

Just Ask for Whole Grains Conference
Kansas City, Missouri
November 5, 2007

***Whole Grains: Dietary Recommendations,
Intake Patterns, and Promotion***

Dr. Robert C. Post, Deputy Director
Center for Nutrition Policy and Promotion

United States Department of Agriculture



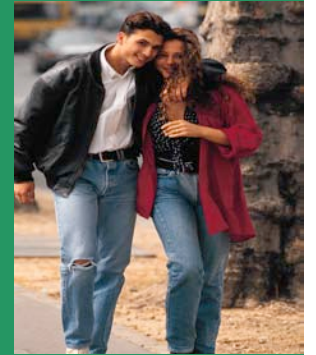


Vision-Focused. . . .Mission-Driven

**Center for
Nutrition Policy
and Promotion
(CNPP)**

**Improved
nutrition and
well-being of
Americans**

***To improve the
health of
Americans by
developing and
promoting
dietary guidance
that links
scientific
research to the
nutrition needs of
consumers***



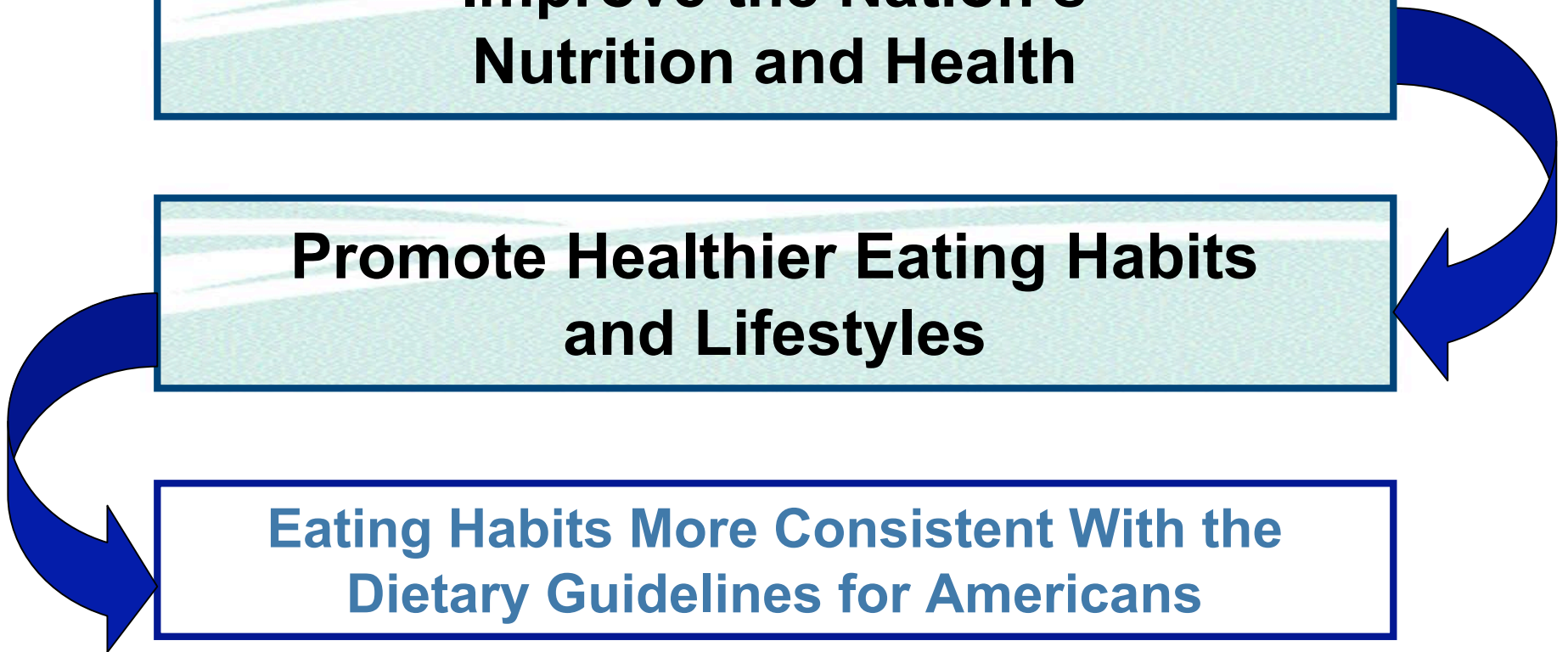


Strategic Goal, Objective, and Outcome

**Improve the Nation's
Nutrition and Health**

**Promote Healthier Eating Habits
and Lifestyles**

**Eating Habits More Consistent With the
Dietary Guidelines for Americans**



CNPP's Outcome-Focused, Strategic Projects

Dietary Guidelines for Americans

MyPyramid Educational Tools

USDA Food Plans

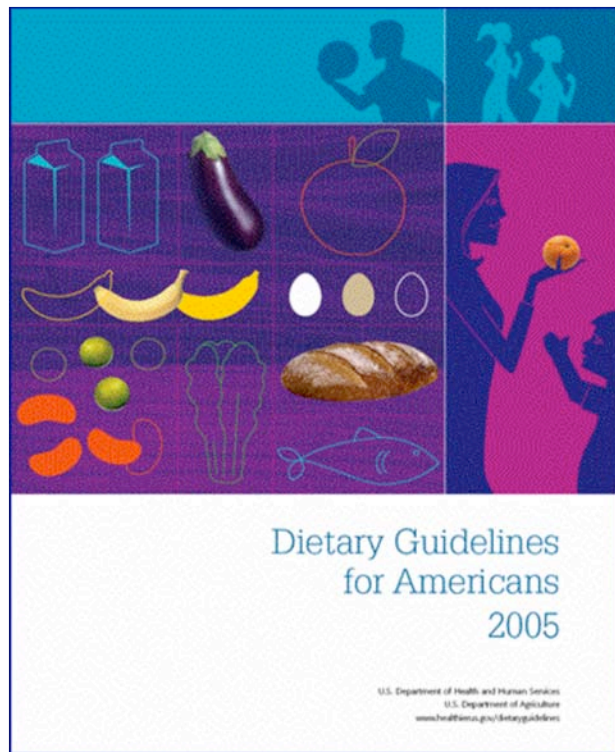
Food Supply Series

Expenditures on Children

Healthy Eating Index



2005 *Dietary Guidelines for Americans*

