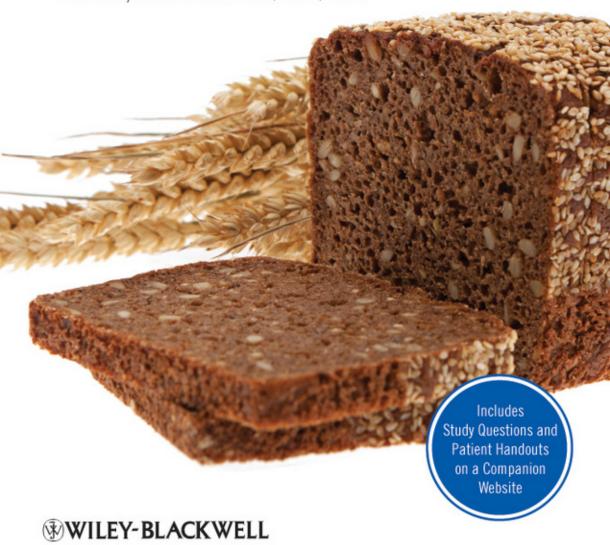
Eleventh Edition

Iowa Dietetic Association Edited by Andrea K. Maher, R.D., L.D.



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Edited by

Andrea K. Maher, R.D., L.D.

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This book has a companion website providing patient education handouts and study questions only available online at www.wiley.com/go/maher.

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About the Book

The eleventh edition of the *Simplified Diet Manual* marks 59 years of its publication by the Iowa Dietetic Association. In 1953 Nina Kagarice Bigsby, the dietary consultant to small hospitals and nursing homes for the Iowa State Department of Health, began a survey of diets that were being prescribed by physicians in Iowa. A trial manual was compiled, used for several months in ten Iowa hospitals, and evaluated by a special committee of the Iowa Dietetic Association; then a manuscript was prepared for publication.

Hospitals and long-term care facilities in every state and many foreign countries now use the *Simplified Diet Manual*. The Iowa Dietetic Association receives the royalties from its publication and uses them for the organization's mission: "Empower members to be Iowa's food and nutrition leaders."

Through the eleven editions, many thoughtful, practical, and insightful Iowa dietitians have contributed their expertise, ideas, and experience to keep the *Simplified Diet Manual* up to date while retaining its straightforward and uncomplicated style.

Educational handouts are now available with the diet manual. Visit the website www.wiley.com/go/maher for patient education handouts that correspond with the therapeutic diets in the *Simplified Diet Manual*.

Study Guide Questions have been incorporated within the diet manual to give practice in applying the information. The material included has been carefully selected to cover basic information on the General Diet and its modifications for individually prescribed diets. Successful completion of this study will improve the skill of foodservice employees and other healthcare workers.

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Instructions for Students:

1. Read and study each chapter of the Simplified Diet Manual.

- Review the Study Guide Questions that follow each chapter, and answer as specified. Refer back to the chapter as needed. In some questions several answers are possible.
- 3. See Appendix 18 for the Suggested Responses; they may be removed from the manual. For incorrect answers, review with the instructor. If the answer section is left in the book, students should complete each section and then compare the answers with those in the answer section. The instructor should review answers with the students to provide additional clarification and explanation as needed.

The eleventh edition was edited by Andrea Maher, RD, LD, a consultant dietitian in long-term care. It reflects the comments and recommendations of Iowa Dietetic Association members and other users of this manual. These suggestions led to the revisions and additions that make this edition as comprehensive and useful as possible, consistent with current advances in Medical Nutrition Therapy.

The eleventh edition was endorsed by the Iowa Dietetic Association Publications Committee, Judy Fitzgibbons, MS, RD, LD, Chair; the Iowa Dietetic Association Board, Jill Lange, MPH, RD, LD, President; Iowa Dietetics in Health Care Communities, Jill Dolan, RD, LD, Chair; and Darcy Otto, C.D.M., C.F.P.P., Iowa Dietary Managers Association, Past-President.

The major changes in this edition are outlined in detail in the Preface.

Preface

In the early 1980s, the Iowa Dietetic Association adopted the policy of reviewing and revising its publications, including the *Simplified Diet Manual*, on a regular basis. The eleventh edition reflects the seventh time the manual has been revised under this policy. The diet manual is kept up to date and on the cutting edge by registered dietitians from the Iowa Dietetic Association that have expertise in the therapeutic diets in which they contribute.

