



Eating for Health and Longevity

A Practical Guide to Adding More Whole, Plant-Based Foods to Your Diet



SUNY DOWNSTATE COMMITTEE ON
Plant-Based Health & Nutrition
More Plants, Less Meat, Better Health
www.downstate.edu/plant-based



Regardless of whether you seek to stay healthy, improve your health, or even reverse chronic disease, we have terrific, evidence-based news: transitioning to a diet rich in plant foods can help you achieve your goal. Millions of people have successfully made this transition and so can you by using this Practical Guide as a launch pad and guide post for your path to optimal health.

Compelling scientific evidence highlights that the best diet for optimal health is a *whole-food, plant-based* (WFPB) diet. Whole foods occur naturally and are unrefined (i.e., unprocessed), or only minimally refined. More specifically, a WFPB diet is a type of vegetarian diet that:

- Emphasizes eating plants (vegetables, fruits, whole grains, legumes, beans, nuts, and seeds)
- Discourages eating refined carbohydrates (such as white rice, white bread, and pastries) and other foods that have been stripped of their nutrients (extracted oils, fruit juice, many prepared and convenience foods)
- Minimizes, or completely avoids, eating meat (red meats, poultry, fish/seafood) or other animal products (such as eggs and dairy)

Please note that a *vegan* diet is exclusively plant-based and does not include any animal products at all. In contrast to a WFPB diet, however, a vegan diet may include refined grains, refined sweeteners, extracted oils, and highly processed foods. To maintain our focus on health, we prefer to use the term WFPB based diet instead of vegan diet.

Almost half of Americans suffer from at least one chronic disease, but many of these diseases are preventable. Obesity, diabetes, heart disease, and high blood pressure are directly related to lifestyle factors including poor diet, inadequate exercise, tobacco use, and excess alcohol. The food we

choose to eat can lead us either to disease or to vibrant health and longer life.

Extensive research has shown the impressive health benefits of eating more whole, plant-based foods while also decreasing or eliminating consumption of animal products. Studies have shown that WFPB diets can prevent diabetes and heart disease and, in some cases, even reverse these conditions. Plus, following a WFPB diet is one of the best ways to lose excess weight and keep the weight off.

Despite the health benefits of WFPB eating, it can be difficult at first to change what we eat. Obstacles can be cultural, social, financial, and just plain lack of knowledge. We hope to bridge the knowledge gap with this practical guide for transitioning to a WFPB diet as a path to better health. We hope this guide and the evidence-based resources on our website answer your questions and address your concerns. Cheers to health and happiness for a lifetime!

Sincerely yours,

The SUNY Downstate Committee on Plant-based Health & Nutrition



Deciding What to Eat and What Not to Eat

Plant-based eating can be varied, exciting and delicious. Before getting into details later in this Guide, here are some general ideas on foods to include and foods to avoid.

Foods to eat and enjoy

- Fresh and frozen vegetables: corn, peppers, broccoli, cauliflower, eggplant, leafy vegetables, tubers (potatoes, carrots, parsnips, beets), and others
- Fresh fruits: apples, bananas, berries, grapes, citrus fruits, and others
- Whole grains: oats, corn, barley, quinoa, rye, spelt, whole wheat, brown rice
- Legumes: peas, lentils, beans, peanuts, chickpeas, soybeans (including tofu and tempeh)
- Dried fruits without added sugar, coloring, or other ingredients
- Unsalted nuts and seeds (including nut and seed butters)
- Unsweetened, non-dairy milk alternatives (nut milks, soy milks, etc.)

Foods to avoid or minimize

- Meats (red meat, processed meat, poultry, and fish/seafood)
- Refined grains (white rice, white pasta, white bread, white bagels, etc.).
- Products with refined sugar or sweeteners (sugar-sweetened drinks, juices, cookies and pastries, candy, sugary cereals)
- Prepared or convenience foods and snacks that are refined, highly processed, or high in added salt (sodium)
- Eggs and dairy products
- Processed plant-based alternatives to meat, cheese, or butter
- Refined, extracted oils (canola, olive, vegetable, etc.)
- Sweetened non-dairy milk alternatives (nut milks, soy milks, etc.)
- Alcoholic drinks and beverages