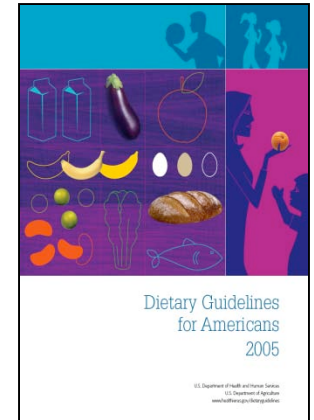


- For policymakers, health professionals
- Separate policy and consumer documents
- 23 general recommendations
- 18 population-specific recommendations (e.g., for older Americans, children, African Americans)



Nine separate focus areas

- Adequate Nutrients Within Calorie Needs
- Weight Management
- Physical Activity
- Food Groups to Encourage
- Fats
- Carbohydrates
- Sodium and Potassium
- Alcoholic Beverages
- Food Safety



Dietary Guidelines

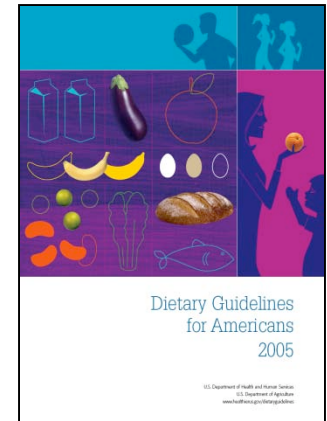
Summary of Recommended Food Pattern Changes

More

- fruits
- dark green vegetables
- orange vegetables
- legumes
- whole grains
- low-fat milk and milk products
- physical activity

Less

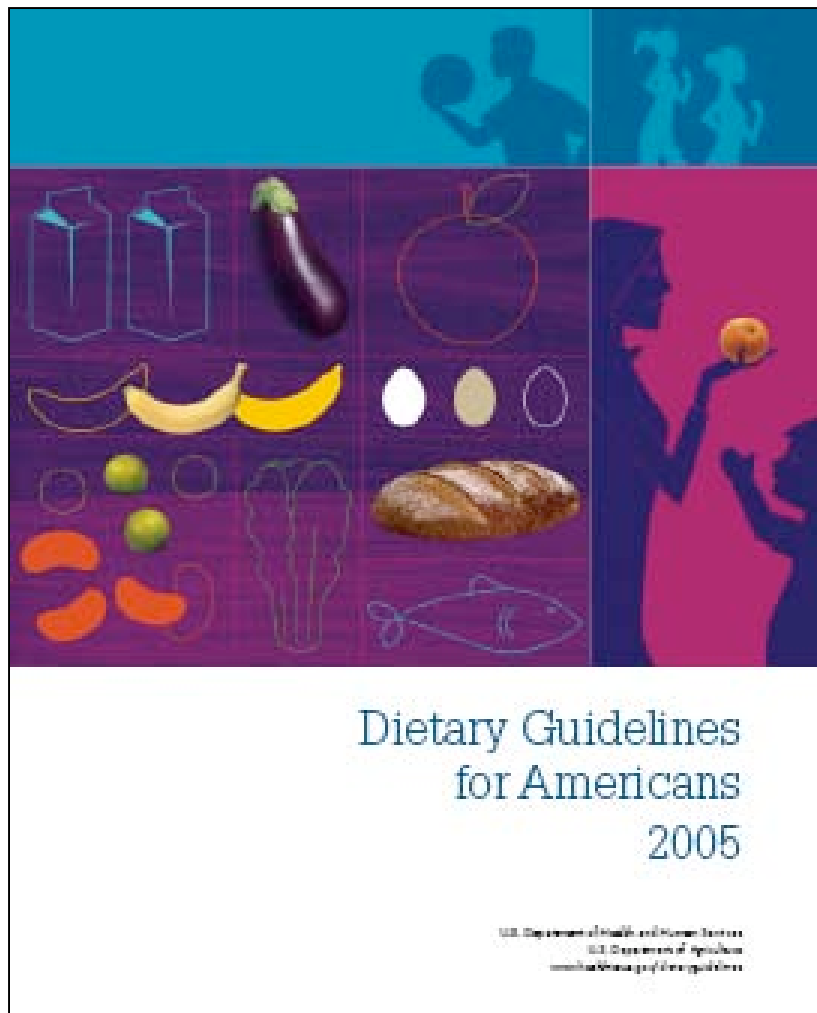
- saturated fats
- *trans* fats
- cholesterol
- added sugars
- refined grains
- sodium



www.healthierus.gov/dietaryguidelines



Dietary Guidelines for Americans: Federal Policy



Focus on fruits.

Vary your veggies.

Get your calcium-rich foods.

Make half your grains whole.

Go lean with protein.

Know the limits on fats, salt, and sugars.

Mix up your choices within each food group.



