

SUPPLEMENT ARTICLE

Expert Panel on Integrated Guidelines for Cardiovascular Health and Risk Reduction in Children and Adolescents: Summary Report

TABLE 5-2

Estimated Calorie Needs per Day by Age, Gender, and Physical Activity Level^a

Gender	Age (Years)	Calorie Requirements (kcal) by Activity Level ^b		
		Sedentary	Moderately Active	Active
Child	2-3	1000-1200	1000-1400 ^c	1000-1400 ^c
Female ^d	4-8	1200-1400	1400-1600	1400-1800
	9-13	1400-1600	1600-2000	1800-2200
	14-18	1800	2000	2400
	19-30	1800-2000	2000-2200	2400
Male	4-8	1200-1400	1400-1600	1600-2000
	9-13	1600-2000	1800-2200	2000-2600
	14-18	2000-2400	2400-2800	2800-3200
	19-30	2400-2600	2600-2800	3000

Estimated amounts of calories needed to maintain caloric balance for various gender and age groups at three different levels of physical activity. The estimates are rounded to the nearest 200 calories. An individual's calorie needs may be higher or lower than these average estimates.

^aBased on Estimated Energy Requirements (EER) equations, using reference heights (average) and reference weights (health) for each age/gender group. For children and adolescents, reference height and weight vary. For adults, the reference man is 5 feet 10 inches tall and weighs 154 pounds. The reference woman is 5 feet 4 inches tall and weighs 126 pounds. EER equations are from the Institute of Medicine. *Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids*. Washington (DC): The National Academies Press; 2002.

TABLE 5-3 DASH Eating Plan: Servings per Day According to Food Group and Total Energy Intake

Food Group	No. of Servings						Serving Size	Examples and Notes	Significance of Each Food Group to the DASH Eating Plan
	1200 cal	1400 cal	1600 cal	1800 cal	2000 cal	2600 cal			
Grains^a	4–5/d	5–6/d	6/d	6/d	6–8/d	10–11/d	1 slice bread; 1 oz dry cereal ^b ; ½ cup cooked rice, pasta, or cereal ^b	Whole-wheat bread and rolls, whole-wheat pasta, English muffin, pita bread, bagel, cereals, grits, oatmeal, brown rice, unsalted pretzels and popcorn	Major sources of energy and fiber
Vegetables	3–4/d	3–4/d	3–4/d	4–5/d	4–5/d	5–6/d	1 cup raw leafy vegetable; ½ cup cut-up raw or cooked vegetable; ½ cup vegetable juice	Broccoli, carrots, collards, green beans, green peas, kale, lima beans, potatoes, spinach, squash, sweet potatoes, tomatoes	Rich sources of potassium, magnesium, and fiber
Fruits	3–4/d	4/d	4/d	4–5/d	4–5/d	5–6/d	1 medium fruit; ¼ cup dried fruit; ½ cup fresh, frozen, or canned fruit; ½ cup fruit juice	Apples, apricots, bananas, dates, grapes, oranges, grapefruit, grapefruit juice, mangoes, melons, peaches, pineapples, raisins, strawberries, tangerines	Important sources of potassium, magnesium, and fiber
Fat-free or low-fat milk and milk products	2–3/d	2–3/d	2–3/d	2–3/d	2–3/d	3/d	1 cup milk or yogurt; 1½ oz cheese	Fat-free milk or buttermilk, fat-free, low-fat, or reduced-fat cheese, fat-free/low-fat regular or frozen yogurt	Major sources of calcium and protein
Lean meats, poultry, and fish	≤3/d	≤3–4/d	≤3–4/d	≤6/d	≤6/d	≤6/d	1 oz cooked meats, poultry, or fish; 1 egg ^c	Select only lean; trim away visible fats; broil, roast, or poach; remove skin from poultry	Rich sources of protein and magnesium
Nuts, seeds, and legumes	3/wk	3/wk	3–4/wk	4/wk	4–5/wk	1/d	½ cup or 1½ oz nuts; 2 tbsp peanut butter; 2 tbsp or ½ oz seeds; ½ cup cooked legumes (dry beans and peas)	Almonds, filberts, mixed nuts, peanuts, walnuts, sunflower seeds, peanut butter, kidney beans, lentils, split peas	Rich sources of energy, magnesium, protein, and fiber
Fats and oils^d	1/d	1/d	2/d	2–3/d	2–3/d	3/d	1 tsp soft margarine; 1 tsp vegetable oil; 1 tbsp mayonnaise; 2 tbsp salad dressing	Soft margarine, vegetable oil (such as canola, corn, olive, or safflower), low-fat mayonnaise, light salad dressing	The DASH study had 27% of calories as fat, including fat in or added to foods
Sweets and added sugars	≤3/wk	≤3/wk	≤3/wk	≤5/wk	≤5/wk	≤2/d	1 tbsp sugar; 1 tbsp jelly or jam; ½ cup sorbet, gelatin; 1 cup lemonade	Fruit-flavored gelatin, fruit punch, hard candy, jelly, maple syrup, sorbet and ices, sugar	Sweets should be low in fat

Table 5-2 provides estimated energy requirements according to age, gender, and activity level for use with this table. The FDA and the Environmental Protection Agency advise women of childbearing age who may become pregnant, pregnant women, nursing mothers, and young children to avoid some types of fish and shellfish and eat fish and shellfish that are low in mercury. For more information, call the FDA's food information line toll free at 1-888-SAFEFOOD or visit www.cfsan.fda.gov/~dms/admeHg3.html.

^a Whole grains are recommended for most grain servings as a good source of fiber and nutrients.

^b Serving sizes vary between a ½ and 1¼ cups, depending on cereal type. Check the product's nutrition-facts label.

^c Because eggs are high in cholesterol, limit egg yolk intake to no more than 4 per week; 2 egg whites have the same protein content as 1 oz of meat.

^d Fat content changes serving amount for fats and oils. For example, 1 tbsp of regular salad dressing = 1 serving; 1 tbsp of low-fat dressing = ½ serving; 1 tbsp fat-free dressing = 0 servings.