</sup> Wardlaw GM. *Contemporary Nutrition: Issues and Insights*, 5<sup>th</sup> Edition. New York: McGraw-Hill. 2003, p 35-36. ISBN: 0-07-286530-X.
- <sup>17</sup> Boyle MA and SL Anderson. *Personal Nutrition*, 5<sup>th</sup> Edition. Belmont, CA: Wadsworth/Thomson Learning. 2003, pp191-197. ISBN: 0-534-55868-2.
- <sup>18</sup> Wardlaw GM. *Contemporary Nutrition: Issues and Insights*, 5<sup>th</sup> Edition. New York: McGraw-Hill. 2003, p 35. ISBN: 0-07-286530-X.
- <sup>19</sup> Wardlaw GM. *Contemporary Nutrition: Issues and Insights*, 5<sup>th</sup> Edition. New York: McGraw-Hill. 2003, p 48. ISBN: 0-07-286530-X.
- <sup>20</sup> Wardlaw GM. *Contemporary Nutrition: Issues and Insights*, 5<sup>th</sup> Edition. New York: McGraw-Hill. 2003, p 37. ISBN: 0-07-286530-X.
- <sup>21</sup> Boyle MA and SL Anderson. *Personal Nutrition*, 5<sup>th</sup> Edition. Belmont, CA: Wadsworth/Thomson Learning. 2003, p 358. ISBN: 0-534-55868-2.
- <sup>22</sup> McCarthy MJ. "Missing ingredient in American Diet," *The Wall Street Journal*. October 22, 2003, p B-1,4.

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KT

UNIVERSITY OF CALIFORNIA, BERKELEY



COLLEGE OF NATURAL RESOURCES  
DEPARTMENT OF NUTRITIONAL SCIENCES AND TOXICOLOGY

October 20, 2003

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive, Rm 1034  
Alexandria, VA 22302

Dear Team Members,

As a nutrition educator with over 35 years of experience working with consumers, it is my professional opinion that providing additional information to the public regarding use of the food guide pyramid is unwarranted. Research does not demonstrate that providing people with more information, particularly complex information that is difficult for them to understand and implement, motivates or supports behavioral change. The Food Guide Pyramid was designed to be a simple tool that the average consumer could use as a guide to obtaining an adequate to optimal diet. Adding complex information about calorie needs and activity levels will make this food guide much less user friendly.

There is also the potential for this focus on caloric intake to "backfire" by promoting restrained eating and constant dieting. For over 50 years, nutritionists and dietitians have promoted calorie restricted diets as a means of "preventing" and "treating" obesity. The majority of girls and women in the country have taken this advice to heart and are constantly dieting. And for those same 50 years obesity rates have skyrocketed. At what point will we finally admit that calorie restriction is not the answer to preventing and treating obesity, and might actually be contributing to the problem?

The common joke about dietitians is that if you ask any one of us what time it is, we cannot simply state the time, but have to tell the inquirer how to build a clock. This detailed elaboration of the food guide pyramid is a perfect example of that - our inability to limit our messages to the promotion of key behaviors which will improve the nutritional well-being of the majority of the populace.

The Food Guide Pyramid, as it stands, promotes the concept that nutrients are found in a wide variety of foods, and that in order to be well nourished, people need to eat a wide variety of foods. The more limited the diet becomes, the greater the risk of nutritional inadequacy. We should value the food guide because it gets across this very important message about the need for dietary diversity.

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Ikeda

The food guide pyramid already promotes moderation by defining standard serving sizes. The fact that people are eating much larger serving sizes is not because they are following the Food Guide Pyramid - it is because they are NOT following the pyramid.

Why are we trying to change the Food Guide Pyramid into yet another set of dietary guidelines? The U.S. Dietary Guidelines provide detailed information about recommended patterns of eating. Why can't the Food Guide Pyramid remain what it was designed to be - a simple tool that is easily understood by most individuals?

As for the Food Guide Pyramid actually contributing to the onset of obesity, a notion fostered by nutritionists who shall remain unnamed, there is absolutely no research to support this contention. The problem is that people are NOT eating according to this food guide. Making it more complex and difficult to use is not the answer to changing the food and activity habits of consumers.

The idea that providing consumers with more information will motivate them to improve their dietary intake, is naïve; it ignores an entire body of research on motivating and supporting behavioral change. If we really want to help consumers to eat healthier diets, we need to focus on designing programs and messages that accomplish this goal. Making messages more complex and difficult to understand will only create additional barriers to these changes.

Sincerely,



Joanne P. Ikeda, MA, RD

Cooperative Extension Nutrition Education Specialist

October 21, 2003

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Mattson

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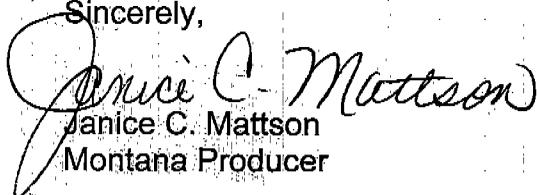
Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive  
Room 1034  
Alexandria, VA 22302

I am aware that you have received technical comments from the National Barley Foods Council (NBFC) concerning the proposed revisions to the daily food intake patterns that serve as the technical basis for the Food Guide Pyramid.

If it were not for my association with organizations such as NBFC and WFC, I, as a consumer, would not be aware of the benefits of barley in our diet. As consumers we look to the USDA and its recommendations through the Food Guide Pyramid to sway our eating choices. You would be doing the public a favor by including barley as one of the whole grains that benefits us all.

As you examine the information provided you by the National Barley Foods Council and the research done by several organizations, please don't leave out the importance of barley in our diets.

Sincerely,

  
Janice C. Mattson  
Montana Producer



Jean Mayer  
United States Department of Agriculture  
Human Nutrition Research Center on Aging  
At Tufts University

received

10/24/03

KY

10/14/03  
Tucker

October 14, 2003

Dear Food Guide Pyramid Reassessment Team,

This letter is in response to the USDA's technical report on Daily Food Intake Patterns and Technical Support Data. The continued commitment to providing dietary guidance to promote healthful eating in the United States is of great importance and with substantial new research available on diet and health; this reassessment of the food guide pyramid is timely. Recently, the DRI for vitamin E was changed, based on research that suggests that alpha-tocopherol in the natural form is the preferred form of vitamin E for the human body. It is therefore surprising to see that the decision for the Food Guide Pyramid reassessment was to lower the target for vitamin E consumption, based on the perception that meeting the RDA would require 'substantial changes from typical intakes and would require use of foods not commonly consumed.

Americans are clearly not meeting the current recommendations for vitamin E—consuming only about one-half to two-thirds of the recommended 15 mg of alpha-tocopherol, on average. In a recent study that is in press at the Journal of the American Dietetic Association, we determined that most consumers are obtaining their daily vitamin E from relatively poor sources of alpha-tocopherol, including oils and baked products. We concluded that the use of more rich sources of alpha-tocopherol, such as nuts and seeds, needs to be encouraged if more Americans are to reach their vitamin E intake goal.

The current version of the guidelines encourages consumption of dark green vegetables, legumes and oils to increase vitamin E intake. While these foods contain vitamin E, it is indeed difficult to achieve DRI intake levels from them. In contrast, several types of nuts and seeds, such as almonds and sunflower seeds, contain sufficient amounts of alpha-tocopherol to achieve DRI recommendations with reasonable intake levels. It would seem, therefore, that the public would be best served by suggesting greater inclusion of these sources in the diet, so that individuals can move toward achieving the DRI for vitamin E from foods.

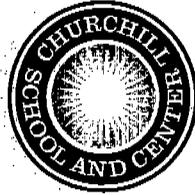
Respectfully submitted,

*Katherine Tucker*

Katherine Tucker, PhD

Associate Professor of Nutritional Epidemiology

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Churchill C.S.



received  
10/29/03

KT

October 16, 2003

USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive, Room 1034  
Alexandria, VA 22302

Dear Food Guide Pyramid Reassessment Team:

Our class of seventh graders from Churchill School in New York City did a project on how we could improve the old food pyramid, here are some of our ideas. First, we think that liquids, especially water, are important to our health because it is important to stay hydrated. Therefore we think that liquids should either be added to the pyramid or at least be addressed somewhere on the guideline sheet.

Our second suggestion is that you make multiple pyramids for different age groups (young children, adolescents, adults) and people with different diets (vegetarians, vegans, etc.).

We also think it would be easier to follow the food pyramid guidelines if the servings were measured in cups and/or ounces. The current serving suggestions are not clear.

Our last suggestion is to include less grains in the pyramid because a lot of foods that are considered grains have too much starch and a lot of calories. Too many calories are not good for our bodies.

Thank you for your time; we appreciate you letting us contribute our suggestions. Please respond to our suggestions.

Sincerely,

Will Hertzman, Will Zimmermann  
Madeline Heller-Andrew  
Tori Piskin  
Andrew Estrada  
Samuel Blake  
PAPAZOGLU  
Alexandra Korves  
Gregory Quintan  
Frank Pastale  
Sophie Glassman  
Wolgemuth  
Alexis Aliperta

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LC

October 21, 2003

USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive, Room 1034  
Alexandria, VA 22302

Dear Food Guide Pyramid Reassessment Team:

We are a seventh grade class of students from The Churchill School and Center. In our science class we were learning about the food pyramid and we would like to give you some suggestions about how to change the current food pyramid.

Our first suggestion is that you should make all servings into measurements like cups and ounces because this would make the pyramid easier to follow. We also think there should be less servings per day overall but more of the servings per day should come from vegetables.

Another suggestion is that you should separate fish from the meat category because, in general, fish have less fat. Poultry should also be in a separate category because it also has less fat than red meat.

Our last suggestion is to make different pyramids for different ages. Young people are still growing; they need more servings than people who are older and not growing anymore.

We think these suggestions will make the food pyramid better. Thank you for listening to our ideas.

E@

Jesse Medalia-Strauss

Rachel Greenhoe

Austin

~~Stephen~~ K-The Greek

Konstantin Ovarstey - The Greek

Sincerely

Elizabeth C. Veruch

Kaleb Thorning Wine

Ross Giattino

Ashley #

Steckman

Jacob Federman

MIKE  
Arbittier



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President  
James Dexter  
Canadian Grain Commission

President-Elect  
George Lookhart  
USDA ARS US Grain  
Marketing Research Lab

October 21, 2003

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive, Room 1034  
Alexandria, VA 22302

Dear Food Guide Pyramid Reassessment Team:

We, the American Association of Cereal Chemists Board of Directors, are writing to you with scientific data in support of grains at the base of the Food Guide Pyramid (hereafter referred to as the Pyramid). AACC is the premier worldwide organization for advancing grain science and technology by creating, interpreting, and disseminating cereal information to our 3,000 plus members throughout the world.

In this letter we will cover several key areas in relating this support.

1. **Grains have historically been at the base of the Pyramid and as such should remain there.**
2. **Obesity is due to too many calories of all types and too little energy expenditure.**
3. **Dietary advice for the nation as a whole should be devised for healthy, normal-weight people. The Food Guide Pyramid is no exception.**
4. **The problem with the U.S. diet is not the Pyramid itself; it is that people do not follow the Pyramid and do not follow the guidelines with respect to recommended portions.**

**Grains have historically been at the base of the Pyramid and as such should remain there.**

Cultures, ancient and modern and in developed and developing nations, all have a carbohydrate staple, often a grain-based food, that has nourished peoples over time. Each staple, while unique, provides the population with the bulk of its energy as well as numerous important nutrients.

Ancient texts have praised carbohydrate staples that are eaten the world around. Old Testament writings talk of manna from heaven; New Testament texts suggest breaking bread together and speak of the bread of life and living not by bread alone. Jewish hallah bread takes pride of place for a Sabbath meal and unleavened bread for a Seder meal. Asians ask one another if they have eaten by

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saying, "Have you had rice?" Corn and wild rice were considered by native tribes as gifts of an important god or from the Great Spirit.

Chronicles of early pioneer life suggest that it would be customary to bake as many as 13 loaves of bread for a large farm family. Early American songs sing of hasty pudding (corn meal mush.) Thus, the cultural melting pot and framework of the current American diet is based on breadstuffs and grains that incorporate the variety of cultural traditions. These various grain-based foods are a cornerstone of the diet.

Grain-based staples provide an array of B vitamins, a number of important minerals, and all-important dietary fiber. With these important nutritional contributions, it is no wonder that health and government organizations around the world, together with expert consultative committees such as those convened by the WHO/FAO, recommend that the bulk of the calories come from carbohydrates, particularly in the form of tuber- and grain-based food products. Thus, most recommendations from these bodies suggest that at least 45% of calories come from carbohydrates and most recommend that 55-60% of calories come from carbohydrate.

Grains, especially whole grains, offer tremendous dietary advantage. Numerous epidemiological studies have shown that the inclusion of whole grains in the diet is associated with reduced risk of a variety of chronic diseases, including heart disease,<sup>1,2</sup> certain types of cancer,<sup>3</sup> diabetes<sup>4,5</sup>, and stroke,<sup>6</sup> as well as overall mortality.<sup>7</sup> For most of these diseases, risk reduction was 25% or greater for those ingesting somewhere between two and three servings of whole grain each day. Even waist circumference and body mass index (BMI) were affected by whole grains.<sup>8,9,10,11</sup> Since the average American eats less than one serving of whole grain per day, it is critical that grains and whole grains be emphasized in the Pyramid.<sup>12</sup>

Grains at breakfast and the inclusion of breakfast cereals in the diet are shown in study after study to provide many important B vitamins and minerals to children who eat breakfast. A recent study comparing breakfast patterns of adolescents once again showed that a ready-to-eat cereal breakfast provided significantly more folic acid, iron, niacin, vitamins A and D, and zinc, per dollar spent, than fast food or traditional breakfasts other than cereals.<sup>13</sup> These data are in line with a number of past studies, including the 25-year-long Bogalusa Heart study ( $n = 1254$ ) and continue to document the importance of fortified cereals in making nutrient contributions to the diets for a large number of children and adolescents.<sup>14</sup>

An analysis of the contribution of fortified cereals to the diets of adults, using data from the USDA Consumer Survey of Food Intake of Individuals (CSFII), showed that, in numerous cases, fortification was responsible for boosting median or 25th percentile intakes of nutrients from below to above the Recommended Dietary Allowance (RDA). The breakfast cereal category was responsible for nearly all the intake of nutrients from fortified foods.<sup>15</sup> In addition, analysis of data from the National Nutrition and Health Examination Survey II (NHANES II) ( $n = 11,528$  adults) showed that "other" foods (i.e., foods not from the groups meat, dairy, grain, fruit, and vegetable) provided an average 33% total daily energy intake. As foods in the "other" category increased, the number of servings in the food group categories decreased, as did the attendant diet quality.<sup>16</sup>

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Dexter

Recent data on folate fortification of grain products show that, in just five years since fortification was instituted in the USA and Canada, the rate of neural tube defects and some other related birth defects has decreased by as much as 50%.<sup>17,18</sup> Fortification of grains is an ideal vehicle because grains are widely eaten by the population. Further, for prevention of birth defects, it is the folate status of the woman at the time she becomes pregnant that is important.

Folate fortification not only helped to reduce birth defects, it also decreased the heart disease risk factor of high circulating homocystiene. Data collected on the Framingham offspring show a decrease in homocystiene blood levels by 50% over that seen in the population prior to fortification.<sup>19</sup> Folate fortification of grain products shows that these foods provide a platform with which to deliver needed nutrients to the population. Moving grains to a less prominent place in dietary guidance might reduce some of these positive gains seen with the fortification strategies.