Focus on fruits. Eat a variety of fruits—whether fresh, frozen, canned, or dried—rather than fruit juice for most of your fruit choices. For a 2,000-calorie diet, you will need 2 cups of fruit each day (for example, 1 small banana, 1 large orange, and ¼ cup of dried apricots or peaches).



Vary your veggies. Eat more dark green veggies, such as broccoli, kale, and other dark leafy greens; orange veggies, such as carrots, sweetpotatoes, pumpkin, and winter squash; and beans and peas, such as pinto beans, kidney beans, black beans, garbanzo beans, split peas, and lentils.



Get your calcium-rich foods. Get 3 cups of low-fat or fat-free milk—or an equivalent amount of low-fat yogurt and/or low-fat cheese (1½ ounces of cheese equals 1 cup of milk)—every day. For kids aged 2 to 8, it's 2 cups of milk. If you don't or can't consume milk, choose lactose-free milk products and/or calcium-fortified foods and beverages.



Make half your grains whole. Eat at least 3 ounces of whole-grain cereals, breads, crackers, rice, or pasta every day. One ounce is about 1 slice of bread, 1 cup of breakfast cereal, or ½ cup of cooked rice or pasta. Look to see that grains such as wheat, rice, oats, or corn are referred to as "whole" in the list of ingredients.



Go lean with protein. Choose lean meats and poultry. Bake it, broil it, or grill it. And vary your protein choices—with more fish, beans, peas, nuts, and seeds.

Know the limits on fats, salt, and sugars. Read the Nutrition Facts label on foods. Look for foods low in saturated fats and *trans* fats. Choose and prepare foods and beverages with little salt (sodium) and/or added sugars (caloric sweeteners).



Significance of Dietary Fiber

- Most health benefits related to digestion
- Increases satiety without adding calories
- High-fiber diet lowers blood cholesterol levels and stimulates bacterial fermentation in the colon
- Research supports that these actions contribute to the health benefits of dietary fiber in chronic diseases such as heart disease, some types of cancer, diabetes, and obesity.



Nutritive Value of Whole Grains

- Whole-grain foods are an important source of dietary fiber
- Whole-grain foods are significant sources of vitamins, minerals, and other compounds, such as phytochemicals, that alone or in combination, have health benefits

Whole Grains Recommendation

The 2005 Dietary Guidelines recommend the consumption of 3 or more ounce equivalents of whole grains per day by substituting whole grains for refined grains. In general, at least half the grains consumed should come from whole grains.



One Whole Grain Ounce-Equivalent

<u>Food Item</u>	<u>Household Measure</u>	<u>Amount of Whole Grain (gm)</u>
Bread, whole wheat commercial	1 slice	16
Cereal, whole grain, ready-to-eat	1 cup	~28
Cereal, whole grain, cooked	_ cup	27
Rice, brown, medium grain, cooked	_ cup	29
Macaroni, whole wheat	_ cup	25

Source: DGA, 2005; Appendix A-1, 2, & C



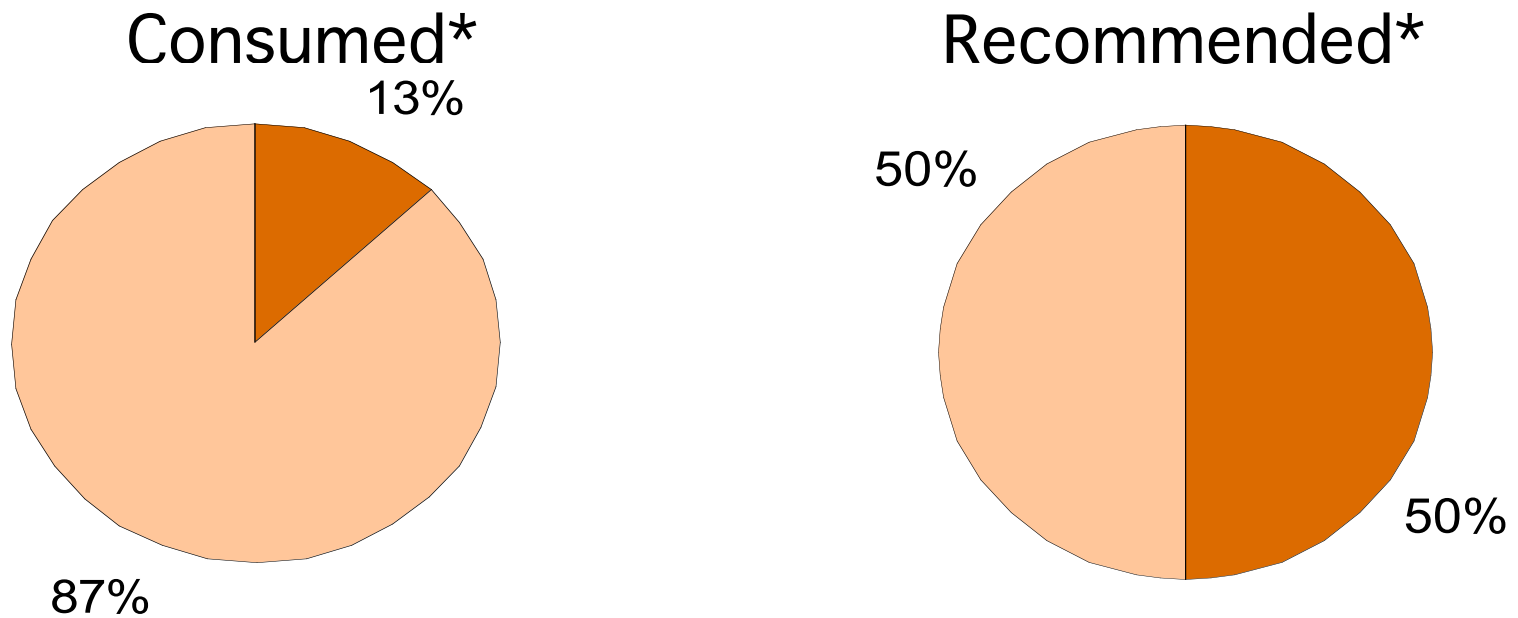
Whole Grain Consumption

According to the NHANES 1999-2002:

