

THE PLANT-BASED LIFESTYLE

Does fish oil improve heart health?

The usual reason given for taking fish oil is to help prevent heart disease. Fish oil contains EPA, DHA, and ALA, the long-chain fatty acids (called omega-3s) which were thought to be protective against heart disease. However, studies show that these omega-3s taken as supplements do not protect against heart disease and other chronic conditions. According to a study in the *Cochrane Database of Systematic Reviews*, "Long-chain fatty acids from fish oil supplements did not protect against all-cause mortality and did not reduce the risk for cardiovascular events. Results showed increased consumption of ALAs from plant-foods provided a protective effect against coronary heart disease, arrhythmia, and other cardiovascular events. The authors note that previous recommendations for fish oil supplementation derived from biased research." ([Abdelhamid AS, Brown TJ, Brainard JS, et al. Omega 3 fatty acids for the primary and secondary prevention of cardiovascular disease. Cochrane Database Syst Rev. Published online July 18, 2018.](#))



What should I know about supplements?

In general, only two supplements make my list of required add-ins to a healthy, whole-foods, plant-based (WFPB) diet (defined as one where you are only eating whole or minimally processed plant foods). The first is B12. B12 is an essential nutrient for healthy nerve and blood cells and helps to make DNA. A B12 deficiency can be a very serious problem leading to nerve damage and even stiffening of the arteries. B12 comes from microorganisms in the dirt. When animals eat off the ground they are getting some of the dirt and hence the B12 that then ends up in their muscles. For vegans, who do not eat animal muscle and do not eat dirt, we must get our B12 from another source. Breakfast cereals are typically fortified with B12 as is nutritional yeast. Supplements are also a source. The current recommended amount (as of 1/1/20) is 4.5mcg three times per day. Since it may be difficult to meet all your B12 needs through foods, it is imperative that someone on a WFPB diet take a B12 supplement. The recommendation to plant-based eaters is to take a B12 supplement of at least 50 micrograms of cyanocobalamin or methylcobalamin once a day or 2000 micrograms of cyanocobalamin or methylcobalamin once a week. Even non-vegans should probably take a B12 supplement as B12 from food is often poorly absorbed.

Do calcium supplements improve bone health?

While calcium is an absolutely essential mineral for bone health, the source of that calcium matters a great deal. Calcium supplementation is neither effective nor safe. Dr. Michael Gregor reports that “Calcium intake in general does not seem to be related to hip fracture risk at all, and when people have been given calcium supplements, not only was there no reduction in hip fracture risk, an increased risk is possible. The randomized controlled trials suggested a 64% greater risk of hip fractures with calcium supplementation compared to just getting like a placebo sugar pill.” (source: [Are Calcium Supplements Effective](#)). Nor is it a good idea to think that all that dairy is going to help get calcium into your bones. It is best to get calcium from whole plant foods. “In a 12-year Harvard study of 78,000 women, those who drank milk three times a day actually broke more bones than women who rarely drank milk.. Similarly, a 1994 study of elderly men and women in Sydney, Australia, showed that higher dairy product consumption was associated with increased fracture risk. Those with the highest dairy product consumption had approximately double the risk of hip fracture compared to those with the lowest consumption.” (source: [Calcium and Strong Bones](#)). For more on how to build strong bones check out the two linked articles above.

The second supplementary add-in to a WFPB diet is D₃. D₃ is essential to the absorption of calcium and helps regulate our blood PH. While our bodies will make plenty of D₃ if we get adequate sunshine (10-20 minutes a day not filtered through sunscreen), the truth is that the vast majority of us do not get adequate sunshine on our skin especially if you live in the north. Therefore, the Physicians’ Committee for Responsible Medicine (PCRM) recommends 2000IUs of D₃ daily.

The question always arises about the long-chain fatty acids EPA and DHA (omega-3s) and whether supplements are necessary (for more on what these fatty acids are see the previous newsletter “Are Fats Good or Bad?”). While opinions differ even in the plant-based community, PCRM recommends getting these essential fatty acids from whole plant foods rather than supplements (see sidebar “Does fish oil improve heart health”). Sources include ground flax seed, chia seeds, walnuts. Omega-3 supplementation does not offer protection against cardiovascular disease nor does it slow mental decline in Alzheimer’s patients.

Finally, what about calcium supplements? Calcium is an essential mineral for healthy bones, but supplements do not work and can cause problems. See the sidebar “Do calcium supplements improve bone health?” for more information.

Conclusion

If you are eating a whole-foods vegan diet (not a processed junk food vegan diet) you will get all the essential nutrients you need with the exception of B₁₂ and D₃.

Since we don’t eat dirt to get B₁₂ and do not get enough sunshine to make D₃ it is recommended to take both B₁₂ and D₃ supplements.



Want to know more about how to begin eating a healthier whole-foods, plant-based diet? Email alexandra@resolvehealthandfitness.com to learn about our whole-food plant-based education programs, consultations, and meal plans.