Simple Ways to Integrate More Plant-Based Foods in Your Diet

Meat and other animal products do not have to be excluded from your diet all at once. You can gradually make the switch to plant-based alternatives over time with these suggestions:

- Gradually switch to plant-based dishes over time, by using less meat, more vegetables, and more meat alternatives (tofu, tempeh, beans, lentils, chickpeas) when cooking
- Preserve the texture of minced or chopped meat dishes like chili and sauce by substituting lentils, split peas, or grated vegetables for the meat
- Have fresh fruit or unsweetened dried fruit when you crave something sweet instead of candy, sugary snacks, or refined baked products; use frozen fruit for salads and smoothies
- Have oatmeal, whole grain cereal, or a smoothie for breakfast
- Try whole food alternatives to refined pasta and white rice, such as quinoa, bulgur, whole-wheat pasta, brown rice, or pasta made from lentils, beans, or chickpeas
- Add unsalted seeds and nuts to any meal as they are a good source of protein and fiber
- Substitute unsweetened almond milk, soy milk, or other plant-based milk alternatives for traditional cow's milk
- Make salads exciting by adding plant-based protein (e.g., chickpeas, edamame, other beans), roasted vegetables (e.g., sweet potatoes, Brussels sprouts, carrots, other root vegetables), fruit (e.g., apples, berries, raisins), nuts and seeds



Getting A Bang for Your Buck with Plant-Based Protein

Let's start by dispelling two common myths:

1. Myth: It is hard to get enough protein with a plant-based diet

Fact: Most adults eat more than enough protein and you can get all the protein your body needs with plant foods

2. Myth: Animal protein is better than plant protein

Fact: Any whole food, plant-based diet with a good variety of protein-rich foods (see the list that follows) will provide all the amino acids (protein building blocks) your body needs without having to eat animal products or use any supplements

Here are some of the best and most affordable sources of plant-based protein:

- Peanut butter and other nut butters, preferably unsweetened and without added oils
- Soybean products: tofu, tempeh, edamame, and soy milk
- Nuts and Seeds: sunflower seeds, pumpkin seeds
- Beans, lentils, peas, chickpeas, and other legumes
- Pulse-based pasta, made from dried peas, beans, lentils, or chickpeas
- Whole grains, such as barley, oats, quinoa, amaranth, and whole-wheat pasta
- Potatoes, mushrooms, broccoli, and kale

There is *no need to combine* different plant foods in the same meal (rice and beans) for “complete” proteins. The balance over the day is more important and your body has amino acids that do all the completing for you.



Tips to Get You Going

1. Educate yourself

- Watch *movies* about the benefits of a whole-food plant-based diet. *Forks Over Knives*, and *Plant Pure Nation* are two inspirational and informative selections.
- Watch *YouTube videos* by experts in plant-based medicine, like T. Colin Campbell, Dr. Caldwell Esselstyn, Dr. Michael Greger, Dr. Neal Barnard, or Dr. Garth Davis
- Read inspiring books on WFPB nutrition like *The China Study*, *How Not to Die*, *Whole*, and *Prevent and Reverse Heart Disease*

2. Have fun within the kitchen

Get creative! Who doesn't like good food? There are plenty of plant-based recipes online:

- Nutrition Facts: nutritionfacts.org
- Forks Over Knives: forksoverknives.com
- Happy Herbivore: happyherbivore.com/recipes/
- Fat Free Vegan Kitchen: blog.fatfreevegan.com/recipes
- Cooking With Plants: cookingwithplants.com/recipe-index/

You can also use any Internet search-engine to readily find whole-food plant-based recipes. If you prefer books, the following are a couple of options: *Veganomicon*, *Forks Over Knives*, *The Prevent and Reverse Heart Disease Cookbook*, *Straight Up Food*.

3. Motivate yourself

Take a second and remind yourself what your goals are, and what you want to achieve. What is important to you?

Do you want to prevent, or reverse a chronic condition? Gain energy and clarity? Perhaps be alive to see your grandchildren grow up and graduate? Take a moment to write this down—this will come in handy when you are feeling doubtful and unmotivated. *Remember, you can do it!*

4. Surround yourself with healthy foods

Help yourself by keeping plenty of fruits and vegetables on hand. Discard or give away any food that isn't beneficial to you. Stock your pantry and freezer with foods that are whole, natural, and good for you, including whole grains (quinoa, oats, brown rice, and others), lots of beans and legumes (dried, frozen, and canned), nuts and seeds, dates and other unsweetened dried fruit, berries and corn (fresh, canned, and frozen), all types of canned tomato, and lots of your favorite herbs and spices to add zest to your plant-based dishes.

