Science Summary
Yogurt & Health

Overview

Yogurt is a nutrient-rich food that has been nourishing people for centuries. Made by culturing milk, yogurt contributes essential nutrients such as protein, calcium, phosphorus, zinc, vitamin B12, pantothenic acid (B5) and riboflavin (B2) to recommended healthy dietary patterns. Different yogurts help meet different people's health, taste and cooking needs. Yogurt varieties available include low-fat, fat-free, flavored and sweetened options as well as different styles like Greek and Icelandic. Lactose-free yogurt is also available. Emerging research indicates that healthy dietary patterns that include yogurt may be linked with a reduced risk for chronic diseases, long-term weight maintenance, improved bone health and reduced markers of chronic inflammation. The Dietary Guidelines for Americans (DGA) and the American Academy of Pediatrics (AAP) recommend eating low-fat or fat-free dairy foods like yogurt every day to help meet nutrient needs.

Eating yogurt helps Americans meet dairy food recommendations

Dairy foods like yogurt are foundational foods in healthy dietary patterns. Healthy dietary patterns, which include dairy foods, are associated with reduced risk for several chronic diseases, including cardiovascular disease (strong evidence) and type 2 diabetes (moderate evidence).[1-3] The DGA also recognizes the importance of consuming dairy foods in healthy dietary patterns to achieve peak bone mineral density in childhood and adolescence.[3-5] The DGA recommends that Americans consume dairy foods as part of healthy dietary patterns throughout the lifespan, beginning in the complementary feeding stage. At about 6 months of age, small amounts of yogurt and cheese can be introduced to infants, depending on developmental readiness.[3] The DGA recommends 1⅓ to 2 servings of whole- and reduced-fat dairy foods for toddlers 12-23 months no longer consuming human milk or infant formula as part of the Healthy U.S.-Style Dietary Pattern. It also recommends 2 daily servings of low-fat or fat-free dairy foods for children 2-3 years, 2½ for children 4-8 years and 3 for those 9 years and older in the Healthy U.S.-Style Dietary Pattern.[3] Young children come the closest to meeting DGA recommendations. Toddlers 12-23 months consume 2½ servings of dairy foods per day, on average.[3] Dairy food consumption tends to fall below recommended amounts by the time children go to school, and this trend carries forward through adolescence and into adulthood.[6] American adults 20 years and older average just 1½ servings of dairy foods daily. Overall, yogurt makes up only about 2 percent of the dairy foods consumed by Americans.[6] Encouraging adults and children to add 1 more daily serving of dairy foods like yogurt to their eating pattern is a practical way to help meet dairy recommendations.[7,8]

Eating yogurt helps Americans meet nutrient recommendations

Yogurt contains nutrients important for the daily nutrition of Americans. Low-fat yogurt is an excellent source of calcium,[9] a nutrient of public health concern in the U.S. due to low consumption,[6] as well as protein, phosphorus, zinc, vitamin B12, pantothenic acid (B5) and riboflavin (B2).[9]* Cross-sectional studies conducted in the U.S., Canada and the U.K. indicate that children and adults who ate yogurt on any given day had better diet quality than those who did not eat yogurt.[10–12] Yogurt eaters had a higher intake of several key nutrients including potassium, calcium, magnesium, vitamin D, riboflavin (B2) and fiber compared to non-eaters.[11,12] In children 2-18 years, yogurt provides, on average, about 19 percent of calcium, 11 percent of vitamin D, 12 percent of potassium, 14 percent of vitamin B12 and 10 percent of protein.[12] Among adults 19 years and older, yogurt provides 22 percent of calcium, 16 percent of vitamin D, 11 percent of potassium, 16 percent of vitamin B12 and 11 percent of protein, on average.[12]