- Only 13% of current total grain consumption is whole grain
 - _ 42% of respondents consumed no whole grains on survey date
 - _ 8% consumed 3 or more whole grains servings
 - _ Only 5% of those consuming whole grains made “half their grains whole”

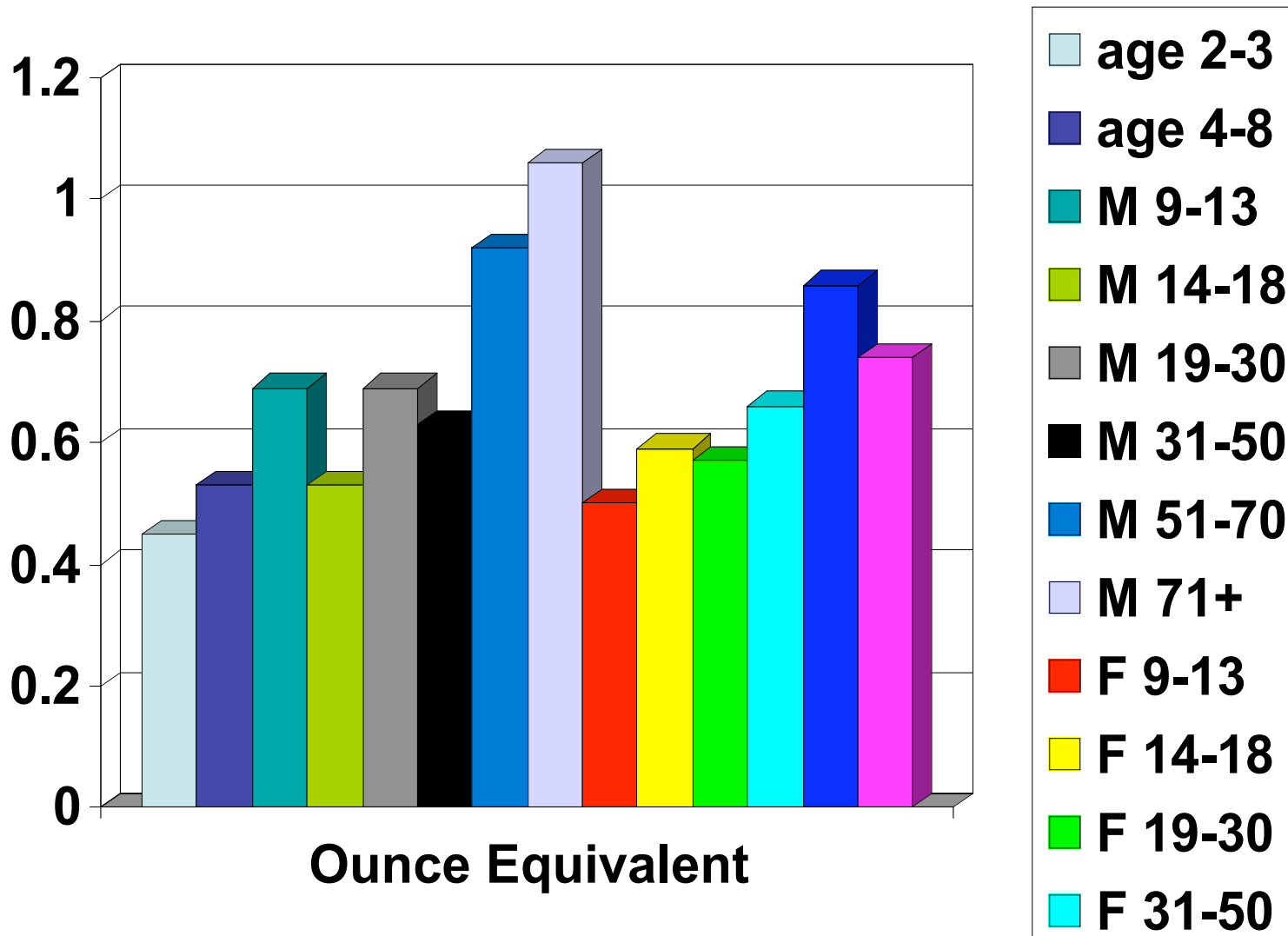


Grain Recommendations Compared to Consumption

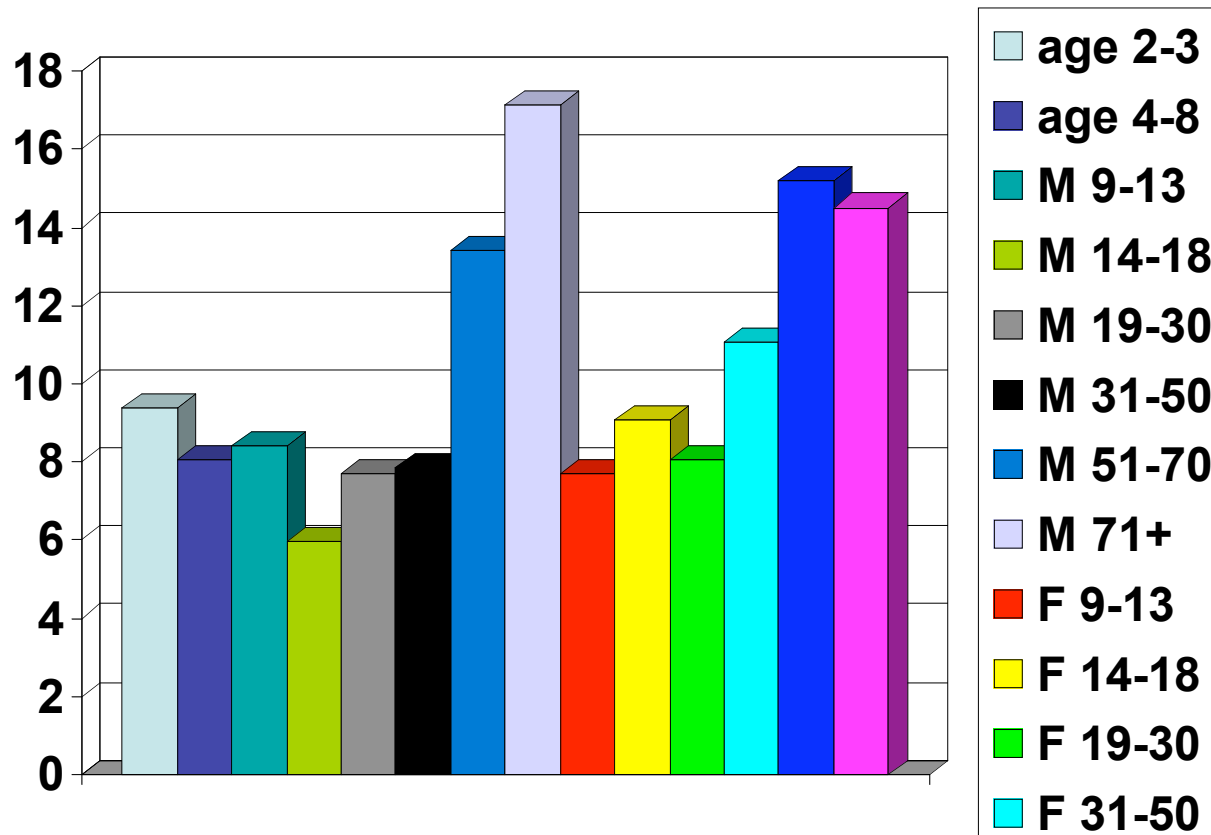


*Females 31-50

Whole Grain Consumption 2001-2002



Percent of Whole Grain Consumption in Total Grain 2001-2002





Promoting **Whole Grain** Consumption: Implementation Challenge



Federal Efforts to Promote Whole Grains

- The Dietary Guidelines recommend that the U.S. population consume more whole grains due to the health benefits
- MyPyramid recommends that at least half of total grain consumption be whole grains
- MyPyramid Tracker – an educational tool for providing consumers with analyses of their food intake and physical activity in relation to the DGA
- Tracker and other education materials are accessible from the USDA/CNPP web site



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- [My Pyramid Tracker](#)

Inside the Pyramid

Grains

Make half your grains whole



- Eat at least 3 ounces of whole grain bread, cereal, crackers, rice, or pasta every day.
- Look for "whole" before the grain name on the list of ingredients.

[Learn more >>](#)

Related Topics

- [Grains](#)
- [Vegetables](#)
- [Fruits](#)
- [Milk](#)
- [Meat & Beans](#)
- [Oils](#)
- [Discretionary Calories](#)
- [Physical Activity](#)

Inside the Pyramid

How many grain foods are needed daily?

The amount of grains you need to eat depends on your age, sex, and level of physical activity. Recommended daily amounts are listed in the chart. Most Americans consume enough grains, but few are whole grains. At least ½ of all the grains eaten should be whole grains.