### **Obesity is due to too many calories of all types and too little energy expenditure.**

The current obesity epidemic that is occurring in the USA and around the world is sobering. Attending the rise in obesity are increases in the metabolic syndrome (Syndrome X) and Type II diabetes. Some argue that, since traditional dietary advice seems to be incapable of stopping the dramatic rise in these conditions, drastic changes to the diet are needed. Some of the most evangelistic and iconoclastic nutritionists and health professionals have thrown off the ideas of the past. They lay the blame for the obesity epidemic on the eating of too much bread and refined carbohydrate. Consumers, journalists, and best-selling book authors have assured the public that the culprit is sugar and foods containing refined carbohydrate such as white bread and pasta. They argue that as fat intake was decreasing, abdominal fat and weight were increasing. While it is true that the percentage of calories from fat was decreasing, this was true only because the total number of calories was increasing. As a backlash, they argue that all the high-carbohydrate, fat-free food made the population fatter. While there may be some data to support this view, the reason that fat-free food made some people fatter is that there is a general misunderstanding of the word "free." For some consumers, "free" meant that they could ingest as much as they liked. In some cases, the fat-free food did not save the consumer any calories. For other consumers, the diminished taste of the fat-free item left them eating more in a futile attempt to seek the same degree of satisfaction obtained from the higher-fat counterpart.

Numerous studies show that those who eat a high-carbohydrate diet over a lifetime tend to have normal body weights (or BMIs less than 25). Additionally, it was shown that, when the diets of 10,014 U.S. adults over 19 years of age in the CSFII were segmented into four groups based on their carbohydrate intake—very low, low, moderate, and high carbohydrate (55% CHO), those with the highest carbohydrate intake were more likely to have a BMI <25, to meet nutrient recommendations, and to eat a higher volume of food per 1000 cal.<sup>20,21</sup> Many other studies have shown the same relationship. For example, data from the Bogalusa Heart cohort showed that total consumption of low-quality foods, total amount of food consumed, and calories from snacks was positively associated with overweight status.<sup>22</sup> These studies do not pick out breads and pasta as the culprit, but rather the total amount of food and food with little nutritional contribution. Thus, most argue, as was concluded in a recent review,<sup>23</sup> that fat, not carbohydrate

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and grain-based foods, leads to passive over-consumption and obesity. Fat yields more than twice as many calories per gram, and despite popular myths to the contrary, calories do count.

Calories "out" count, as well as calories "in." Clearly, our twenty-first century lifestyles—complete with people movers, wheeled luggage, and garage door openers—means that we expend fewer calories than we did in earlier times. This lack of caloric expenditure in daily life is exacerbated by the proclivity to sit before some sort of screen, either using a computer or watching television. In either case, the caloric need for the activity is small indeed, and it means that we are not involved in activities that would expend energy and build muscle.

Changing the Pyramid by moving grains from the base will not do what is critical with regard to weight—that is, increase the energy expenditure. Neither will it decrease the size of portions, the number of total calories, or the selection of foods with high caloric yield and low nutrient density.

**Dietary advice for the nation as a whole should be devised for healthy, normal-weight people. The Food Guide Pyramid is no exception.**

Population dietary recommendations have been based on meeting the needs of healthy people. This strategy was used for the calculations of the RDAs and Dietary Reference Intakes (DRIs), the Dietary Guidelines, and other dietary advice. Recommendations from the upcoming Food Guide Pyramid should not break with this tradition. However, it is mandatory that the Pyramid emphasize exercise and movement.

**The problem with the U.S. diet is not the Pyramid itself; it is that people do not follow the Pyramid and do not follow the guidelines with respect to recommended portions.**

The Food Guide Pyramid is not the problem. According to CSFII data, only 1% of U.S. children and adolescents and 3% of U.S. adults eat according to the Pyramid.<sup>24</sup> Those who did, met the nutrient requirements.<sup>4</sup>

Consumers are very confused about portions and proper portion size. Further, portion sizes have increased over time. The Pyramid must help consumers understand that it is the combination of portion size and total energy intake and expenditure that is important for maintenance of weight.

**Summary—Leave grains at the base of the Pyramid**

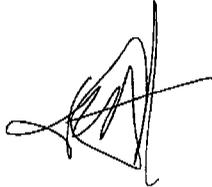
Thus, in closing, we recommend that the overall placement of food groups in the Pyramid remain the same, with the **bread and cereal group as the base**, but that the Pyramid be tweaked in the following ways:

- (1) Emphasis on the importance of whole-grain foods
- (2) Emphasis on adequate energy expenditure

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Dexter

- (3) Graphic help for consumers to help them deal with realistic portion sizes
- (4) Help for consumers in selecting lower-calorie items within various categories in order to make choices that will allow them to maintain a healthy weight.

Sincerely,



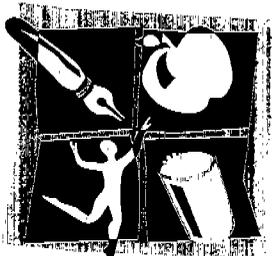
James Dexter  
AACC President

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- <sup>1</sup> Liu S, Stampfer MJ, Hu FB, Giovannucci E, Rimm E, Manson JE, Hennekens CH, Willett WC. Whole-grain consumption and risk of coronary heart disease: results from the Nurses' Health Study. *Am J Clin Nutr.* 1999 Sep;70(3):412-9.
  - <sup>2</sup> Jacobs DR Jr, Meyer KA, Kushi LH, Folsom AR. Is whole grain intake associated with reduced total and cause-specific death rates in older women? The Iowa Women's Health Study. *Am J Public Health.* 1999 Mar;89(3):322-9.
  - <sup>3</sup> Pelucchi C, Talamini R, Levi F, Bosetti C, La Vecchia C, Negri E, Parpinel M, Franceschi S. Fibre intake and laryngeal cancer risk. *Ann Oncol.* 2003 Jan;14(1):162-7.
  - <sup>4</sup> Fung TT, Hu FB, Pereira MA, Liu S, Stampfer MJ, Colditz GA, Willett WC. Whole-grain intake and the risk of type 2 diabetes: A prospective study in men. *Am J Clin Nutr.* 2002 Sep;76(3):535-40.
  - <sup>5</sup> Murtaugh MA, Jacobs DR Jr, Jacob B, Steffen LM, Marquart L. Epidemiological support for the protection of whole grains against diabetes. *Proc Nutr Soc.* 2003 Feb;62(1):143-9.
  - <sup>6</sup> Liu S, Manson JE, Stampfer MJ, Rexrode KM, Hu FB, Rimm EB, Willett WC. Whole grain consumption and risk of ischemic stroke in women: A prospective study. *JAMA* 2000 Sep 27;284(12):1534-40.
  - <sup>7</sup> Lubin F, Luskay A, Chetrit A, Dankner R. Lifestyle and ethnicity play a role in all-cause mortality. *J Nutr.* 2003 Apr;133(4):1180-5.
  - <sup>8</sup> McKeown NM, Meigs JB, Liu S, Wilson PW, Jacques PF. Whole-grain intake is favorably associated with metabolic risk factors for type 2 diabetes and cardiovascular disease in the Framingham Offspring Study. *Am J Clin Nutr.* 2002 Aug;76(2):390-8.
  - <sup>9</sup> Newby P, Muller D, Hallfrisch J, Qiao N, Andres R, Tucker KL. Dietary patterns and changes in body mass index and waist circumference in adults. *Am J Clin Nutr.* 2003 Jun;77(6):1417-1425.
  - <sup>10</sup> Mickelsen O, Makdani DD, Cotton RH, Titcomb ST, Colmery JC, Gatty R. Effects of a high fiber bread diet on weight loss in college-age males. *Am J Clin Nutr.* 1979 Aug;32(8):1703-9.
  - <sup>11</sup> Koh-Banerjee P, Rimm EB. Whole grain consumption and weight gain: A review of the epidemiological evidence, potential mechanisms and opportunities for future research. *Proc Nutr Soc.* 2003 Feb;62(1):25-9.
  - <sup>12</sup> Cleveland LE, Moshfegh AJ, Albertson AM, Goldman JD. Dietary intake of whole grains. *J Am Coll Nutr.* 2000 Jun;19(3 Suppl):331S-338S.
  - <sup>13</sup> Nicklas TA, McQuarrie A, Fastnought C, O'Neil CE. Efficiency of breakfast consumption patterns of ninth graders: Nutrient-to-cost comparisons. *J Am Diet Assoc.* 2002 Feb;102(2):226-33.
  - <sup>14</sup> Nicklas TA, O'Neil CE, Berenson GS. Nutrient contribution of breakfast, secular trends, and the role of ready-to-eat cereals: A review of data from the Bogalusa Heart Study. *Am J Clin Nutr.* 1998 Apr;67(4):757S-763S.
  - <sup>15</sup> Berner LA, Clydesdale FM, Douglass JS. Fortification contributed greatly to vitamin and mineral intakes in the United States, 1989-1991. *J Nutr.* 2001 Aug;131(8):2177-83.
  - <sup>16</sup> Kant AK, Schatzkin A. Consumption of energy-dense, nutrient-poor foods by the US population: Effect on nutrient profiles. *J Am Coll Nutr.* 1994 Jun;13(3):285-91.
  - <sup>17</sup> French AE, Grant R, Weitzman S, Ray JG, Vermeulen MJ, Sung L, Greenberg M, Koren G. Folic acid food fortification is associated with a decline in neuroblastoma. *Clin Pharmacol Ther.* 2003 Sep;74(3):288-94.
  - <sup>18</sup> Ray JG, Meier C, Vermeulen MJ, Boss S, Wyatt PR, Cole DE. Association of neural tube defects and folic acid food fortification in Canada. *Lancet.* 2002 Dec 21-28;360(9350):2047-8.

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- <sup>19</sup> Rader JI. Folic acid fortification, folate status and plasma homocysteine. *J Nutr.* 2002 Aug;132(8 Suppl):2466S-2470S.
- <sup>20</sup> Bowman SA, Spence JT. A comparison of low-carbohydrate vs. high-carbohydrate diets: Energy restriction, nutrient quality and correlation to body mass index. *J Am Coll Nutr.* 2002 21(3):268-74.
- <sup>21</sup> Kennedy ET, Bowman SA, Spence JT, Freedman M, King J. Popular diets: Correlation to health, nutrition, and obesity. *JADA.* 2001, 101:411-20.
- <sup>22</sup> Nicklas TA, Yang SJ, Baranowski T, Zakeri I, Berenson G. Eating patterns and obesity in children. The Bogalusa Heart Study. *Am J Prev Med.* 2003 Jul;25(1):9-16.
- <sup>23</sup> Jequier E. Pathways to obesity. *Int J Obes Relat Metab Disord.* 2002;26 Suppl 2:S12-7.
- <sup>24</sup> Munoz KA, Krebs-Smith SM, Ballard-Barbash R, Cleveland LE. Food intakes of US children and adolescents compared with recommendations. *Pediatrics.* 1997 Sep;100(3 Pt 1):323-9. Erratum in: *Pediatrics.* 1998 May;101(5):952-3.

10/22/03 Goetze, Leonard, Price



Nutrition Education Services  
Oregon Dairy Council

October 22, 2003

received  
10/24/03

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive, Room 1034  
Alexandria, VA 22302

To the Team:

Over the past ten years, our staff has conducted countless sessions with thousands of children, teens, adults and seniors using the Food Guide Pyramid (FGP) as our nutrition education foundation. It is with that expertise, along with our professional knowledge and ability to apply research to practical situations that we respectfully submit the following feedback on the Technical Report.

First and foremost, we disagree with those who would argue that the FGP has not done its job. We argue instead that it has become the unfortunate scapegoat for a society that has lost all focus when it comes to balance, variety and proportionality. The technical report speaks to the scope and breadth of the science behind the recommendations. The real need that we see is more nutrition education to support the science and messages of the FGP.

At this time, however, we do offer the following specific comments regarding the technical report:

#### **Proposed Daily Food Intake Patterns**

We agree with a food grouping system based on nutritional similarities among foods, their use in meals and consumer perception. Americans have learned to think in terms of simple food groups. By emphasizing the importance of building a good diet based on five nutrient-dense food groups, the FGP reinforces the notion that people eat foods, not nutrients. Maintaining the current groups will assist in efforts to reduce consumer confusion.

The recommendations for "additional fats" and "added sugars" are clearly quantified and provide flexibility in food choices. We have always recommended a "trade-off" or "all foods can fit" approach to managing dietary fat intake. We think consumers

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Goetze, Leonard, Price

approach to managing dietary fat intake. We think consumers are capable of making these kinds of choice, but will need significant education, especially considering emerging research that will soon allow us to assess an individual's risk for chronic disease, and thereby customize dietary guidance.

**We are concerned about the nutritional adequacy of the number of servings from the milk food group.** Four groups (males ages 9-13, females ages 9-13, females ages 14-18, females ages 31-50) will not meet calcium the AI for their age with the proposed 2-3 servings of dairy (ref Table 5). The IOM's Applications of Dietary Assessment indicates that if the AI is not met or exceeded, attainment of nutrient adequacy can not be assumed.

The proposed recommendations for all age groups call for additional calcium, beyond the 2-3 milk servings, to come from plant-based sources. We think this is unrealistic based on typical consumption patterns and would contribute to nutrition inadequacy. Suggested amounts of non-dairy calcium sources are:

- 30 – 50% higher than the current FGP recommendations
- 3 – 4 times higher than current consumption by Americans older than age two
- 6 – 8.5 times higher than current consumption by children ages 2- 19

Additionally, the calcium in dark, green leafy vegetables, whole grains and legumes has decreased bioavailability compared to the calcium from dairy foods. (AJCN, 51(4): 656-7, 1990)

The risks of inadequate calcium intake due to recommending only 2-3 servings are well documented. Osteoporosis is major public health threat for an estimated 44 million Americans. Calcium's role in prevention and treatment is well established. Lower calcium intake in children and adolescents is already impacting bone health, with forearm fractures increasing by 42 percent in the past 30 years. (JAMA, 9/03). Additionally, new research has demonstrated a role for milk group foods in the prevention of heart disease (CARDIA, DASH and PREMIER Studies)

One of the stated goals of the proposed changes is to represent "a diet that is both adequate and moderate, as well as to reflect current food consumption choices in determining nutrient sources." A higher number of servings from the milk group (3-4) would support the FGP goals and would be supported by scientific research.

**Another area of concern is fortified foods.** The 2001 *Position of the American Dietetic Association: Food Fortification and Dietary Supplements* serves as an excellent guide for addressing this important issue:

*"Wise food choices provide the necessary foundation for optimal nutrition. Science has not fully identified the specific chemical components that account for the benefits of healthy eating patterns. Selection of a wide variety of foods, using tools such as the Dietary Guidelines for Americans and the FGP, is the best way to provide a desirable balance, without excess."*

2007  
Gaeke, Leonard, Price

Introducing the suggestion of calcium-fortified soy beverages as a substitute for dairy foods is an incomplete recommendation. While intention is to provide a calcium alternative, it must be recognized that the complete nutrient profile of these two foods is completely different. Dairy products are an important source of high-quality protein, Vitamins A, D, B6 and B12, riboflavin, magnesium, zinc, potassium, phosphorus, niacin, and other essential nutrients.

In addition, dairy foods provide numerous other health benefits. Naturally nutrient-rich milk, yogurt and cheese have been shown times to improve the overall nutritional quality of the diet, play a role in preventing hypertension, insulin resistance, and colon polyp recurrence. Selecting dairy foods as part of a typical diet has not been shown to increase total calorie or fat intake, body weight or percent body fat. Emerging research shows that dairy foods may even have additive effect on reduced-calorie, low-fat diets for weight loss.

Soy beverages are often fortified with calcium and Vitamin D to mimic cow's milk. However, the calcium added to soy beverages is absorbed at 75% efficiency compared to cow's milk (AJCN 2000, 71:1166-9). This is not commonly understood by consumers and could lead to more confusion regarding the larger serving size needed for equivalency.