5. Find a support group

More and more people are learning about and embracing WFPB nutrition.

Consider joining a group of like-minded people, either online or in person.

- For more information, visit www.brooklyn-usa.org/plant-based-nutrition/ or call (718) 802-3700.
- *Plant Powered Metro New York* plans meet-ups and educational events on a regular basis throughout the NYC metro area. Visit www.plantpoweredmetrony.org for more information.

Delicious Herbs and Spices with Powerful Health Benefits

You can add variety, excitement, and enticing flavor to your WFPB diet by using herbs and spices when preparing foods. The list that follows of delicious herbs and spices will not only add flavor to your food but are also good for you.

One additive that we encourage you to limit, however, is salt, because it can increase your blood pressure and reduce your heart health. Be especially aware of “hidden salt” that is added to canned legumes, prepared soups, and many canned tomato products (whole, crushed, diced, and pureed). Always check the nutrition label and look for low-salt alternatives, if available

- **Basil:** Sweet and aromatic flavor. The herb can be cooked, or thrown raw on all vegetables, soups, and dishes. Benefits: Contains powerful antioxidants that may fight inflammation and help your body fight viruses and infections
- **Cinnamon:** Aromatic with a sweet and savory flavor. Can be added to everyday meals and treats, such as oatmeal, smoothies, baked goods, and savory dishes like curry. Benefits: May reduce inflammation, help fight infections, support heart health, and lower blood sugar levels
- **Cumin:** Nutty, spicy, and warming in its flavor. Cumin is an incredibly flavorful spice that can be used in entrees, grains, and side dishes. Benefits: Full of antioxidants, cumin may improve blood sugar, cholesterol, and may even promote weight loss.
- **Fenugreek seeds:** Can be used whole or ground, and most commonly found in curry powder. These seeds can be used to season rice, vegetables, and even be taken with water. Benefits: These seeds may improve digestion, lower cholesterol and blood sugar levels.



- **Garlic:** Garlic has been believed to have medicinal properties for years. Raw garlic has a strong, pungent, and heated taste, however, the flavor mellows and sweetens as it is cooked. It can be used to flavor many foods, including homemade salad dressings, sauces, vegetables, and soups. Benefits: Eating garlic regularly may help with high cholesterol and high blood pressure, and may lower your chances of getting heart disease.
- **Ginger:** Hot and zesty in taste. It can complement many different cuisines, be added in various meals, and even be used in herbal teas. Benefits: Ginger provides a myriad of health effects. It can be consumed fresh, dried, or in powdered form. It may calm coughing and respiratory troubles, stimulate the circulatory system, lower blood pressure, lower cholesterol, soothe nausea, and help fight arthritis pain.
- **Rosemary:** Vibrant green plant that contains many vital vitamins, including vitamin A, vitamin B6, vitamin C, and other vitamins such as folate and thiamine. Pairs well with potatoes and vegetables, and a majority of different dishes. Benefits: May promote gut health and digestion, is rich in antioxidants, and has been used for improving memory and brain activity
- **Turmeric:** This golden spice delivers some solid benefits. Bright yellow/orange in color, it is known for its role in curries. It can be added to many meals and dishes, smoothies, and even plant milks. Benefits: May help lower blood glucose levels and reduce inflammation.



Tips for Healthier Cooking

Cooking without oil

Extracted oils, including olive oil, add empty calories to your cooking. Instead of cooking with oil try the following:

- **Sautéing:** water, vegetable broth, vinegar, or a combination. Use a high-quality, non-stick skillet or sauce pan, add some liquid at the start, stir frequently, and add a tablespoon or two of additional liquid, as needed, to prevent sticking.
- **Roasting:** use parchment paper, a silicone mat or a pizza stone. Parchment paper can become your best friend, because you can roast vegetables without sticking by placing them directly on the paper without any oil.
- **Steaming:** add water and throw in the vegetables letting them steam for about 4–5 minutes. Add spices at the end and enjoy!
- **Air frying:** an increasingly popular alternative to traditional frying in oil that uses only hot, circulated air to get a crispy outside and soft, cooked inside.