The eleventh edition of the *Simplified Diet Manual* strives to keep up with the changes in the science of nutrition using evidence-based research. Its basic purpose is to provide consistency among diet terminology, in a simplified manner, for the prescription and interpretation of diets or nutrition plans.

Individuals' nutrition plans must meet their needs physiologically, psychosocially, and functionally. Nutritional adequacy must be emphasized, but the consideration of these needs will contribute to the greatest success. In all cases, we advocate the most liberal, least restrictive diets to meet nutritional needs, especially for residents in long-term care facilities.

Several changes were made to this edition:

- Revision of FOOD FOR THE DAY tables using wider variety of culturally diverse foods
- Addition of the Mechanical Soft and Pureed Diets
- Addition of the Small Portions Diet
- Revision of the Fat Restricted Diets
- Addition of the DASH Diet
- Revision of the Diets for Kidney and Liver Disease to include potassium and phosphorus food lists and section on Guidelines for Liver Disease

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- Addition of the Kosher Diet
- Inclusion of *Choose Your Foods*, Exchange Lists for Diabetes (© 2008, American Dietetic Association, American Diabetes Association)
- Inclusion of updated Study Guide Questions at the end of each chapter for training foodservice employees in healthcare facilities that are served by a registered dietitian or dietary consultant.
- Inclusion of online patient education handouts that coordinate with therapeutic diets in the manual

The *Simplified Diet Manual* includes suggested meal patterns with most diets. As the use of the manual has spread, we realize that the names we use for meals do not always fit those used in other regions and countries. For meal planning purposes, we define meal names as follows:

Breakfast: The first meal of the day, served shortly after rising.

Lunch: The meal served at midday.

Supper: The meal served in the evening, often a lighter meal than the midday

meal.

Snacks: A small amount of food offered in addition to main meals.

Eleventh Edition

Guidelines for Diet Planning

Current dietary recommendations for Americans are based on two complementary resources: the Dietary Reference Intakes (DRIs) and the Dietary Guidelines for Americans (DGA).

The DRIs are published by the Food and Nutrition Board of the National Academy of Sciences. They are intended to serve as a guide for good nutrition and provide the scientific basis for the development of food guidelines in both the United States and Canada. The nutrient reference values are specified on the basis of age, gender and life stage. (1) The DRIs provide reference values for both adequate intakes and upper levels of intakes. This edition of the *Simplified Diet Manual* includes the DRIs available to date (see Appendix 1–4).

DIETARY GUIDELINES FOR AMERICANS

The *Dietary Guidelines for Americans 2010* provide advice for making food choices that promote health, a healthy weight, and help prevent disease for healthy Americans, ages 2 and older. The US Department of Agriculture (USDA) and the US Department of Health and Human Services (USDHHS) jointly publish them. The DGA are reviewed by a panel of scientists, updated if necessary, and published every 5 years. They form the basis for federal nutrition policy, education, outreach, and food assistance programs used by consumers, industry, nutrition educators, and health professionals.

The *Dietary Guidelines for Americans 2010* were released in January 2011 and are available at www.dietaryguidelines.gov. For the first time, the guidelines address an unhealthy American public, with the majority of women and men classified as overweight or obese and the rest at risk of becoming obese. This increases the urgency and significance associated with the translation and implementation of the DGA. The decision-making process and evidence relevant to each review is publicly available at www.nutritionevidencelibrary.gov.

The DGAs recommendations support two major themes:

- 1. Maintain calorie balance to achieve and sustain a healthy weight by
 - Controlling total calorie intake to manage body weight. For most people, this will mean consuming fewer calories by making informed food and beverage choices.
 - Increasing physical activity and reducing time spent in sedentary behaviors.
- 2. Focus on nutrient-dense foods and beverages by
 - Increasing intake of foods that are consumed below recommended amounts. For most people, this means choosing more vegetables, fruits, whole grains, fat-free or low-fat milk and milk products, seafood, and oils.
 - Reducing intake of foods and food components consumed in excessive amounts. For most people, this means consuming fewer foods and beverages high in solid fats (sources of saturated and trans fatty acids), added sugars, and sodium (i.e., consume these foods and beverages less often and in small amounts). If alcohol is consumed at all, it should be consumed in moderation and only by adults of legal drinking age.

Figure 1.1 summarizes the degree to which Americans under-consume nutrient-dense foods and over-consume problem foods and the nutrients that should be limited.

