



PYRAMID SERVINGS DATA

Results from USDA's 1994 Continuing Survey of Food Intakes by Individuals

Table Set 3

By

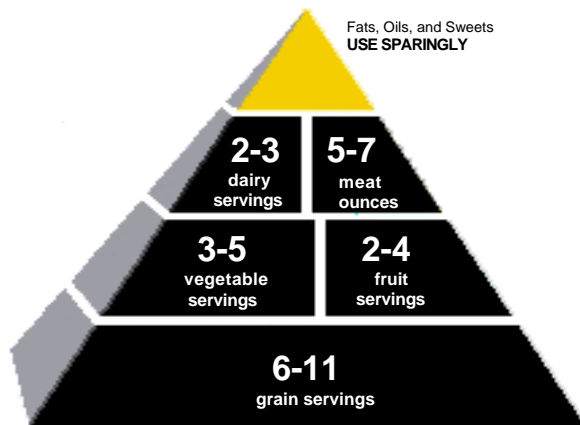
Linda E. Cleveland, Annetta J. Cook, John W. Wilson, James E. Friday,
Jane W. Ho, and Parshotam S. Chahil

Food Surveys Research Group
Beltsville Human Nutrition Research Center
Agricultural Research Service
U.S. Department of Agriculture
10300 Baltimore Ave., Bldg. 005, Rm 102, BARC-West
Beltsville, Maryland 20705-2350
<http://www.barc.usda.gov/bhnrc/foodsurvey/home.htm>
March 1997

How Do American Diets Stack Up Compared to Food Guide Pyramid Recommendations?

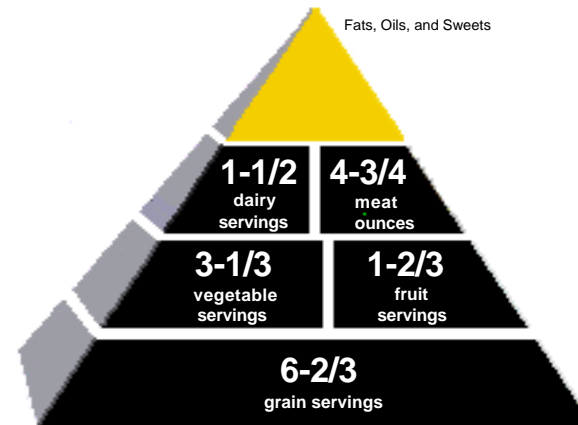
A survey of what Americans eat conducted by the U.S. Department of Agriculture (USDA) provides the answer. In 1994, as part of the Continuing Survey of Food Intakes by Individuals (CSFII), USDA interviewed people nationwide to find out what they ate and drank (USDA-ARS 1996). Results reported here are based on information from 4,952 people 2 years of age and over who provided food intakes on 2 days. These results were compared to the recommendations in USDA's Food Guide Pyramid (USDA 1992).

USDA's Food Guide Pyramid



The Pyramid shows a recommended range of servings to eat each day from five major food groups -- Grain, Vegetable, Fruit, Dairy, and Meat. In general, the numbers of servings that are right for a person depend on calorie needs; people who need more calories should eat more servings. The Pyramid also provides guidance to help people choose diets low in fat and moderate in sugars.

Average American Diet, 1994



In 1994, the average diet of Americans 2 years of age and over contained almost 2,000 calories. On average, servings from the fruit, dairy, and meat groups were below recommended ranges and servings from the grain and vegetable groups were near the bottom of recommended ranges. Calories from fats and sugars exceeded Pyramid recommendations.

A New Method for Evaluating Food Intakes...

USDA has developed a new method for converting data from the CSFII into servings to find out how well Americans eat compared to Pyramid recommendations. The method adheres to Pyramid principles, uses the serving sizes specified by the Pyramid, and strictly categorizes foods according to Pyramid criteria. Since many foods people eat -- foods like pizza, soups, and pies -- count toward more than one food group, the method separates foods into their ingredients before servings are counted.

Interpreting the Food Guide Pyramid Recommendations...

The Pyramid provides guidance for individuals 2 years of age and over. According to the Pyramid, everyone should eat at least the lowest number of servings within recommended ranges. Except for the dairy group, the number of servings that is right for a person depends on his or her calorie needs. For the dairy group, the recommended number of servings depends on age and for women, on whether or not they are pregnant or lactating.

Generally speaking, the bottom of the recommended range of servings is about right for many sedentary women and older adults, the middle is about right for most children, teenage girls, active women, and many sedentary men, and the top of the range is about right for teenage boys, many active men, and some very active women. Preschool children with low calorie needs (less than 1,600 calories) should eat at least the lowest number of servings in the ranges, but they can eat smaller servings from all except the dairy group.

Shown below are sample Pyramid diets for a day at three calorie levels. These diets are guides to the number of servings from each food group people should eat depending on their calorie needs.

SAMPLE DIETS FOR A DAY AT 3 CALORIE LEVELS			
	Lower	Moderate	Higher
	about	about	about
	1,600	2,200	2,800
Bread Group Servings	6	9	11
Vegetable Group Servings	3	4	5
Fruit Group Servings	2	3	4
Dairy Group Servings	2-3 ¹	2-3 ¹	2-3 ¹
Meat Group (ounces)	5	6	7

¹Women who are pregnant or lactating, teenagers, and young adults to age 24 need 3 servings.

What We Eat in America 1994 Results

Grain Group. The Pyramid recommends eating 6 to 11 servings of grain products each day; several should be whole-grain servings. One serving is defined as 1 slice of bread, 1 small roll or muffin, 1/2 of a bagel or croissant, 1 ounce of ready-to-eat cereal, or 1/2 cup of cooked cereal, rice, or pasta.