Lactose Intolerance has become an often reported reason to avoid milk group foods. For Americans (including most African Americans) with lactose intolerance, research shows they can still consume dairy products and reap the health benefits (Suarez, et al.) There are also a variety of lactose-reduced and lactose-free milk products readily available today that provide all the nutritional benefits found in traditional dairy products.

#### **Appropriateness of using cups and ounces vs. servings**

We completely agree that the term "serving" has been widely misunderstood by consumers. We have addressed this issue by illustrating typical servings in each food group (Pyramid Plus, Nutrition Education Services/Oregon Dairy Council). We urge you to consider some sort of pictorial approach in the new educational materials no matter which approach you choose.

We recommend using total cups or ounces per day to help consumers know the quantity of each food group they need. Americans will be more apt to confidently apply the information to their diet if it matches a product label or corresponds with measuring knowledge that many already know, such as cups or ounces.

While serving sizes are not, and probably won't ever be, standardized among food products and nutrition recommendations, we need to help people navigate with familiar tools.

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Goetze, Leonard, Price

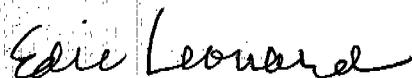
The concern of losing a "variety" message because of a total cups or servings recommendation can be addressed either through a subtitle or in consumer materials. The recommendation of "eating a variety of foods within each food group" is a familiar concept, though needs reinforcement and constant examples. Taking words from the Healthy Eating Index, one suggested message would be "to get the nutrients you need, eat 16 or more different foods during a 3 day time period."

Finally, we applaud you for your excellent and thorough work. We look forward to continued participation in this process and offer our assistance to help yield effective educational tools that will benefit the health and well-being of Americans.

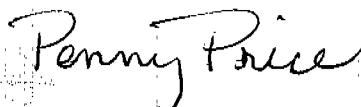
Sincerely,



Anne Talbott Goetze, RD, LD  
Director



Edie Leonard, MS, RD, LD  
Nutrition Educator



Penny Price, MS  
Nutrition Educator

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10/24/03

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GENERAL MILLS

October 24, 2003

Eric Hentges, Director  
Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive, Room 1034  
Alexandria, VA 22302

**RE: Federal Register Notice, Volume 68, No. 176, September 11, 2003**  
Center for Nutrition Policy and Promotion; Notice of Availability of  
Proposed Food Guide Pyramid Daily Food Intake Patterns and Technical  
Support Data and Announcement of Public Comment Period

Dear Dr. Hentges:

General Mills is a Delaware Corporation with its general offices at No. 1 General Mills Boulevard, Minneapolis, MN 55426. General Mills is a major, world-wide packaged-food manufacturer engaged for over 60 years in the development and production of food products including flour, ready-eat-cereals, refrigerated dough products, cake and other dessert mixes, soups, vegetables, yogurts, snacks and numerous other products.

General Mills believes the Food Guide Pyramid has been, and can continue to be, an important tool for providing dietary guidance to the American public. Over the years, General Mills has helped provide visibility and understanding of the Pyramid by communicating it on millions of food packages as well as making it an integral part of our educational materials for adults and children.

We plan to continue to provide this support and believe it is important to review and revise the current food guide pyramid, if necessary, to reflect the 2005 Dietary Guidelines as well as the latest scientific standards and advancements. We applaud the USDA for the thorough science-based approach used to address the potential changes and issues that have been raised as a result of this assessment. Addressing the specific questions outlined in the Federal Register Notice, our comments are as follows:

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**Appropriateness of using sedentary reference-sized individual in assigning target calorie levels**

We believe the calorie levels for Food Guide Pyramid should be targeted to *healthy* Americans. These targets would ensure adequate nutrient intakes and energy levels to *maintain* healthy weight. Thus, using the 'Low active' reference individual for assigning target calorie levels would be most appropriate.

Since the purpose of the Food Guide Pyramid is to provide guidance for good health, the food patterns should not only ensure adequate nutrient intakes, but also represent calorie levels that will support and encourage active, healthy lifestyles. Therefore, using the sedentary referenced- sized individual to assess *nutritional adequacy* seems appropriate; however, it is not appropriate to use it to assess *calorie levels*.

According to the latest national dietary intake survey, NHANES 1999-00<sup>1</sup>, the current reported median energy intake of American adult males ages 19+ is 2,427 kcals (mean = 2,601 kcal) and approximately one-third of adult males reported consuming less than 2,000 kcal/day. The median energy intake of American adult women ages 19+ is 1,714 kcals (mean=1,849 kcal) and approximately 1/3 reported consuming less than 1500 kcal/day. This suggests that while adult men may be consuming close to their calorie goals for an active, healthy lifestyle, many women are consuming closer to the sedentary levels.

These current consumptions patterns reinforce the need for incorporating *physical activity goals* as part of the recommendations for healthy food choices and a healthy lifestyle.

<sup>1</sup> National Center for Health Statistics. National Health and Nutrition Examination Survey, 1999-00. Public-use data file and documentation. [http://www.cdc.gov/nchs/nhanes/NHANES99\\_00.htm](http://www.cdc.gov/nchs/nhanes/NHANES99_00.htm). 2003.

**Appropriateness of the selection of nutritional goals for the daily food intake patterns**

Using a target of 100% of the RDA nutrients (as set by the Institute of Medicine [IOM] in their recent Dietary Reference Intake reports) seems appropriate to assess food patterns for individuals.

Moderation goals

While it may be important to include advice on limiting intakes of trans fat, it will be equally important to balance that message with messages about consuming total fat in moderation, limiting saturated fat intakes and choosing more unsaturated fats and oils.

The amount of trans fat in the diet is much smaller than the saturated fat and therefore it is misleading to put too much emphasis on trans fat. Providing positive messages about choosing a diet with moderate amounts of fat and substituting oils (such as olive or canola oil) for some

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Wiemer

of the saturated fat in the diet would be a more practical and useful message.

#### Nutritional goals for total fiber

The goal of 14 grams of total fiber per 1000 calories seems to be a much more practical approach than the recommending the high levels (25-38 grams) set in the IOM report. However, it will be very important to harmonize fiber terminology with the terminology used on the nutrition label and the data currently available in the food composition tables.

Therefore, until the term *total* fiber is incorporated into food labeling and food composition tables, the food guide pyramid fiber recommendation should reflect *dietary* fiber levels.

#### Nutritional goals for added sugar

Since the recommended food patterns are well below the 25% maximum level set in the IOM report, care should be taken not to imply that these lower levels are recommended levels. Once nutrient needs are met, it is important to allow individuals flexibility in food choices in order to be able to choose a diet that will be palatable and meet their individual preferences.

### **Appropriateness of proposed food intake patterns for educating the Americans**

Since these patterns are goals, it seems appropriate to encourage choosing minimum servings from these foods categories- grains, vegetables, fruit, meat and beans and milk-foods and food patterns that have been demonstrated to ensure adequate intakes of nutrients necessary for good health.

Consistent with the current Dietary Guidelines and the current Food Guide Pyramid, **grains** should continue to make up the base of the pyramid. These foods provide complex carbohydrates, an important source of energy in the diet. They also provide essential nutrients such as thiamin, niacin, riboflavin, folic acid, iron and zinc, fiber and other non-nutrient components beneficial to good health. Widely consumed, economical, convenient, versatile and healthful, grains are the foundation of the American diet and most dietary patterns around the world.

We strongly support the continued emphasis on whole grain and the recommendation that **one half of the grain servings be whole grain** (or at least 3 servings of whole grains daily). Consumption of whole grain will greatly increase intakes of fiber, certain vitamins, minerals and other non-nutrients such as lignans, tocotrienols and other phenolic compounds linked to good health and disease prevention. The 2000 Dietary Guidelines Advisory Committee emphasized whole grain consumption because they recognized the health benefits associated with it. Both epidemiological and clinical research has clearly

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established the role of whole grain as part of a healthy diet in reducing risk for heart disease and cancer and there is strong evidence for reduced risk of diabetes.

In 2002, the Institute of Medicine established for the first time, adequate intake levels for fiber. Consumption surveys show that Americans are not consuming the recommended levels of fiber with fiber intakes averaging 14 grams. Increasing consumption of whole grains will help close the gap on the current low fiber intake of both adults and children.

#### **Appropriateness of cups and ounces verses servings**

In order to make the basic pyramid graphic simple to understand, the single term *servings* should be used. Educational materials should then explain what the various serving sizes are. This is a very complicated task and should not be undertaken without reconciling the food guide pyramid serving sizes with those required on the nutrition label.

#### **Selection of appropriate illustrative food patterns for consumer materials**

Providing meal patterns for 12 calorie levels may be helpful for some health professionals; however, it would be totally confusing for the public and defeat the purpose of the Pyramid as an educational tool. It seems that **one** food pattern is all that is necessary. *(For example, select **one** food pattern [e.g. 1600 calories] that covers the minimum nutrient needs for **adults and teens** and **one** food pattern [e.g. 1200 calories] that is targeted to the needs of **young children**).*

With this approach, once minimum nutrient requirements are met it allows individuals the flexibility of choosing among the other foods to meet their individual calorie needs while allowing room for individual preferences. As long as the diet is nutritionally adequate and meets the other Dietary Guideline recommendations, it should not be necessary to prescribe meal patterns for all calorie levels. Focusing on a single daily food intake pattern would provide an opportunity for a clear and simple communication message. Table 1 provides examples of this approach.

Educational efforts that can be focused on helping the public understand:

- Servings/portion sizes
- Energy/activity balance
- How to fit an individual's food choices (*such as pizza, pasta dishes, other ethnic foods, soups, stew, mixed salads, fruit and dairy desserts*) into the basic food groups in the food guide pyramid.

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Wiemer

Table 1

The base recommended (1600 calorie) food guide pattern for adults and teens would then be:

- ⇒ 6 servings of Grains (1/2 whole grain)
- ⇒ 2 servings of Fruit
- ⇒ 3 servings Vegetables
- ⇒ 2-3 servings of Meat and Beans
- ⇒ 2-3 servings of Milk
- ⇒ Additional fats and added sugar within the levels recommended in the IOM report.

The base recommended (1200 calorie) food guide pattern for young children would be:

- ⇒ 4 servings of Grains (1/2 whole grain)
- ⇒ 1 1/2 servings of Fruit
- ⇒ 2 servings of Vegetables
- ⇒ 1-2 servings meat and Beans
- ⇒ 2 servings Milk
- ⇒ Additional fats and added sugars within the levels recommended in the IOM report

In closing, we commend CNPP for your continual research to test understanding and potential messages with the consumer. Thank you for the opportunity to comment on the proposed Food Guide Pyramid daily food intake patterns and technical support data. We look forward to continuing to discuss and develop the next generation of the Food Guide Pyramid.

Respectfully submitted,



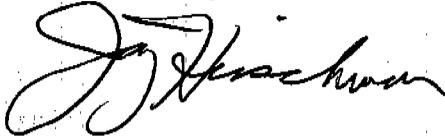
Kathryn L. Wiemer MS, RD, LD  
Senior Manager  
General Mills Bell Institute of Health & Nutrition

2005  
Hirschman

Any new food guidance system and graphic will require extensive consumer testing with practitioners (e.g., nutritionists, WIC and extension paraprofessionals, and school teachers) and key population subgroups to ensure that they motivate appropriate behavior change with a minimum of misinformation. Future budget requests to Congress should provide adequate funding for CNPP to conduct the development, testing and promotion campaigns needed to achieve improved dietary intake by the U.S. population.

I would be glad to provide additional verbal clarification of any of the points in this letter or the attachment if this would be of use to CNPP or the Dietary Guidelines Advisory Committee.

Sincerely,



Jay Hirschman

Enclosure (3 pages)

3035  
Hirschman

**Comments on Proposed Food Guide Pyramid Daily Food Intake Patterns and  
Technical Support Data**

personal comments submitted by

**Jay Hirschman, M.P.H., C.N.S.**

These comments focus on one critical issue that should be addressed carefully as part of the revision to the Federally recognized dietary guidelines graphic currently represented by the 1992 Food Guide Pyramid, the issue of the nutrient profiles for the food groups and subgroups.

**Nutrient Profiles for the Food Groups and Subgroups:** The approach to nutrient profiles for the food groups used in the September 11, 2003 notice is similar to that described in Cronin et al's excellent 1987 article "Developing a Food Guidance System to implement the Dietary Guidelines" (JNE 19:281-302, 1987). This approach uses foods "in their lowest fat and sugar form" when defining the nutrient profile of the group (USDA/CNPP, September 11, 2003, Table 4, page 3). This approach was taken by USDA's Human Nutrition Information Service in the mid-1980's in order to develop a food guidance system that met nutrition requirements and addressed professional concerns for "usability issues such as availability and acceptability of foods and eating practices of the population." (Cronin et al, op cit, p.297)

**While this was a reasonable and scientifically justifiable approach at the time of publication, 16 years of experience shows that this approach does not work effectively as the primary approach to dietary guidance for the American population. It is essential for USDA to reconsider this core component of its dietary guidance system and its implications for revising the Food Guide Pyramid or whatever graphic is needed to effectively communicate the intended 21<sup>st</sup> century messages.**

Since the 1987 article, data from the HHS/CDC (National Center for Health Statistics NHANES surveys and the Behavioral Risk Factor Surveys) have documented a widespread and growing epidemic of obesity in the U.S. Energy imbalance has replaced nutrient inadequacy as the single most important nutritional concern for our nation. A new Federal food guidance system, and the graphic that represents it, should accordingly adopt this energy balance concern as the primary focus of its message.

Studies by Krebs-Smith (Krebs-Smith et al: *Characterizing food intake patterns of American adults*. Am J Clin Nutr. 1997 Apr;65(4 Suppl):1264S-1268S.) and Munoz (Munoz et al: *Food intakes of US children and adolescents compared with recommendations*. Pediatrics. 1997 Sep;100(3 Pt 1):323-9 and correction in Pediatrics. 1998 May;101(5):952-3.) and others have documented that very few individuals in the

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Hirschman

U.S. -- perhaps only one to two percent -- actually eat according to the Food Guide Pyramid. The USDA/CNPP Healthy Eating Index, based upon the Food Guide Pyramid, shows that average scores are in the 60's, and very few individuals obtain a perfect score of 100. These scientific explorations indicate that we as a nation need a food guidance system that is easier for the broad population to achieve.

One key weakness in the proposed system is that it does not take into account the full range of information on food consumption available from the key USDA and HHS national nutrition monitoring surveys--NFCS, CSFII, and NHANES. By using foods in their lowest fat and sugar forms in the calculations, it largely disregards the wealth of information available on consumer preference, expressed by the actual intake choices made by consumers. USDA, originally through the Human Nutrition Information Service, and now through CNPP, already has a system to make better use of the available consumer preference data--the approach used in calculating the Thrifty Food Plan (TFP) and the three other USDA food plans.

During my tenure at CNPP in 1995-96, I had the pleasure of working with Dr. Peter Basiotis and the Nutrition Policy Staff on updating the TFP. The new (1999) TFP and other food plans have a number of constraints, "including serving specifications for the Food Guide Pyramid." One of the key findings emerging out of the TFP development was that the Food Guide Pyramid servings constraints were in many cases binding. That is, the RDA- and Dietary Guidelines-based standards for nutrients and other food components could be met more easily if people did not have to also try to meet the Pyramid recommendations for food group servings. In this case "more easily met" means that less change from the current actual eating pattern of the population was needed.

