

Myths & Facts

Plant-Based Health & Nutrition

MYTH: A plant-based diet means that I must only eat plant foods

FACT: A plant-based diet emphasizes eating more plant-based foods (i.e., fruits, vegetables, grains, nuts, seeds, and legumes/beans) and fewer or no animal products (i.e., red meat, poultry, fish, eggs, and dairy). For example, *vegetarian diets* are plant-based and do not include meat but may include eggs and dairy products. Some vegetarians exclude only red meat, but do eat some fish, chicken, or both. In contrast, some diets do not include any animal products at all (vegan diet) and may be even further limited to only whole, unrefined foods (whole foods plant-based diet, or WFPB).

MYTH: A plant-based diet is too expensive and difficult to prepare

FACT: Plant-based foods such as beans, grains, sweet potatoes, lentils, and fruits are found in most local supermarkets at relatively low cost and covered under SNAP benefits (Supplemental Nutrition Assistance Program). Because plant-based meals use whole foods in their natural state, they often need fewer steps to prepare. Spices you use in your favorite dishes, especially cultural ones, can also be used to prepare vegetables and other whole foods. Whole, plant-based food costs much less than managing illness caused by a poor diet. The cost of paying a caregiver, traveling to and from doctors' offices, lost wages, prescriptions and copays goes way beyond the cost of purchasing healthy food.

MYTH: Plant-based diets are nutritionally deficient

FACT: A diet rich in vegetables, fruits, legumes, whole grains, nuts and seeds is highly nutrient-dense. In addition to serving as a wonderful source of disease-fighting antioxidants and fiber, plant foods also provide healthy levels of protein and calcium. There are only two nutrients that are obtained primarily from animal sources: Vitamin B12 and Vitamin D. People who eat little or no meat should supplement with Vitamin B12. Vitamin D is synthesized in the skin after sun exposure, but if sun exposure is less than 5 to 15 minutes then people with dark skin or in colder climates will need to use supplements or fortified foods (breakfast cereals, bread, plant-based milks).

MYTH: All vegetarian diets are healthy

FACT: While a diet based on whole plant foods is healthy, it is possible to be a "junk food" vegetarian. After all, Oreos are vegetarian! A vegetarian diet that includes a lot of refined carbohydrates and French fries is not nutritionally sound. Vegetarian prepared foods that are high in refined foods (e.g., oil, sugar, flour) and salt are abundant in supermarkets and should be avoided. An ideal diet should consist mostly of whole, plant-based foods without added oil, salt, and refined sugar or flour. Aim for consuming whole plant-based foods exclusively, or as much as possible.

MYTH: Plant-based diets are high in carbohydrates that raise blood sugar levels

FACT: There are different types of carbohydrates. Carbohydrates can be refined or unrefined. Refined, highly processed carbohydrates such as those found in candy, table sugar, syrups, soft drinks, and flour are quickly broken down and absorbed into the body, raising blood sugar levels. In contrast, the unrefined carbohydrates found in most fruits and vegetables take longer to digest, and release sugar more slowly into the blood stream. In fact, many studies suggest that people with diabetes who switch to whole food plant-based diets improve their blood glucose control.

MYTH: A plant-based diet is not good for pregnant women

FACT: There are actually many benefits to following a whole-foods, plant-based diet during pregnancy. One is that plant-based diets typically provide higher amounts of folate, which is essential to fetal health. Higher intake of fruits and vegetables during pregnancy may also lead to a lower risk of excessive weight gain during pregnancy, and lower risk of gestational diabetes. Whole grains, legumes and leafy greens are excellent sources of the iron needed to support a healthy pregnancy. Pregnant women need higher amounts of healthy fats, including ALA, DHA and EPA fats. ALA fats are found in avocado and seeds, and DHA and EPA fats can be obtained from seaweed. Like any person following a strict plant-based diet, pregnant woman should consider vitamin B12 supplementation.