- ▲ Americans ate an average of about 6-2/3 servings of grain products daily. Only 1 of these servings (15%) was a whole-grain serving. That's well below what the Pyramid suggests.
- ▲ About half (51%) of Americans consumed at least 6 servings of grain products daily (the bottom of the recommended range), and only 36 percent met or exceeded the recommendation based on their calorie intake.

Vegetable Group. The Pyramid recommends eating 3 to 5 servings of vegetables each day. It suggests eating dark-green leafy vegetables and cooked dry beans and peas several times a week. One serving is defined as 1 cup of raw leafy vegetables, 1/2 cup of cooked or chopped raw vegetables, or 3/4 cup of vegetable juice.

- ▲ Americans ate an average of 3-1/3 servings of vegetables daily. Intakes of vegetables that the Pyramid emphasizes were notably low. Dark-green leafy vegetables made up only 3 percent of the vegetable servings and cooked dry beans and peas made up only 6 percent. In contrast, white potatoes made up 33 percent of the vegetable servings.
- ▲ Americans were more likely to meet their recommendation for the vegetable group than for most other groups. Still, 59 percent failed to meet the recommendation based on their calorie intake.

Fruit Group. The Pyramid recommends eating 2 to 4 servings of fruit each day -- about half from citrus fruit, melons, and berries and half from other fruits. One serving is defined as a whole fruit such as a medium apple, banana, or orange, a grapefruit half, 1/2 cup of berries, melon, or chopped raw fruit, 1/2 cup of cooked or canned fruit, 1/4 cup of dried fruit, or 3/4 cup of fruit juice.

- ▲ Americans ate an average of 1-2/3 servings of fruit daily. Equal proportions were from citrus fruits, melons, and berries and from other fruits.
- ▲ The percentage of Americans who met their recommendation was low (24%). Almost half (48%) failed to consume even 1 serving of fruit a day.

Dairy Group. The Pyramid recommends consuming 2 to 3 servings of dairy products each day. One serving is defined as 1 cup of milk or yogurt, 1-1/2 ounces of natural cheese, or 2 ounces of processed cheese. Dairy ingredients in ice cream, ice milk, frozen yogurt, custard, pudding and other foods count toward dairy servings, too.

- ▲ Americans consumed an average of 1-1/2 servings a day from the dairy group, with 1 serving from milk and 1/2 serving from cheese.
- ▲ The percentage of Americans who met their dairy group recommendation was low (23%). It was especially low among teenage girls (12%) and women 20 years and over (14%).

Meat Group. The Pyramid recommends consuming 2 to 3 servings each day of foods from the meat group. The total amount of these servings should be the equivalent of 5 to 7 ounces of cooked lean meat, poultry, or fish. According to the Pyramid, 1 egg, 1/2 cup of tofu, 2 tablespoons of peanut butter, 1/3 cup of nuts, and 1/4 cup of seeds are each equivalent to 1 ounce of cooked lean meat.

- ▲ The average amount of meat and meat alternates consumed by Americans was the equivalent of about 4-3/4 ounces of cooked lean meat a day. Forty percent was from red meat, and 27 percent was from poultry. Meat alternates (eggs, nuts, seeds, and soybean products) accounted for only 10 percent of the meat servings.
- ▲ Fifty-two percent of men, but only 25 percent of women met their meat group recommendation.

The Pyramid Tip. The Pyramid recommends that Americans limit the fat in their diets to 30 percent of calories. People will consume about half of this amount if they eat the recommended number of servings from each food group, select the lowest fat choices, and add no fat to their foods in preparation or at the table. Additional fat, up to 30 percent of calories, is considered discretionary in that people can decide whether to get it from higher-fat food choices or additions to their foods.

- ▲ The average fat intake of Americans, at 33 percent of calories, exceeded the recommendation.
- ▲ Discretionary fat accounted for 25 percent of calories. Discretionary fat includes fat added to foods in preparation or at the table and excess fat above amounts people would consume if they selected only the lowest-fat foods within the major food groups. Examples are the fat absorbed by french-fried potatoes during preparation, the fat from margarine spread on bread at the table, and the fat in whole milk.

The Pyramid suggests that Americans try to limit their added sugars to 6 teaspoons a day if they eat about 1,600 calories, 12 teaspoons at 2,200 calories, or 18 teaspoons at 2,800 calories.

- ▲ Americans consumed an average of 19 teaspoons of added sugars a day in a diet that provided about 2,000 calories. Added sugars accounted for 15 percent of calories.

References

U.S. Department of Agriculture. 1992. The Food Guide Pyramid. Home and Garden Bulletin 252.

U.S. Department of Agriculture, Agricultural Research Service. 1996. 1994 Continuing Survey of Food Intakes by Individuals and 1994 Diet and Health Knowledge Survey. CD-ROM, NTIS accession number PB96-501010.

Summary Data Tables and Microdata

Summary data tables showing average food intakes as Pyramid servings and percentages of people by sex and age consuming various numbers of servings are available on the Home Page for USDA's Food Surveys Research Group at <http://www.barc.usda.gov/bhnrc/foodsurvey/home.htm>. In addition, the microdata are available on CD-ROM for use in secondary analyses. The CD-ROM can be purchased by writing to the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161 or calling them at (703) 487-4650. The price is \$50. When placing an order, request the 1994 Continuing Survey of Food Intakes by Individuals: Pyramid Servings, accession number PB97-502058.

