

What you need to know about dairy & bone health



A large randomized controlled trial by Luliano et al. showed that meeting dairy recommendations, by increasing calcium and protein intakes, decreased fall risk by 11% and fracture risk by 33% among older adults in assisted living facilities.

SCIENCE SAYS

When older adults increase their dairy intake to meet the recommended daily servings, it directly contributes to a reduction in falls and fractures.¹ **Dairy products provide important nutrients, like calcium, vitamin D, and protein, that support bone health.**



Low dairy intake: significant public health implications

Dairy consumption is critical across the life span, but particularly for older adults who consume less than half of the recommended 3 cups per day.² Advancing age is associated with an increased prevalence of chronic illness, including loss of muscle mass, fragility, and bone weakness, which amplify the risk of falls and fractures³ and need for full-time institutionalized care.⁴ In fact, millions of older adults (65 and above) – more than one in four – experience a fall each year.⁵ These falls can result in broken hips which account for more than 300,000 hospitalizations among aging adults in the U.S., annually.⁵

Preventing falls through nutrition has the potential to save thousands of dollars in healthcare costs and improve quality of life.



Research suggests dairy foods decrease fracture & fall risk

In a two-year, cluster-randomized controlled trial¹ published in **The British Medical Journal**, researchers examined the impact of consuming an additional 1.5 servings of dairy foods on fractures and falls among older Australian adults in 54 residential facilities.

While there was no group difference in all-cause mortality, the results of this study strengthen the available evidence on dairy and bone health. **Providing residents with 1.5 additional servings of dairy foods in order to meet the recommendation is an effective and accessible intervention for assisted living facilities to reduce the risk of falls and fractures.**

The dairy intervention group experienced



▼ **33%**

reduction in risk of fractures of any type



▼ **46%**

reduction in risk of hip fractures



▼ **11%**

reduction in risk of falls relative to controls

What's to love about dairy

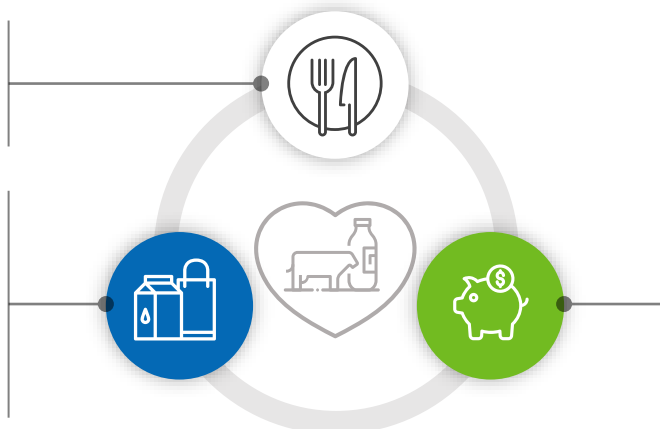
A TRIFECTA

Delicious

Dairy foods can provide creaminess, tanginess, and sweetness to meals and snacks.

Widely available & versatile

Dairy foods are plentiful! Enjoy the many versatile products made from milk, like cheese, Greek yogurt, kefir, cottage cheese or pudding. Dairy foods can be used as ingredients and flavorful toppings in a variety of dishes.



Affordable

Research shows that dairy foods are affordable sources of calcium, potassium and vitamin D — two nutrients underconsumed by most Americans.⁶ For as little as \$0.60 a day, people can meet the dairy recommendations for dairy.⁷

Amp up your dairy for bone health

Making small changes to include more dairy throughout the day can help you meet your dairy needs to enhance bone health and overall wellness



Berry Delicious Overnight Oats

<https://www.usdairy.com/recipes/berry-overnight-oats>

INGREDIENTS

- 1/4 cup yogurt, low-fat strawberry
- 1/4 cup milk, low-fat or fat-free
- 1/2 cup berries, frozen, unsweetened
- 1/3 cup oats, quick-cooking, dry

INSTRUCTIONS

1. Combine all ingredients in a cup or jar. Stir to mix thoroughly
2. Cover and refrigerate several hours or overnight
3. Top each cup with 1 oz. of vanilla yogurt, 1 tablespoon of berries, or 1/2 an ounce of your favorite nuts



Snack on some pudding

Use low-fat milk to make pudding — mix in flavorful fruit like berries.



Sip some dairy

Use milk in your favorite beverages like tea, coffee, or hot chocolate to add 13 essential nutrients, including calcium and protein.

Lactose intolerant?

No problem! Lactose-free milks offer the same nutrients and bone-supporting benefits as regular milk.



Seek ways to add nutrition + flavor

Top toast with ricotta or cottage cheese and fresh fruit or veggies. Add whey protein powder to shakes, mashed potatoes and soups. Sprinkle your favorite cheese on top of salads or grain bowls.

REFERENCES

1. Iuliano S, Poon S, Robbins J, et al. Effect of dietary sources of calcium and protein on hip fractures and falls in older adults in residential care: cluster randomised controlled trial. *BMJ*. 2021;375:n2364. Published 2021 Oct 20.
2. U.S. Department of Agriculture and U.S. Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. 9th Edition. December 2020. Available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov).
3. Prince MJ, Wu F, Guo Y, et al. The burden of disease in older people and implications for health policy and practice. *Lancet*. 2015;385(9967):549-562.
4. Australian Institute of Health and Welfare 2018. Hip fracture incidence and hospitalisations in Australia 2015–16. Cat. no. PHE 226. Canberra: AIHW.
5. Centers for Disease Control and Prevention. Important Facts about Falls. Updated Aug 2021. <https://www.cdc.gov/homeandrecreationalafety/falls/adultfalls.html>
6. 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. Published 2019 Nov 9.
7. Based on U.S. average gallon milk price. Source: IRI Multi Outlet + Conv. 2020, YTD through 10/04/20.