

## Plant-Based Eating Workshop FAQ

**1. Can you eat as many fruits and vegetables as you want without gaining weight? Does fruit have too much sugar?**

*Non-starchy vegetables are very low in calories and very satiating. It is nearly impossible to gain weight on a diet of mostly non-starchy vegetables! That's why people eating a Whole Food, Plant-based diet must eat some starchy vegetables like potatoes and winter squash, as well as beans, lentils, and whole grains, in order to get enough calories. Most fruit is slightly higher in calories, but contains a lot of water and valuable nutrients, leading to high satiety. Of course, whether or not you gain weight depends on what else you are eating, and also on your activity level. High-fat fruits such as olives, coconut, and avocados may add too much fat if eaten in large quantities, and reduce your ability to reverse chronic disease. But eating a diet that is very low in fat and animal products, and very high in fruits and vegetables has been found to be the best predictor of normal weight, as you saw in the presentation.*

**2. What vitamins deficiencies (iron, Vitamin D, Vitamin B12) are of potential concern if you choose to follow a WFPB diet? Does it require supplementation?**

*As seen in the presentation, the one item of concern is Vitamin B-12. It is also a concern for many people over age 50, who may not absorb B-12 as well as they used to, regardless of their dietary pattern. B-12 may require supplementation, and some science suggests using a supplement if you are eating a plant-only diet. If you are eating a variety of foods, iron should not be a problem, but if you already have been diagnosed with iron deficiency anemia, see #3. "Vitamin D" is actually a hormone produced in humans in response to sunlight. Be sure to get 15 minutes or so of outdoor time every day you can, without sunscreen. If you're staying out longer, put your sunscreen on.*

**3. Can someone with iron deficiency anemia be plant-based?**

*Yes, people who eat a plant-based diet are no more likely to be iron-deficient than anyone else, because most of the iron we get in our diets comes from plants anyway.*

*<https://www.ncbi.nlm.nih.gov/pubmed/25369923> But if you have been diagnosed with iron-deficiency anemia, monitoring would be important, and it is critical to choose some foods that are high in iron each day. Some good choices would be beans, peas, and lentils; soy such as tofu, tempeh, and natto; nuts, nut butters, and seeds, especially pumpkin, sesame, hemp, and flax; dark green leafy vegetables; white potatoes; mushrooms; prunes, olives, and mulberries; and whole grains—particularly ancient grains like amaranth, quinoa, and spelt, as well as oats; and, finally, some herbs and blackstrap molasses! As you see, you won't have difficulty finding high-iron plant foods. You can find details about how much each contains on websites such as [nutrition.gov](http://nutrition.gov), [cronometer.com](http://cronometer.com), [myfooddata.com](http://myfooddata.com). We don't see people having problems from too much plant iron like we sometimes see with too much iron from animal foods.*

*<https://www.ncbi.nlm.nih.gov/pubmed/24401818>*

**4. Are plant-based frozen foods, like frozen veggie burgers, a good option to include?**

*I do not recommend any food that is highly processed. Most frozen or packaged prepared foods contain additional chemicals to preserve flavor, texture, or color. It is easy to make bean or veggie burgers at home, without added chemicals and using only whole foods. Most commercial options contain added chemicals and/or fats. I have not personally examined ALL options, though, so your best bet is to carefully read the ingredient list.*

**5. How do you encourage kids to follow a WFPB diet while still getting all the nutrients they need?**

*Most children love fruit and some vegetables, like baby carrots or celery with peanut butter. Encourage them to increase their consumption of these foods, and then to try new foods. Make sure there are some fruits or vegetables you know they like at every meal, so if they discover they really don't like a particular new food, they won't have a meal without the plant foods they need. In the long term, a colorful plate with a variety of foods is important. Children also love to eat food they have helped to grow or helped to prepare. Including them in the planning of the meals they will eat can help, too. They like doing things to help others, and there are so many reasons to eat plant-based diets, including reducing damage to Earth. In NYC, the schools have Meatless Mondays and this article includes a link with a principal talking about the enthusiasm of the students and the benefits he sees. <https://www.pcrm.org/news/blog/new-york-city-schools-adopt-meatless-mondays>. I was particularly intrigued to read that the children were talking their parents into more vegetables once they tried them, not the other way around!*

