

Practice Guidelines

Dietary Guidelines for Americans 2020-2025: Recommendations from the U.S. Departments of Agriculture and Health and Human Services

Key Points for Practice

- For people two years and older, vegetables and whole fruits represent one-half of a healthy diet.
- Potentially allergenic foods should be introduced to infants at about six months of age with solid foods to reduce food allergies.
- During pregnancy, there is no need to limit potentially allergenic foods without a known food allergy, although large fish, unpasteurized juices and dairy products, and alcohol should be avoided.
- In older adults, high-protein diets can limit natural decreases in lean muscle mass and vitamin B₁₂ deficiency caused by decreased absorption.

From the *AFP* Editors

More than one-half of U.S. adults have at least one diet-related chronic disease such as type 2 diabetes mellitus, cardiovascular disease, and some cancers. About three-fourths are overweight or obese. Foods are consumed in patterns, and it is these dietary patterns that affect disease risk. Because surveys show minimal improvement in healthy eating over the past 10 years, simple guidance is needed in improving food and beverage choices. The U.S. Departments of Agriculture and Health and Human Services

published updated guidelines for healthy eating across a person's lifespan.

Core Dietary Elements

For people two years and older, healthy dietary patterns involve choosing nutrient-dense foods and beverages. Nutrient-dense foods provide vitamins, minerals, and other essential nutrients, and are lower in added sugar, saturated fat, and sodium (*Table 1*). At least one-half of food eaten should be fruits and vegetables, especially whole fruits and vegetables of a variety of colors. The core elements of the other half of food that should be eaten include grains, dairy, protein, and oils with lower saturated fat. At least one-half of grain servings should be whole grains. Minimize alcohol use and consumption of foods with added sugar, saturated fat, and sodium. Serving sizes on labels can be used to determine appropriate single portions.

These guidelines will be more difficult to follow for people with food insecurity, which is the limited or uncertain access to nutrient-dense foods that affects 10% of households. Most people, even those without limited access, exceed the recommended intake of refined grains, added sugars, sodium, and saturated fats.

Infants and Toddlers

During the first four months of life, breast milk is the optimal sole form of nutrition. Infants fed breast milk as part or all of their diet should get a 400-IU supplement of vitamin D each day. An iron-fortified commercial infant formula is recommended when breast milk is unavailable. Formula should be prepared per the manufacturer's instructions.

Between four and six months of age, infants can begin eating nutrient-dense foods prepared to reduce choking risk. Although dairy products such as yogurt and cheese can be introduced at this time, cow's milk is not a safe replacement for human milk or formula until 12 months of age. Foods high in added sugar or sodium should

See related editorial on page 448.

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This series is coordinated by Michael J. Arnold, MD, contributing editor.

A collection of Practice Guidelines published in *AFP* is available at <https://www.aafp.org/afp/practguide>.

CME This clinical content conforms to AAFP criteria for CME. See CME Quiz on page 449.

Author disclosure: No relevant financial affiliations.

TABLE 1

Examples of Nutrient-Dense Foods and Less Healthy Forms

Food	Nutrient-dense		Less healthy	
	Form	Calories	Form	Calories
Applesauce, 1 cup	Unsweetened	103	Sweetened	170
Cod, 4 oz	Baked	99	Breaded, fried	230
Ground beef, 3-oz patty	97% lean	122	80% lean	209
Milk, 1 cup	Fat free	83	Whole	146
Mocha, 12 oz	Fat-free milk	110	Full-fat milk and chocolate syrup	290
Popcorn, 2 cups	Air-popped	62	Buttered	184

Adapted from U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. 9th ed. December 2020:21. Accessed September 16, 2021. <https://dietaryguidelines.gov>.

be limited. Honey and unpasteurized foods (e.g., juices, milk, yogurt, cheeses) are unsafe for infants to consume.

Potentially allergenic foods such as peanuts, tree nuts, egg, soy, and shellfish should be introduced with other complementary foods at six months of age to reduce risk of allergy. There is no evidence that delaying introduction of allergenic foods prevents food allergy, and introducing peanut-containing foods in the first year reduces the risk of developing an allergy.

Children and Adolescents

The same core nutrient-dense foods are recommended for children and adolescents as for adults, because childhood habits guide adult eating patterns. Modeling and supporting healthy dietary patterns during childhood is the best way for parents and caregivers to prevent chronic diseases during adolescence and adulthood. Age-based caloric needs (Table 2) are estimates that should be adjusted by the size and activity level of the child. In childhood, beverages are optimally limited to water, unsweetened reduced fat milk, and juices without added sugars. Cow's milk should be fat free or reduced fat, although lactose-free or soy milk is also acceptable. Sugar-sweetened beverages such as soda, sports drinks, and energy drinks should be avoided.

Adults

The core dietary elements also guide the adult diet. Standard caloric recommendations (Table 2) can be adjusted by age, activity, and current weight. U.S. adults consistently overconsume added sugars, refined grains, saturated fats, and sodium. Adults should be encouraged to prepare household meals from fresh ingredients, minimizing intake of sugar-sweetened beverages, alcohol, and added sugars. Sandwiches and grain-based dishes such as spaghetti and meatballs are the major sources of saturated fat in the U.S. diet. Increasing dietary fiber intake is particularly important to prevent

coronary heart disease. Intake of calcium and vitamin D is particularly important in adults up to 30 years of age because bone mass is actively increasing.