The reliance on a system based on foods in their lowest fat and sugar form tends to lead to a significant misunderstanding of dietary recommendations by both the public and many health professionals. For example, the USDA/CNPP Healthy Eating Index uses the Food Guide Pyramid servings for five of the ten component scores. In the 1999-2000 HEI, the average score for the "meat group" was 6.6 out of a possible score of 10 (see CNPP-12, p.9). Some would take this to mean that the population is eating only 66 percent of the amount of meat recommended by the Food Guide Pyramid, and that people should, on average, increase their intake of meat by about 50 percent. However, in determining the number of servings, all meats are scored based on the profile of low fat meats, so that a high fat meat like the ground beef in a typical hamburger contributes only based on the lean meat contained in the burger. For example, according to the existing pyramid and HEI, a female between the ages of 25 and 50 needs the equivalent of 6 ounces of lean meat from the meat group (2.4 servings of 2.5 ounces each). If she eats 6 ounces of cooked ground beef, the HEI scores this as achieving only 87% of her target for the meat group, because the fat in the ground beef in excess of the fat in lean meat is not counted. This gives the false impression that she needs to eat more from this group, when in fact she needs to keep the total quantity constant and shift to lower fat choices in this group, lean meat and/or meat alternates. One cannot tell from the population's HEI score of 6.6 out of 10 if what is needed is increased consumption or a significant shift away from high

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Hirschman

fat choices to low fat choices within this group, or both.

Similarly, if people try to eat the current pyramid recommendation for servings from each of the five major pyramid food groups, but do not select from the low fat and sugar form of the foods, but continue to consume the types of foods from each group that they historically have eaten, they are likely to consume excess total calories, and probably excess saturated fat.

In my view, this indicates that USDA should be open to adopting an approach to nutrient profiles for food groups that yields the greatest likelihood that the resulting food guidance system and graphic will present to the population recommendations they are likely to achieve. That is, what is needed is a model that requires the least amount of change in current dietary practice while achieving good nutrition, with an emphasis on energy balance. The TFP model, which benefits from an optimization function updated the USDA's Economic Research Service, indicates that this can be done without sacrificing the DRI- and Dietary Guidelines-based nature of the nutrient targets for the system. USDA/CNPP has within its own organization many of the best experts in our nation on developing and maintaining such a system.

I would be glad to provide additional verbal clarification of any of the points above if this would be of use to CNPP.

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McCarthy



**SNACK FOOD  
ASSOCIATION**  
*An International Trade Association*

**received**  
10/24/03

KT

October 24, 2003

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive  
Room 1034  
Alexandria, VA 22302

Dear Food Guide Pyramid Reassessment Team:

The Snack Food Association (SFA) is an international trade association representing snack food manufacturers and suppliers. SFA membership includes smaller regionally based snack food companies in addition to large national branded snack food manufacturers. SFA members manufacture potato chips, snack bars, tortilla chips, pretzels, cookies, popcorn, crackers, extruded snacks, meat snacks, pork rinds, snack nuts, party mix and other snacks. We are pleased to have the opportunity to provide comments on the review of the Food Guide Pyramid, hereafter referred to as the "pyramid."

The pyramid is one of the most recognized nutrition education tools in the United States and around the world and is used by health educators to convey basic nutrition concepts. We believe that to overhaul the entire pyramid graphic at this point, as some have suggested, would be counterproductive. At the same time, some improvements are needed. Although the pyramid is very recognizable, only a small percentage of the population is following its advice. In one study published in the Journal of the American College of Nutrition, the authors identified significant gaps between the nutrition information contained in the pyramid and consumer eating behaviors. They specifically identified large segments of the adult population from a nationally representative sample that failed to meet USDA dietary recommendations for fruit and dairy consumption (1). In another article in the Journal of the American College of Nutrition, the authors found that less than 10% of older adults met the pyramid's recommendations for dairy and grain servings. In the British Journal of Nutrition, it was reported that only 9% of children met their needs for fruits and dairy (2,3).

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The pyramid cannot convey all nutrition concepts to all audiences, but there are a few key messages within the existing pyramid that would benefit from refinement and focus. As a general approach, it might help consumers if the pyramid itself targeted one or two overarching nutrition messages and communicated those to the public, while accompanying educational materials provided additional reinforcement and explanation about its use. For example, we know that variety, proportionality, and moderation are major themes in the current pyramid, but the practical application of these concepts is not always clear to consumers. USDA can build on the existing success of the graphic and use that success to better highlight those messages that are most important to use of the pyramid in building a healthy diet.

One critical message in particular need of further refinement and clarification is portion awareness. It is important that consumers understand that calories do count and that portion control is a critical component of calorie control. According to a recent American Dietetic Association survey, there is considerable confusion about serving and portion size. A serving is the amount recommended in consumer education such as the pyramid, but a serving is not necessarily the amount commonly eaten, which is often more than one serving. In fact, two-thirds of survey respondents overestimated the serving size of cooked vegetables and the majority also overestimated serving sizes of pasta, rice and meat. Few underestimated serving sizes. Even those who try to do the right thing nutritionally have trouble with serving sizes.

To help consumers better understand dietary recommendations, it may be useful to provide more education about the amounts of foods commonly eaten by consumers in one meal and how those portions relate to the number of servings recommended in the pyramid. For example, a serving of pasta may be two cups instead of half a cup and the recommended number of servings in the grain group would be four or six. The same would apply to the fruit and vegetable group. Hardly any fruits on the market are the size of a tennis ball or baseball which is the reference point used to measure a serving of fruits. If fruits and vegetables were adjusted to accurately reflect the produce in the market, then consumers may understand that the recommendation to eat five servings of fruits and vegetables is not unrealistic.

USDA should also consider developing calorie-specific pyramids. This may help consumers to estimate specific calorie needs and the corresponding amounts of food needed to meet those needs. Another area in need of evaluation is mixed meals and how these meals fit into the pyramid and the overall diet.

As it has in the past, the pyramid must be based on the most recent, authoritative scientific information and should be consistent with the Dietary Guidelines for Americans. The revised pyramid should also be clear that the information is intended for healthy people. Individuals with medical conditions or diseases should consult a professional that can assist with specific dietary needs.

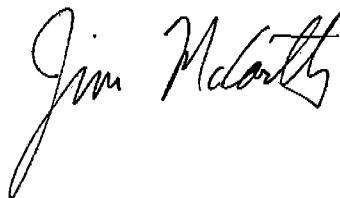
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McCarthy

Exercise is vital to the health of all Americans and should be considered as an integral part of the messages communicated in the pyramid. Today, less than one-third of Americans meet the federal recommendations for a minimum of 30 minutes of moderate physical activity at least 5 days a week. Forty percent of adults engage in no exercise activity at all. It is clear that physical activity and exercise need to be made a higher priority in the United States. Leading health experts know that inactivity leads to poor health; daily physical activity should be part of everyone's life.

The children's food pyramid contains information and visuals targeting exercise and activity, perhaps it is time to move in the same direction with adults.

Thank you for considering our recommendations for revision of the Food Guide Pyramid.

Sincerely,



James A. McCarthy  
President and CEO

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McCarthy

1. Cleveland LE, Moshfegh AJ, Albertson AM, Goldman JD. Dietary intake of whole grains. *JAM College of Nutrition*. 2000; 19(3 Suppl): 331S-338S.
2. Foote JA, Guiliano AR, Harris RB. Older adults need guidance to meet nutritional recommendation. *JAM Coll Nutr*. 2000; 19(5): 628-640.
3. Brady LM, Lindquist CH, Herd SL, Goran MI. Comparison of children's dietary intake patterns with US dietary guidelines. *Br J Nutr*. 2000; 84(3):361-367.



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October 24, 2003

Food Guide Reassessment Team  
USDA Center for Nutrition Policy & Promotion  
3101 Park Center Drive, Room 1034  
Alexandria, VA 22302

Dear Food Guide Reassessment Team Members:

Thank you for the opportunity to provide comments on the proposed revisions to the food intake patterns that form the basis for the Food Guide Pyramid (hereinafter the Pyramid). With nearly two (2) out of three (3) American adults and approximately fifteen (15) percent of children overweight or obese, the time is right to address the accuracy of the Pyramid and the messages it conveys on healthy dietary patterns to consumers.

The American Meat Institute (AMI or the Institute) is the nation's oldest and largest trade association representing packers and processors of beef, pork, lamb, veal, turkey, and processed meat products in the U.S. Our member companies produce more than ninety (90) percent of meat products available in the U.S. AMI supports the use of the *Dietary Guidelines for Americans*, the Food Guide Pyramid, and other educational programs in educating consumers on healthful eating and living. The following comments respond to the questions raised by the Food Guide Reassessment Team (the Team) in the September 11, 2003, *Federal Register* Notice. These comments are meant to strengthen the underlying rationale for the Pyramid.

*Question 1. Appropriateness of using sedentary, reference-sized individuals in assigning target calorie levels.*

It is well understood that calorie requirements depend on activity level. "The body needs about 1.5 times the basal energy expenditure (BEE). There is a 10 percent reduction of caloric need between ages 51-75, with an additional 10-15 percent reduction after age 75, depending on individual activity.<sup>1</sup>" The Institute agrees with the Food and Drug Administration's (FDA) assertion that caloric needs are based on activity level and that the majority of Americans are sedentary. Therefore, the recommended caloric intake for populations and the Pyramid should be based on a sedentary lifestyle. In addition, the Center for Nutrition Policy & Promotion (the Center) should work to educate consumers through public schooling, community programs, and other venues, about their individual

<sup>1</sup>Baldwin, Chris, Christine Morrison, Michael Butler, and Mary Beth Papisan. "Nutritional Requirements." *Nutritional Needs of the Elderly* Pages: <http://www2.msstate.edu/~cem2/aging/>. (24 Oct. 2003).

caloric needs and how they increase or decrease in response to changes in activity level, or physiological state (e.g. pregnancy, lactating women, aging).

*Question 2: Appropriateness of the selection of nutritional goals for the daily food intake patterns.*

AMI generally agrees with the decision to base nutrient recommendations on available Recommended Daily Allowances (RDAs) or Adequate Intake as set by the Institute of Medicine (IOM) in recent Dietary Reference Intake reports. Unfortunately, it is impossible for the Institute to determine whether the information provided in the Tables is appropriate because the Team has not released the data on which the Tables are based. We respectfully request that the Team provide the data that were used to develop the intake patterns and subsequent tables to the public. These data are greatly needed in order to provide meaningful responses to the questions posed. Based on the available information, the Institute is providing the following recommendations regarding the intake patterns.

The Team chose to use the recommendation for potassium provided in the 1989 Dietary Reference Intake report. The current recommendation, provided in Table 3, is intake of 1400 to 2000 milligrams daily. However, more recent research indicates that a diet higher in dietary potassium may decrease blood pressure. According to Anderson and Young of Colorado State University Cooperative Extension, "Research suggests that the ratio of sodium to potassium in the diet may be more important than the specific amounts of sodium or potassium. The American Heart Association recommends a sodium-to-potassium ratio of one-to-one, or equal amounts of sodium and potassium. A diet low in potassium and high in sodium may be a factor in high blood pressure. Increasing potassium in the diet may protect against hypertension in people who are sensitive to high levels of sodium."<sup>2</sup> The authors recommend that adults consume 1,600 to 3,500 milligrams (mg) of sodium per day. The Team should further investigate the role of potassium in a healthy diet by conducting a thorough review and analysis of published scientific findings.

The *Federal Register* Notice reveals the Center's plan to make recommendations on limiting consumption of trans fats in the absence of a quantified standard. AMI respectfully reminds the Center that FDA's definition of trans fat does not include conjugated linoleic acid (CLA), a naturally occurring fat in meat and dairy products. Therefore, any consumer communications on consumption of trans fat should be representative of the definition.

<sup>2</sup> Anderson, J. and L. Young. "How Much Potassium." *Potassium and Health* Pages. <http://www.ext.colostate.edu/pubs/foodnut/09355.html>. (24 Oct. 2004).

*Question 3: Appropriateness of the proposed food intake patterns for educating Americans about healthful eating patterns.*

As previously stated, it is impossible for the Institute to determine whether the information provided in the Tables is an appropriate basis for food intake patterns because the Team has not released the data on which the Tables and intake patterns are based. The patterns provided in the Tables indicate levels of caloric intake the Team finds appropriate for each age group and gender. However, AMI is unable to comment on the propriety of these findings having not reviewed the raw data. Assuming the recommendations are appropriate, the Institute questions how the Center will communicate this large amount of information to the population in a meaningful and effective way through the use of graphics?

The *Federal Register* Notice states, "nutrient profiles were calculated by using forms of each food in the group with the lowest fat content and without added sugar." Therefore, one can deduce that low-fat dairy products, low-fat and low added sugar grain products, low-fat and low added sugar fruit and vegetable products, and lean meats were used to develop the recommended serving sizes for the intake patterns. The Center should conduct focus groups to determine whether Americans consistently choose low-fat and low-sugar food items when selecting a diet. If not, the Center should investigate the likelihood that Americans will subtract added sugars and fats when reading food labels to determine if the nutrient profile of the food fits into the recommendations for the food group and for consumption of added sugars and additional fats for the day? If consumers do not go through these calculations, the Team should consider the impact of consumers' behavior on the intake of their food and revise the recommended number of serving sizes within the Pyramid.

The intake patterns differentiate between consumption of more unsaturated (oils and soft margarines) and more saturated fats (solid fat) in the category "additional fats." Admittedly, the suggested consumption levels for additional fats are meant to "encourage substitution of solid fats with oils and soft margarines." However, the current categorization of fat types may mislead consumers. The Institute cautions that consumers are likely to perceive the terms "margarine" and "soft margarine" as interchangeable. The following table provided by the National Association of Margarine Manufacturers demonstrates that there is wide variance in saturated fat and trans fat content among low-fat, traditional, and liquid margarine products<sup>3</sup>.

<sup>3</sup>National Association of Margarine Manufacturers. "Tablesread Comparisons." *Nutritionally Speaking* Pages. <http://www.margarine.org/nutritionallyspeaking.html#>. (24 Oct. 2003).

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 Koshy

## MARGARINE: Still the Best Choice

### How Tablespreads Compare

Product (per 1 T.J)	Calories	Total Fat (g)	Saturated Fat (g)	Trans Fat (g)	Saturated + Trans Fat (g)	Cholesterol (mg)	Uses
Butter	100	11.0	7.0	0.5	7.5	31	Spreading, Topping, Cooking, Baking
Lower Fat/Fat-free Margarine Products (60% or less oil)	5-80	0-9.0	0-1.5	0-2.5	0-4.0	0	Spreading, Topping, some Cooking
Traditional Margarine Products (more than 60% oil)	80-100	9.0-11.0	1.0-2.0	0-3.0	1.0-5.0	0	Spreading, Topping, Cooking, Baking
Liquid Margarine Products	5-80	0-9.0	0-1.5	0	0-1.5	0	Topping, some Cooking, some Baking

Data compiled by National Association of Margarine Manufacturers, 2000

Any communication to consumers regarding eating patterns should distinguish between "soft margarine" and "margarine" and the Center should conduct consumer focus groups to ensure that consumers understand these terms. AMI recommends the Team adopt the term used in the 2000 edition of the *Dietary Guidelines for Americans*, "hard margarine" to replace the word, "margarine" for consistency in messaging<sup>4</sup>. The additional fats category would read, "Solid Fat/Hard Margarine and Oils/Soft Margarine."

*Question 4: Appropriateness of using "cups" and "ounces" vs. "servings" in consumer materials to suggest daily amounts to choose from each food group and subgroup.*

In October 2000 the Center published research titled, "Consumption of Food Group Servings: People's Perceptions vs. Reality." The study compared the Pyramid serving sizes consumed by individuals with self-reported portion sizes consumed of commonly eaten foods over the same time period. The study concluded, "people's perceptions of their food group consumption are very different from their actual consumption based on diaries. Adults underestimated their consumption of servings of grains, as well as servings of fat, oils, and sweets. They overestimated their consumption of fruit, milk products, and meat, poultry, fish, dry beans, eggs, and nut servings." Additionally, researchers concluded that "the difference between what people thought they ate and the number of servings they consumed may be the result of their not understanding what constitutes a serving."<sup>5</sup> Regardless of whether the Team chooses to label consumer materials with "cups," "ounces," or "servings," the Team must develop a plan for educating consumers on the difference between Pyramid serving sizes and food label serving sizes.