		Daily recommendation*	Daily minimum amount of whole grains
Children	2-3 years old	3 ounce equivalents**	1 ½ ounce equivalents**
	4-8 years old	4 - 5 ounce equivalents**	2 - 2 ½ ounce equivalents**
Girls	9-13 years old	5 ounce equivalents**	3 ounce equivalents**
	14-18 years old	6 ounce equivalents**	3 ounce equivalents**
Boys	9-13 years old	6 ounce equivalents**	3 ounce equivalents**
	14-18 years old	7 ounce equivalents**	3 ½ ounce equivalents**
Women	19-30 years old	6 ounce equivalents**	3 ounce equivalents**
	31-50 years old	6 ounce equivalents**	3 ounce equivalents**
	51+ years old	5 ounce equivalents**	3 ounce equivalents**
Men	19-30 years old	8 ounce equivalents**	4 ounce equivalents**
	31-50 years old	7 ounce equivalents**	3 ½ ounce equivalents**
	51+ years old	6 ounce equivalents**	3 ounce equivalents**

*These amounts are appropriate for individuals who get less than 30 minutes per day of moderate physical activity, beyond normal daily activities. Those who are more physically active may be able to consume more while staying within calorie needs. [Click here for more information about physical activity.](#)

**[Click here to see what counts as an ounce-equivalent of grains.](#)



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- ▶ My Pyramid Tracker

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My Pyramid Plan

Based on the information you provided and the average needs for your age, gender and physical activity [Age: 54, Sex: male, Physical Activity: More than 60 minutes] your results indicate that you should eat these amounts from the following food groups daily.

Your results are based on a 2800 calorie pattern*.

▶ Grains *	10 ounces	tips
▶ Vegetables **	3.5 cups	tips
▶ Fruits	2.5 cups	tips
▶ Milk	3 cups	tips
▶ Meat & Beans	7 ounces	tips

Click the food groups above to learn more.