Suggested citation: Cleveland, L.E., A.J. Cook, J.W. Wilson, J.E. Friday, J.W. Ho, and P.S. Chahil. 1997, March 10. Pyramid Servings Data: Results from USDA's 1994 Continuing Survey of Food Intakes by Individuals, [Online]. ARS Food Surveys Research Group. Available (under "Releases"): <<http://www.barc.usda.gov/bhnrc/foodsurvey/home.htm>> [visited year, month, date].

PYRAMID SERVINGS DATA

This table set presents data comparing food intakes of Americans to recommendations in the U.S. Department of Agriculture's Food Guide Pyramid -- a general guide designed to help Americans choose what and how much to eat to get the nutrients they need without excess calories or fat. The Pyramid specifies numbers of servings to eat from five major food groups (grain, vegetable, fruit, dairy, and meat) and gives advice about intakes of fats and added sugars as well.

The data are derived from the 1994 Continuing Survey of Food Intakes by Individuals (CSFII 1994) conducted by the Agricultural Research Service of the U.S. Department of Agriculture. The data in these tables provide national probability estimates for the U.S. population based on food intakes reported by 4,952 individuals 2 years of age and older on 2 nonconsecutive days. Sample sizes on which the estimates are based are provided in appendix A. Daggers are used in the tables to flag estimates that may tend to be less statistically reliable than those that are not flagged. Statistical guidelines are provided in appendix B.

List of Tables

Average daily servings from Pyramid food groups

- Table 1A. Grain group
- Table 2A. Vegetable group
- Table 3A. Fruit group
- Table 4A. Dairy group
- Table 5A. Meat and meat alternates group

Percentages of individuals consuming various numbers of servings from Pyramid food groups

- Table 1B. Grain group
- Table 2B. Vegetable group
- Table 3B. Fruit group
- Table 4B. Dairy group
- Table 5B. Meat and meat alternates group

The Pyramid tip

- Table 6. Calories, total fat, discretionary fat, and added sugars

Appendixes

- A. Counts of individuals
- B. Statistical notes

**Table 1A.--Grain Group: How many servings did Americans eat a day, on average, in 1994?
 USDA's Food Guide Pyramid recommends eating between 6 and 11 servings of grain products each day, depending on calorie needs.**

Sex and age (years)	Percentage of population	Total grain products	Whole-grain products	Nonwhole-grain products
	<i>Percent</i>	<i>Servings ‡</i>		
Males:				
2-5.....	3.4	6.3	.9	5.4
6-11.....	4.7	6.7	.9	5.8
12-19.....	5.9	9.2	1.0	8.2
20-29.....	7.0	8.5	1.1	7.4
30-39.....	9.3	8.2	1.2	7.0
40-49.....	6.8	8.1	1.2	6.9
50-59.....	4.8	7.0	1.2	5.8
60-69.....	3.5	7.0	1.2	5.8
70 and over.....	3.4	6.4	1.3	5.1
20 and over.....	34.9	7.8	1.2	6.6
Females:				
2-5.....	3.1	6.0	1.0	5.0
6-11.....	4.5	6.0	.8	5.1
12-19.....	5.7	6.5	.9	5.6
20-29.....	7.2	5.5	.8	4.7
30-39.....	9.3	5.5	.9	4.7
40-49.....	6.9	5.7	.8	4.9
50-59.....	5.2	5.2	.9	4.3
60-69.....	4.6	4.8	.9	3.9
70 and over.....	4.7	4.9	.9	3.9
20 and over.....	37.9	5.3	.8	4.5
All Individuals 2 and over.....	100.0	6.6	1.0	5.6

‡ One serving is 1 slice of bread; 1 small roll; 1/2 bagel, English muffin, or croissant; 1 ounce of ready-to-eat cereal; 1/2 cup cooked cereal, rice, or pasta; 1 small muffin; or amounts of other grain products such as pretzels and cakes that contain an amount of grain equivalent to that in a standard slice of bread. For children 2 to 5 years old who consume less than 1,600 calories per day, 1 serving is two-thirds of the standard serving size to allow for their lower energy needs. Whole- and nonwhole-grain servings were calculated based on the proportion of whole- and nonwhole-grain ingredients in foods as consumed.

SOURCE: 1994 Continuing Survey of Food Intakes by Individuals, 2-day average, excluding breast-fed children
 USDA, ARS, Beltsville Human Nutrition Research Center, Food Surveys Research Group

Table 1B.--Grain Group: In 1994, what percentage of Americans consumed less than 1 serving of grain products a day? What percentage consumed the number of servings recommended by USDA's Food Guide Pyramid?

Sex and age (years)	Percentage of population	Percentage of individuals.....		
		Consuming less than 1 serving a day	Consuming at least minimum number of servings recommended (6 a day)	Consuming number of servings recommended based on caloric intake ‡
	<i>Percent</i>	----- <i>Percent</i> -----		
Males:				
2-5.....	3.4	† *	52	48
6-11.....	4.7	† *	57	43
12-19.....	5.9	0	75	51
20-29.....	7.0	† *	68	41
30-39.....	9.3	0	69	41
40-49.....	6.8	† *	65	39
50-59.....	4.8	† 1	57	35
60-69.....	3.5	† *	57	39
70 and over.....	3.4	† 1	52	39
20 and over.....	34.9	† *	63	39
Females:				
2-5.....	3.1	† 1	44	42
6-11.....	4.5	† 1	44	34
12-19.....	5.7	† 1	52	41
20-29.....	7.2	† 2	33	23
30-39.....	9.3	† 2	39	28
40-49.....	6.9	† 1	42	34
50-59.....	5.2	† 1	33	28
60-69.....	4.6	† 4	27	25
70 and over.....	4.7	0	32	29
20 and over.....	37.9	2	35	28
All Individuals 2 and over.....	100.0	1	51	36

‡ Recommended servings were derived from sample patterns in "The Food Guide Pyramid" (USDA 1992). Individuals consuming less than 2,200 calories met the recommendation if they ate at least 6 grain servings a day; individuals consuming 2,200 up to 2,800 calories met the recommendation if they ate at least 9 grain servings a day; and individuals consuming 2,800 calories or more met the recommendation if they ate at least 11 grain servings a day.