The Pyramid serving size is designed to help consumers choose foods from each of the Pyramid's food groups to achieve an overall healthful diet. On the other hand,

<sup>4</sup> U.S. Department of Agriculture, Center for Nutrition Policy and Promotion. "Dietary Guidelines for Americans 2000, 5th Edition." <http://www.usda.gov/cnpp/DietGd.pdf>. (24 Oct. 2003).

<sup>5</sup> U.S. Department of Agriculture, Center for Nutrition Policy and Promotion. "Consumption of Food Group Servings: People's Perceptions vs. Reality." [Nutrition Insights](#).

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food label serving sizes are designed to help consumers compare nutrient profiles of different products within a Pyramid food group (e.g. nutrients of one brand of pasta to another brand of the same pasta). Permitting food manufacturers to label how many Pyramid "servings" for that food group are included in the labeled serving size of a particular product may help consumers put in perspective a serving of a food product as it relates to eating a diet consistent with the Pyramid's goals. In some cases the label might include Pyramid serving sizes for more than one food group. For example, a slice of Cinnamon Raisin Bread may constitute one serving of grains and one serving of fruit.

*Question 5: Selection of Appropriate Illustrative Food Patterns*

The U.S. Department of Agriculture (USDA of the agency) endorses two Pyramids for consumers use. They are: the Food Guide Pyramid for Young Children (age 2-6) and the Food Guide Pyramid (for adults). The agency's website also provides a link to the Food Nutrition Information Center which provides a variety of other pyramids including a Pyramid for individuals over the age of 70 and, a Pyramid for vegetarian meal planning. The Center website provides the following disclaimer, "The use of trade, firm, or corporation names in this Web site (or in Web site pages) is for the information and convenience of the reader. Such use does not constitute an official endorsement or approval by the USDA or the Agricultural Research Service of any product or service to the exclusion of others that may be suitable." Regardless of the disclaimer, the mere presence of a link to these Pyramids leads one to believe that the agency thinks more Pyramids that target specific populations are appropriate. The Institute is not in disagreement. However, if the agency believes this to be true, it should undertake efforts to develop Pyramids it can endorse. Otherwise, a variety of nutritional resource guides from multiple sources adds more confusion when determining the appropriate dietary patterns rather than simplifying it.

It seems fitting that the amount and number of food intake patterns used as the basis for the Pyramid be representative of the U.S. population. Therefore, the Institute recommends the Team review the most recent U.S. Census Bureau report from 2000 (the Census) that provides a breakdown of the U.S. population by: age, sex, ethnicity, income level, level of education, language spoken, etc. As of July 2002, the Census Bureau reported 281,421,906 people residing in the United States. Of those, there are approximately one hundred and thirty-eight (138) million males and one hundred and forty-three (143) million females. The median age of both males and females is approximately thirty-five (35) years. Nearly sixty-two percent (62%) of all people included in the Census are in the age range of eighteen (18) and sixty-four (64) years of age, with the greatest percentage, (30.2%), falling between the ages of twenty-five (25) and forty-four (44) years of age. Individuals under the age of eighteen (18) were found to be the second largest population at nearly twenty-six (26) percent. The Census found the third largest population was comprised of people between the ages of forty-five (45) and

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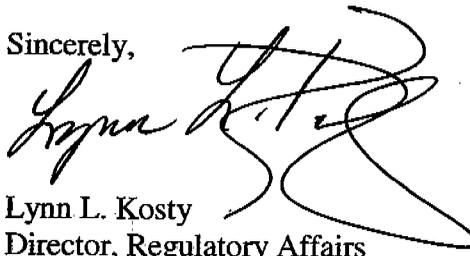
sixty-four (64) at twenty-two percent (22%). Individuals age sixty-five (65) and older represent less than six percent (6%) of the population<sup>6</sup>.

The Pyramid (for adults) should be based on typical caloric intake for the largest percentage of U.S. adults, those age twenty-five (25) to forty-four (44) years of age; individuals under the age of eighteen (18); and people between the ages of forty-five (45) and sixty-four (64). The median age for both males and females is approximately thirty-five (35) years of age. The median age also falls within the largest percentage of the population. Thus, it is appropriate that intake patterns for the Pyramid include caloric intake of 2200 calories/day for males and 1800 calories/day for females. AMI recommends that the 2800 calories/day intake pattern included in the 1992 Pyramid release be removed as it likely provides a caloric intake that is too great for the U.S. population.

The Census indicates that the second largest population of individuals is under the age of 18, the majority of which fall between the ages of five (5) and fourteen (14) years of age. The Team should consider whether it is appropriate to include a lesser caloric intake level such as 1400 calories/daily for these populations in the Pyramid (for adults). Perhaps it is more appropriate to design a Pyramid specific to the needs of children and adolescents. It is important to remember that adults typically do the food shopping and preparation for the household, although a growing number of children are taking on this responsibility. A Pyramid aimed at the needs of children and adolescents may be more useful in educational programs than for product labeling. The Team should also consider developing a separate Pyramid for aging Americans (over age sixty-five), many of whom have special caloric and nutritive needs. Regardless of the intake levels chosen for the basis of the Pyramid, the team must ensure that any recommended caloric intake levels are conservative estimates that are appropriate for individuals in the specified age range, gender, and recognizing the probability of limited physical activity.

The American Meat Institute applauds the Center's effort to update the Food Guide Pyramid to better serve the American consumer. We appreciate your consideration of these recommendations and look forward to our continued work toward a healthier America.

Sincerely,



Lynn L. Kosty  
Director, Regulatory Affairs

[Enclosure]

<sup>6</sup> U.S. Census Bureau. "Census 2000 Summary File 1, Matrices P13 and PCT12."  
[http://factfinder.census.gov/servlet/QTTable?geo\\_id=01000US&ds\\_name=DEC\\_2000\\_SF1\\_U&qr\\_name=DEC\\_2000\\_SF1\\_U\\_QTP1&lang=en&sse=on](http://factfinder.census.gov/servlet/QTTable?geo_id=01000US&ds_name=DEC_2000_SF1_U&qr_name=DEC_2000_SF1_U_QTP1&lang=en&sse=on). (24 Oct. 2003).

10/23 Palmer-Sullivan

NATIONAL

BARLEY

FOODS COUNCIL

received  
10/24/03  
KT

October 20, 2003

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive  
Room 1034  
Alexandria, VA 22302

Dear Sir or Madam:

The National Barley Foods Council (NBFC) would like to submit a comment on the proposed revisions to the daily food intake patterns that serve as the technical basis for the Food Guide Pyramid. This comment pertains to one aspect of Issue No. 3 (the appropriateness of the proposed food intake patterns for educating Americans about healthful eating patterns -- FR 68(176):53539).

As stated in your Sept. 11, 2003 notice, "The Food Guide Pyramid is an educational tool that interprets and helps Americans implement the Dietary Guidelines for Americans". Accordingly, we applaud the focus on whole grains realizing that presently few people consume significant amounts of them. To that end, we would like to encourage the inclusion of whole barley and pearl barley in the actual diagrams of the Food Guide Pyramid and in the footnotes that describe whole grains.

Despite its many health benefits, human consumption of barley is still somewhat limited. However, a form of pearl barley that is considered whole grain (because it is lightly pearled, leaving the pericarp, alurone and germ) is available in most supermarkets around the country. With our continued emphasis on educating consumers and food and health professionals on availability, usage and the excellent nutritional benefits of this grain, we are convinced that barley will make a significant impact on whole grain consumption in the U.S.

2003  
Palmer-Sullivan

A number of agencies currently recommend barley in diets. The USDA Dietary Guidelines for Americans (Home and Garden Bulletin No. 232, 2000) mentions pearl barley and whole barley in soup as ways to increase whole grain in the diet. The Dietary Guidelines Advisory Committee stressed that variety be emphasized because of the substantial differences in the individual whole grains. Of the 17 primary cereals defined by FAO, those that make a significant contribution to the human diet are rice, wheat, maize (corn), barley, rye, oats, millet and sorghum. A comparison of the macronutrients in Table 1 shows that barley is high in Total Dietary Fiber, has a reasonable protein content and is fairly low in fat.

**TABLE 1. Nutritive value of major cereals /100g edible portion<sup>1</sup>**

Cereal	Energy kJ	Moisture %	Protein g	Fat g	CHO <sup>2</sup> g	NSP <sup>2</sup> g	TDF <sup>2</sup> g	Starch g	Sugars g
Wheat	1318	14.0	12.7	2.2	63.9	9.0	12.6	61.8	2.1
Maize	1515	12.0	8.7	0.8	77.7	na	11.0	71	1.6
Rice	1531	11.8	6.4	0.8	80.1	2.0	3.5	80.1	1.0
Barley	1282	11.7	10.6	2.1	64.0	14.8	17.3	62.2	1.8
Sorghum	1610	14.0	8.3	3.9	57.4	na	13.8	(50)	1.3
Millet	1481	13.3	5.8	1.7	75.4	na	8.5	60	4
Rye	1428	15.0	8.2	2.0	75.9	11.7	14.6	75.9	na
Oats	1698	8.9	12.4	8.7	72.8	6.8	10.3	72.8	1.2

<sup>1</sup>Taken from: FAO/WHO Expert Consultation on Carbohydrates in Human Nutrition, FAO Food And Nutrition Paper 66, 1997, <http://www.fao.org/docrep/w8079e/w8079e00.htm>.

<sup>2</sup>CHO = carbohydrate; NSP = Non-starch polysaccharides; TDF = Total dietary fibre

In a petition recently submitted to the FDA, we provided evidence that barley fiber is equivalent to oat fiber in lowering cholesterol. In addition, barley has one of the lowest glycemic indexes of any of the whole grains. Barley is one of the three cereal grains recommended in the National Cholesterol Education Program as a source of viscous fiber that may help to lower LDL cholesterol (NCEP, ATP III, V-9 to V-21, 2001). Greater consumption of all whole grains but especially barley in the U.S. population

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Palmer-Sullivan

may help to slow the increasing numbers of people at risk for Type 2 diabetes.

The Sept. 11, 2003 notice states "The Daily Food Intake Patterns identify the types and variety of foods suggested for Americans to eat for health". We suggest that barley be added to the descriptions and types of whole grains that should be included. Following are suggested changes for model statements:

**Grains:**

**Whole grains:** All whole grain products and whole grains used as ingredients: for example, whole wheat and rye breads, whole grain cereals and crackers, corn tortillas, oatmeal, brown rice, **barley**.

**Other grains:** All refined grain products and refined grains used as ingredients: for example, white breads, enriched grain cereals and crackers, enriched pasta, white rice.

**Grains:** The following each count as 1 cup (2 servings) of grains: 1 cup cooked rice, pasta, **barley** or cooked cereal; 2 slices bread; 2 small muffins (1 oz each); 2 cups ready- to- eat cereal flakes.

Again, we congratulate your efforts to update and refine the US Food Guide Pyramid and thank you for your consideration of our comments and recommendations.

Sincerely,



Mary Palmer-Sullivan  
Executive Director  
National Barley Foods Council

10/29/03  
O'Neil

CAROLYN O'NEIL

received  
10/29/03

To Food Guide Pyramid Reassessment Team:

This letter is in response to the September 11, 2003 notice in the Federal Register: Department of Agriculture Center for Nutrition Policy and Promotion: Notice of Availability of Proposed Food Guide Pyramid Daily Food Intake Patterns and Technical Support Data. My comments relate specifically to information in the technical support data regarding the *Nutrition goal for Vitamin E* and the consumption of nuts and seeds.

As a registered dietitian who specializes in nutrition communication I applaud the USDA for their efforts to provide dietary guidance and to promote healthy eating habits across the nation and really, throughout the world! As a food journalist who works full time translating nutrition science into easy to understand nutrition advice, I recognize the difficult but important task USDA faces in updating and improving the Food Guide Pyramid. There's nothing more complicated than trying to make something simple!

There is one point I would like to draw attention to that may need some clarification. As the notice states, the 15 mg RDA for Vitamin E set in 2000 by IOM report increased substantially over the 1989 RDA. Therefore, it behooves us to tell consumers where they can get Vitamin E in the diet and highlight the best sources. At the same time, many good sources of Vitamin E are high in fat and calories, such as vegetable oils and spreads, so it also behooves us to point out Vitamin E sources with less of a calorie cost.

Nuts and seeds are good sources of Vitamin E. In fact, 164 calories/one ounce of almonds contains 7.3 mg alpha-tocopherol; compared to 164 calories/1.3 Tablespoons of Soybean oil which contain just 2 mg of alpha-tocopherol. As you can see, for the same calorie expenditure you get *more than three times* the alpha-tocopherol by choosing almonds as opposed to soybean oil. Even when comparing to safflower oil, a specified good source of alpha-tocopherol, almonds fare better as well. (164 calories worth of safflower oil contains 6.3 mg alpha-tocopherol.) Add to that the fact that nuts contain other important nutrients such as fiber and minerals and you see that they should not be left out of the list of specified Vitamin E sources.

And rather than focusing on where the American consumer has been, why not look where they are going? By concluding that "specifying the use of nuts and seeds to meet the vitamin E RDA is not considered feasible because they contribute only 4% of the total Vitamin E in America" does not take into account the optimistic news that tree nut consumption is actually going up! Per capita consumption of tree nuts has increased from 2.23 pounds in 2000 to 2.92 pounds in 2001. Looking at a breakdown, it's interesting to note that per capita consumption of almonds (which are the most popular of the tree nuts and the richest source of alpha-tocopherol) increased from 0.74 pounds in 1990 to 1.0 pounds per capita in 2001. So, more consumers are choosing nuts as a healthful addition to their diets. Let's encourage this encouraging trend to help more Americans reach the nutrition goal for Vitamin E!

Carolyn O'Neil, MS, RD, LD  
Nutrition Communication Specialist

*Carolyn O'Neil*

# Barley Foods Consulting

October 16, 2003

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive  
Room 1034  
Alexandria, VA 22302

Dear Sir or Madam:

I would like to submit a comment on the proposed revisions to the daily food intake patterns that serve as the technical basis for the Food Guide Pyramid. This comment pertains to one aspect of Issue No. 3 (the appropriateness of the proposed food intake patterns for educating Americans about healthful eating patterns -- FR 68(176):53539).

As stated in your Sept. 11, 2003 notice, "The Food Guide Pyramid is an educational tool that interprets and helps Americans implement the Dietary Guidelines for Americans" and "The Daily Food Intake Patterns identify the types and variety of foods suggested for Americans to eat for health". Accordingly, I agree with the focus on whole grains realizing that presently few people consume significant amounts of them. But greater consumption of whole grains should lead to a healthier America. To that end, I would like to encourage the inclusion of whole barley and pearl barley in the actual diagrams of the Food Guide Pyramid and in the footnotes that describe whole grains.

Despite its many health benefits, human consumption of barley is still somewhat limited. However, a form of pearl barley that is considered whole grain (because it is lightly pearled, leaving the pericarp, aleurone and germ) is available in most supermarkets around the country. Barley flour and flakes are available at health food stores, in conventional stores that carry health foods and via mail order companies. Increased consumer awareness of barley as a whole grain could make a significant impact on whole grain consumption in the U.S. because it can be consumed in various forms throughout the day.

In a petition recently submitted to the FDA, the National Barley Foods Council provided evidence that barley fiber is equivalent to oat fiber in lowering cholesterol. In addition, barley has a low glycemic index. Barley is one of the three cereal grains recommended in the National Cholesterol Education Program as a source of viscous fiber that may help to lower LDL cholesterol (NCEP, ATP III, V-9 to V-21, 2001). Greater consumption of all whole grains but especially barley in the U.S. population may help to slow the increasing obesity and the numbers of people at risk for Type 2 diabetes.