**6. Do some blood types thrive better on a WFPB diet?**

*All blood types thrive on a WFPB diet. It is the one diet that has been consistently shown to reduce and reverse chronic disease across populations.*

**7. What is the difference between frozen, fresh, and canned fruits and vegetables and which one is ideal?**

*I am not being facetious when I say the ideal one is the one you can get and will eat! With that said, canned products are more highly processed, so they have lower nutrient content. In addition, many cans have linings that contain many chemicals that may be harmful to the body. <https://www.ncbi.nlm.nih.gov/pubmed/26117403> Fresh, locally sourced organically grown produce is probably the best, but produce grown farther away may have been picked before peak ripeness. Food that is ripened in transit has fewer nutrients, because it is no longer being "fed" by the soil and the sun. Frozen fruits and vegetables are usually picked at peak ripeness and flash-frozen before transport to preserve their nutrient content, so frozen fruits and vegetables are a great option.*

**8. My pediatrician recommends whole cow's milk products. Should we not be giving these to our kids?**

*Unfortunately, many doctors do not have the opportunity to learn about nutrition. Because it wasn't taught in medical school, it's not on their radar for later reading, either. Milk and milk products are certainly not needed by children, as demonstrated by the many children who thrive but who cannot consume dairy products due to lactose intolerance. In fact, about 65% of humans are lactose-intolerant after weaning. <https://ghr.nlm.nih.gov/condition/lactose-intolerance> Associations with dairy consumption have been found with later infertility <https://www.ncbi.nlm.nih.gov/pubmed/19496976>, and Type 1 Diabetes <https://www.ncbi.nlm.nih.gov/pubmed/8112184>, to name a few negative outcomes. The study done in China by Cornell University and Oxford University in the 1980s, showing associations between milk protein (casein) and some cancers, spiked today's growing interest in plant-based eating. Milk contains growth factors designed to grow a calf to an adult in a short time. Growth factors also promote cell division and growth, so they can promote cancer growth as well as more desirable growth.*

**9. What is your opinion about fiber and gastroparesis?**

*This is something that should be discussed with your doctor and dietitian. There is some evidence in the medical literature that fiber needs to be controlled, but there is little consensus at this time about what types of fiber or how much. There are some recent studies of various other GI disorders and diseases that are showing that a gradual increase of fiber intake can be beneficial, but I have not seen anything specific to this disorder. I wish I had a better answer for you! [For those who may be wondering about IBD, there is evidence for increased dietary fiber (which comes only from plants), especially for prevention but also for reversal. Here's a link to one article: <https://www.ncbi.nlm.nih.gov/pubmed/21468064>]*

**10. What are your thoughts about lectins in foods like legumes, nightshades, and grains?**

*Lectins are easily deactivated by cooking. The biggest danger comes from eating uncooked kidney beans. However, the best dietary predictor of survival in older people is legumes (cooked). <https://www.ncbi.nlm.nih.gov/pubmed/15228991> We have vast quantities of research showing that fruits, vegetables, beans, and grains provide many health benefits. Indeed, it turns out the societies that have the most centenarians eat mostly lectin-containing foods. The Blue Zones organization has been doing research on this for many years. <https://www.bluezones.com/> Tomatoes (a nightshade) have been shown to reduce chronic diseases. Of course, if you have an allergy or food sensitivity, you should avoid that food, and if you are taking medication, though, check with your pharmacist about possible food interactions.*

**11. What plant-based milk option is the best?**

*Each plant has different nutrients, so a variety would be best, to provide benefits across the nutrient spectrum. I recommend looking for unsweetened versions, and trying to find plant milks without added chemicals. A great alternative is making your own, if you have time and enjoy that sort of thing.*

**12. Should I take a multivitamin if I am eating the recommended daily amount of fruits and vegetables while also decreasing animal protein intake?**