* Value less than 0.5 but greater than 0.

† See "Statistical notes," appendix B.

SOURCE: 1994 Continuing Survey of Food Intakes by Individuals, 2-day average, excluding breast-fed children
USDA, ARS, Beltsville Human Nutrition Research Center, Food Surveys Research Group

**Table 2A.--Vegetable Group: How many servings did Americans eat a day, on average, in 1994?
 USDA's Food Guide Pyramid recommends eating between 3 and 5 servings of vegetables each day, depending on calorie needs.**

Sex and age (years)	Percentage of population	Total vegetables	Dark green leafy vegetables	Deep yellow vegetables	Cooked dry beans and peas	Starchy vegetables		Tomatoes	Other vegetables
						White potatoes	Other starchy ‡		
	<i>Percent</i>	----- <i>Servings §</i> -----							
Males:									
2-5.....	3.4	2.2	.1	.1	.1	.9	.2	.4	.5
6-11.....	4.7	2.4	†.1	.1	.1	1.0	.2	.4	.5
12-19.....	5.9	3.7	.1	.1	.2	1.6	.2	.7	.8
20-29.....	7.0	4.4	.1	.1	.2	1.7	.2	.7	1.2
30-39.....	9.3	4.4	.2	.2	.2	1.5	.2	.7	1.4
40-49.....	6.8	4.2	.2	.2	.2	1.3	.3	.6	1.3
50-59.....	4.8	3.9	.2	.2	.2	1.2	.3	.5	1.2
60-69.....	3.5	4.1	.2	.3	.2	1.2	.3	.5	1.4
70 and over.....	3.4	3.4	.2	.2	.2	.9	.3	.5	1.1
20 and over.....	34.9	4.2	.2	.2	.2	1.4	.3	.6	1.3
Females:									
2-5.....	3.1	2.2	.1	.1	.1	.9	.2	.3	.5
6-11.....	4.5	2.0	†.1	.1	.1	.8	.2	.3	.5
12-19.....	5.7	2.9	.1	.1	.1	1.2	.1	.5	.7
20-29.....	7.2	2.8	.1	.1	.1	.9	.2	.5	.9
30-39.....	9.3	3.0	.2	.2	.2	.8	.2	.4	1.0
40-49.....	6.9	3.2	.2	.2	.1	.8	.2	.5	1.2
50-59.....	5.2	3.2	.2	.2	.1	.9	.2	.4	1.1
60-69.....	4.6	3.1	.2	.2	.2	.7	.2	.5	1.2
70 and over.....	4.7	2.7	.2	.2	.1	.6	.2	.4	.9
20 and over.....	37.9	3.0	.2	.2	.1	.8	.2	.5	1.0
All Individuals 2 and over.....	100.0	3.3	.1	.2	.2	1.1	.2	.5	1.0

‡ Examples are corn, green peas, and lima beans (immature).

§ One serving is 1 cup of raw leafy vegetables; 1/2 cup of cooked or chopped raw vegetables; 1 ounce of vegetable chips; or 3/4 cup of vegetable juice. For children 2 to 5 years old who consume less than 1,600 calories per day, 1 serving is two-thirds of the standard serving size to allow for their lower energy needs.

† See "Statistical notes," appendix B.

SOURCE: 1994 Continuing Survey of Food Intakes by Individuals, 2-day average, excluding breast-fed children
 USDA, ARS, Beltsville Human Nutrition Research Center, Food Surveys Research Group

Table 2B.--Vegetable Group: In 1994, what percentage of Americans consumed less than 1 serving of vegetables a day? What percentage consumed the number of servings recommended by USDA's Food Guide Pyramid?

Sex and age (years)	Percentage of population	Percentage of individuals.....		
		Consuming less than 1 serving a day	Consuming at least minimum number of servings recommended (3 a day)	Consuming number of servings recommended based on caloric intake ‡
	<i>Percent</i>	----- <i>Percent</i> -----		
Males:				
2-5.....	3.4	21	26	25
6-11.....	4.7	15	28	23
12-19.....	5.9	9	54	39
20-29.....	7.0	† 5	69	53
30-39.....	9.3	† 5	67	49
40-49.....	6.8	6	61	51
50-59.....	4.8	9	63	54
60-69.....	3.5	† 3	65	54
70 and over.....	3.4	11	52	42
20 and over.....	34.9	6	64	51
Females:				
2-5.....	3.1	23	23	22
6-11.....	4.5	27	23	18
12-19.....	5.7	12	39	31
20-29.....	7.2	15	38	34
30-39.....	9.3	8	43	40
40-49.....	6.9	7	52	48
50-59.....	5.2	9	49	45
60-69.....	4.6	6	50	48
70 and over.....	4.7	10	38	38
20 and over.....	37.9	9	45	42
All Individuals 2 and over.....	100.0	10	49	41

‡ Recommended servings were derived from sample patterns in "The Food Guide Pyramid" (USDA 1992). Individuals consuming less than 2,200 calories met the recommendation if they ate at least 3 vegetable servings a day; individuals consuming 2,200 up to 2,800 calories met the recommendation if they ate at least 4 vegetable servings a day; and individuals consuming 2,800 calories or more met the recommendation if they ate at least 5 vegetable servings a day.