* Make Half Your Grains Whole

Aim for at least 5 whole grains a day

** Vary Your Vegetables

Aim for this much every week:

Dark Green Vegetables = 3 cups weekly
 Orange Vegetables = 2 1/2 cups weekly
 Dry Beans & Peas = 3 1/2 cups weekly
 Starchy Vegetables = 7 cups weekly
 Other Vegetables = 8 1/2 cups weekly

Oils & Discretionary Calories

Aim for 8 teaspoons of oils a day

Limit your extras (extra fats & sugars) to 374 Calories

*This calorie level is only an estimate of your needs. Monitor your body weight to see if you need to adjust your calorie intake.



View, Print & Learn More:




▶ Click here to view and print a PDF version of **your results**.

▶ Click here to view and print a PDF of a helpful **Meal Tracking Worksheet**.





▶ For more detailed assessment of your diet quality and physical activity go to the **My Pyramid Tracker**.

You will need the free Adobe Acrobat Reader plug-in to view and print the above PDF files.

The 2005 Dietary Guidelines (DG) Recommendations for **JohnDoe** on **4/11/2005**

Click directly on the    emoticon (face) for more detailed dietary information.

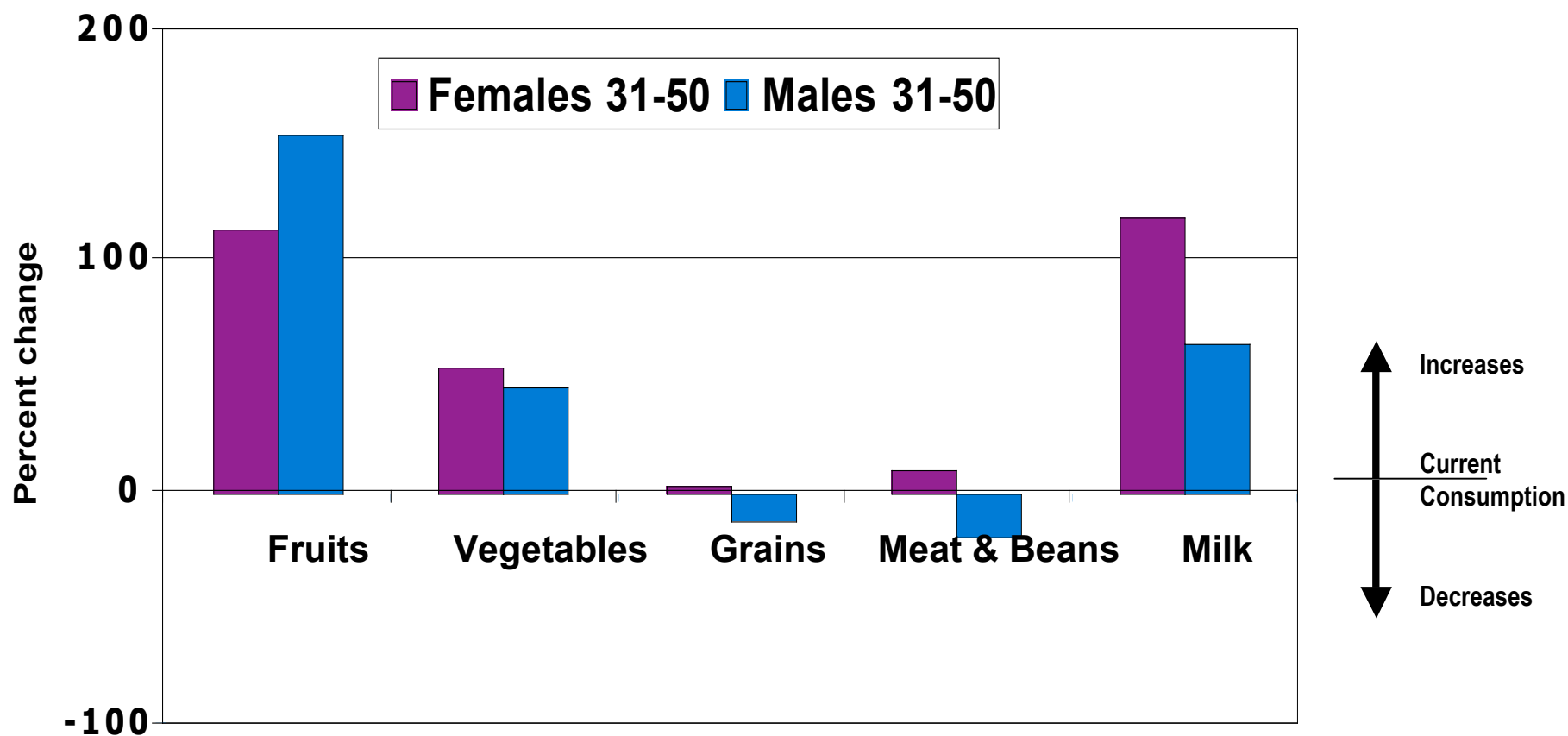
Dietary Guidelines Recommendations	Emoticon	Number of cup/oz. Equ. Eaten	<u>Number of cup/oz. Equ. Recommended</u>
Grain		5.7 oz equivalent	6 oz equivalent
Vegetable		2 cup equivalent	2.5 cup equivalent
Fruit		0.8 cup equivalent	2 cup equivalent
Milk		2 cup equivalent	3 cup equivalent
Meat and Beans		5.2 oz equivalent	5.5 oz equivalent

