

19

OMEGA-3, CALCIUM, IRON, VITAMIN D AND B12

By Dr. Kerry Graff

In addition to protein, there are a few other nutrients that people are concerned about when they consider adopting a plant-based diet. In this chapter, I draw on the collective wisdom of Dr. T. Colin Campbell and the five medical doctors featured in the first three chapters of “Healthy Eating, Healthy World”--Drs. Caldwell Esselstyn, John McDougall, Dean Ornish, Neal Barnard, and Joel Fuhrman.

The good news is that you don’t ever need to eat ANY animal-based foods in order to get all the vitamins and minerals you need. And you probably won’t need much supplementation either, with the exception of B12 and possibly Vitamin D.

Here are five frequently asked questions that I hear in my office along with my replies:

1. Don’t I need omega-3 fatty acids from fish or fish oil supplements? This was addressed when going over the survey. Basically, you get a perfect ratio of omega-3 to

omega-6 from eating whole plants and do not need to do anything specific to be sure you obtain extra omega-3. In addition, a recent meta-analysis showed no survival benefit from taking fish oil supplements, despite the billion dollars or more per year that we spend on them.

Another recent study showed many fish oil supplements are contaminated with heavy metals, which are toxic. Just throw them out and never buy them again! If you remain concerned about getting enough omega-3 while eating a plant-based diet, some good plant-based sources of this nutrient are walnuts and flax, chia, and hemp seeds, but you *do not need them*.

2. Don't I need calcium from dairy to prevent osteoporosis? Thanks to an enormous amount of advertising by the dairy industry, just about everyone believes eating dairy builds strong bones. In reality, nothing could be further from the truth. In fact, countries with the highest dairy consumption have the highest rates of osteoporosis and bone fractures! How can this be?

The consumption of animal protein (in the form of animal flesh as well as calcium-rich dairy products) actually promotes bone loss. Proteins from plants do not have this blood acidifying effect. Our bodies can't tolerate this and pull calcium out of our bones to neutralize the acid (think Tums). Plant proteins have different properties than animal proteins and don't cause the blood acidity. Thus, they do not contribute to bone loss.

The experts mentioned above agree that minimizing calcium loss by avoiding animal-based foods is far more important for bone health than maximizing calcium intake. By eating a diet of whole plants, it would be impossible for you not to get enough calcium (as well as all of the other minerals you require) as long as you avoid the animal

products that deplete the calcium from your bones.

3. Don't I need to drink milk to get Vitamin D?

Vitamin D occurs naturally in very few foods and milk is not one of them. However, cow's milk, like many soy and nut milks, is fortified with Vitamin D and the dairy industry has been doing that for so long, that people naturally assume that they need to drink cow's milk to get enough Vitamin D.

Technically, Vitamin D is not a vitamin, but a hormone produced by sunlight on your skin. That is the way nature intended humans to acquire Vitamin D and, if possible, is the way we should get it. When Vitamin D is made in the skin, there is a mechanism that prevents us from accumulating too much, even if we get a lot of sun exposure. Taking supplements of Vitamin D in the form of pills bypasses the system that prevents excessive storage and levels can become toxic.

Living in upstate New York, however, many of my patients aren't going to be making Vitamin D in their skin much of the year. In addition to having a lot of cloudy days, we often work jobs that keep us inside. We cover up to stay warm and, even if we do go outside when the weather is warm enough to show some skin, many of us slather ourselves with sunscreen. While this may keep our skin from frying, it also blocks all the Vitamin D formation! So, should I encourage my patients to take a supplement, at least in the winter months, to keep their levels in a "normal range?"

Well, let's see what the experts say. The US Preventive Services Task Force, an independent organization that evaluates the effectiveness of various treatments, concluded that there is insufficient evidence to conclude for or against taking Vitamin D as a supplement--unless

you are over 65 and at increased risk of falls, in which case they recommend it.

Until we have more specific data, I will be happy to write everyone a prescription to go to Florida for at least a week in the winter to stock up on their Vitamin D! Joking aside, get some sun on skin that hasn't been covered with sunscreen--enough to get a little color but not enough to burn--whenever you can. That rule works well, since light-skinned people need less sun to generate their Vitamin D than darker skinned people and UV penetration depends on time of the year and time of day, along with other factors.

4. Don't I need to eat meat to prevent anemia? Once again, a varied diet rich in whole, plant-based foods will provide you with all the iron that you need to make red blood cells. Although red meat does contain a lot of iron, it also has a lot of fat, cholesterol and animal protein (which you now know is *not* a good thing) which don't tag along when you are getting iron from plant sources. In addition, iron overload is a significant problem in people eating SAD, causing additional health problems. With plants, you get enough iron but not too much.

5. Aren't plant-based diets deficient in Vitamin B12? This is where you might want to take a routine supplement or at least monitor the levels in your blood occasionally. Vitamin B12 is actually made by the bacteria in dirt. Why didn't nature put this vital nutrient in plants? She did in that she didn't plan on our food consumption to take place in such a sterile environment!

Our ancestors weren't so meticulous about washing their vegetables and got B12 from dirt or insects in some of their foods. We do not recommend you eat bugs or dirt!!!

Please wash those fruits and veggies well, especially if you buy non-organic ones that have been treated with pesticides!

If you had been eating meat until you read this book, you likely have several years of B12 in storage. That is because animal-based foods contain Vitamin B12 because animals eat dirty plants. After a couple of years of eating a whole food, plant-based diet, you may need to start replacing B12.

That said, many plant-based foods are now fortified with B12 (almond milk, for example) so you may not need to take it in a pill at all, depending on how much of these B12 fortified foods you eat. Your doctor can check your level and let you know how much, if any, you need. 400mcg daily is usually enough and you may not even need that much.

The Bottom Line. You will get nearly everything your body needs from a whole food, plant-based diet. Other than a B12 supplement and possibly Vitamin D depending on your circumstances, in my opinion, practically all other vitamin supplements are a complete waste of money and are even potentially harmful! Taken as supplements, vitamins are not in the same combinations and proportions as they are found in nature.

For example, foods that contain a lot of beta-carotene decrease risk of cancer, but beta-carotene supplements on their own were shown to actually increase the risk for cancer! Just another reminder not to fool with Mother Nature.