† See "Statistical notes," appendix B.

SOURCE: 1994 Continuing Survey of Food Intakes by Individuals, 2-day average, excluding breast-fed children
USDA, ARS, Beltsville Human Nutrition Research Center, Food Surveys Research Group

**Table 3A.--Fruit Group: How many servings did Americans eat a day, on average, in 1994?
 USDA's Food Guide Pyramid recommends eating between 2 and 4 servings of
 fruits each day, depending on calorie needs.**

Sex and age (years)	Percentage of population	Total fruits	Citrus fruits, melons, berries	Other fruits
	<i>Percent</i>	<i>----- Servings ‡ -----</i>		
Males:				
2-5.....	3.4	2.4	.8	1.7
6-11.....	4.7	1.6	.6	.9
12-19.....	5.9	1.3	.8	.6
20-29.....	7.0	1.3	.8	.5
30-39.....	9.3	1.5	.6	.9
40-49.....	6.8	1.6	.8	.8
50-59.....	4.8	1.6	.7	.8
60-69.....	3.5	1.9	.9	1.0
70 and over.....	3.4	2.2	1.0	1.2
20 and over.....	34.9	1.6	.8	.8
Females:				
2-5.....	3.1	2.0	.6	1.3
6-11.....	4.5	1.6	.7	.9
12-19.....	5.7	1.2	.6	.6
20-29.....	7.2	1.2	.6	.6
30-39.....	9.3	1.4	.6	.7
40-49.....	6.9	1.5	.7	.8
50-59.....	5.2	1.7	.9	.8
60-69.....	4.6	2.0	1.1	.9
70 and over.....	4.7	1.7	.8	.9
20 and over.....	37.9	1.5	.8	.8
All Individuals 2 and over.....	100.0	1.6	.7	.8

‡ One serving is a whole fruit such as a medium apple, banana, or orange; a grapefruit half; 1/2 cup of berries, melon, or chopped raw fruit; 1/2 cup of cooked or canned fruit; 1/4 cup of dried fruit; or 3/4 cup of fruit juice. For children 2 to 5 years old who consume less than 1,600 calories, 1 serving is two-thirds of the standard serving size to allow for their lower energy needs.

SOURCE: 1994 Continuing Survey of Food Intakes by Individuals, 2-day average, excluding breast-fed children
 USDA, ARS, Beltsville Human Nutrition Research Center, Food Surveys Research Group

**Table 3B.--Fruit Group: In 1994, What percentage of Americans consumed less than 1 serving of fruit a day?
What percentage consumed the number of servings recommended by USDA's Food Guide Pyramid?**

Sex and age (years)	Percentage of population	Percentage of individuals.....		
		Consuming less than 1 serving a day	Consuming at least minimum number of servings recommended (2 a day)	Consuming number of servings recommended based on caloric intake ‡
	<i>Percent</i>	<i>----- Percent -----</i>		
Males:				
2-5.....	3.4	26	51	48
6-11.....	4.7	44	27	23
12-19.....	5.9	54	20	13
20-29.....	7.0	60	22	14
30-39.....	9.3	56	28	19
40-49.....	6.8	52	28	19
50-59.....	4.8	48	30	22
60-69.....	3.5	43	34	27
70 and over.....	3.4	33	44	35
20 and over.....	34.9	51	29	21
Females:				
2-5.....	3.1	31	43	42
6-11.....	4.5	43	30	28
12-19.....	5.7	56	20	15
20-29.....	7.2	58	19	17
30-39.....	9.3	54	25	20
40-49.....	6.9	49	29	27
50-59.....	5.2	43	33	31
60-69.....	4.6	37	38	37
70 and over.....	4.7	35	31	30
20 and over.....	37.9	48	28	26
All Individuals 2 and over.....	100.0	48	29	24

‡ Recommended servings were derived from sample patterns in "The Food Guide Pyramid" (USDA 1992). Individuals consuming less than 2,200 calories met the recommendation if they ate at least 2 fruit servings a day; individuals consuming 2,200 up to 2,800 calories met the recommendation if they ate at least 3 fruit servings a day; and individuals consuming 2,800 calories or more met the recommendation if they ate at least 4 fruit servings a day.

SOURCE: 1994 Continuing Survey of Food Intakes by Individuals, 2-day average, excluding breast-fed children
USDA, ARS, Beltsville Human Nutrition Research Center, Food Surveys Research Group

**Table 4A.--Dairy Group: How many servings did Americans eat a day, on average, in 1994?
 USDA's Food Guide Pyramid recommends eating 2 or 3 servings of dairy products each
 day, depending on age and physiological status.**

Sex and age (years)	Percentage of population	Total dairy ‡	Milk	Yogurt	Cheese
	<i>Percent</i>	<i>Servings §</i>			
Males:					
2-5.....	3.4	1.9	1.5	*	.3
6-11.....	4.7	2.3	1.7	*	.5
12-19.....	5.9	2.3	1.6	†*	.8
20-29.....	7.0	1.7	.9	†*	.8
30-39.....	9.3	1.7	1.0	*	.7
40-49.....	6.8	1.5	1.0	*	.5
50-59.....	4.8	1.2	.8	†*	.4
60-69.....	3.5	1.3	.9	†*	.4
70 and over.....	3.4	1.3	1.1	†*	.3
20 and over.....	34.9	1.5	.9	*	.6
Females:					
2-5.....	3.1	1.8	1.5	*	.3
6-11.....	4.5	1.9	1.5	*	.4
12-19.....	5.7	1.6	1.0	†*	.5
20-29.....	7.2	1.3	.8	†*	.5
30-39.....	9.3	1.2	.7	*	.4
40-49.....	6.9	1.1	.7	†*	.4
50-59.....	5.2	1.0	.7	.1	.3
60-69.....	4.6	1.0	.7	*	.3
70 and over.....	4.7	1.0	.7	†*	.2
20 and over.....	37.9	1.1	.7	*	.4
All Individuals 2 and over.....	100.0	1.5	1.0	*	.5

‡ Includes small amounts of miscellaneous dairy products, such as whey and nonfat sour cream, that are not included in the subgroups (milk, yogurt, cheese).