Dietary Guidelines Recommendations	Emoticon	Amount Eaten	Recommendation or Goal
Total Fat		45.9% of total calories	20% to 35%
Saturated Fat		14.6% of total calories	less than 10%
Cholesterol		258 mg	less than 300 mg
Sodium		7406 mg	less than 2300 mg
Oils	*	*	*
Discretionary calories (solid fats, added sugars, and alcohol)	*	*	*

MyPyramid

Recommendations Compared to Consumption

Bars show percent change needed in consumption to meet recommendations



Whole Grains Consumption

Percent of Food Item Clusters in MyPyramid Whole Grains Composite

Whole Grain Item Clusters (Sample Foods)	Percentage of Total Ounce Equivalents Consumed
Whole-wheat breads (multigrain & cracked wheat bread; whole-wheat tortillas, pita, bagels, rolls, English muffins) ^a	17.4
Oatmeal bread (granola bars, oatmeal cookies, oatmeal muffins) ^a	3.0
Whole-wheat quick breads ^a	1.7
Rye bread (pumpernickel) ^a	1.5
Total Whole-Grain breads	23.6
Whole-wheat ready-to eat cereals ^c	15.5
Whole-oat ready-to eat cereals ^c	10.3
Oatmeal, cooked ^b	10.1
Total Whole-Grain Cereals	35.9
Corn tortillas (corn chips) ^c	22.9
Popcorn ^d	13.2
Whole wheat crackers ^a	1.5
Total Whole -Grain Snack Products	37.6
Brown rice (barley, wild rice) ^b	2.9

Print materials: *Mini Poster*

GRAINS Make half your grains whole	VEGETABLES Vary your veggies	FRUITS Focus on fruits	MILK Get your calcium-rich foods	MEAT & BEANS Go lean with protein										
<p>Eat at least 3 oz. of whole-grain cereals, breads, crackers, rice, or pasta every day</p> <p>1 oz. is about 1 slice of bread, about 1 cup of breakfast cereal, or 1/2 cup of cooked rice, cereal, or pasta</p>	<p>Eat more dark-green veggies like broccoli, spinach, and other dark leafy greens</p> <p>Eat more orange vegetables like carrots and sweetpotatoes</p> <p>Eat more dry beans and peas like pinto beans, kidney beans, and lentils</p>	<p>Eat a variety of fruit</p> <p>Choose fresh, frozen, canned, or dried fruit</p> <p>Go easy on fruit juices</p>	<p>Go low-fat or fat-free when you choose milk, yogurt, and other milk products</p> <p>If you don't or can't consume milk, choose lactose-free products or other calcium sources such as fortified foods and beverages</p>	<p>Choose low-fat or lean meats and poultry</p> <p>Bake it, broil it, or grill it</p> <p>Vary your protein routine – choose more fish, beans, peas, nuts, and seeds</p>										
<p>For a 2,000-calorie diet, you need the amounts below from each food group. To find the amounts that are right for you, go to MyPyramid.gov.</p>					<p>Eat 6 oz. every day</p>	<p>Eat 2 1/2 cups every day</p>	<p>Eat 2 cups every day</p>	<p>Get 3 cups every day; for kids aged 2 to 8, it's 2</p>	<p>Eat 5 1/2 oz. every day</p>	<p>Find your balance between food and physical activity</p> <ul style="list-style-type: none"> Be sure to stay within your daily calorie needs. Be physically active for at least 30 minutes most days of the week. About 60 minutes a day of physical activity may be needed to prevent weight gain. For sustaining weight loss, at least 60 to 90 minutes a day of physical activity may be required. Children and teenagers should be physically active for 60 minutes every day, or most days. 		<p>Know the limits on fats, sugars, and salt (sodium)</p> <ul style="list-style-type: none"> Make most of your fat sources from fish, nuts, and vegetable oils. Limit solid fats like butter, stick margarine, shortening, and lard, as well as foods that contain these. Check the Nutrition Facts label to keep saturated fats, <i>trans</i> fats, and sodium low. Choose food and beverages low in added sugars. Added sugars contribute calories with few, if any, nutrients. 		
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STEPS TO A HEALTHIER YOU

U.S. Department of Agriculture
Center for Nutrition Policy and Promotion
April 2005
CNPP-15

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Mix up your choices within each food group.



Focus on fruits. Eat a variety of fruits—whether fresh, frozen, canned, or dried—rather than fruit juice for most of your fruit choices. For a 2,000-calorie diet, you will need 2 cups of fruit each day (for example, 1 small banana, 1 large orange, and ¼ cup of dried apricots or peaches).



Vary your veggies. Eat more dark green veggies, such as broccoli, kale, and other dark leafy greens; orange veggies, such as carrots, sweetpotatoes, pumpkin, and winter squash; and beans and peas, such as pinto beans, kidney beans, black beans, garbanzo beans, split peas, and lentils.



Get your calcium-rich foods. Get 3 cups of low-fat or fat-free milk—or an equivalent amount of low-fat yogurt and/or low-fat cheese (1½ ounces of cheese equals 1 cup of milk)—every day. For kids aged 2 to 8, it's 2 cups of milk. If you don't or can't consume milk, choose lactose-free milk products and/or calcium-fortified foods and beverages.



Make half your grains whole. Eat at least 3 ounces of whole-grain cereals, breads, crackers, rice, or pasta every day. One ounce is about 1 slice of bread, 1 cup of breakfast cereal, or ½ cup of cooked rice or pasta. Look to see that grains such as wheat, rice, oats, or corn are referred to as “whole” in the list of ingredients.



Go lean with protein. Choose lean meats and poultry. Bake it, broil it, or grill it. And vary your protein choices—with more fish, beans, peas, nuts, and seeds.