MYTH: Eating a plant-based diet means that I will be hungry all of the time

FACT: Many people feel *less* hungry on a whole-food plant-based diet than they do on a typical American diet, which tends to be low in fiber and high in sugar. Healthy, plant-based foods, such as vegetables, whole grains, legumes, nuts and seeds, and fruit are rich in dietary fiber. Increasing dietary fiber intake by eating more whole plant foods helps us to feel full after a meal and can also help prevent food cravings.

MYTH: It's impossible to get enough protein on a plant-based diet

FACT: The US recommended daily allowance for protein is just 0.8 grams per kg of body weight for inactive people. More active people and pregnant women need a bit more. Protein is found in a wide variety of common plant-based foods, especially nuts, beans, legumes (including soy products) and whole grains. People are sometimes surprised to learn that protein is also found in green vegetables, potatoes, mushrooms and squash, and that even fruits contain some protein. Therefore, it is easy to get adequate protein from a whole-foods, plant-based diet.

MYTH: Protein from plants is less effective in building muscle strength than animal-based protein

FACT: A plant-based diet can support muscle gain, and there have been many successful plant-based bodybuilders. In fact, there is a trend towards plant-based nutrition among elite athletes, including David Carter, the defensive lineman of the Oakland Raiders, New England Patriot's quarterback Tom Brady, tennis player Venus Williams, and Olympic weightlifter Kendrick Farris. In a scientific review of research studies that compared the effect of supplementation with soy protein to animal protein, it was found that there was no difference by supplementation type in gains in muscle mass and strength following resistance training.

MYTH: The only way I can benefit from a whole-foods, plant-based diet is to completely eliminate meat and dairy products

FACT: Diets that have a small amount of meat, fish, poultry or dairy in them can still be healthy. The key is having these foods less often and in small amounts (think of them as a garnish rather than a main dish). The more whole plant foods you eat, the better off you will be. And in fact, the more plants you add to your meals, the more you "crowd out" less healthy foods. A plant-based diet high in vegetables, fruits, legumes and low in animal foods can reduce the risk of chronic disease, compared with diets that are low in plant foods. A recent study of the dietary patterns of more than 200,000 people found that those whose diets that included the highest amount of healthy plant foods had lower risks of type II diabetes, and that even modestly lowering the amount of animal foods in the diet was associated with significantly lower risk of type II diabetes.

MYTH: Consuming dairy products is essential for building strong bones and avoiding osteoporosis

FACT: Nutrients that are important for strong bones include protein, vitamin D, and calcium. Greens like broccoli, bok choy, kale, mustard greens, and collard greens are all high in calcium, as are almonds and beans, and it is easier to absorb calcium from plant-based sources than from dairy products. In fact, a recent study that compared long-term followers of a whole-foods, plant-based diet to omnivores found no differences in bone density. Most studies do not show a protective effect of dairy intake on bone fracture risk. Vitamin D is primarily synthesized in our skin upon exposure to sunlight. Secondary plant-based

sources include fortified nondairy milks and fortified orange juice. Bones are also strengthened by weight-bearing exercise and strength training.

MYTH: Plant-based diets are not appropriate for people with kidney failure

FACT: Recent research suggests that a healthy plant-based diet may prolong the lives of people with chronic kidney disease (CKD). Patients with CKD who ate more plant protein than animal protein were less likely to die from their disease. It is important that people with kidney disease consult with their doctor or dietician to ensure they get the right nutrients in safe amounts, since dialysis puts them at risk for protein deficiency and high blood levels of potassium and phosphorus.

MYTH: The best way to lose weight and get healthy is high protein, high fat ketogenic diet

FACT: While ketogenic (high protein, high fat) diets do cause weight loss, and can be effective for the treatment of specific neurologic conditions such as epilepsy, a scientific review of studies that followed large groups of people found that low carbohydrate diets were associated with higher risk of dying from any cause, in general. Ketogenic diets have been shown to cause increased cholesterol levels. In contrast, plant-based diets have been regularly shown to reduce cholesterol and healthy plant-based diets are associated with lower mortality.

For questions or comments regarding this document, please contact Richard Rosenfeld, MD, MPH, MBA, Chair of the SUNY Downstate Committee on Plant-based Health & Nutrition at richard.rosenfeld@downstate.edu