§ One serving is 1 cup of milk; 1 cup of yogurt; 1-1/2 ounces of natural cheese; 2 ounces of processed cheese; 1/2 cup of ricotta cheese; or 2 cups of cottage cheese. Dairy desserts, such as ice cream, ice milk, frozen yogurt, custard, and pudding, were separated into ingredients and servings from dairy ingredients (usually milk) are tabulated. Serving sizes are the same for all individuals regardless of age.

* Value less than 0.05 but greater than 0.

SOURCE: 1994 Continuing Survey of Food Intakes by Individuals, 2-day average, excluding breast-fed children
 USDA, ARS, Beltsville Human Nutrition Research Center, Food Surveys Research Group

Table 4B.--Dairy Group: In 1994, what percentage of Americans consumed less than 1 serving of dairy products a day? What percentage consumed at least 2 servings a day? What percentage consumed the number of servings recommended by USDA's Food Guide Pyramid?

Sex and age (years)	Percentage of population	Percentage of individuals.....		
		Consuming less than 1 serving a day	Consuming at least 2 servings a day	Consuming number of servings recommended based on age and physiological status ‡
	<i>Percent</i>	----- <i>Percent</i> -----		
Males:				
2-5.....	3.4	20	38	38
6-11.....	4.7	13	50	45
12-19.....	5.9	25	49	29
20-29.....	7.0	37	34	27
30-39.....	9.3	40	30	30
40-49.....	6.8	42	29	29
50-59.....	4.8	53	18	18
60-69.....	3.5	48	21	21
70 and over.....	3.4	42	23	23
20 and over.....	34.9	42	27	26
Females:				
2-5.....	3.1	22	37	37
6-11.....	4.5	18	43	37
12-19.....	5.7	37	28	12
20-29.....	7.2	46	21	14
30-39.....	9.3	54	18	14
40-49.....	6.9	52	19	19
50-59.....	5.2	57	11	11
60-69.....	4.6	58	12	12
70 and over.....	4.7	62	11	11
20 and over.....	37.9	54	16	14
All Individuals 2 and over.....	100.0	42	27	23

‡ The recommendation for an individual is based on age and physiological status. Women who were pregnant or lactating and individuals 11 to 24 years of age were counted as meeting the recommendation if they consumed at least 3 dairy servings a day; all other individuals were counted as meeting the recommendation if they consumed at least 2 dairy servings a day.

SOURCE: 1994 Continuing Survey of Food Intakes by Individuals, 2-day average, excluding breast-fed children
 USDA, ARS, Beltsville Human Nutrition Research Center, Food Surveys Research Group

**Table 5A.--Meat Group: How many ounces of cooked lean meat or the equivalent in meat alternates did Americans eat a day, on average, in 1994?
 USDA's Food Guide Pyramid recommends eating between 5 and 7 ounces of cooked lean meat or the equivalent in meat alternates
 each day, depending on calorie needs.**

Sex and age (years)	Percentage of population	Total meat and alternates ‡	Meat	Poultry	Fish	Organ meat	Frankfurter and lunch meat	Eggs	Soybean products §	Nuts and seeds
	<i>Percent</i>	<i>----- Ounces Cooked Lean Meat Equivalents ¶ -----</i>								
Males:										
2-5.....	3.4	2.9	1.0	.7	.1	0.0	.6	.3	*	.2
6-11.....	4.7	3.8	1.5	.7	.3	†*	.8	.3	†*	.2
12-19.....	5.9	5.9	2.4	1.6	.4	†*	.9	.4	†*	.2
20-29.....	7.0	7.1	3.0	2.0	.3	†.1	1.1	.5	†*	.2
30-39.....	9.3	6.8	2.9	1.7	.6	†*	1.0	.4	†*	.2
40-49.....	6.8	6.8	2.7	1.8	.6	†*	1.0	.5	†*	.2
50-59.....	4.8	6.5	2.5	1.9	.5	†*	1.0	.5	0.0	.2
60-69.....	3.5	5.7	2.3	1.4	.5	†*	.8	.5	†*	.2
70 and over.....	3.4	4.7	1.6	1.0	.6	†.1	.7	.5	†*	.2
20 and over.....	34.9	6.5	2.6	1.7	.5	*	1.0	.5	*	.2
Females:										
2-5.....	3.1	2.6	.9	.6	.1	†*	.6	.2	0.0	.1
6-11.....	4.5	3.1	1.1	.7	.1	0.0	.8	.2	†*	.1
12-19.....	5.7	3.9	1.7	.9	.3	†*	.6	.3	†*	.1
20-29.....	7.2	4.0	1.4	1.3	.3	†*	.6	.3	†*	.1
30-39.....	9.3	4.1	1.6	1.1	.3	†*	.7	.3	†*	.1
40-49.....	6.9	4.2	1.6	1.2	.4	†.1	.5	.4	†*	.1
50-59.....	5.2	4.2	1.4	1.3	.5	†*	.6	.3	†*	.1
60-69.....	4.6	3.8	1.4	.9	.6	†*	.4	.4	0.0	.1
70 and over.....	4.7	3.5	1.1	1.0	.5	†.1	.4	.4	*	.1
20 and over.....	37.9	4.0	1.4	1.1	.4	†*	.5	.3	*	.1
All Individuals 2 and over.....	100.0	4.8	1.9	1.3	.4	*	.7	.4	*	.1

‡ Excludes cooked dry beans and peas, which are tabulated with vegetables in Table 2A; according to USDA's Food Guide Pyramid they can be counted as a vegetable or a meat alternate.

