

The Power and Promise of a Plant-Based Diet

Research has clearly demonstrated that healthy lifestyle choices could prevent 90 percent of type 2 diabetes, and there's strong consensus that diet is the kingpin. Adopting smart diet and lifestyle choices after the onset of diabetes can change the course of the disease and, in many cases, reverse it altogether.

We know this from studies of people with diabetes who made significant changes to their diets. In studies using very-low-calorie diets, reversal of insulin resistance has been reported within seven days. A more gradual reversal of insulin resistance has been reported with the use of whole-foods, plant-based diets that are less restrictive. The reason this approach is successful is because such diets disable the drivers of insulin resistance.

Plant Foods: The Key to Success

Plant foods are the primary sources of the nutrients known to protect against diabetes. **Fiber**, (the indigestible part of plants), helps control blood sugar, lowers blood cholesterol, keeps the gastrointestinal system healthy, promotes a health-supportive mix of gut bacteria, and aids with weight loss by staving off hunger. Fiber is only found in plant foods, not in animal products. **Phytochemicals**, also found only in plants, improve fasting blood glucose and insulin sensitivity and reduce inflammation.

Plant foods are high in prebiotics, the component in food that nourishes the beneficial gut bacteria that reduce chronic inflammation, improve insulin sensitivity, and control blood sugar. Fermented plant foods, such as tempeh, miso, naturally pickled vegetables, and nondairy yogurts, provide friendly bacteria that aid in the maintenance of a healthy microbiome. Plant foods also contain large amounts of **antioxidants and phytochemicals**, compounds that help us fight the onset and progression of disease. See pages XX–XX for a list of some of the most concentrated sources.

Highly processed foods and **animal products** are the primary sources of compounds that have been linked to increased insulin resistance, inflammation, gastrointestinal disorders, hormonal imbalances, high blood cholesterol levels, and hypertension. **Refined carbohydrates** (carbohydrate-rich foods that have been stripped of fiber and nutrients by food-processing techniques) promote overeating, inflammation, and insulin resistance. **Trans fats** (found mainly in partially hydrogenated oils, which are currently being eliminated from the food supply) and **saturated fats** (found most frequently in animal-based foods) increase insulin resistance and cholesterol levels. Other dietary factors that can increase inflammation and the harmful effects of diabetes are **environmental contaminants**, excessive sodium, certain food additives, and high-temperature cooking (such as **grilling** or **frying foods**).

Diet and Lifestyle: Your Focus for Defeating Diabetes

Changes in diet and other aspects of lifestyle are fundamental to restoring health. Where diet is concerned, you need to focus on disabling the drivers of insulin resistance. All of these drivers influence weight gain in some way. Even a little excess weight impairs insulin sensitivity in people with type 2 diabetes, so aim for a loss of one to two pounds (0.5–1 kg) a week. The following Kick Diabetes strategies will show you how:

Bulk up on fiber.

Include legumes, whole grains, and generous servings of vegetables and fruits throughout the day.

To reverse diabetes, aim to get at least 45–60 grams of fiber a day, depending on your body size (larger individuals will benefit by aiming for at least 60 grams per day). This translates to a minimum of 15–20 grams per meal. Particular-

ly helpful are foods rich in soluble fiber, such as barley, beans, flaxseeds, oats, and some fruits and vegetables (apricots, asparagus, Brussels sprouts, citrus fruits, mangoes, parsnips, passion fruit, sweet potatoes, and turnips), as soluble fiber help to stabilize blood glucose and reduce blood cholesterol levels.

TABLE 1 Fiber in common foods

FOOD (SERVING SIZE)	FIBER (G)
Beans, lentils, and split peas, cooked, 1 cup/250 ml	14–17
Avocado, 1 medium	13
Edamame or lima beans, 1 cup /250 ml	10
Peas, 1 cup/250 ml	8
Intact whole grains (barley, bulgur, Kamut berries, or spelt berries), cooked, 1 cup/250 ml	6–8
Baked potato or sweet potato, with skin, 1 medium	5–8
Flaxseeds, whole, 2 tbsp/30 ml	7
Blackberries, raspberries, 1 cup/250 ml	6–7
Vegetables, higher fiber (e.g., asparagus, broccoli, Brussels sprouts, cooked greens, green beans, okra, parsnips, squash), 1 cup/250 ml	4–6
Fruits, higher fiber (e.g., apples, blueberries, guava, kiwi, pears), 1 cup/250 ml	4–6
Oatmeal, 1 cup/250 ml	4
Almonds or sunflower seeds, ¼ cup/60 ml	4
Pasta, whole wheat, 1 cup/250 ml	4
Brown rice, cooked, 1 cup/250 ml	3.5
Peanuts, ¼ cup/60 ml	3
Vegetables, lower fiber (e.g., cabbage, carrots, cauliflower, celery, peppers, raw greens, turnips), 1 cup/250 ml	1–3.9
Fruits, lower fiber (e.g., banana, cherries, grapes, mango, melon, orange, pineapple, strawberries), 1 cup/250 ml	1–3.9
Dried fruits, ¼ cup/60 ml	2–3
Other nuts, ¼ cup/60 ml	1–2

Reduce the glycemic load (GL) of your diet.

Fill most of your plate with legumes, nonstarchy vegetables, and fruits, plus nuts and seeds (in smaller amounts). Include moderate portions of other healthy foods, such as whole grains and starchy vegetables.

The glycemic load (GL) is a rating system that estimates the impact a serving of food will have on your blood sugar. GL is related to the well-known glycemic index (GI) of foods; however, GL is even more helpful for our purposes because it includes the actual amount of carbohydrate in a standard serving. Some foods, such as watermelon, have a high GI but a low GL because the total amount of carbohydrate in a standard serving is low.

You can find extensive GI and GL indexes online. Table 2 provides a general idea of the GI and GL of some common foods. Use the following color key to help you quickly select the best options.

Foods with a low GL have a relatively small impact on blood glucose. Bear in mind that GI and GL are just one set of factors by which we judge the healthfulness of food. Some unhealthy foods, such as potato chips, have a low GI and moderate GL, while some extremely healthy foods, such as sweet potatoes, have a high GI and GL. Note that preparation can affect GI and GL, so don't be surprised if you see slightly different numbers in various tables.

You can take simple steps to reduce the glycemic impact of your meals and how much your blood sugar spikes after a meal. Among the most powerful tools is the addition of vinegar, lemon, or lime, ideally near the beginning of your meal on a salad. Even two to three teaspoons (10–15 ml) is often enough to have an effect. Cinnamon (see page XX) can reduce blood sugar spikes, as it appears to slow stomach emptying, so sprinkle it on breakfast cereal or sliced fruit.

GI (Glycemic Index)	GL (Glycemic Load)
Green = low GI (55 or less)	Green = low GL (10 or less)
Yellow = medium GI (56–69)	Yellow = medium GL (11–19)
Red = high GI (70 or more)	Red = high GL (20 or more)