Some yogurts contain added sugar to help reduce its natural tartness.[9] The DGA notes that a small amount of added sugar can improve the palatability of nutrient-dense foods, like low-fat and fat-free yogurt, within a healthy eating pattern.[3] Sweetened yogurt contributes to the added sugars intake of Americans in different amounts depending on age. Yogurt contributes about 18 percent of added sugars to the diets of infants 6-11 months, according to national survey data from 2005-2016.[13] Among toddlers 12-24 months, sweetened yogurt contributes 7 percent of added sugars, according to data from 2015-2016,[6] and yogurt contributes about 1 percent of added sugars to the diets of Americans 2 years and older, according to data from 2015-2018.[14]

Choosing yogurt as a snack can improve the nutrient-density of dietary patterns

Yogurt is among the most nutrient-dense snacks eaten by Americans.[15] Yogurt, like milk and cheese, is a good source of high-quality protein, and as part of a diet higher in protein, yogurt may help promote satiety when eaten as a snack.[16,17] Eating dairy foods, including yogurt, as a snack is linked with better diet quality among young children 2 to 10 years.[18] Adults who regularly ate at least 5 servings of yogurt per week had healthier dietary patterns overall and consumed fewer sweets and sugar-sweetened beverages than adults who consumed less yogurt.[19] Snacking on yogurt can help Americans eat more nutrient-dense diets.

Research indicates yogurt may be linked with lower risk for cardiovascular disease and type 2 diabetes

Eating yogurt has been linked with a range of health benefits, including a reduced risk for cardiovascular disease (CVD), type 2 diabetes (T2D) and less weight gain over time.[20] In adults, eating yogurt has been linked to a 10 percent lower risk of high blood pressure,[21] and one meta-analysis found that eating at least 7 ounces of yogurt per day was linked with a decreased risk for CVD compared to eating less yogurt.[22] High-quality evidence supports a link between eating yogurt and a reduced risk of T2D as well.[1] Results of two meta-analyses and a follow-up study of 3 large prospective cohort studies indicate that eating yogurt, or increasing yogurt consumption by ½ serving per day, is associated with an 11 to 27 percent lower risk of developing T2D in adults.[2,23,24] Another meta-analysis concluded that eating 60 grams of yogurt per day (245 grams yogurt = one 8-ounce cup) compared to eating no yogurt decreased T2D risk by 17 percent.[25] A recent cross-sectional study reported that, in adults, eating yogurt was associated with lower body weight and body mass index, as well as a 23 percent lower risk of being overweight or obese.[12]

*USDA FoodData Central (FDC) ID: Low-fat vanilla yogurt 170888. One serving refers to one cup-equivalent. For yogurt, 1 cup-equivalent equals 1 cup.

Eating yogurt is linked with decreased risk for obesity and inflammation

Emerging evidence indicates that eating yogurt may also support bone health and reduce markers of inflammation.[20,26] Eating yogurt has also been linked with improved markers of bone health in both younger and older adults.[27,28] A meta-analysis of three prospective cohort studies also concluded that eating yogurt was also linked to a reduced risk of hip fracture in older women.[29] Eating yogurt is also not linked to higher levels of inflammation and may help lower markers of inflammation. Healthy pre-menopausal women eating 1½ servings of low-fat yogurt every day for 9 weeks had reduced markers of chronic inflammation compared to women eating a yogurt (non-dairy) alternative.[26] In three additional randomized controlled trials, interventions including yogurt did not increase levels of biomarkers of inflammation.30–32 More research is needed to confirm these findings.

What to know about lactose in yogurt

Lactose intolerance (LI) may lead some individuals to avoid or decrease dairy food consumption. Dairy avoidance, whether due to LI or other reasons, can lead to inadequate consumption of important nutrients like calcium.[33] Yogurt does contain lactose; however, the cultures used to make it can help digest lactose in the body. While LI should be diagnosed and treated by a health care professional, the live cultures in yogurt can make it easier for people with LI to tolerate.[34–36] Greek-style and Icelandic-style yogurts are strained after being cultured, which can result in less lactose, more protein and less calcium than unstrained yogurts[9,37,38]* Lactose-free varieties of yogurt are also available.

*FDC ID: Traditional Icelandic skyr: 776018

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