

Am J Clin Nutr. 2014 Jul;100 Suppl 1:329S-35S.

Vegetarian diets and bone status.

Tucker KL.

Osteoporosis is a common chronic condition associated with progressive loss of bone mineral density (BMD) and compromised bone strength, with increasing risk of fracture over time. Vegetarian diets have been shown to contain lower amounts of calcium, vitamin D, vitamin B-12, protein, and n-3 (ω -3) fatty acids, all of which have important roles in maintaining bone health. Although zinc intakes are not necessarily lower quantitatively, they are considerably less bioavailable in vegetarian diets, which suggests the need for even higher intakes to maintain adequate status. At the same time, healthy vegetarian diets tend to contain more of several protective nutrients, including magnesium, potassium, vitamin K, and antioxidant and anti-inflammatory phytonutrients. On balance, there is evidence that vegetarians, and particularly vegans, may be at greater risk of lower BMD and fracture. Attention to potential shortfall nutrients through the careful selection of foods or fortified foods or the use of supplements can help ensure healthy bone status to reduce fracture risk in individuals who adhere to vegetarian diets.