USDA Food Patterns

The USDA Food Patterns provide recommended average daily intake of nutrient-dense foods from each food group at various calorie levels. The food pattern templates allow for flexibility in food choices to accommodate individual food and beverage preferences. Research on eating patterns is incorporated for the first time in the *Dietary Guidelines for Americans* 2010. Mediterranean-style eating patterns and the DASH diet (see Chapter 8) are recognized for their beneficial health outcomes and their food groups are compared to the USDA Food Patterns in the *Dietary Guidelines for Americans*.

The *Dietary Guidelines for Americans* 2010 policy document states, "The USDA Food Patterns emphasize selection of most foods in nutrient-dense

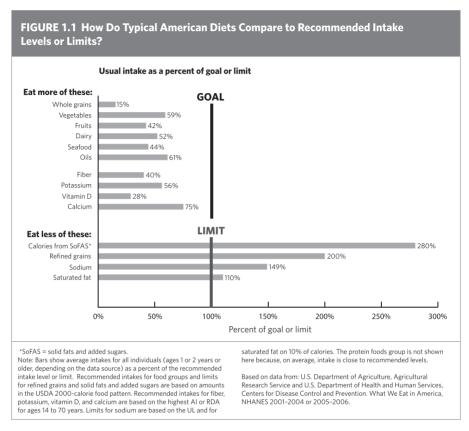


Figure 1.1 How Do Typical American Diets Compare to Recommended Intake Levels or Limits?

forms—that is, with little or no solid fats and added sugars." The food patterns include calorie levels ranging from 1,000 to 3,200. Calorie levels ranging 1,000 to 1,400 meet the needs of most children ranging 2 to 8 years old. Patterns at 1,600 and more meet the needs for adults and children ages 9 years and older.

A "discretionary calorie" allowance is no longer included because it was a difficult concept for consumers to understand. Instead, a maximum limit for calories from solid fats and added sugars in each food pattern is provided that allows for some foods that have a higher level of solid fat or a small amount of added solid fat or added sugars. If choices that are not nutrient dense are routinely eaten, total calories will be over-consumed due to increased calories from solid fats and added sugars. If all food and beverage choices were in forms typically consumed rather than nutrient-dense forms, intake from the food groups and oils in the 2,000-calorie pattern would actually be about 2,400 calories, or 400 calories more than the target calorie level. See "USDA Food Patterns" chart in this section.

Table 1.1 USDA Food Patterns

For each food group or subgroup, a recommended average daily intake amounts at all calorie levels. Recommended intakes from vegetable and protein foods subgroups are per week. For more information and tools for application, go to ChooseMyPlate.gov.

Calorie level of	1,000	1,200	1,400	1,600	1,800	2,000	2,200	2,400	2,600	2,800	3,000	3,200
pattern ^c												
Fruits	1 c	1 c	1½ c	1½ c	1 ½ c	2 c	2 c	2 c	2 c	2½c	2½ c	2½c
Vegetables ^d	1 c	1½ c	1 ½ c	2 c	2½ c	2½ c	3 c	3 c	3½ c	3½ c	4 c	4 c
Dark-green vegetables	¹⁄₂ c/wk	1 c/wk	1 c/wk	1½ c/wk	1½ c/wk	1½ c/wk	2 c/wk	2 c/wk	2½ c/wk	21/2 c/wk	21/2 c/wk	21/2 c/wk
Red and orange vegetables	2½ c/wk	3 c/wk	3 c/wk	4 c/wk	5½ c/wk	5½ c/wk	6 c/wk	6 c/wk	7 c/wk	7 c/wk	7½ c/wk	7½ c/wk
Beans and peas (legumes)	¹⁄₂ c/wk	¹⁄₂ c/wk	¹/₂ c/wk	1 c/wk	1½ c/wk	1½ c/wk	2 c/wk	2 c/wk	2½ c/wk	21/2 c/wk	3 c/wk	3 c/wk
Starchy vegetables	2 c/wk	31/2 c/wk	$3\frac{1}{2}$ c/wk	4 c/wk	5 c/wk	5 c/wk	6 c/wk	6 c/wk	7 c/wk	7 c/wk	8 c/wk	8 c/wk
Other vegetables	1½ c/wk	21/2 c/wk	$2\frac{1}{2}$ c/wk	31/2 c/wk	4 c/wk	4 c/wk	5 c/wk	5 c/wk	5½ c/wk	5½ c/wk	7 c/wk	7 c/wk
Grains ^e	3 oz-eq	4 oz-eq	5 oz-eq	5 oz-eq	6 oz-eq	6 oz-eq	7 oz-eq	8 oz-eq	9 oz-eq	10 oz-eq	10 oz-eq	10 oz-ed
Whole grains	1½ oz-eq	2 oz-eq	2½ oz-eq	3 oz-eq	3 oz-eq	3 oz-eq	3½ oz-eq	4 oz-eq	4½ oz-eq	5 oz-eq	5 oz-eq	5 oz-eq
Enriched grains	1½ oz-eq	2 oz-eq	2½ oz-eq	2 oz-eq	3 oz-eq	3 oz-eq	3½ oz-eq	4 oz-eq	4½ oz-eq	5 oz-eq	5 oz-eq	5 oz-eq
Protein foods ^d	2 oz-eq	3 oz-eq	4 oz-eq	5 oz-eq	5 oz-eq	5½ oz-eq	6 oz-eq	6½ oz-eq	6½ oz-eq	7 oz-eq	7 oz-eq	7 oz-eq
Seafood	3 oz/wk	5 oz/wk	6 oz/wk	8 oz/wk	8 oz/wk	8 oz/wk	9 oz/wk	10 oz/wk	10 oz/wk	11 oz/ wk	11 oz/ wk	11 oz/ wk