*No. You should be able to get all your nutrient needs, with the possible exception of Vitamin B-12, from the food you eat. Supplementing can cause nutritional imbalances, too. In a famous lung cancer study, scientists supplemented with beta carotene because they had seen that people with more beta carotene in their blood had less lung cancer. Unfortunately, because only part of the nutritional spectrum was in the supplement, rates of lung cancer went up. In addition to cutting out any additional phytonutrients (plant nutrients) in the original foods that may boost the effectiveness of the recognized nutrients, supplements are poorly regulated—you may get more or less of the substance than you think because it is not required that manufacturers test how much of the supplement is actually available to the body. They just have to tell you how much they put into the product. Do be aware that, in many cases, recommended amounts of fruits and vegetables are minimum recommendations—the amount needed to keep you from a deficiency disease—not necessarily optimal amounts. There is no documented disadvantage to eating more servings. So unless you have been diagnosed with a deficiency, you should not need to use supplements. If you have been diagnosed, have your doctor prescribe the correct amount and test you regularly.*

**13. Can you still get enough protein on a WFPB diet if you do not like beans or tofu?**

*All foods contain some protein. Nuts and seeds are full of protein, but they are also high in fat, so should be consumed carefully. People in the U.S. are overly concerned with protein. It is impossible to develop a protein deficiency if you eat enough calories from whole foods to*

*maintain normal body weight. We should really be more concerned with eating too much protein, not too little. <https://www.ncbi.nlm.nih.gov/pubmed/24967251>*

**14. Can diet sodas be a healthy part of a WFPB diet?**

*No. Sodas of any kind are not nutritious, so they don't fit into a healthy diet. Diet sodas can cause sugar cravings, and added sugars can lead to cardiovascular disease. They are also linked to weight gain, which raises risk of chronic disease.*

*<https://www.ncbi.nlm.nih.gov/pubmed/25128835>*

**15. What are some ways to make a WFPB diet budget-friendly?**

*First of all, not buying meat will immediately reduce your expenses. A quick glance at meat costs at my local grocery shows \$4.99 - \$12.99 per pound for pork and beef, and \$2.99-\$6.99 for chicken. Fish is much higher. A pound of these products is usually suggested for 4 servings. A pound of beans costs \$0.99 - \$1.99 and serves 8 - 12. Choosing grains, such as oatmeal, over animal products for breakfast is extremely cost-effective, too. The warehouse stores sell 10 pounds of Old Fashioned Oats for less than \$10. Watch grocery advertisements for weekly produce specials and build your menus around them. If no great specials jump out at you, check frozen options (see question 7). If you can find locally-grown produce, it is usually less expensive because it doesn't incur transportation expenses. Local, in-season produce also gives you lots of the nutrients you need because it is usually picked at peak ripeness. Finally, avoid food that is pre-prepared whenever possible. Buying ingredients and making your own meal is much less expensive than paying for labor as well as ingredients. Lastly, if you love to garden, consider growing your own food. A great way to start is growing fresh herbs.*

**16. Can drinking juice be a healthy part of a WFPB diet?**

*If it is tomato juice! Tomato juice has been found to have more antioxidants than the tomato itself. <https://journals.sagepub.com/doi/abs/10.1177/1559827610387488> Try for those without added salt. There are several reasons it is better to eat the fruit. If you've ever used a juicer (not a pulverizer), then you've seen all the pulp that's left behind. A lot of the nutrients are in the pulp, and they don't end up in the juice. The juice is mostly sugars and water. So the nutrient count is lower than in the fruit or vegetable itself. A second problem is that you aren't eating the fiber. The fiber slows the absorption rate of the sugars, so you don't get hungry as quickly after eating it. A third problem is that people don't seem to compensate for liquids they drink (if you eat food now, you eat less food later, but that doesn't seem to be the case with drinks) so you may be increasing your calorie intake above what your body needs, with possible weight gain as the result. Satiety is lower with liquids, too. <https://www.ncbi.nlm.nih.gov/pubmed/10878689>*