Baking without butter or oil

Many recipes call for butter, oil, or other fats to create a soft, appealing consistency. You can get similar results by substituting the following in your recipes:

- Avocados, which are rich in fiber, vitamin K, and potassium, and may help lower “bad” (LDL) cholesterol and raise “good” (HDL) cholesterol
- Nut butters, including cashew and almond butter
- Fruit purees, including apple butter, unsweetened applesauce, prune puree, pumpkin puree, or mashed banana
- Ground flax or chia seeds mixed with water

Substitutes for meat and animal protein

There are many plant-based meat alternatives that are healthy and tasty. Avoid refined products (seitan, textured soy protein, and other fake meats) and instead use:

- Tofu or tempeh
- Portobello mushrooms
- Jackfruit
- Eggplant
- Lentils
- Beans and legumes

Substitutes for refined sugar and sweeteners

Refined sugars and sweeteners are high in calories, low in nutrients, and can promote insulin resistance and eventual diabetes. You can avoid refined sugar by substituting any of the following healthy alternatives:

- Pureed or mashed ripe (or even better, over-ripe) bananas
- Unrefined sweeteners including dates, date sugar, date syrup, apple butter, or unsweetened applesauce
- Minimally processed sweeteners including stevia (a non-caloric plant extract), coconut sugar, sucanat (whole cane sugar that retains its molasses content), or monk fruit extract
- Sugar alcohols that are generally recognized as safe by the Food and Drug Administration, including xylitol, sorbitol, or erythritol
- Spices, including cardamom, nutmeg, or clove

Even better than using added sweeteners in your cooking is to train yourself to enjoy the natural sugars found in whole (or dried) plant foods. When you do use sweeteners, however, keep in mind that sucanat, coconut sugar, date sugar, and date syrup are similar to refined sugar. Instead, try to ideally use fruit products (e.g., ripe bananas, whole dates, apple butter, unsweetened applesauce) as 1-to-1 replacements for sweeteners.



Substitutes for eggs and dairy products

Here are some plant-based alternatives to using eggs and dairy products in your food. Additional substitutes can be found by searching the Internet, in your local markets, and at stores including Target, Wal Mart, Shop Rite, and Costco (or other wholesale clubs).

- **Cheese:** Nutritional yeast can be used in many recipes to add a cheesy taste and to create your own dairy-free “cheese.” Additionally, you can find recipes online to make your own. For example, dairy-free parmesan cheese can be created using nuts, nutritional yeast, garlic powder, and salt. The book *This Cheese is Nuts! Delicious Vegan Cheese at Home*, by Julie Piatt, has recipes for those who want to make other types of nut-based cheeses, such as mozzarella and cheddar. There are also ways to create vegetable-based cheesy sauces that do not include nuts. For example, look for recipes that combine carrots, potato, nutritional yeast, lemon juice and spices.

- **Milk:** Almond and soy milk are the most common substitutes, and ideally should be the unsweetened varieties. You can also use rice milk, coconut milk, oat milk, hemp milk, flax milk, or other nut milks (cashew, macadamia). For some tips on choosing a plant-based milk, visit <https://nutritionstudies.org/plant-based-doctors-take-on-choosing-plant-based-milk/>.
- **Eggs:** For baked goods, you can make a flax egg by mixing 1 tablespoon of ground flax seeds and 3 tablespoons water and letting stand until thickened (about 15 minutes). Additionally, applesauce and mashed bananas can be used. For dishes where egg is used for binding, you can use oat, chickpea, or soy flour, rolled oats, cooked oatmeal, or breadcrumbs. Silken tofu is another useful egg substitute.
- **Yogurt:** Almond, soy, and coconut-based yogurts.



Eating a Whole-Food Plant-Based Diet on a Budget

Many people are worried that eating healthy means spending a lot of money on food. But we're here to tell you that this is *not* true! Of course it can be costly depending on how and where you are shopping. However, generally speaking, a diet consisting of wholesome foods can cost less than one that includes meat. For example, 2000 calories of whole-wheat pasta costs about \$2 and has approximately 80 grams of protein. All the items in the shopping list that follows can be found at your local supermarket.