Meat, poultry, eggs	10 oz/wk	14 oz/ wk	19 oz/wk	24 oz/ wk	24 oz/ wk	26 oz/wk	29 oz/wk	31 oz/wk	31 oz/wk	34 oz/ wk	34 oz/ wk	34 oz/ wk
Nuts, seeds, soy products	1 oz/wk	2 oz/wk	3 oz/wk	4 oz/wk	4 oz/wk	4 oz/wk	4 oz/wk	5 oz/wk	5 oz/wk	5 oz/wk	5 oz/wk	5 oz/wk
Dairy ^f	2 c	2½ c	2½ c	3 c	3 c	3 c	3 c	3 c	3 c	3 c	3 c	3 c
Oils ^g	15g	17g	17g	22 g	24 g	27 g	29 g	31 g	34 g	36 g	44 g	51g
Maximum SoFASh	137	121	121 (9%)	121	161	258	266	330	362	395	459	596
limit, calories (% of calories)	(14%)	(10%)		(8%)	(9%)	(13%)	(12%)	(14%)	(14%)	(14%)	(15%)	(19%)

Notes for Table 1.1

aAll foods are assumed to be in nutrient-dense forms, lean or low-fat and prepared without added fats, sugars, or salt. Solid fats and added sugars may be included up to the daily maximum limit identified in the table. Food items in each group and subgroup are:

Fruits	All fresh, frozen, canned, and dried fruits and fruit juices: for example, oranges and orange juice,					
	apples and apple juice, bananas, grapes, melons, berries, raisins.					
Vegetables						
Dark-green vegetables	All fresh, frozen, and canned dark-green leafy vegetables and broccoli, cooked or raw: for example, broccoli; spinach; romaine; collard, turnip, and mustard greens.					
Red and orange vegetables	All fresh, frozen, and canned red and orange vegetables, cooked or raw: for example, tomatoes, red peppers, carrots, sweet potatoes, winter squash, and pumpkin.					
Beans and peas (legumes)	All cooked beans and peas: for example, kidney beans, lentils, chickpeas, and pinto beans. Does not include green beans or green peas. (See additional comment under protein foods group.)					
Starchy vegetables	All fresh, frozen, and canned starchy vegetables: for example, white potatoes, corn, green peas.					

(Continued)

Table 1.1 (Continued)

Other vegetables	All fresh, frozen, and canned other vegetables, cooked or raw: for example, iceberg lettuce, green beans, and onions.
Grains	
Whole grains	All whole-grain products and whole grains used as ingredients: for example, whole-wheat bread, whole-grain cereals and crackers, oatmeal, and brown rice.
Enriched grains	All enriched refined-grain products and enriched refined grains used as ingredients: for example, white breads, enriched grain cereals and crackers, enriched pasta, white rice.
Protein foods	All meat, poultry, seafood, eggs, nuts, seeds, and processed soy products. Meat and poultry should be lean or low-fat and nuts should be unsalted. Beans and peas are considered part of this group as well as the vegetable group, but should be counted in one group only.
Dairy	All milks, including lactose-free and lactose-reduced products and fortified soy beverages, yogurts, frozen yo-gurts, dairy desserts, and cheeses. Most choices should be fat-free or low-fat. Cream, sour cream, and cream cheese are not included due to their low calcium content.

b. Food group amounts are shown in cup (c) or ounce-equivalents (oz-eq). Oils are shown in grams (g). Quantity equivalents for each food group are:

- Grains, 1 ounce-equivalent is: 1 one-ounce slice bread; 1 ounce uncooked pasta or rice; ½ cup cooked rice, pasta, or cereal; 1 tortilla (6" diameter); 1 pancake (5" diameter); 1 ounce ready-to-eat cereal (about 1 cup cereal flakes).
- Vegetables and fruits, 1 cup equivalent is: 1 cup raw or cooked vegetable or fruit; ½ cup dried vegetable or fruit; 1 cup vegetable or fruit juice; 2 cups leafy salad greens.