Pregnancy and Lactation

Although caloric requirements increase during pregnancy and lactation (Table 3), many patients

TABLE 2

Caloric Needs by Stage of Life

Life stage	Female caloric needs (kcal)	Male caloric needs (kcal)
Early childhood (2 to 4 years of age)	1,000 to 1,400	1,000 to 1,600
School age (5 to 8 years of age)	1,200 to 1,800	1,200 to 2,000
Late childhood (9 to 13 years of age)	1,400 to 2,200	1,600 to 2,600
Adolescence (14 to 18 years of age)	1,800 to 2,400	2,000 to 3,200
Adulthood (19 to 59 years of age)	1,600 to 2,400	2,200 to 3,000
Older adults (60 years and older)	1,600 to 2,000	2,000 to 2,600

TABLE 3

Estimated Change in Caloric Needs During Pregnancy and Lactation for Patients with a Healthy Prepregnancy Weight

Stage of pregnancy or lactation	Estimated increase in daily caloric needs compared with prepregnancy
Pregnancy: first trimester	0
Pregnancy: second trimester	340
Pregnancy: third trimester	452
Lactation: initial 6 months	330
Lactation: after 6 months	400

Adapted from U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. 9th ed. December 2020:112. Accessed September 16, 2021. <https://dietaryguidelines.gov>

experience excessive weight gain during pregnancy. One-half of patients retain at least 10 lb (4.5 kg) of excess weight after pregnancy and one-fourth retain at least 20 lb (9.1 kg). Goal weight gain during pregnancy depends on starting weight (Table 4).

Potentially allergenic foods do not need to be restricted when pregnant or breastfeeding because they do not influence allergy development in children. Because pregnant patients are more susceptible to foodborne illnesses, proper washing and sufficient reheating of food are essential. Unpasteurized (raw) juice or milk, raw sprouts, or soft cheeses made from unpasteurized milk should be avoided. Access to healthy, safe food for children and families is a U.S. government priority. Families facing food insecurity should be referred to assistance programs such as the Special Supplemental Nutrition Program for Women, Infants, and Children to ensure adequate nutrition is available.

Although the guidelines contain minimal discussion of micronutrients, there are some recommendations for

people who are planning to become pregnant or who are not effectively preventing pregnancy. One of the most important is the recommendation to consume 400 to 800 mcg of folic acid daily to reduce risk of neural tube defects. Another is to increase iron intake during pregnancy. Heme iron from animal sources is better absorbed than non-heme iron found in supplements and vegetables. For patients following vegetarian or plant-based diets, absorption of non-heme iron can be enhanced by consuming foods high in vitamin C. Seafood intake during pregnancy is associated with improved cognitive development in young children. However, large fish like tuna, king mackerel, and swordfish should be avoided to limit methylmercury ingestion and accumulation.

Although patients who are pregnant or planning to become pregnant should avoid alcohol, one in 10 drink an average of two alcoholic drinks in a day. When breastfeeding, avoiding alcohol is safest but one standard drink per day does not appear to harm the breastfed infant. Similarly, caffeine consumption of less than 300 mg daily during pregnancy and lactation does not appear to affect infant health.

Older Adults

Although core dietary elements do not change in older age, calorie requirements generally decrease. On average, older adults have the best quality diets. Consuming higher amounts of protein can limit the natural decrease in lean muscle mass. High-protein animal products and foods fortified with vitamin B₁₂ such as cereals can

TABLE 4

Weight Gain Recommendations for Pregnancy

Prepregnancy weight category	Body mass index (kg per m ²)	Range of total pounds gained (kg)	Weekly rates of pounds gained in second and third trimesters (kg)
Underweight	Less than 18.5	28 to 40 (12.7 to 18.1)	1 (0.5)
Healthy weight	18.5 to 24.9	25 to 35 (11.3 to 15.9)	1 (0.5)
Overweight	25 to 29.9	15 to 25 (6.8 to 11.3)	0.6 (0.3)
Obese	≥ 30	11 to 20 (5.0 to 9.1)	0.5 (0.2)

Adapted from U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. 9th ed. December 2020:112. Accessed September 16, 2021. <https://dietaryguidelines.gov>

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decrease the risk of vitamin B₁₂ deficiency from age-related decreases in absorption. Healthy eating recommendations for older adults may require adjustment based on ability to obtain and prepare food and ability to chew or swallow.

Consumption of water and unsweetened beverages is more important in older adults to maintain hydration, because bladder control, mobility changes, and diminishing thirst sensation increase risk of dehydration.

Editor's Note: Providing nutritional guidance can be challenging in the clinic. Although I try to tailor recommendations to my patients, I am often disappointed by the vague platitudes I hear myself saying. I hope that like me, you find some interesting information from these guidelines to add specificity to patient discussions.—Michael J. Arnold, MD, Contributing Editor

The views expressed are those of the author and do not necessarily reflect the official policy or position of the Department of the Navy, Uniformed Services University of the Health Sciences, Department of Defense, or the U.S. government.

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Available at: https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdf

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