**17. Should I take a probiotic if I follow a WFPB diet?**

*I don't recommend that you do. They should not be needed. Plant-based diets are loaded with prebiotics. That means they provide your "good" gut bacteria with the "food" they need to thrive and reproduce. Your gut has about 3,000 square feet of surface area, and it is protected by only one layer of cells! This thin layer is kept alive by a short-chain fatty acid called butyrate, made by our gut bacteria from the fiber we eat. Inflammation of this layer can be reversed in a few weeks by providing it with butyrate. Our bacteria "want" to keep us healthy so they can continue to live inside us. If we don't eat enough fiber, we can't keep making the butyrate to keep our cell lining healthy. Our body is historically used to getting up to 100 grams of fiber per day. The average person in the US gets about 13 grams. Our body hasn't evolved to understand "not enough fiber," so it reacts to this condition by assuming there is too much bad bacteria, and it becomes*

*inflamed to try to fight the bad guys. The thought used to be that probiotics could reduce the inflammation, but that doesn't really seem to work, because there still isn't enough fiber coming in, or enough butyrate being produced. But all that fiber you're eating with a WFPB diet provides plenty of food for the bacteria. Problem solved. Some food also provides probiotics. Fermented foods are good examples (think Kimchi, sauerkraut, pickles, olives in brine, natto). You don't have to add starter when you make them, because the bacteria needed come on the vegetables right from the fields. And, indeed, fermented foods are beneficial to the gut! The one instance in which probiotic supplements might be helpful is when you are taking antibiotics, which kill both the good and bad bacteria indiscriminately. Not enough research has been done yet to determine if just continuing to eat lots and lots of fiber-containing foods can counteract the damage from the antibiotic. Finally, as with vitamins, much of the probiotic you take is eliminated from the body without making a change to your gut biome.*

**18. I've heard that soy can cause negative effects to estrogen levels. Is this true?**

*That is exactly what health professionals used to believe. But we know more now. There are 2 kinds of estrogen receptors in the human body. The beta estrogen receptor was discovered around 5 years ago. Different cells have different types of receptors. Soy phytoestrogens prefer to bind to estrogen receptor beta--not estrogen receptor alpha, to which animal estrogens bind preferentially. So when you eat a cup of soybeans (or the equivalent in other soy products, such as tofu), most of these isoflavones bind to estrogen receptor beta. There is not much alpha activation at all. The negative effects of blood clots and gynecological diseases (including breast cancer) come from the alpha receptors. Women who ate the most soy had 30-50% fewer cancers. Soy has been found to be protective of the breast, too. Women eating high amounts of soy had a 58% lower incidence of cancer. Cancer cells have alpha estrogen receptors, not beta receptors. What if the phytoestrogen from soy accidentally hits an alpha receptor? The affect is up to 100 times less potent than when hormonal estrogen attaches. The phytoestrogens in soy work like tamoxifen to shut down estrogen's effects in breast cancer. Even for breast cancer survivors taking tamoxifen, the Life After Cancer Epidemiology Study found ½ serving of soy to be additionally protective against recurring cancers.*

<https://link.springer.com/article/10.1007/s10549-009-0321-5> *The liver also has only alpha receptors, so blood clotting isn't a factor with soy, either. For bone health, human bone cells carry beta estrogen receptors, and there is a slight benefit to bone health when women eat soy. And no, men do not become feminine when they eat soy!*

<https://www.sciencedirect.com/science/article/abs/pii/S0015028210003687> *There is some question about people who suffer with hypothyroidism, so limiting soy consumption to one or two servings per day may be recommended for those members of the population, at least until more research is in. Check with your doctor or pharmacist, if you are on thyroid-replacement drug therapy. Of course, if you have a soy allergy, you should avoid it. Also, much of our soy production in the U.S. is genetically modified and sprayed with Roundup, which has been linked to cancers in many countries of the world. If you can source organically produced soybeans and soy products, or at least those labeled as non-GMO, that might be best.*

