

Dairy Foods Can Help Close Nutrient Gaps

Hess JM, Cifelli CJ, Fulgoni VL. Energy and Nutrient Intake of Americans according to Meeting Current Dairy Recommendations. *Nutrients*. 2020;12(10):E3006.

Funded by National Dairy Council



STUDY OVERVIEW

A large, nationally representative study* found American children and adults, ages 2+, meeting the Dietary Guidelines for Americans (DGA) dairy food recommendations are less likely to be below recommendations for the following 12 important nutrients.

- Calcium⁺
- Magnesium⁺
- Phosphorus
- Protein
- Riboflavin
- Vitamin A⁺
- Vitamin B12
- Vitamin D⁺
- Selenium
- Zinc
- Potassium⁺
- Choline⁺

*Shortfall nutrient for the US population.

The study found fewer than 1 in 3 children ages 2 - 18 and roughly 1 in 7 adults ages 19+ consume the recommended amounts of dairy foods. The researchers concluded that it can be difficult to meet nutrient needs without consuming recommended amounts of dairy foods. Given that one serving of nutrient-rich, low-fat milk costs about \$0.20**, **dairy foods can be an affordable and accessible way to close this nutrient gap.**¹

* Data were from the National Health and Nutrition Examination Survey (NHANES) from 2013-2014 and 2015-2016.

** Based on US average price of unflavored, branded and private label milk, 1 gal. [Source: IRI Multi Outlet + Conv 2020, YTD ending 10-4-20]

Key Takeaway

Eating the recommended daily dairy servings could have a large impact on Americans' nutritional status.



SPOTLIGHT ON MILK AND YOGURT

Other nationally representative studies of children and adults report similar outcomes.

Milk consumption is associated with better vitamin D status

It is also associated with a higher probability of meeting recommended vitamin D blood levels. Therefore, milk consumption may be an effective strategy to improve vitamin D status in the U.S. population.²

Yogurt consumption is associated with higher nutrient consumption

Those who ate yogurt compared to those who did not had higher intakes of fiber, calcium, magnesium, potassium and vitamin D and had higher overall diet quality.³

National Dairy Council's (NDC) mission is to bring to life the dairy community's shared vision of a healthy, happy, sustainable world with science as our foundation.

On behalf of America's dairy farmers and importers, NDC strives to help people thrive at every age through science-based information on dairy's contributions to nutrition, health and sustainable food systems.

For more information visit www.USDairy.com

www.USDairy.com



National Dairy Council



@NtIDairyCouncil

Eating dairy foods as part of healthy eating patterns can help people consume a range of nutrients important for normal immune function.⁴

The ABCs of Immunity

Adequate Quality Sleep. Prolonged sleep disruption increases risk of infectious disease.⁵

Better Nutrition. Specifically, protein and vitamins A, D and B12 found in milk and protein, zinc, selenium and vitamin B12 found in cheese and some yogurts contribute to healthy immune function. Other food groups contribute other important nutrients for immune function like vitamins B6, C, E and folate, trace elements including iron, copper and magnesium and omega-3 fatty acids EPA & DHA.⁴

Carve Out Time for Exercise. Regular, moderate to vigorous exercise improves immune function across the lifespan.⁵

Decrease Stress. Enhancing physical and mental health through meditation and mindfulness can help enhance immune response.⁵



Age	Servings* (cup-equivalents)
2-3 years	2 servings of low-fat or fat-free milk, cheese, yogurt or fortified soy beverage**
4-8 years	2.5 servings of low-fat or fat-free milk, cheese, yogurt or fortified soy beverage
≥ 9 years	3 servings of low-fat or fat-free milk, cheese, yogurt or fortified soy beverage

*Serving sizes based on 2020-2025 Dietary Guidelines for Americans Healthy US Style Eating Pattern and Healthy Vegetarian Eating Pattern.

**Beverages fortified with calcium, vitamin A and vitamin D are included as part of the dairy group because they are similar to milk based on nutrient composition and in their use in meals.⁶



Did You Know? The vitamin C found in red pepper and the protein, vitamin B12, zinc and selenium found in yogurt all contribute to healthy immune function.

Roasted Red Pepper Dip

Total Preparation Time: 15 minutes

Makes 5 servings

Ingredients

- 1, 12-oz jar roasted red peppers, drained
- 2, 8-oz containers plain yogurt
- 1 can chopped green chilies, drained
- 1 garlic clove, minced

Instructions

Puree red peppers in food processor or blender. Drain excess liquid. Add remaining ingredients. Mix until blended and refrigerate. Serve with sliced veggies or whole grain pita bread.

References:

1. Hess, JM, Cifelli, CJ, Agarwal, S, Fulgoni, VL 3rd. Comparing the Cost of Essential Nutrients from Different Food Sources in the American Diet Using NHANES 2011-2014. *Nutr J.* 2019;18(1):68.
2. Torres-Gonzalez M, Cifelli CJ, Agarwal S, Fulgoni VL 3rd. Association of Milk Consumption and Vitamin D Status in the US Population by Ethnicity: NHANES 2001–2010 Analysis. *Nutrients.* 2020; 12(12):3720.
3. Cifelli, CJ, Agarwal, S, Fulgoni, VL 3rd. Association of Yogurt Consumption with Nutrient Intakes, Nutrient Adequacy, and Diet Quality in American Children and Adults. *Nutrients.* 2020;12(11):E3435.
4. Calder, PC, Carr, AC, Gombart, AF, Eggersdorfer, M. Optimal Nutritional Status for a Well-Functioning Immune System Is an Important Factor to Protect against Viral Infections. *Nutrients.* 2020;12(4):1181.
5. Trivedi, G, Saboo, B. The Risk Factors for Immune System Impairment and the Need for Lifestyle Changes. *J Soc Health Diab.* 2020.
6. USDA, HHS. 2020-2025 Dietary Guidelines for Americans. Washington, DC; 2020 [cited 2021 Jan 5]. Available from: https://www.dietaryguidelines.gov/sites/default/files/2020-12/Dietary_Guidelines_for_Americans_2020-2025.pdf