- Protein foods, 1 ounce-equivalent is: 1 ounce lean meat, poultry, seafood; 1 egg; 1 Tbsp peanut butter; ½ ounce nuts or seeds. Also, ¼ cup cooked beans or peas may also be counted as 1 ounce-equivalent.
- Dairy, 1 cup equivalent is: 1 cup milk, fortified soy beverage, or yogurt; 1½ ounces natural cheese (e.g., cheddar); 2 ounces of processed cheese (e.g., American).
- c. See Appendix 6 for estimated calorie needs per day by age, gender, and physical activity level. Food intake patterns at 1,000, 1,200, and 1,400 calories meet the nutritional needs of children ages 2 to 8 years. Patterns from 1,600 to 3,200 calories meet the nutritional needs of children ages 9 years and older and adults. If a child ages 4 to 8 years needs more calories and, therefore, is following a pattern at 1,600 calories or more, the recommended amount from the dairy group can be $2\frac{1}{2}$ cups per day. Children ages 9 years and older and adults should not use the 1,000, 1,200, or 1,400 calorie patterns.
- d. Vegetable and protein foods subgroup amounts are shown in this table as weekly amounts, because it would be difficult for consumers to select foods from all subgroups daily.
- e. Whole-grain subgroup amounts shown in this table are minimums. More whole grains up to all of the grains recommended may be selected, with offsetting decreases in the amounts of enriched refined grains.
- f. The amount of dairy foods in the 1,200 and 1,400 calorie patterns have increased to reflect new RDAs for calcium that are higher than previous recommendations for children ages 4 to 8 years.
- g. Oils and soft margarines include vegetable, nut, and fish oils and soft vegetable oil table spreads that have no trans fats.
- h. SoFAS are calories from solid fats and added sugars. The limit for SoFAS is the remaining amount of calories in each food pattern after selecting the specified amounts in each food group in nutrient-dense forms (forms that are fat-free or low-fat and with no added sugars). The number of SoFAS is lower in the 1,200, 1,400, and 1,600 calorie patterns than in the 1,000 calorie pattern. The nutrient goals for the 1,200 to 1,600 calorie patterns are higher and require that more calories be used for nutrient-dense foods from the food groups.
- U.S Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2010.* 7th Edition, Washington, DC: U.S. Government Printing Office, December 2010.]

Food Groups

A variety of foods should be selected within each food group. This helps ensure that the foods and beverages selected by individuals over time provide a mix of nutrients meeting their needs.

Vegetable Group: 1 to 4 Cups Daily

The Vegetable Group includes fresh, frozen, and canned vegetable or 100% vegetable juice. Most vegetables are naturally low in fat and calories and provide rich sources of many nutrients including potassium, dietary fiber, folate, vitamin A, vitamin E, and vitamin C. The guidelines recommend weekly intake amounts for the five vegetable subgroups and should be considered in meal planning (dark-green, red and orange, beans and peas, starchy, and other vegetables).

Table 1.2 Commonly Consumed Vegetables

Dark-green	Red and	Dry beans/	Starchy	Other	
	Orange	peas			
Bok choy	Acorn squash	Black beans	Corn	Artichokes	
Broccoli	Butternut squash	Black-eyed peas	Green peas	Asparagus	
Collard greens	Carrots	Garbanzo beans (chickpeas)	Lima beans (green)	Bean sprouts	
Dark green leafy leafy lettuce	Hubbard squash	Kidney beans	Potatoes	Beets	
Kale	Pumpkin	Lentils		Brussels sprouts	
Mesclun	Sweet potatoes	Lima beans (mature)		Cabbage	
Mustard greens		Navy beans		Cauliflower	
Romaine lettuce		Pinto beans		Celery	
Spinach		Soy beans		Cucumbers	
Turnip greens		Split peas		Eggplant	
Watercress		Tofu (bean curd made from soybeans)		Green beans	
		White beans		Green or red peppers	
		vville bodils		Iceberg (head) lettuce	
				Mushrooms	
				Okra	
				Onions	
				Parsnips	

Table 1.2	(Continued)
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Dark-green	Red and	Dry beans/	Starchy	Other
	Orange	peas		
				Tomatoes
				Tomato juice
				Vegetable juice
				Turnips
				Wax beans
				Zucchini

US Department of Agriculture. MyPyramid.gov Website. Washington, DC. Vegetables. http://www.mypyramid.gov/pyramid/vegetables.html. Accessed February 22, 2011.