[https://journals.lww.com/nutritiontodayonline/Abstract/2013/03000/Exploring\\_the\\_Soyfood\\_Controversy.5.aspx](https://journals.lww.com/nutritiontodayonline/Abstract/2013/03000/Exploring_the_Soyfood_Controversy.5.aspx) *The current recommendation is to limit soy servings to no more than 7 per day—not because it is bad for you, but because you may limit the variety of foods you can eat before you become full—and variety is important.*

### **19. What plant-based protein supplement is the best?**

*I do not recommend protein supplements. There is much confusion about protein in the U.S. We don't really have any evidence of dietary protein deficiency. In the 1970s the idea that we must consume massive amounts of protein was debunked, but the word-of-mouth mythology that surrounds protein continues. Look at human breast milk—about 1% protein by weight. Even our developing babies don't need much protein. Chances are, if you are deficient in protein it is because you are consuming a lot of processed (junk) food instead of "real" food. If your diet becomes more nutritious, the protein is likely to take care of itself. Of course, if you have been diagnosed with a protein deficiency, you should discuss effective supplements—or, better yet, effective food choices—with your diagnosing physician or your dietitian.*

### **20. How much protein do I need?**

*The current understanding is that adults require 0.8 – 0.9 grams of protein per healthy kilogram of body weight per day. (If you are overweight, the fat weight doesn't get added into the equation. If you are calculating your own needs, go on your recommended weight.) This means that a woman whose ideal body weight is 110 pounds would need about 44 grams of protein per day. Total. Even if you exercise (which I hope you do). If you are an elite athlete, in a sport that requires significant additional muscle mass, such as power lifting or Olympic weightlifting, you might need up to 1 gram per kilogram of body weight. You can easily consume it with a nutritious diet containing lots of plant foods. A cup of garbanzo beans has 14 grams of protein in it.*

*Be more concerned about animal protein excess, which can lead to disorders of bone and calcium balance, kidney problems, increased risk of some cancers, liver problems, and coronary artery disease.*

<https://www.ncbi.nlm.nih.gov/pubmed/24967251>

### **21. Sample meals and snacks**

*Here are some suggestions:*

*Breakfast: ½ cup dry Old Fashioned oatmeal cooked in water with 1 teaspoon of ground flax seed (optional), cinnamon to taste, a tablespoon of raisins or dates and a tablespoon of nuts, a sliced banana or a cup of berries, and a pinch of salt (optional) Cook until thick, let stand 2 minutes, and pour into a bowl. Enjoy with or without plant milk.*

*Chop an apple finely, sprinkle generously with cinnamon and 1 tsp. lemon or pineapple juice; add 1 Tbsp walnuts, 1 Tbsp raisins or other chopped, dried fruit, stir in ½ cup of Quick Oats. Cover with water or plant milk and refrigerate overnight. Enjoy in the morning*

*Four fruits of your choice, cut up and arranged artfully on a plate or tossed together in a bowl. Sprinkle with spices like Pumpkin Pie Spice or cinnamon and 1 Tablespoon of your choice(s) of chia seed, hemp hearts, sesame seed, poppy seed, or ground flaxseed. Enjoy!*

*Buckwheat pancakes made with plant milk and flax "egg" (1 Tbsp ground flaxseed. Cover with 1/3 cup boiling water, stir, and let stand for 5 minutes. Use in place of 1 medium egg in any baked goods. Serve with fresh fruit and plant yogurt.*

*Lunch or dinner: Sandwich with 100% whole grain bread or wrap. Add spread, such as spicy mustard, mashed avocado, tomato paste, cooked, mashed beans, salsa, or guacamole. Add sliced or shredded vegetables of your choice. Try roasted, marinated veggies or a portabello mushroom if you prefer, either hot or cold. Use fresh or dried herbs. Be creative!*

*Any kind of vegetable soup or stew. Try minestrone, butternut squash soup, ribollita, kale and white bean soup, vegetable chili, lentil soup, mushroom and barley soup, miso soup, or anything else you love! Serve a baked sweet potato with cinnamon, boiled white potatoes with rosemary, or 100% whole grain bread or rolls on the side to dip in the soup (Ribollita has the bread built in). If you're extra-hungry, add a green salad with any veggies you desire. Or try something simple like arugula with cherry tomatoes, sprinkled with a little aged balsamic or red wine vinegar.*