§ Includes tofu and simulated meat products made from soy.

¶ Only the lean portion of meat, poultry, fish, and simulated meat products is tabulated here. One egg, 1/2 cup of tofu, 2 tablespoons of peanut butter, 1/3 cup of nuts, and 1/4 cup of seeds are each equivalent to 1 ounce of cooked lean meat. Fat in excess of amounts in the leanest meats is tabulated as discretionary fat in Table 6.

* Value less than 0.05 but greater than 0.

† See "Statistical notes," appendix B.

SOURCE: 1994 Continuing Survey of Food Intakes by Individuals, 2-day average, excluding breast-fed children
 USDA, ARS, Beltsville Human Nutrition Research Center, Food Surveys Research Group

Table 5B.--Meat Group: In 1994, what percentage of Americans consumed less than 1 ounce of cooked lean meat or the equivalent in meat alternates a day? What percentage consumed the amount recommended by USDA's Food Guide Pyramid?

Sex and age (years)	Percentage of population	Percentage of individuals.....		
		Consuming less than 1 ounce equivalent a day	Consuming at least 5 ounce equivalents a day	Consuming number of ounce equivalents recommended based on caloric intake ‡
	<i>Percent</i>	<i>Percent</i>		
Males:				
2-5.....	3.4	10	10	19
6-11.....	4.7	† 4	21	17
12-19.....	5.9	† 2	56	45
20-29.....	7.0	† 2	67	54
30-39.....	9.3	† *	65	55
40-49.....	6.8	† 1	68	56
50-59.....	4.8	† 2	63	56
60-69.....	3.5	† 2	59	49
70 and over.....	3.4	† 2	41	35
20 and over.....	34.9	1	63	52
Females:				
2-5.....	3.1	14	8	17
6-11.....	4.5	9	13	11
12-19.....	5.7	9	27	24
20-29.....	7.2	6	28	24
30-39.....	9.3	4	28	26
40-49.....	6.9	6	29	27
50-59.....	5.2	5	30	28
60-69.....	4.6	† 5	27	26
70 and over.....	4.7	6	20	18
20 and over.....	37.9	5	27	25
All Individuals 2 and over.....	100.0	5	39	34

‡ Recommended amounts were derived from sample patterns in "The Food Guide Pyramid" (USDA 1992). Individuals consuming less than 2,200 calories met the recommendation if they ate at least 5 ounces of cooked lean meat equivalents a day; individuals consuming 2,200 up to 2,800 calories met the recommendation if they ate at least 6 ounces of cooked lean meat equivalents a day; and individuals consuming 2,800 calories or more met the recommendation if they ate at least 7 ounces of cooked lean meat equivalents a day. The recommendation was adjusted for children 2 to 5 years old who consumed less than 1,600 calories. To allow for their lower energy needs, the minimum recommendation was lowered by one-third to 3.3 ounce equivalents. (For grains, fruits, and vegetables, these children's intakes were compared to minimum recommendations, but smaller serving sizes counted as a serving.)

* Value less than 0.5 but greater than 0.

† See "Statistical notes," appendix B.

SOURCE: 1994 Continuing Survey of Food Intakes by Individuals, 2-day average, excluding breast-fed children
USDA, ARS, Beltsville Human Nutrition Research Center, Food Surveys Research Group

**Table 6.--Pyramid Tip: How many calories and how much fat and sugar did Americans eat a day, on average, in 1994?
 USDA's Food Guide Pyramid recommends that fats and sugars be used sparingly; they contain calories and little else of
 nutritional value.**

Sex and age (years)	Percentage of population	Food energy	Total fat	Discretionary fat ‡	Added sugars §	Discretionary fat	Added sugars
	<i>Percent</i>	<i>Kilocalories</i>	<i>----- Percent of Kilocalories -----</i>		<i>----- Grams -----</i>		<i>--- Teaspoons ¶ ---</i>
Males:							
2-5.....	3.4	1,549	32.7	25.4	15.1	44.4	14.9
6-11.....	4.7	1,961	33.3	25.8	17.8	56.7	21.5
12-19.....	5.9	2,705	32.9	25.2	20.5	76.6	35.4
20-29.....	7.0	2,745	33.5	24.9	15.7	76.5	26.7
30-39.....	9.3	2,549	34.4	25.9	14.7	74.2	23.6
40-49.....	6.8	2,444	34.6	25.7	13.1	70.6	20.0
50-59.....	4.8	2,184	34.2	25.3	13.1	63.1	18.1
60-69.....	3.5	2,086	33.2	24.5	12.0	58.4	16.3
70 and over.....	3.4	1,868	33.4	24.9	11.4	53.1	13.7
20 and over.....	34.9	2,403	34.0	25.4	13.7	68.7	21.0
Females:							
2-5.....	3.1	1,432	33.4	26.3	15.9	42.5	14.3
6-11.....	4.5	1,733	32.8	25.7	18.3	49.5	20.4
12-19.....	5.7	1,859	33.1	25.3	19.1	53.2	22.2
20-29.....	7.2	1,709	33.1	25.4	17.5	49.6	18.8
30-39.....	9.3	1,661	32.2	24.2	15.8	45.4	16.8
40-49.....	6.9	1,627	33.8	25.4	13.5	46.6	13.9
50-59.....	5.2	1,565	33.2	25.0	13.4	45.0	13.2
60-69.....	4.6	1,458	32.9	24.6	12.1	40.6	11.6
70 and over.....	4.7	1,345	32.2	23.9	12.3	36.3	10.6
20 and over.....	37.9	1,587	32.9	24.8	14.5	44.7	14.8
All Individuals 2 and over.....	100.0	1,971	33.3	25.2	15.2	56.1	19.2

‡ Discretionary fat includes fats added to foods in preparation and at the table (i.e., cream, butter, margarine, cream cheese, oil, lard, meat drippings, cocoa, and chocolate) and fat from grain products, vegetables, fruits, dairy products, and meats and meat alternates beyond amounts people would consume if they selected only the lowest-fat foods in each food group.