The USDA Dietary Guidelines for Americans (Home and Garden Bulletin No. 232, 2000) mentions pearl barley and whole barley in soup as ways to increase whole grain in the diet. The

# Barley Foods Consulting

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Dietary Guidelines Advisory Committee stressed that variety be emphasized because of the substantial differences in the individual whole grains. I realize that not every food item can be mentioned in the Food Pyramid, not even in the footnotes. But barley is easily attainable and has the highest level of balanced fiber (both soluble and insoluble) of any of the whole grains. Thus it seems highly desirable to educate the consumer about this very important alternative in the whole grain menu.

I would like to recommend the following simple additions:

## Grains:

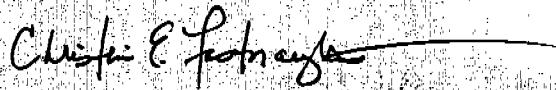
**Whole grains:** All whole grain products and whole grains used as ingredients: for example, whole wheat and rye breads, whole grain cereals and crackers, corn tortillas, oatmeal, brown rice, **barley**.

**Other grains:** All refined grain products and refined grains used as ingredients: for example, white breads, enriched grain cereals and crackers, enriched pasta, white rice.

**Grains:** The following each count as 1 cup (2 servings) of grains: 1 cup cooked rice, pasta, **barley** or cooked cereal; 2 slices bread; 2 small muffins (1 oz. each); 2 cups ready-to-eat cereal flakes.

Thank you for your consideration of my comments and suggestions.

Sincerely,



Christine E. Fastnaught, Ph.D.

10/22/03 porter



STATE OF NEW YORK  
DEPARTMENT OF HEALTH

received  
10/24/03  
KJ

October 21, 2003

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive  
Room 1034  
Alexandria, VA 22302

Dear Sir or Madam:

Thank you for the opportunity to provide comments on the proposed revisions to the daily food intake patterns that serve as the technical basis for the Food Guide Pyramid. As Director of the Bureau of Supplemental Food Programs and responsible for the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), Commodity Special Food Program (CSFP), and the Farmers Market Nutrition Program, I would like to submit the following comments:

- The nutritional goals for the proposed daily food intake patterns are appropriate for professional use. The important issue is that these goals be communicated in language that people will understand. If foods that are high in desired nutrients are given the most emphasis, the message that they are contributors to a more healthful diet will come across.
- The proposed daily food intake patterns are appropriate for educating Americans about a healthful diet. The increased amounts of whole grains, dark-green leafy vegetables, legumes and fruits are consistent with chronic disease prevention. The translation of these food intake patterns to Americans is critical. Emphasis should be on low-fat choices in each food group.
- The labeling of each food group should be considered part of the education on healthful eating. With that in mind, we would recommend that the names of the food groups be more nutrient-based (e.g. Protein-Rich Foods Group, Calcium-Rich Foods Group, etc.) The labels "additional fats" and "added sugars" may be misleading in that consumers may feel they should be added to achieve a healthful diet.
- We recommend the use of cups and ounces, rather than "servings" to suggest daily amounts from each food group. There is tremendous confusion between "serving" and "portion." When cups or ounces are not appropriate, portion sizes should be related to common object sizes, such as the palm of a hand or deck of cards.

*M. Frances Porter*

- Consumer materials should be focused on balance and variety with special focus to the extreme demands on the best food choices in times of growth (childhood and pregnancy.) Specific recommendations for consumer materials include:
  - A separate Food Guide Pyramid for children.
  - Pictures of foods used in consumer materials should represent recommended portion sizes.
  - Fats and oils, and sweets should be separated into two groups.
  - Include some reference to trans fats in the fats and oils groups to reflect new labeling requirements.
  - There should be a clear understanding that the range of number of servings is based on age, gender, and physical activity level.
  
- When looking at Table 2 and Table 3 there are three distinct calorie levels that become apparent within a 600 calorie range determination:
  - Level 1 – Children 2-8 = 1000-1600 calories
  - Level 2 – All females and older Americans (>50) = 1600 – 2200 calories
  - Level 3 – Males 14-50

These three levels could be subsets of the food patterns for developing consumer materials.

Meeting the dietary needs of Americans is clearly a challenge. With the rise in obesity in all age groups we must strive to shift the current eating and physical activity patterns contributing to this rise. We appreciate the opportunity to contribute to this process and anxiously await the final product.

Sincerely,

*M. Frances Porter*

M. Frances Porter, Director  
Bureau of Supplemental Food Programs

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Goldring

received  
10/21/03

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October 21, 2003

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive, Room 1034  
Alexandria, VA 22302

To Whom It May Concern:

Thank you for the opportunity to comment on the proposed Food Guide Pyramid Update. As a leading manufacturer of food ingredients with fiber benefits, National Starch and Chemical Company (NSC) is very interested in the proposed recommendations regarding fiber intake.

In the *Federal Register* notice describing the proposal (Sept. 11, 2003, pp. 53536-53539), fiber intake recommendations are based on the "Adequate Intake (AI)" levels for fiber proposed in the 2002 Institute of Medicine (IOM) Report entitled "Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein and Amino Acids (Washington: National Academies Press). In the proposal, the AI for fiber is set for "total" fiber, which in the IOM report is defined as the sum of "dietary" and "functional" fiber. In the IOM report, "dietary" and "functional" fiber are in turn defined as "nondigestible carbohydrates and lignin that are intrinsic and intact in plants" and "isolated, nondigestible carbohydrates that have beneficial physiological effects in humans," respectively. NSC supports the use of the "total fiber" concept as the basis for the recommendations in the Food Guide Pyramid but is concerned about potential adoption of the IOM definition.

Specifically, NSC is concerned about the distinction between "dietary" and "functional" fiber. These definitions are *functional* rather than *analytic*, a situation unique to the nutrients discussed in the IOM report. These definitions imply that a physiological benefit must be proven for a particular material before classification as a "functional", but not a "dietary", fiber. Among the unanswered questions with these definitions:

- What physiological benefits will be necessary for classification as a "functional" fiber?
- What proof will be required for these benefits? Will *in vitro* evidence or specific biomarkers be acceptable?
- Who will decide whether a specific material can be so classified? Will a formal application be required?



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Food Guide Pyramid Reassessment Team

Page 2

October 21, 2003

In addition, adoption of the IOM definition raises a series of practical questions:

- Will a "functional" fiber have to be proven as such before it is included in the "total" fiber value?
- If the "functional" fiber content of a specific food must be subtracted from the "total" fiber value if its physiological benefits have not been proven to the satisfaction of the regulatory authority, what analytic methods should be used to distinguish it from the "dietary" fiber? NSC is not aware of any methods capable of making such a distinction.

NSC agrees that fiber intake among the general population is low and should be increased, and government-sponsored consumer education such as the Food Guide Pyramid can be an effective tool to achieve that goal. The food ingredient industry can also help by developing materials that can increase the fiber content of foods commonly enjoyed by consumers. However, in order to develop such materials, companies must be confident that they can be claimed as fiber. The lack of clarity in the IOM definition undermines that confidence and thus could serve as a barrier to innovation.

Instead, NSC proposes that the current definition of fiber be retained. In CFR 101.9 and the 1998 "Nutrition Labeling Guidance Manual," all nutrients, including fiber, are defined analytically. The Guidance Manual specifically states,

"For compliance purposes, FDA uses appropriate methods as given in the most recent edition of Official Methods of Analysis of AOAC International, or if no AOAC method is available or appropriate, by other reliable and appropriate analytical procedures (21 CFR 101.9 (g)(2)). AOAC International's current Official Methods volumes are updated annually with new or modified methods. In addition, results of successful collaborative studies appear in the J. Assoc. Offic. Anal. Chem. throughout the year."

We believe that this definition is workable and minimizes the uncertainty associated with functional definitions of fiber. Such a definition will not serve as a barrier to food companies developing new sources of fiber and will ultimately help achieve the goals of the Food Guide Pyramid.

Thank you for your consideration.

  
Jay Goldring, Ph.D.

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10/24/03  
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October 21, 2003

Center for Nutrition Policy and Promotion  
Food Guide Pyramid Reassessment Team  
USDA CNPP  
3101 Park Center Drive  
Room 1034  
Alexandria VA 22302

Dear Mr. Hentges:

The California Walnut Commission/Walnut Marketing Board is a nonprofit organization that represents the California walnut industry, which is made up of over 5,000 walnut growers and processors. We appreciate the opportunity to share our comments in regard to the proposed modifications to the Food Guide Pyramid

This important nutrition education tool is the basis and main resource/reference for American food choices and as these choices have evolved, so should the pyramid. Increased scientific evidence in recent years has clearly shown the difference among dietary fats in relation to health and disease processes. Polyunsaturated, monounsaturated and saturated fat are not created equal and indeed, polyunsaturated fats contain essential nutrients, which are vital to good health. To this end, we are pleased that the proposed revisions suggests daily intake amounts of essential alpha-linolenic acid (ALA), however food sources noted of this essential fatty acid are misleading and incomplete. Based on national surveys, the main food sources of ALA in the American diet are canola oils and canola based soft margarines, however as American consumers begin to think about changing their personal dietary choices, they may want to know more about walnuts. Walnuts are unique as one of the only whole food sources of ALA – often thought, as mentioned, to be only in canola oil and canola based soft margarines. In addition, walnuts are also lower in calories and saturated fat than canola oil, plus offer protein, fiber and other nutrients. And while national consumer intake surveys provide an outline for food choices, recommendations to the Food Guide Pyramid should be based on scientific based evidence. The purpose of the Food Guide

California Walnut Commission

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Balint

Pyramid is to show the way to make food choices, not be indicative of how Americans are currently eating.

Support for the inclusion of walnuts in the diet is clear. In fact, in July of 2003, the Food and Drug Administration (FDA) affirmed the health claim, "Supportive but not conclusive research shows that eating 1.5 ounces per day of walnuts as part of a diet low in saturated fat and cholesterol may reduce the risk of heart disease. See nutrition information for fat content." This FDA decision comes in response to a petition filed by the California Walnut Commission, which highlights a body of international scientific research substantiating the specific benefit of consuming walnuts as part of a heart healthy diet in reducing the risk of heart disease. The body of evidence suggests that the nutritional composition of walnuts contribute to these heart health benefits. In addition, several recognized scientific organizations have identified walnuts as an essential part of a healthy diet. These organizations include the Food and Drug Administration and USDA's Strategic Action Plan: Protecting and Advancing American Health, the American Heart Association (consumer programs), and the National Academies' Institute of Medicine (DRI for ALA).

I urge you to please consider this recommendation and thank you for the opportunity to comment on this important issue.

Sincerely,



Dennis A. Balint

Chief Executive Officer/Executive Director

California Walnut Commission/Walnut Marketing Board

10/24/03  
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received  
10/24/03

KT

October 20, 2003

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive, Room 1034  
Alexandria, Virginia 22302

Dear Food Guide Pyramid Reassessment Team Members:

The National Association for Family and Community Education represents thousands of consumers in 28 states. We are concerned that information on the Nutrition Facts labels and information contained in the Food Guide Pyramid is very confusing to consumers since these two sources do not always agree as to the amounts of food in a "serving." We encourage you to make the information for both more realistic and easy to understand. The average person is not going to review sophisticated and detailed documents trying to understand the how and why of the discrepancies in these two dietary tools.

We understand that there are many variables involved in setting the Nutrition Facts label and Food Guide Pyramid patterns, such as an individual's age, gender, weight, and daily caloric intake. However, in order to make this information in the best, usable form for the consumer, we would like to see cups and ounces versus servings in the charts. This would allow a man weighing 190 lbs and with an active lifestyle to determine his nutritional needs as well as a mother feeding a 10 year old girl weighing 70 lbs to determine her daughter's nutritional needs.

Both the Nutrition Facts label and the Food Guide Pyramid are valuable tools Americans can use to make wise food choices. If food product labels stated how many Pyramid servings were in one Nutrition Food label serving, this would increase the usefulness of both and lessen the confusion consumers face when shopping and preparing meals.

Thank you for the opportunity to express our concerns.

Sincerely,

A handwritten signature in cursive script that reads "Carolyn Ropp".

Carolyn Ropp, Vice President for Program  
National Association for Family and Community Education





Oklahoma Cooperative Extension Service  
Division of Agricultural Sciences and Natural Resources  
Oklahoma State University

10/23  
Miracle

received  
10/24/03

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Pontotoc County OSU Extension Office

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive, Room 1034  
Alexandria, VA 22302

Dear Food Guide Pyramid Reassessment Team,

The following contains written comments on the proposed changes in the Food Guide Pyramid. These comments are from a group of ten individuals who teach from the FGP a minimum of 25 hours per week and one Dietitian that is their supervisor. We are a part of the Food Stamp Nutrition Education Program and EFNEP (Expanded Food and Nutrition Education Program) serving people with low incomes in Southeastern Oklahoma. Please find more information about our program enclosed with this letter.

We submit this without scientific information as we feel that what we can best provide is the insight into our experiences in teaching hard to reach audiences and what our observations have been about their ability and readiness to learn using the FGP.

We would be willing to pilot the use of the new FGP or assist in its development in any way possible. The FGP is the backbone of our education program and we deeply care about how functional and effective the information is. We understand that you are not addressing the graphic presentation at this time.

The following comments came from a brain storming session on September, 19, 2003:

1. Addressing overweight and obesity is vital. Supporting documents with the 12 Calorie categories is an excellent tool. The more categories the more the individual will feel that the information is meant for them and not their neighbor.
2. If skim milk is to be used as the reference it must be identified more clearly. Many would never read the footnote and miss the extra fat and calories in the milk group. We find that skim milk intake is the exception not the norm but it is important to guide people to the lower fat choice.

2003 Miracle

3. Nuts appear important to health and it should not be assumed that people will not eat them.
4. It is great to keep pushing fruit and vegetable consumption. We feel that we are making progress in consuming more.
5. We agree that matching FGP serving size and common amounts on labels would be much easier to teach.
6. Table 1 is good but confusing. Using common household measurements, rounded off, is always best for us to teach with.
7. We are concerned that 5 a day from the fruit and vegetable group starts at 1600 Calories. We feel that 5 a day is a minimum for any Calorie level and especially when we teach children.
8. We need a better FGP for children. Portion sizes and servings do change more than what the current FGP allows us to address easily.
9. We like the idea of added fats and sugars and need to have a mechanism to add to that/those food groups when teaching about high fat foods. We like the approach that if a food is fried you also give yourself 1 to 3 servings in the fat group. We teach that but it would be nice to have a chart that spells that out for commonly consumed foods.
10. Table 2. Really like this as is. It encourages identifying your activity level and the needs of different age groups. All commented on learning from the definitions of activity levels. They feel this could have a positive impact on their participants.
11. A table that states serving from food groups for commonly consumed combination foods would be very helpful.
12. A tool that address total cups or servings per week would help to assess intake beyond the daily amounts.
13. We think addressing the different types of vegetable and grains in the food groups is vital to be able to promote optimal food choices.
14. We feel trans-fat exclusion should be reconsidered – even if in supporting documents that address the added fat group.
15. The fiber intake of 14gr/1000 does not seem adequate as many elderly have an intake of about 1,200 Calories and need closer to 25 gr. of fiber per day. Is there another way to address this issue as the population is aging?

3993  
Miracle

Considering the above comments:

1. We feel that the proposed patterns are reasonable intakes to expect for the various age groups. And the proposed intakes do seem feasible. (It is an attainable goal - not what is currently found in our participants)
2. We do feel we could use these proposed new patterns to help educate Americans about healthful eating patterns.
3. We feel that individuals or families will be able to use these patterns in making food choices. However, the graphic representation and the ongoing marketing of the FGP will be vital to its success.
4. Consumers can understand that 2 slices of bread equals 1 cup of grains - but it will need to be explained in some manner. We spend many hours explaining the FGP to our participants and coaching for behavior change so we know that the FGP is not understood by many individuals.
5. We feel that there needs to be a very simple FGP addressing children, adolescents, general population and older Americans (4 categories) and then there must be supporting documents that can go farther in our educating as addressed above.

