

3-3). Oils are not a food group, but are emphasized because they contribute essential fatty acids and vitamin E to the diet.

**FOR MORE INFORMATION**

See **Chapter 3** for additional discussion of the types of fats and effects of various fatty acids on blood cholesterol levels.

Replacing some saturated fatty acids with unsaturated fatty acids lowers both total and low-density lipoprotein (LDL) blood cholesterol levels.

Oils are naturally present in foods such as olives, nuts, avocados, and seafood. Many common oils are extracted from plants, such as canola, corn, olive, peanut, safflower, soybean, and sunflower oils. Foods that are mainly oil include mayonnaise, oil-based salad dressings, and soft (tub or squeeze) margarine with no *trans* fatty acids. Coconut oil, palm kernel oil, and palm oil are high in saturated fatty acids and partially hydrogenated oils contain *trans* fatty acids. For nutritional purposes, they should be considered solid fats.

Americans consume more solid fats but less oil than is desirable. (See Chapter 5 for specific information and recommendations.) 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. For example, individuals can use soft margarine instead of stick margarine, replace some meats and poultry with seafood or unsalted nuts, and use vegetable oils instead of solid fats, such as butter, in cooking.

**Nutrients of Concern**

Because consumption of vegetables, fruits, whole grains, milk and milk products, and seafood is lower than recommended, intake by Americans of some nutrients is low enough to be of public health concern. These are potassium, dietary fiber, calcium, and vitamin D. In addition, as discussed below, intake of iron, folate, and vitamin B<sub>12</sub> is of concern for specific population groups.

**FOR MORE INFORMATION**

See **Chapter 5** for a discussion of the role of supplements and fortified foods.

*Potassium*

As described in **Chapter 3: Foods and Food Components to Reduce**, high intake of sodium is related to the high prevalence of high blood pressure in the

United States. Dietary potassium can lower blood pressure by blunting the adverse effects of sodium on blood pressure. Other possible benefits of an eating pattern rich in potassium include a reduced risk of developing kidney stones and decreased bone loss. The Adequate Intake (AI) for potassium for adults is 4,700 mg per day. AIs are amounts of a nutrient that are adequate for almost everyone in the population; therefore, intake below an AI may be adequate for some people. Available evidence suggests that African Americans and individuals with hypertension especially benefit from increasing intake of potassium.

Few Americans, including all age-gender groups, consume potassium in amounts equal to or greater than the AI. In view of the health benefits of adequate potassium intake and its relatively low current intake by the general population, increased intake of dietary potassium from food sources is warranted. Individuals with kidney disease and those who take certain medications, such as ACE inhibitors, should consult with their health care provider for specific guidance on potassium intake.

Dietary sources of potassium are found in all food groups, notably in vegetables, fruits, and milk and milk products. Appendix 12 lists food sources of potassium. Americans should select a variety of food sources of potassium to meet recommended intake rather than relying on supplements.

*Dietary fiber*

Dietary fiber is the non-digestible form of carbohydrates and lignin. Dietary fiber naturally occurs in plants, helps provide a feeling of fullness, and is important in promoting healthy laxation. Some of the best sources of dietary fiber are beans and peas, such as navy beans, split peas, lentils, pinto beans, and black beans. Additional sources of dietary fiber include other vegetables, fruits, whole grains, and nuts. All of these foods are consumed below recommended levels in the typical American diet. Bran, although not a whole grain, is an excellent source of dietary fiber. Appendix 13 lists food sources of dietary fiber.

Dietary fiber that occurs naturally in foods may help reduce the risk of cardiovascular disease, obesity, and type 2 diabetes. Children and adults should consume foods naturally high in dietary fiber in order