

How (and Why) to Benefit from Even Partial Vegetarianism

by Ann Gerhardt, MD February 2020

Bottom Line at the Top: You don't need to do the full vegetarian monty to be healthy but eating a mostly plant-based diet improves both the planet's and your health.

Should we all be vegetarian? A slew of epidemiologic studies support vegetarianism to slash risk of cancer, coronary artery disease and Type II diabetes. Vegans consume absolutely no animal products, and lacto-ovo-vegetarians add dairy and eggs. These and other partial vegetarian diets, like Mediterranean-type (vegetables, fruit, olive oil, whole grains, pasta, fish and lean meat) and pescatarian (contains seafood) diets all promote health to a similar degree. So it seems that one doesn't have to totally eschew animal protein to promote health.

Climate change experts push plant-based diets, because animal food production generates horrific volumes of methane and nitrous oxide, responsible for about 14.5% of all human-originated greenhouse gas emissions.

Ruminants like cows ferment the plants they eat in their foreguts. This generates methane-rich gas, which is burped and passed into the air, having an effect on global warming 28 times as great as carbon dioxide (CO₂). All livestock animals produce manure, which releases methane as well as nitrous oxide. Crop fertilizer degradation also releases nitrous oxide, a greenhouse gas 280 times as harmful as CO₂. Beef and dairy cattle account for about 70% of the production of both gases.

Trees pull CO₂ out of the air, an anti-global warming mechanism lost with clearing land for grazing. Both food crop and livestock agriculture require land. Plants grown for both human consumption or animal feed remove CO₂ from the air, unfortunately offset somewhat

by CO₂ generated from decomposing plant residue and any nitrous oxide released from fertilizer degradation.

On balance, animal agriculture generates far more greenhouse gas, contributing to climate change, than does growing food plants. For maximum benefit to the planet, we should all stop producing and consuming animal-based food. Practically speaking, however, most Americans consume far more protein than they need. Cutting out three quarters of the animal protein eaten and supplementing with some plant protein foods would go a long way to reducing greenhouse gas production.

Vegetables: Vegetarians eat plant-based foods – grains, legumes, vegetables, fruits, nuts and seeds. Delete vegetables from that list and one is still vegetarian. That's unfortunate, because vegetables supply myriad healthy nutrients including vitamins, a few minerals, bioflavonoids and a little fiber. It's unclear how much of vegetarianism's health benefit derives from omitting animal foods vs, eating more of any particular plant-food like vegetables.

For most educated people, the concept that we should eat vegetables needs little reinforcement. That doesn't mean that everyone eats them. Some shun vegetables, including some vegetarians who eat mostly grain-based foods. Some people dislike the taste of most vegetables. There are 'super-tasters' who have ultra-sensitive taste buds for bitter foods, like kale and brussels sprouts. People with irritable bowel may react poorly to certain vegetables. Others simply don't make an effort to eat recommended amounts of a variety of them.

Diet purists with black-and-white thinking believe they should only eat steamed vegetables. That thinking should go away. There is nothing wrong with stir-fried or casseroled vegetables, as long as they are not swimming in fat. In addition, enhancing (or hiding) taste with BBQ sauce, mustard, hot sauce and

a variety of spices, herbs and sauces from around the world make almost anything palatable.

A good rule of thumb for ANY food pattern, vegetarian or not, is to somehow eat at least 2 cups of vegetables daily, cooked or raw, sauced or plain, and alone or mixed with other food.

Whole grains, Seeds, Nuts, Legumes: These foods supply protein, fiber, minerals, some fat or carbohydrate and a few vitamins. Process out the fiber and they're not nearly as healthy. The ratio between these and animal foods in a food plan determines whether someone is an omnivore, part-vegetarian or vegan. Eating non-processed versions of these foods every day goes a long way to preventing cancer and chronic disease, even if they aren't a diet's only protein source.

Dairy foods: Vegetarians and vegans have lower bone mineral density and a 32% greater risk of bone fractures compared with omnivores, even if they take supplements. Consuming some dairy might help. There's something about dairy foods that protects bone density and reduces osteoporotic fractures out of proportion to their calcium or vitamin D content. Dairy foods make it easier (but are not essential) to meet dietary protein recommendations.

Weight: It's quite possible to be fat on a vegetarian or vegan diet. After all, cookies, pie, candy, sugar, food prepared in plant oil (including olive), sweetened beverages and donuts may all be vegetarian or even vegan. All deliver sugar or fat out of proportion to other nutrients. A large amount of empty-calorie foods, regardless of diet type, puts on the pounds and makes it hard to lose them.

Vegetarians who maintain an ideal body weight succeed by using the same approach as do omnivores: They 1) replace empty calories with nutrient and fiber-packed foods and 2) reduce total calories, often by reducing portions. Weight loss is proportional to fiber consumption, regardless of dietary type. Fiber foods fill us up quickly, putting a break on eating too many calories. Vegetarians find it easier to eat more fiber because beans, whole grains, nuts and seeds contain more fiber than do animal protein foods.

Though less effective than fiber, protein also increases satiety, aiding weight control. It doesn't matter

whether the protein is of plant or animal origin. Total vegetarianism adds no weight control advantage over other diets packed with fiber, protein and whole grains.

In summary, individuals who consume predominantly plant-based foods fare best nutritionally and health-wise if they eat a varied diet packed with vegetables, whole grains, nuts, seeds, legumes and fruit. Those of us who care about the environment and our own health would do well to temper the amount of animal foods, particularly from ruminants like cattle, replacing them with plant-based foods. ¶