Whole-Food, Plant-Based Shopping List

- **Fruits:** bananas, berries, oranges, pineapple, apples, cherries, etc.
- **Vegetables:** kale, spinach, tomatoes, broccoli, cauliflower, carrots, asparagus, beets, cabbage, okra, potatoes etc.
- **Whole grains:** brown rice, oats, faro, quinoa, brown rice and lentil pasta, barley, etc.
- **Legumes:** chickpeas, lentils, kidney beans, black beans, peas, etc.
- **Seeds, nuts, and nut butters:** almonds, macadamia nuts, Brazil nuts, cashews, sunflower seeds, pumpkin seeds, peanut butter, almond butter, etc.
- **Plant based milks:** soy milk, rice milk, coconut milk, oat milk, hemp milk, flax milk, or nut milks (almond, cashew, macadamia)
- **Herbs and spices:** basil, rosemary, turmeric, curry, black pepper, salt, mint, parsley, paprika, etc.



Know Where to Shop Putting it All Together

You can create quick, inexpensive, and healthy plant-based meals by simply including a green, a grain and a bean on your plate. The possibilities and combinations are endless, limited only by your imagination. The green can be fresh or frozen, the grain should be a whole food, and the bean can be fresh, canned, or frozen. Load up on your favorite herbs and seasonings, but remember to keep any added oil or salt to a minimum or avoid them entirely.

- Local supermarkets to purchase fresh produce, grains, and beans (preferably in bulk—cost effective)
- Ethnic supermarkets for dried herbs and spices
- NYC Green Carts for quick fruits and vegetables
- Local farmers markets
- Wholesale clubs such as BJs and Costco

Resources on Food and Disease Prevention

Websites

- <https://nutritionfacts.org/>
- www.pcrm.org
- www.nutritionstudies.org
- www.brendadavisrd.com
- www.panafricanalliance.com/plant-based-diet/
- www.plantricianproject.org

Books

- *The China Study: Revised and Expanded*, by T. Colin Campbell and Thomas Campbell II
- *The Food Revolution: How Your Diet Can Help Save Your Life and Our World*, by John Robbins and Dean Ornish
- *Forks Over Knives: The Plant-Based Way to Health*, by Gene Stone & T. Colin Campbell
- *How Not to Die*, by Michael Greger

- *Plant-Based Nutrition, Idiot's Guides*, by Julieanna Hever & Raymond Cronise
- *Power Foods for the Brain*, by Neal Barnard
- *Prevent and Reverse Heart Disease*, by Caldwell Esselstyn Jr.
- *Whole: Rethinking the Science of Nutrition*, by T. Colin Campbell & Howard Jacobson

Cookbooks

- *Clean Eats: Over 200 Delicious Recipes*, by Alejandro Junger
- *Fork Over Knives – The Cookbook*, by Del Sroufe and Isa Moskowitz
- *Plant-Powered Families: Over 100 Kid-Tested, Whole-Foods Vegan Recipes*, by Dreena Burton
- *Plant Pure Nation Cookbook: Over 150 Plant-Based Recipes*, by Kim and T. Colin Campbell
- *The Prevent and Reverse Heart Disease Cookbook*, by Ann and Jane Esselstyn
- *Straight Up Food: Delicious and Easy Plant-based Cooking without Salt, Oil, or Sugar*, by Cathy Fisher
- *Whole Foods Plant-Based Cookbook with Recipes Ready in 30 Minutes*, by Esther Keller
- *Veganomicon: The Ultimate Vegan Cookbook*, by Isa Moskowitz and Terry Romero

We hope you enjoy our guide to *Eating for Health and Longevity* and encourage you to view “food as medicine” as part of an overall wellness strategy. This strategy, known as *lifestyle medicine*, includes predominantly a whole-food plant-based diet, regular physical activity, adequate sleep, stress management, and avoiding risky substance use.

Wishing you continued success on your journey,
Richard M. Rosenfeld, MD, MPH, MBA, chair,
Elizabeth P. Helzner, PhD, vice chair,
SUNY Downstate Committee on Plant-Based
Health & Nutrition



If you have a chronic disease including diabetes, heart failure, chronic kidney disease, end-stage kidney disease or kidney stones please consult a Registered Dietician regarding appropriate selection of fruits, vegetables and plant-based proteins.





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