§ Includes white sugar, brown sugar, raw sugar, corn syrup, honey, molasses, and artificial sweeteners containing carbohydrate that were eaten separately or used as ingredients in processed or prepared foods such as breads, cakes, soft drinks, jams, and ice cream. Does not include sugars such as fructose and lactose that occur naturally in foods such as fruit and milk.

¶ Quantities are standardized on a carbohydrate equivalent basis. One teaspoon of added sugars is defined as the quantity of a sweetener that contains the same amount of carbohydrate as 1 teaspoon (4 grams) of table sugar (sucrose).

SOURCE: 1994 Continuing Survey of Food Intakes by Individuals, 2-day average, excluding breast-fed children
 USDA, ARS, Beltsville Human Nutrition Research Center, Food Surveys Research Group

APPENDIX A. PYRAMID SERVINGS: COUNTS OF 2-DAY RESPONDENTS AND POPULATION PERCENTAGES, BY SEX AND AGE, 1994

Interpreting information in Appendix A--

- Appendix A shows unweighted counts of survey respondents in each sex-age group shown in the tables and the weighted percentages of the population that they represent. One breast-fed child is excluded from the unweighted counts and the weighted percentages of the population they represent. Weights are used to account for differential rates of selection and nonresponse, to calibrate the sample to match population characteristics known to be correlated with eating behavior, and to equalize intakes over the 4 quarters of the year and the 7 days of the week.

Appendix A.-- Pyramid Servings: Counts of 2-day respondents and population percentages, by sex and age, 1994

Sex and age (years)	2-day count (unweighted)	2-day percentage of population (weighted)
----- Percent -----		
Males:		
2-5.....	419	3.4
6-11.....	252	4.7
12-19.....	268	5.9
20-29.....	244	7.0
30-39.....	295	9.3
40-49.....	288	6.8
50-59.....	255	4.8
60-69.....	231	3.5
70 and over.....	234	3.4
20 and over.....	1,547	34.9
Females:		
2-5.....	410	3.1
6-11.....	254	4.5
12-19.....	261	5.7
20-29.....	256	7.2
30-39.....	278	9.3
40-49.....	287	6.9
50-59.....	272	5.2
60-69.....	232	4.6
70 and over.....	216	4.7
20 and over.....	1,541	37.9
All Individuals 2 and over.....	4,952	100.0

SOURCE: 1994 Continuing Survey of Food Intakes by Individuals, excluding 1 breast-fed child
 USDA, ARS, Beltsville Human Nutrition Research Center, Food Surveys Research Group

APPENDIX B. STATISTICAL NOTES

Estimates based on small cell sizes may tend to be less statistically reliable than estimates based on larger cell sizes. Cell size refers to the unweighted number of individuals in a given sex-age group or demographic group (see appendix A). The guidelines (listed below) for determining when a cell size is small take into account the average design effect for the survey. The design effect results from the complex sample design and from the procedures used to weight the data. When the design effect is 1.00, its effect on accuracy is negligible; a larger design effect implies a greater effect on variance. The guidelines derive from a policy statement (FASEB/LSRO 1995) that specifies the use of a broadly calculated average design effect. In that role, we are using a variance inflation factor. A variance inflation factor of 1.60, which is specific to the 2-day CSFII data set, was used in generating these tables.

Daggers † are used in the tables to flag estimates that may tend to be less statistically reliable than those that are not flagged. The rules used for flagging estimates are listed below, and tables to which each rule applies are identified.

1. An estimated mean or median is flagged when it is based on a cell size of less than 30 times the average design effect or when its coefficient of variation (CV) is equal to or greater than 30 percent. The CV is the ratio of the estimated standard error of the mean to the estimated mean, expressed as a percentage.

Rule 1 has been applied to data in tables 1A, 2A, 3A, 4A, 5A, and 6 to flag estimates that should be used with caution. It applies to mean intakes of servings and means expressed as percentages, such as the percent of kilocalories in table 6.

2. An estimated proportion (percent) that falls above 25 percent and below 75 percent is flagged when it is based on a cell size of less than 30 times the average design effect or when the CV is equal to or greater than 30 percent.
3. An estimated proportion of 25 percent or lower or 75 percent or higher is flagged when the smaller of np and $n(1-p)$ is less than 8 times the average design effect, where "n" is the cell size on which the estimate is based and "p" is the proportion expressed as a fraction.

Rules 2 and 3 have been applied to data in tables 1B, 2B, 3B, 4B, and 5B to flag estimates that should be used with caution.

REFERENCE

Federation of American Societies for Experimental Biology, Life Sciences Research Office. 1995. Third Report on Nutrition Monitoring in the United States: Volume 1. Prepared for the Interagency Board for Nutrition Monitoring and Related Research. U.S. Government Printing Office, Washington, DC, pages III-1 to III-10.