*A brown rice bowl. You can also substitute other grains, such as farro, quinoa, or amaranth. Rice bowls are only limited by your imagination! Consider red beans and rice (It's the spices in the sausage that give it the distinctive flavor, so add the spices but omit the sausage. Or, if you aren't fully vegan, use just a little sausage (an ounce or so) for flavor.) Rice with Mexican beans and sautéed vegetables, topped with guacamole or sliced avocado. Asian tofu or bean sprouts and vegetables, sautéed in a bit of low-sodium Tamari sauce with fresh diced ginger and garlic, topped with green onion slices and a sprinkle of toasted sesame oil. An African bowl, with veggies cooked in lite coconut milk, low-sodium soy sauce, and red curry paste. My favorite has broccoli, cauliflower, mushrooms, diced sweet potato, onion, fresh ginger, red bell pepper, and zucchini in it, with just-wilted Napa cabbage steamed on top for the last minute or two before ladling it over the rice.*

*Burrito wraps. This is a great use of the leftover beans and veggies from the rice bowl. Get a really big 100% whole grain wrap (I like sprouted grain wraps for extra flavor and nutrition), spread the beans on it in a stripe across the middle. Add the leftover veggies and top, if you like, with fresh shredded carrot and cabbage, spinach, or romaine lettuce before rolling it up. Variations can be stuffed into a middle-eastern pita or wrapped with a Greek pita if you prefer.*

*Pasta. Cook whole grain pasta if you can get it, according to the package directions. Top it with a marinara or diavolo sauce, which is already vegan. Or try it the Italian way: sauté whatever veggies you have on hand in water with a little olive oil, some pine nuts, and fresh or dried Italian herbs with a few fennel seeds and a dash of dried red pepper flakes. Toss with the pasta, with or without another sauce.*

*Get out your Instant Pot and Google "Vegan Instant Pot recipes". For the best nutrition, look for those using unprocessed ingredients and little or no added fat, but with lots of herbs and spices for additional antioxidants and intense flavor. I always recommend finding recipes that were intended to be plant-based, not those that use manufactured supplements.*

*Another option would be a big salad, and I mean big! Get a serving bowl per person. Start with 3 cups of various lettuces and greens per person. Add a cup of shredded carrots and*

*cabbage. Add 7 or 8 more veggies or fruits: cucumber, celery, bell pepper, tomatoes, radishes, onion and anything else you like, including cooked green beans, asparagus, eggplant, zucchini, yellow squash, etc. Add ½ -1 cup of cooked dried beans (my favorites are garbanzos or black beans). Add olives or peppers in brine if you like, or artichoke or palm hearts. Sprinkle with lemon or lime juice or a flavorful vinegar. Suggestion: If you're in a rush, run some frozen mixed vegetables under running water in a strainer, and use them instead of some of the other options above.*

*Easy Snacks:*

*Fruit is portable, delicious, and nutritious!*

*Cut up fresh raw veggies are portable, too, if you have a ziplock bag or reusable container. Think outside the usual box of celery and baby carrots. Serve with or without a dip, such as hummus, baba ganouche, salsa, or guacamole.*

*100% whole grain bread, toasted, makes a great base for dips, too. Or use a wrap. Try the dips above, or use a nut butter or mashed beans with a little water mixed in for spreadability. Sprinkle with herbs.*

*Any leftovers in your refrigerator can be a good snack. One of my favorites is a cold, baked sweet potato, sliced open and sprinkled with cinnamon and/or nutmeg. Or anything with natural peanut butter (just peanuts and a bit of salt) or another nut butter. Remember Ants on a Log from your childhood?*

*These are only some suggestions. Remember to give yourself 21 days to reset your taste buds. You fully repopulate the cells in 10 days, but we'll give you a little more time in case you are adopting the plant-based dietary pattern more gradually. Use that time to figure out what things you love, and try some new recipes if you like to cook. Your reward will be delicious meals and good health. If you didn't love something at first try, give it another shot in a couple of weeks.*