We hope that the above information is helpful in a practical manner. We understand it is anecdotal in nature and may not meet your needs in many ways. However, we are a group that actually uses the FGP and want to give you our opinions.

Again, if we can be of assistance in any manner please do not hesitate to call on us. We have assisted in field testing materials for The American Diabetes Association and found that there is much to be gained by participating in the development of educational materials.

Thank you for your dedication and your willingness to be open to input.

Respectfully submitted,

  
Sarah Miracle, MBA, RACD  
Sarah Miracle, CNEP Area Coordinator

**Nutrition Education Assistants**

Cindy Kesler  
Cindy Kesler

Tammie Howard  
Tammie Howard

Rose Ann Newton  
Rose Ann Newton

Becky Smith  
Becky Smith

Donna Campbell  
Donna Campbell

Debbie Gould  
Debbie Gould

Cheryle Dillingham  
Cheryle Dillingham

Rhonda Skelton  
Rhonda Skelton

Brenda Russell  
Brenda Russell

Debra Sanders  
Debra Sanders

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10/24/03

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October 22, 2003

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive, Room 1034  
Alexandria, VA. 22302

Dear Sir or Madam:

On behalf of 6,000 Sunkist Citrus growers, we support your efforts to update the Food Guide Pyramid to reflect current nutrition science and foster better dietary habits for Americans.

As outlined in the Federal Register notice, we agree that it is prudent for USDA to recommend daily intake patterns based on different lifestyles/energy levels so that consumers can better understand the relationship between food and exercise in a healthy lifestyle.

We also concur with the need to simplify consumer messages/materials for greater acceptance and adherence of the guidelines. However, we are concerned that replacing standard "serving size" information with "cups" will increase consumer confusion, not diminish it. Families do not think of a "cup" of oranges or a "cup" of bread. Thus, we strongly recommend that the new Food Guide graphic/illustration maintain "serving size" information along with "cups" so that the information is compatible with FDA Nutrition Facts Labels featured on virtually every item in the grocery store. This type of increased harmonization between USDA's Food Guide graphic and FDA's Nutrition Facts Labels will provide consumers with clear, consistent information no matter which source they turn to for assistance in making better food choices.

Relative to fruits and vegetables, science indicates that an increased consumption of fruits and vegetables promotes better health...from disease prevention to weight loss and weight maintenance. Therefore, we suggest that fruits and vegetables be given a more prominent position on the new Food Guide graphic, encouraging a minimum of five servings a day and preferably nine or more for most individuals. Such a dietary change would help combat heart

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disease, cancer, obesity, and diabetes – key health issues plaguing our nation and costing million of lives and billions of dollars each year. Further, we would like to encourage greater consumption of *whole* fruits and vegetables, each of which provides a family of health-promoting vitamins and nutrients that may not be available in juices or supplements.

Consumers need delicious, easy-to-eat foods to live healthier lives. Citrus fruit offers that type of simple solution and has been scientifically linked to numerous health benefits, some of which are outlined below:

- **Vitamin C:** Supports the immune system and helps the body fight a variety of illnesses from colds and flu to cancer and heart disease.
- **Fiber:** Supports weight loss by contributing to satiety and curbing appetite, and may also reduce the risk of cancer and coronary heart disease. This is a key benefit of whole citrus fruit since juice is an insignificant source of fiber.
- **Folate:** Helps reduce the risk of heart disease and stroke, while also protecting against some birth defects.
- **Potassium:** Helps reduce the risks of high blood pressure and stroke, while helping the heart and kidneys to function properly.
- **Phytochemicals:** Powerful disease-fighting nutrients like beta-cryptoxanthin (linked to lung health), zeaxanthin (linked to eye health) and flavanones and limonoids, which may inhibit cancer cell growth, detoxify carcinogens and enhance the immune system.

Not only is citrus currently included in USDA's Dietary Guidelines for Americans, many other leading health organizations also promote the benefits of citrus including the American Heart Association, American Cancer Society, the National Cancer Institute and the Produce for Better Health Foundation, to name just a few.

As a voice for thousands of dedicated citrus growers, Sunkist urges USDA to depict citrus (predominantly oranges, lemons and grapefruit) prominently in the new Food Guide graphic and Dietary Guidelines for Americans.

Sincerely,



Robert Verloop  
Vice President of Marketing



UNIVERSITY OF  
FLORIDA

EXTENSION

Institute of Food and Agricultural Sciences

received  
10/24/03

KJ

October 16, 2003

Food Guide Pyramid Assessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive, Room 1034  
Alexandria, Virginia 22303

Dear Assessment Team,

Enclosed please find a cassette tape, written comments and a newspaper article on the Public Forum held on October 10, 2003 at the University of Florida/IFAS Extension complex in Palm Beach County. As you will hear on the tape and see in the written comments, the following concepts were brought up by several speakers:

- The Food Guide Pyramid (FGP) is confusing to both the general public and nutrition educators.
- The FGP does not accurately reflect the science as it is understood in 2003. Some FGP concepts are vague and/or misleading.
- The FGP does not embrace the multicultural nature of our country or various cultures understanding of what foods are included in specific groups.
- "Eat sparingly" is too vague and does not distinguish between healthier choices of fats.
- Water is not included in the FGP.
- Beans, legumes, potatoes and starches are grouped in the protein or vegetable groups, but are considered the same exchange for diabetic diets. This is too confusing.
- With the concern over obesity should exercise and caloric recommendations be a part of the FGP?
- Few people prepare food from "scratch", they do not have a good understanding of measurement of ingredients (including fats and sugars) that are included in "combination" foods.
- We may be victims of our own success. Produce (as well as fast foods) have become larger and larger. The public's perception of a serving has also become larger.

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Norman

We look forward to further information and another comment period next year.

Sincerely,

*Audrey R. Norman*

Audrey R. Norman, CFCS, CFLE  
Program Leader  
Family and Consumer Sciences

enclosures

ARN:jl

Cc: Dr. Joe Schaefer  
Dr. Linda Bobroff  
Clayton Hutcheson  
Linda Nolte

3095 Norman

October 10, 2003

From: Clint Stevens, MS (formerly a registered dietitian 1991-2002)  
Former Clinical Assistant Professor of Nutrition, Dietetic Internship Director, and/or Lecturer,  
at the University of Houston, South Carolina State University, and San Jacinto Community  
College in Pasadena, Texas.

Further accomplishments include being the Recipient of Houston Area Dietetics Association  
Outstanding Educator Award, 2000; Texas Dietetics Association Outstanding Dietetics  
Internship Director Award 2000; and The American Dietetics Association Outstanding  
Dietetics Internship Director Award for Area 4 (Texas, Utah, Colorado, Oklahoma, Kansas,  
New Mexico, and Nevada), 2000.

Now living in West Palm Beach, FL, 561-254-0471.

A few observations regarding the food guide pyramid:

1. The pyramid might be more effective if it was inverted, since people tend to read from the top down than the bottom up. That way, the "less healthy" foods would be at the bottom of the pyramid.
2. The pyramid uses certain starches/complex carbohydrates (but excluding the potato, beans, and corn) as (at?) its base. Potatoes are categorized as a vegetable, while beans are included as a meat alternate. ~~Corn, a starchy vegetable, and probably the second or third most consumed vegetable in the U.S. (after potatoes) is not depicted anywhere in the pyramid.~~ If an individual consumes the 6-11 servings of the pyramid base group on a regular basis, and then consumes beans, potatoes, and corn as well, the starch content of the diet increases dramatically. This may well promote the overeating of complex carbohydrates, contributing to obesity, since the average American is already over-consuming simple carbohydrates, animal-based protein foods, and fat from multiple sources in addition to complex carbohydrates (which also include "savory snacks" like Triscuits).
3. The pyramid emphasizes servings with overly complicated serving size information that is not adhered to or even known to most health professionals (much less the American public). Six to eleven servings of BCRP per day indicates that some Americans should be eating 3+ servings of starch at every meal (but at least 75% of Americans don't adhere or know about portion sizes). After all, who eats 3-4 crackers, or only 1/2 cup pasta or 1 tortilla at a time? Certainly not most men! I can't speak for women. And even most children eat more than 1 oz of ready-to-eat cereal (and most of it is sugar-coated). The serving sizes seem to be more appropriate to the elderly, if to any group at all.
4. The pyramid says use sugars and fats sparingly. This is entirely too vague. Where do French fries (which account for 25% of all "vegetables" eaten by Americans), and other foods like pastries and cookies and other "combination" foods fit in? What about ice cream? The American public is very confused! And so are the nutrition educators!
5. Meat, fish, poultry, eggs, dried beans, and nuts are lumped into the same group as meats and meat alternates. Yet beans contain virtually no fat, and nuts contain an average of 80% fat, so obviously this category has been made up for its protein content, with disregard as to its fat.
6. Vegetables include a serving of a medium potato or 3/4 cup vegetable juice. What about potato salad with its mayonnaise content? And while baked potatoes are nutritious, most Americans load them with fat when consuming them. And what about foods such as cole slaw, which is a cruciferous vegetable usually prepared with high fat mayonnaise? And why is the serving

4005 Norman

- size for vegetable juice only  $\frac{3}{4}$  cup, instead of a cup, just to make it simpler? V-8 is very low calorie!!
7. Milk and yogurt have far less fat than cheese (which for diabetics is classified as a high-fat meat, and which is only the beginning of the incongruencies/inconsistencies between the Exchange Lists and the Food Guide Pyramid). Can't the USDA, American Dietetic Association, American Diabetes Association, American Heart Association, and other educational/governmental stakeholders reach some kind of consensus so that food classifications and serving sizes for different educational tools (which are dispersed from various private or governmental health promotion/disease prevention/public health-based information/education sources as well as in clinical nutrition environments) be more interlocked?
  8. With what we know about cancer, obesity, gastrointestinal disorders, heart disease, etc., fruits and vegetables MUST occupy a more prominent position in the pyramid. And what about soy products, with their cancer-preventive isothiocyanates? They are invisible when looking at the pyramid.
  9. While the purpose of the pyramid appears to be to promote the eating of a wide variety of foods (good), it does a lousy job regarding portion sizes, making them almost impossible for the average American to follow. The pyramid may even be contributing to "overnutrition" due to its rampant misinterpretation and misuse, even by nutrition professionals and educators.
  10. The Mediterranean pyramid (and other ethnic pyramids) look very different from the American pyramid, and the Mediterranean diet is often touted as being healthier than the American. Can this be addressed? Is the pyramid prescriptive or more descriptive???
  11. The current pyramid in no way reflects the eating habits of millions of Americans on low-carbohydrate diets. This is a serious problem, which contributes to nutritional confusion for tens of millions of Americans.
  12. Paradoxically, the pyramid provides too much information while being detrimentally reductionistic in its food listings and portion sizes. Its only effective use appears to be the promotion of eating a wide variety of foods, but as mentioned above, many healthy foods are not even referred to or depicted in the pyramid. Additionally, the pyramid has very little relevance in terms of the still-increasing consumption of snack foods (usually complex or simple carbohydrates combined with fat), fast foods and the continuing increase in dining out at non-fast food restaurants in the U.S.
  13. The pyramid does not take into account serious problems with food allergies, such as the roughly 1 in 120 Americans who are gluten-sensitive/intolerant, or those individuals who are starch intolerant in general (such as myself with IBS). It also does not take into account such serious allergies as peanuts/tree nuts that are life-threatening to as many as 3 million Americans, including children.
  14. Teaching the pyramid versus teaching the Exchange Lists and how to use them properly is very difficult, even to dietetic interns (individuals who have completed a 4-year accredited dietetics program) since the 200+ undergraduate programs accredited by The American Dietetic Association vary so much from program to program. I have directed numerous dietetic interns (with 4-year bachelor's degrees in nutrition) whose professors did not bother to even teach appropriate usage of the pyramid OR the Exchange Lists, despite being accredited by the American Dietetic Association.
  15. And what about nursing students? Their nutrition education requirements are minimal (usually introductory nutrition), yet they are primary providers of nutrition information to millions of Americans in health-care environments, including home-health care. I have yet to find any nurse who understands nutrition at a competent level, except those who are certified

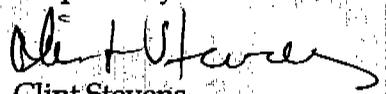
5095 Norman

- diabetes educators or who are certified in nutrition support. Even nurse practitioners do not have adequate training regarding foods, nutrition or the food guide pyramid.
16. And what about pharmacy students and pharmacists who are "dispensing" nutrition information without the benefit of understanding the pyramid (or the Exchange Lists), as well as physicians, certified clinical nutritionists (who may or not be registered dietitians), chiropractors, acupuncturists, and numerous other health care providers such as occupational and physical therapists? What do they know about (or do with) the pyramid, if anything?
  17. "Health-foodists" and other non-licensed and even completely untrained individuals continue to promote nutritional information counter to the pyramid ranging from outright quackery to possibly sound information depending on their backgrounds (and economic goals). Many "nutritionists," registered dietitians, and other health care or community providers of nutrition information continue to lack the training or expertise regarding the pyramid, food sources of nutrients (both macro- AND micronutrients), and the basics of Exchange Lists, partially because of the current Food Guide Pyramid.
  18. Try asking the average registered dietitian to name a good FOOD source of chromium, selenium, or even vitamin E and where these foods are on the food guide pyramid. Try asking any physician, pharmacist, nurse, or home economist the same question. **THEY DON'T KNOW.** Foods like sweet potatoes (an incredible source of vitamin E) don't exist on the pyramid, nor do foods like cruciferous vegetables (broccoli, cabbage, cauliflower, etc.) that are known to be cancer-preventive. And what about spinach, a high intake of which is associated in epidemiological studies with decreases in macular degeneration, the leading cause of blindness in the elderly? And what about all the anti-cancer phytochemicals (e.g., anthocyanins) found in fruits like berries or red grapes? They aren't currently depicted in the pyramid either. The pyramid does NOT effectively promote the public health as it now stands.

In summary, the Food Guide Pyramid is not meeting the needs of the American public, and an entirely different approach is needed (to address obesity alone, which contributes to cancer, heart disease, and diabetes while costing the economy billions of dollars and decreasing the quality of life for millions).

Since this is not going to happen, much more needs to be done to make the pyramid more applicable, sensible, and interpretable to the public, nutrition educators, students of nutrition, students in other health care disciplines including those in medical school and the gamut of current health-care providers in the U.S.

Respectfully submitted,

  
Clint Stevens

10/24  
Adams, Abenante, Page

received  
10/24/03  
KT

October 24, 2003

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive, Room 1034  
Alexandria, VA 22302

**RE: Federal Register Notice, Volume 68, No. 176, September 11, 2003**  
Center for Nutrition Policy and Promotion; Notice of Availability of  
Proposed Food Guide Pyramid Daily Food Intake Patterns and Technical Support  
Data and Announcement of Public Comment Period

Dear Dr. Hentges:

Thank you for the opportunity to comment on the food intake patterns and technical support data released by you in the development of potential revisions to the Food Guide Pyramid. The Wheat Foods Council is an industry-wide association whose mission is to educate the public about the role of grain foods in a healthy diet. The American Bakers Association represents wholesale bakers in the United States who are responsible for manufacturing about 80 percent of grain-based foods. The North American Millers' Association's membership encompasses approximately 95 percent of the U.S. milling capacity for wheat, oats, corn and rye.

We commend USDA for compiling this extensive research and sharing it with the public in such a transparent manner. This data substantiates the scientific evidence that went into developing the first Food Guide Pyramid in the early 90's and subsequent reviews. No other graphic or food plan has undergone the broad and open examination procedures as the pyramid. While the Food Guide Pyramid is a well-researched document that gives scientific advice, our major concern is that the consumer does not follow it in their daily food choices even though it has a huge recognition level. That dilemma must be considered in every decision going forward.