Know the limits on fats, salt, and sugars. Read the Nutrition Facts label on foods. Look for foods low in saturated fats and *trans* fats. Choose and prepare foods and beverages with little salt (sodium) and/or added sugars (caloric sweeteners).

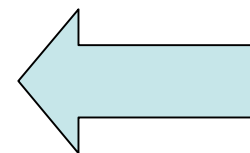
Key food group messages from the Dietary Guidelines and MyPyramid:

Focus on fruits.

Vary your veggies.

Get your calcium-rich foods.

Make half your grains whole.



Go lean with protein.

Know the limits on fats, salt, and sugars.

MyPyramid Menu Planner

- Can plan food intake for a day or up to a week
- Provides immediate feedback as foods entered
- Encourages behavior change – taking small steps
- Can plan for family



MyPyramid on labels



MyPyramid.gov
STEPS TO A HEALTHIER YOU

One serving contains
● cup of vegetables
● 1 ounce of grains

MyPyramid recommends 2 cups of vegetables and at least 3 ounces of whole grains per day for a 2000 calorie intake pattern.

Nutrition Facts

Serving Size ½ cup (114g)
 Servings Per Container 4

Amount Per Serving

Calories 90 **Calories from Fat** 30

% Daily Value*

Total Fat 3g	5%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 300mg	13%
Total Carbohydrate 13g	4%
Dietary Fiber 3g	12%
Sugars 3g	

Protein 3g

Vitamin A 80% • Vitamin C 60%

Calcium 4% • Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:
 Fat 9 • Carbohydrate 4 • Protein 4



One serving contains
● cup of vegetables
● 1 ounce of grains.

MyPyramid recommends 2 cups of vegetables and at least 3 ounces of whole grains per day for a 2000 calorie intake pattern.

Ingredients: asdl asl alsdkf
 asdlf alsdfj lasd spalw wlicgh



2005 Dietary Guidelines & Popularity of **Whole Grain** Products

- The average shopper purchased about 13% more pounds of whole grain products in 2005 after the release of the Guidelines, compared to the same period in 2004.
- The purchases of whole-grain breads, whole-grain rice and ready-to-eat cereals increased by approximately 12%, 19%, and 16% respectively.



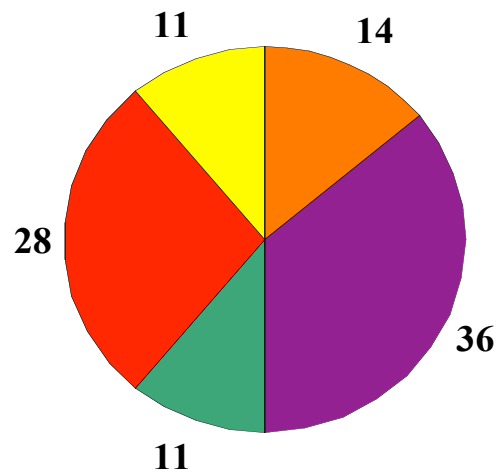
Some Efforts by the Grains-Based Food Industry to Increase Grains Consumption



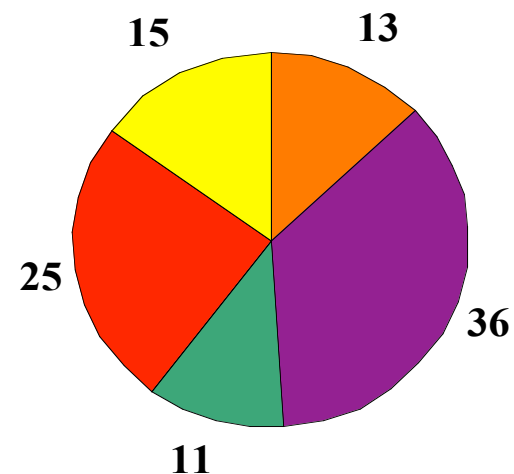
- ***Reformulations of Existing Products with New Ingredients*** (*Sustagrain*®, *Ultragrain*®, and *MaizeWise*™)
- ***New Products*** (wholegrain flour with taste and texture similar to that of refined flour products, Soft and Smooth Whole Grain White, developed Kansas Diamond™ white whole-wheat extra-fine flour)
- ***Manufacturers Efforts To Educate Consumers on Grain Products*** (2-Week Fiber Challenge, Whole Grains Stamp, “Just Ask™” campaign)

Major Sources of Dietary Fiber in the U.S. Food Supply, 1995 vs. 2005

- Contributions of grains to dietary fiber were stable at 36 percent; contributions of vegetables decreased from 28 to 25 percent.



1995



2005

■ Legumes, Nuts, Soy ■ Grain Products ■ Fruits ■ Vegetables ■ Other Foods

*Signs of Increase In **Whole Grains** Consumption*



- The U.S. food fiber industry earned revenue of \$193.1 million in 2004 and could earn \$495.2 million in 2011
- Sales of dietary fiber-sourced whole grain products increased more than 18 percent from June 2004 to 2005 — an increase eclipsing the less-than-1-percent growth in the whole-grain market from 2000 to 2004.

Partnerships

The Need for Collaborative Working Relationships Between the Federal Government & the Grains-Based Food Industry

- When foods are reformulated, the data used to characterize what is available for consumption must reflect those reformulations.
- A reciprocal relationship between the food industry and the Federal Government would strengthen the reporting of trends in nutrient availability.
- The grains-based food and food ingredients industry can help by providing additional data on fiber-enriched products and on formulations/nutrient contents of products.
- When data on fiber-enriched products are included in the U.S. food supply series, the dietary-fiber benefits of grained-based foods are clearly identifiable for their contributions and reflect the industry's responses to Federal nutrition policies regarding the components of healthful diets.

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