Fruit Group: 1 to 2 1/2 Cups Daily

The Fruit Group includes fresh, frozen, canned, and dried fruits and 100% fruit juices. Fruits are rich in many nutrients, including potassium, dietary fiber, vitamin C, and folate. Only 100% fruit juices count as fruit servings. Selecting more fruit rather than juice is recommended. Most fruit drinks, punches, cocktails, and "-ades" contain little juice and a great deal of sugar. Beverages made from powdered fruit-flavored mixes or fruit-flavored carbonated beverages also do not count as fruit servings.

Grain Group: 3 to 10 Ounce-Equivalents Daily

The Grain Group includes any food made from wheat, rice, oats, cornmeal, barley, or another cereal grain (e.g., bread, pasta, breakfast cereals, tortillas, and grits). Grains are divided into two subgroups: whole grains and enriched grains. Selecting at least half of all grains as whole grains is recommended. Whole grains contain the entire grain kernel. Some examples of whole grains include whole-wheat bread, oatmeal, brown rice, and whole-grain cereals. Refined grains have been milled, a process that removes the bran and germ from the kernel, and reduces its nutritive value. Some refined grains are *enriched*. This means certain B vitamins and iron are added back after processing. Fiber is not usually added back to most enriched grains. Some examples of enriched grains include enriched white flour, enriched white rice, and enriched degermed cornmeal.

Dairy Group: 2 to 3 Cups Daily

The Dairy Group includes all milk, including lactose-free and lactose-reduced products and fortified soy and nut beverages; yogurt; dairy desserts; and cheeses. Most choices should be fat-free or low-fat (1%) vitamin D-fortified milk or yogurt instead of cheese. Milk-based foods that are low in calcium

content—such as cream cheese, cream, and butter—are not included. Foods in the dairy group provide calcium, potassium, vitamin D, and protein.

Protein Foods: 2 to 7 Ounce-Equivalents Daily

The Protein Group includes a variety of protein foods for improved nutrient intake and health benefits: meat, poultry, eggs, seafood, beans, peanuts, and tree nuts (i.e., walnuts, almonds, and pistachios). Most meat and poultry choices should be lean or low-fat. Dry beans and peas are part of this group as well as the Vegetable Group, but they should be counted in one group or the other when planning meals. Foods in the protein group provide B vitamins (i.e., niacin, thiamin, riboflavin, and B₆), vitamin E, iron, zinc, and magnesium.

Selecting 8 or more ounces per week of seafood is recommended (less in patterns for young children) because of the omega-3 fatty acids they contain (EPA and DHA). Seafood includes fresh water fish.

Vitamins and Minerals

Nutrient needs should be met primarily through consuming foods. In certain cases, fortified foods and dietary supplements may be useful in providing one or more nutrients that otherwise might be consumed in less than recommended amounts (e.g., vitamin D and folic acid for women capable of becoming pregnant, iron for pregnant women, and B₁₂ for individuals older than age 50 years). Sufficient evidence is not available to support a recommendation for or against the use of multivitamin/mineral supplements in the primary prevention of chronic disease for the healthy American population. (2)

The recommendation for sodium intake was set for most Americans at less than 2,300 mg and further reduced to 1,500 mg among person who are 51 and older and those of any age who are African American or have hypertension, diabetes, or chronic kidney disease. The 1500-mg recommendation applies to about half of the US population ages 2 and older. (2)

Oils

Oils are liquid at room temperature. Although not a food group, oils do provide essential fatty acids and vitamin E to the diet. Naturally occurring food sources of oils include nuts, seeds, avocados, and seafood. Oils are also extracted from plants, such as olive, peanuts, corn, safflower, canola, soybean, sesame, and sunflower. Most oils provide more unsaturated fatty acids than saturated fats. Exceptions to this rule are coconut oil and palm oils, which should be considered solid fats. Because oils are a concentrated source of calories, Americans should replace solid fats with oils, rather than add oil to the diet and should use oils in small amounts. (2)