We welcome the opportunity to address topics of particular interest to you and to comment on areas of concern to us:

*Appropriateness of using sedentary, reference-sized individuals in assigning target caloric levels for assessing the nutritional adequacy and moderation of each food intake pattern.*

While we believe most Americans meet the "sedentary" definition, it is probably in our best interests to encourage activity by using the "low-active" level to maximize physical activity. (We do realize that most individuals over-estimate their physical activity level.) While some of the groups in Table 2 (Energy Levels for Proposed Food Intake

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Adams, Abenante, Faga

Wheat Foods Council comments on Federal Register Notice, No. 176, October 24, 2003, page 2:

Patterns) were assigned higher targets than their EER, we realize that this is a range and hopefully educational efforts will inspire increased activity to compensate for additional calories. It is recommended that future educational materials show activity equivalents to walking (e.g. bike riding, swimming, etc.) to provide additional options that can be easily understood by the general public.

*Appropriateness of the selection of nutritional goals for the daily food intake patterns.*

*Carbohydrates:* The use of the Acceptable Macronutrient Distribution Ranges (AMDR) from the average National Academy of Science recommendation for carbohydrates (55 percent of calories) is probably the least confusing way of listing carbohydrates rather than giving the range of 45 to 65 percent.

*Fiber:* Although there is considerable science to substantiate a fiber goal of 14 grams of total fiber per 1000 calories, the goal is not consistent with the government's aspiration to be "realistic and practical." Ultimately, consumer messages and education campaigns must be simple and easy to follow.

We will later address this issue, but by combining fortified cereals with whole grains, you are not accurately reflecting one of the best sources of fiber. Table 4 (Nutrient Profiles of Food Guide Pyramid Food Groups and Subgroups) does not indicate the fiber contribution of these whole grain and bran cereals in the diet. Also, did you include a common form of fruit – fruit juice – when calculating the fiber contribution of fruit?

*Appropriateness of the proposed food intake patterns for educating Americans about healthful eating patterns. Are the proposed patterns reasonable intakes to expect for the various age/gender groups? Are the proposed intakes of some food groups or subgroups feasible?*

*Whole grains:* By combining fortified cereals with whole grain and rye breads, crackers and pasta, the nutrient profile is misleading to the consumer. A half cup of cooked brown rice provides four mcg of folate (one percent DV) and 1.75 g of fiber. A slice of whole wheat bread provides 17 mcg of folate (four percent DV) and 2 g fiber. Many whole grain and fortified cereals contain 100% DV for folic acid and 3-9 g of fiber per serving. (We assume you are using folate equivalents for the data?) Our recommendation would be to place whole grain and fortified cereals in a separate subgroup. In addition, rye breads are rarely whole grain breads and should be put into the "other grains" grouping.

309 4  
Adams, Abenante, Fagan

Wheat Foods Council comments on Federal Register Notice, No. 176, October 24, 2003, page 3:

*Other grains:* The data table shows approximately 1 mg of cholesterol per serving. Most breads, pastas, crackers, rice, cereals and other grain foods do not contain cholesterol. One would assume that sweet baked goods are included, but not according to the "notes" for Table 1.

*Recommendation for half of the servings to be whole grains:* This recommendation is not consistent with the current recommendations of a minimum of three servings a day, nor does it fit USDA's goal of being "realistic and practical." The average American eats about one serving of whole grains daily, therefore the recommendation of three is asking them to **triple** their intake. Even this is probably not realistic, but it does provide an obtainable goal. Asking teenage boys to eat 5.5 servings of whole grains daily is definitely unrealistic and impractical. We recommend you continue with the commonly recognized level of a minimum of three servings per day.

*Appropriateness of using "cups" and "ounces" vs. "servings" in the consumer materials to suggest daily amount to choose from each food group and subgroup.*

Unfortunately, focus groups do show considerable confusion between the Food Guide Pyramid servings, nutrient label serving sizes and what the consumer perceives to be a "serving" on their plate. Therefore, we agree that changes should be made to the recommendation. We recommend using **cups** (half cups) for cooked pasta, rice and cereal and **ounces** for breads, ready-to-eat cereals, crackers, tortillas, etc. Figuring out what an ounce of cooked pasta, cereal or rice is could be time-consuming and confusing. While the copy may take slightly more space on the graphic, it will make for easier consumer understanding.

*Selection of appropriate illustrative food patterns for various consumer materials. What criteria should be used to select a smaller number of illustrative food intake patterns? Which subset(s) of patterns would be most useful for various audiences?*

The American Heart Association has an easy calculation for calories needed to maintain weight: 13 calories per pounds of weight for sedentary people and 15 calories per pound of weight for active people.<sup>1</sup> But this is only half of the equation. Now the consumer needs guidance on how much of what to eat for that amount of calories. Using a range of twelve caloric levels is helpful for the nutrition educator with patients, but will be overwhelming to the average American. Since the minimum intake of 1600 calories is necessary for following the current Food Guide Pyramid, that number could be used as the basis and then additional servings would be added accordingly for each higher caloric level.

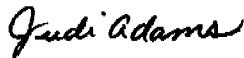
Americans should have the opportunity to tailor recommendations to their caloric needs and preferences without the help of a nutrition educator. (Please consider the possibility of harmonizing the chosen caloric level on the future graphic with the caloric level on the nutrition label).

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Adams, Abenante, Faga

Wheat Foods Council comments on Federal Register Notice, No. 176, October 24, 2003,  
page 4:

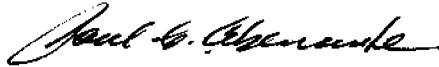
In closing, we commend CNPP for your continual research to test understanding and potential messages with the consumer. Thank you for the opportunity to comment on the proposed Food Guide Pyramid daily food intake patterns and technical support data. If you have any questions, please call Judi Adams

Sincerely,



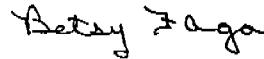
Judi Adams, MS, RD  
President  
Wheat Foods Council

Sincerely,



Paul Abenante  
President

Sincerely,



Betsy Faga  
President  
North American Millers' Assn.

1. American Heart Association. "Be Smart for Your Heart."  
[www.americanheart.org/presenter.jhtml?identifier=502](http://www.americanheart.org/presenter.jhtml?identifier=502). October 20, 2003

California  
Department of  
Health Services



received  
10/24/03

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Lyman, Sallack

October 23, 2003

Food Guide Pyramid Reassessment Team  
USDA Center for Nutrition Policy and Promotion  
3101 Park Center Drive, Room 1034  
Alexandria, VA 22302

Attention: Food Guide Pyramid Reassessment Team

Thank you for the opportunity to provide comments on the USDA Center for Nutrition Policy and Promotion's (CNPP) proposed daily food intake patterns. Members of the California Department of Health Services' (CDHS) Physical Activity and Nutrition Coordinating Committee (PANCC) reviewed the documents outlined in Federal Register Vol. 68, No. 176 and subsequently met to consolidate all the comments. These comments are forwarded to CNPP through CDHS' major nutrition and physical activity enterprises – WIC Supplemental Nutrition Branch and the Division of Chronic Disease and Injury Control. CDHS has also worked collaboratively with California's Interagency Nutrition Coordinating Council who will also be submitting comments. CDHS is thus pleased to submit the following comments regarding the topics of particular interest to CNPP:

**1. Appropriateness of using sedentary, reference-sized individuals in assigning target calorie levels (Table 2) for assessing the nutritional adequacy and moderation of each food intake pattern.**

- In general CDHS is in agreement with using sedentary, reference-sized individuals in assigning target calorie levels; however, there is a question about whether using the term "sedentary" is the best choice given that most people may be likely to classify themselves as "low active" rather than sedentary even if they are sedentary.
- The energy levels for proposed food intake patterns (Table 2) are rough estimates and will not accurately reflect all individuals' caloric needs. It may be necessary to include instructions describing how to modify a diet if the consumer experiences weight gain or loss while following a particular pattern.
- Calorie needs of some sedentary individuals may be lower than indicated in the patterns. The definitions of sedentary, low active, and active are not appropriate for preschool children. One cannot use the same criteria for activity in adults, as

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defined in Table 2, for children. CDHS recommends CNPP define unique activity levels for preschool children based on a pediatric assessment of resting energy expenditures and types of activity.

**Is the proposed selection of nutritional goals for daily food intake patterns appropriate for educating Americans about healthful eating patterns (Table 3).**

- Twelve daily food intake patterns appear to be more than adequate. A breakdown of food pattern calories by 400 calories may be more than sufficient, with instructions for adding additional calories, if needed, for such special groups as pregnant and lactating women.
- These proposed nutritional goals should be very useful in designing the revised food pyramid (s). It would be very useful for CNPP to develop more than one pyramid, one for adults, one for children and one for teens and possibly one for seniors.
- Regarding the USDA "The Food Guide Pyramid" booklet, page 9, "Sample Diets for a Day at 3 Calorie Levels": Suggest 1200 (children and dieters), 1600, 2000, and 2400 for energy levels based on the chart by gender and age groups.

Table 4: Nutrient Profiles of Food Guide Pyramid Food Groups and Subgroups:

⊗ Fruits and Vegetables:

- A 1,000 calorie diet would have 2.5 servings of fruits and vegetables. This does not appear to be nutritionally adequate if an adult is choosing to eat this many calories (e.g., dieters).
- CNPP should include at least five servings of fruits and vegetables in all calorie levels to reflect their protective benefit for heart disease and cancer. Fat and added sugar can be adjusted to allow this.
- Fruits and vegetables should be the primary focus of the pyramid, not grains.
- The breakdown of vegetables could be reformatted, as it requires presenting the data as servings of each type per week when all other foods are listed as servings per day. It would be preferable to keep with eating a "rainbow" of colors from the fruit and vegetable group.
- Encourage fruit and vegetable intake by presenting fruit and vegetable servings as at least 5 or 5+ to let consumers know that they are encouraged to eat more than the recommended number.

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- Include beans and legumes only in the meat group. Including legumes in both the meat and vegetable group is confusing. Also, according to the recommendations for a 1600 calorie diet, beans make up 24 percent of all vegetable servings each day.
- Removing legumes from the Fruits and Vegetables groups would leave enough extra fruit and vegetable calories to add 1-2 servings to each calorie level over 1000 without changing anything else. Also, for the 1000 calorie level, reduce "Added Sugar" to 3 tsp. for adult dieters.

⊗ Grains:

- The California Daily Food Guide suggests 4 out of 6 servings (67 percent) for women and 5 out of 9 servings (56 percent) for men should be whole grain. One suggestion would be "Eat more than half of your grain servings from whole grains."
- Refined carbohydrates high in fat may not be appropriate models in the Grains group.

⊗ Meat and Beans:

- In agreement with California Daily Food Guide, encourage one half serving per day of beans.
- Explicitly include nuts in the name of this group. If so, include a caveat about fat, even if it is good fat.

⊗ Milk:

- As some ethnic groups do not consume dairy, consider renaming the milk group "Milk and Milk Alternatives" (applies to The USDA Food Pyramid as well). Consider how nutrient needs can be met through nondairy sources and calcium-containing soy beverages. Include examples of milk alternatives recognizing that milk provides calcium but also protein, riboflavin, and other nutrients.

⊗ Additional Fats:

- Rename category Added Fat and Fried Food to reflect that fat added in preparation is included (applies to The USDA Food Pyramid as well).
- "Solid fats" and "oils/soft margarines" should be renamed. This does not reflect the differences between saturated, monounsaturated and polyunsaturated fats. We now have solid margarines that do contain "trans" fatty acids or saturated fats.

Added Sugar:

- When translated into The USDA Food Pyramid, the added sugars should say, "not to exceed" and educational material should include examples of major sweets with how many tsps. of sugar they contain. This should also be reflected in the explanation of added sugars in the Food Pyramid booklet.

**3. Are the proposed food intake patterns for educating Americans about healthful eating patterns appropriate?**

- It may be important to consider additional nutrient needs for more active individuals in each target group. Table 3 lists the nutritional goals for the target age/gender groups, but does not address the extra nutrients that may be needed for more active individuals in each group (except for males above 2400 calories).
- Nutrient needs during pregnancy should be identified.
- Consider addressing synthetic folic acid needs for women of childbearing age.
- Consider changing serving sizes to reflect the portion sizes people actually eat. Commercial food portion sizes have increased over the past two decades and consumer perceptions of portion sizes have changed. For example, the typical muffin today is 3-4 times larger than the recommended serving size for a muffin.
- Include a nutritional goal for water consumption.
- Twenty five percent of calories from sugar is too high. Calories would be better spent on fruits and vegetables.

**4. Are "cups" and "ounces" vs. servings appropriate for use in consumer materials to suggest daily amounts to choose from each food group and subgroup?**

- Use of cups and ounces instead of "servings" as a reference for intake is more standardized, relevant and visually concrete for the consumers.
- Consider using Nutritive Value of Foods, Home and Garden Bulletin Number 72 (tennis ball, golf ball, baseball, deck of cards...)

**5. Selection of appropriate illustrative food patterns for various consumer materials and additional CDHS comments.**

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- Please consider placing the **Fruit and Vegetable Groups at the base of the USDA Food Pyramid.**
- Please consider adding **physical activity to the base or center of the USDA Food Pyramid.**
- CDHS is pleased to see that CNPP is taking into consideration a variety of food intake patterns, however, the 12 daily food intake patterns in Table 3 may be too many to translate into direct consumer materials. We do feel it is very important for CNPP to expand the types of food pyramids, especially for children and teens. A practical set of food pyramids related to the food intake patterns would be to have a food pyramid for children (ages 2-8 years), teens (9-18 years), adults (19-55 years) and include information on pregnancy and lactation, and one for seniors (55-years).
- CDHS recommends that new consumer materials also include consideration of the cultural differences in foods and food patterns.
- Provide alternate pyramids for different groups (very active, pregnant, non-milk drinkers).
- The USDA Food Pyramid would be enhanced by having appealing photos of actual foods commonly eaten by diverse ethnic and cultural groups. Also the top of the pyramid should include actual graphics or photos of "Fats, Oils & Sweets" instead of symbols.
- **Consider discouraging high caloric drinks and include an explanation about "added sugars." Twenty five percent of calories from sugar is too high. Calories would be better derived from fruits, vegetables, complex carbohydrates and high quality protein sources.**
- Whole grains and high-fiber whole grain products should be distinguished from other grain products. Please emphasize use of whole grains in consumer products.
- All products that are high in fat and/or refined sugar should be de-emphasized both visually in graphic presentations of food products and in educational materials.
- Beans and bean products like tofu, along with nuts and seeds should be distinguished from animal protein sources, with a recommendation to eat non-animal protein sources at least once daily.

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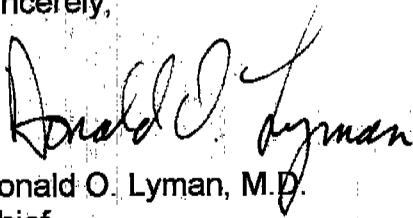
Food Guide Pyramid Reassessment Team

Page 6

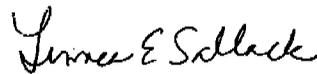
October 23, 2003

- Educational materials should emphasize low fat and non-fat calcium and vitamin D products, such as cow's milk.
- Educational consumer materials should also reflect the health benefits of consuming polyunsaturated and monounsaturated fats, and omega 3 fatty acids, including examples of foods containing these fats. Saturated fats and trans fatty acids should be de-emphasized.

Sincerely,



Donald O. Lyman, M.D.  
Chief  
Division of Chronic Disease & Injury Control



Linnea E. Sallack, M.P.H., R.D.  
Chief  
WIC Supplemental Nutrition Branch

cc: Seleda Williams, M.D., M.P.H.  
Office of Clinical Preventive Medicine