

# Adequate protein intake associates with lower risk of frailty

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Adequate intake of protein is associated with a reduced risk of frailty and prefrailty in older women, according to a new study from the University of Eastern Finland and Kuopio University Hospital. Adequate protein intake was defined as at least 1.1 g per kg of body weight. The findings were published in *European Journal of Nutrition*.

Frailty is a multidimensional condition common in older adults, and those affected are at an elevated risk of dependence and mobility loss, fall, fracture, multimorbidity and mortality. Evidence shows a strong link between frailty and malnutrition, and [protein](#) may be the most important nutrient at play, mostly through its effect on muscle health. The Nordic Nutrition Recommendations (2012) suggest protein intake of 1.1-1.3 g per kg of body [weight](#) as adequate for preserving physical capacity in [older adults](#). However, there is a paucity of data regarding the association of protein intake with frailty. The newly published study examined associations between protein intake and protein sources with frailty status in older women.

Participants were 440 women aged 65—72 years enrolled in the Osteoporosis Risk Factor and Prevention—Fracture Prevention Study. Their protein intake in g per kg of body weight was calculated using a three-day food record at baseline in 2003—2004. At the three-year follow-up in 2006—2007, frailty phenotype was defined as the presence of three or more, and prefrailty as the presence of one or two of the Fried criteria: low grip strength, low walking speed, low physical activity, exhaustion (defined using a low life satisfaction score), and

[weight loss](#) of more than five percent.

The study shows that getting the recommended amount of dietary protein was associated with a lower risk of frailty and prefrailty in [older women](#). Moreover, the consumption of animal protein was associated with a lower likelihood of frailty. The recommended protein intake (1.1-1.3 g per kg of body weight) for an older person weighing 70 kg corresponds to a minimum intake of 77 g of protein. To illustrate, the protein content of a chicken breast per portion is 25 g, one boiled egg 6 g, and two slices of whole grain bread 6 g.

"The public health recommendation is to eat an optimal diet with an adequate intake of protein. Adequate [protein intake](#) is important for muscle health and, according to the new results, may also prevent [frailty](#). However, further research is still required in this area," Senior Lecturer Arja Erkkilä from the University of Eastern Finland concludes.

**More information:** Masoud Isanejad et al. Higher protein intake is associated with a lower likelihood of frailty among older women, Kuopio OSTPRE-Fracture Prevention Study, *European Journal of Nutrition* (2019). [DOI: 10.1007/s00394-019-01978-7](https://doi.org/10.1007/s00394-019-01978-7)

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