

Consequences of Removing Dairy Foods from the Diet of Adults Ages 19 to 50 Years

The dairy group (milk, cheese and yogurt) contributes substantial amounts of nutrients in the diet of 19-50 year old adults.¹

Calcium

- Calcium is a nutrient of public health concern according to the 2010 Dietary Guidelines for Americans.²
- Adults ages 19-50 years old consume 985 mg of calcium daily on average. If dairy was removed from the diet, average intake would decrease by 54% to only 451 mg of calcium per day.
- Consequently, the number of 19-50 year olds who would fall well below the recommended intakes for calcium would increase substantially.

Potassium

- Many adults 19-50 years old are consuming below recommended intakes for potassium,³ a nutrient of public health concern according to the 2010 Dietary Guidelines for Americans.²
- Removing dairy from the diet would decrease potassium intake by 18% from 2783 mg to 2291 mg daily.
- This would result in an even greater number of adults falling well below the recommended intake for potassium.

Phosphorus

- Most of the population ages 19-50 years old are meeting their recommended intakes for phosphorus.⁴
- A 30% decrease in phosphorus intake would result from removing dairy from the diet.
- Intakes would fall to 1008 mg from current average intake of 1436 mg per day with dairy.

Protein

- Most adults ages 19-50 years old are meeting their recommended daily protein intake (0.66 g per kg body weight).³
- Eliminating dairy would negatively impact adult protein intake. They would consume 18% less than they do with dairy (90.4 g per day with dairy, 74 g without).

Vitamin A

- Approximately six out of ten 19-30 year olds and about half of 31-50 year olds have inadequate daily intakes of vitamin A in their diet (625 retinol activity equivalents for men and 500 retinol activity equivalents for women).³
- Adults aged 19-50 years old currently consume 605 retinol activity equivalents in their diets. Removing dairy would cause a 33% drop leaving only 406 retinol activity equivalents in their diets.

Vitamin D

- Vitamin D is a nutrient of public health concern according to the 2010 Dietary Guidelines for Americans.²
- The dairy group is the largest contributor of vitamin D in the diet of 19-50 year olds.
- The average intake for total dietary vitamin D is 4.8 µg. Removing dairy from the diet would cause a significant decrease (59%) to only 2 µg, making meeting recommended intakes even more challenging.

Vitamin B₁₂

- Most men ages 19-50 years old are meeting their recommended intakes of vitamin B₁₂.³
- More than 90% of women 19-50 years old are meeting their recommended intakes of vitamin B₁₂.³
- Vitamin B₁₂ intake would decrease by 30% if the dairy group was not included in the diet. On average, adults 19-50 years old get 5.6 µg daily and that would drop to only 3.9 µg without compensation from other foods.

Riboflavin

- Most adults are meeting the recommended daily intakes for riboflavin.³
- Adults get an average of 2.4 mg per day of riboflavin from their diet.
- Eliminating dairy foods would decrease their riboflavin intake by 28% to 1.7 mg per day.

Magnesium

- About half of 19-50 year olds are not meeting their estimated needs for magnesium.⁴
- A 14% drop in magnesium would occur if dairy were removed from their diet. With dairy, adults get 303 mg of magnesium per day but if dairy were removed from their diet they would only get 262 mg per day.

Zinc

- Up to 13% of women and up to 6% of men 19-50 years old are falling short of recommended zinc intake.³
- Eliminating dairy products would decrease zinc intake significantly by 17%. Adults aged 19-50 years would only get 11.1 mg in their diet as opposed to 13.3 mg with dairy.

Fat

- It is recommended that adults get 20-35% of their total calories from fat.²
- The average fat intake for adults ages 19-50 years old is 90 g which means 34% of their average calories (2409 total calories) are coming from fat.
- Without dairy products in the diet, 32% of adults' calories would come from fat (698 calories from fat out of 2152 calories total).

Values include dairy in food mixtures (e.g. pizza, smoothies).

1. Dairy Research Institute™. NHANES (2003-2006). Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Health and Nutrition Examination Survey Data. Hyattsville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, [2003-2004; 2005-2006]. [<http://www.cdc.gov/nchs/nhanes.htm>]

2. U.S. Department of Health and Human Services and U.S. Department of Agriculture. Dietary Guidelines for Americans, 2010. 7th Edition, Washington, DC: U.S Government Printing Office, December 2010.
3. Moshfegh, Alanna; Goldman, Joseph; and Cleveland, Linda. 2005. *What We Eat in America*, NHANES 2001-2002: Usual Nutrient Intakes from Food and Water Compared to Dietary Reference Intakes. U.S. Department of Agriculture, Agricultural Research Service.
4. Moshfegh, Alanna; Goldman, Joseph; Ahuja, Jaspreet; Rhodes, Donna; and LaComb, Randy. 2009. *What We Eat in America*, NHANES 2005-2006: Usual Nutrient Intakes from Food and Water Compared to 1997 Dietary Reference Intakes for Vitamin D, Calcium, Phosphorus, and Magnesium. U.S. Department of Agriculture, Agricultural Research Service.

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