

## **Trends in Milk Consumption Among Youth and Adults — United States, 2009–2010 Through 2017–March 2020**

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**Background:** Vitamin D is essential for bone health and osteoporosis prevention. More than 90% of the US population consumes less vitamin D than recommended. The Dietary Guidelines for Americans (DGA) dairy group, which includes dairy milk and fortified soy beverages, is a rich source of vitamin D. Alternative milks, including non-soy plant “milks,” are not included due to their lack of nutritional equivalence, but have become more available. We examined recent trends in milk consumption over time in the United States.

**Methods:** Using a limited 30-day food frequency questionnaire within the National Health and Nutrition Examination Survey, a series of cross-sectional surveys representative of the US population, we categorized participants ( $n = 52,190$ ) into three groups of milk consumers: any dairy or soy milk, only alternative milk, and no milk. Accounting for complex survey design, we calculated prevalence and analyzed time trends during 2009–March 2020 using logistic regression (unadjusted and adjusted for age, sex, race/ethnicity, and income) for each group among youth (aged 2–19 years) and adults (aged  $\geq 20$  years).

**Results:** The prevalence of youth consuming any dairy or soy milk in the previous 30 days decreased (95.0% in 2009–2010 to 88.6% in 2017–March 2020), only alternative milk increased (1.9% to 4.9%), and no milk increased (3.2% to 6.5%). Among adults, any dairy or soy milk decreased (82.1% to 68.8%), only alternative milk increased (1.8% to 7.6%), and no milk increased (16.0% to 23.5%). Trends were statistically significant ( $P < .001$ ). Adjusting for demographic changes did not alter the findings.

**Conclusions:** During 2009–March 2020, milk consumption patterns changed. When recommending dietary sources of vitamin D, the DGA should consider that fewer youth and adults are consuming dairy-group beverages. Alternative milks, which may not be fortified with vitamin D, are becoming more commonly consumed.