

Healthy Diet to Prevent Diabetes

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According to the Center for Disease Control and Prevention, more than 24 million Americans, three percent of the United States population, has diabetes. An additional 57 million people have pre-diabetes, a condition that puts them at risk for contracting diabetes. The good news is that the risk for diabetes can be managed through diet, [exercise](#) and medication--if it's caught early.

A Brief Overview of Diabetes

Diabetes is a metabolic condition that affects the way people use glucose, or blood sugar. Type I diabetics cannot use glucose in their blood because of a shortage of insulin, a hormone produced by the pancreas that helps the cells process glucose. Type II diabetics often make adequate amounts of insulin but the cells in the body are resistant to insulin, so they cannot use the glucose. Type I diabetics are typically prescribed medications to stimulate the pancreas into making more insulin. While type II diabetics may also be prescribed oral medications, treatment typically favors following specific dietary guidelines and adding exercise to their daily routine.

Sixteen million Americans have pre-diabetes because of their diet and lifestyle. Pre-diabetics are at high risk for contracting type II diabetes within five to 10 years unless steps are taken to minimize their risk.

Diet Recommendations to Prevent Diabetes

Diabetes can often be prevented by following the same recommendations of other heart-healthy programs with an emphasis on carbohydrate awareness. These include eating large amounts of fruits and vegetables, whole grain [foods](#), eating fish two to three times a week, eating lean cuts of meat, pork and poultry, using liquid oils instead of stick margarine and butter, eliminating or cutting back on [drinks](#) with added sugar, high calorie snacks and reducing portion sizes.

Pre-diabetics also need to learn the importance of meal planning and monitoring the quantity and quality of carbohydrates they eat. Carbohydrates are foods that are quickly broken down into glucose in the blood. Three easy ways to plan meals are based on the Diabetes Food Pyramid (not to be confused with the USDA Food Pyramid), Create a Plate and Carbohydrate Counting.

The Diabetes Food Pyramid divides food into six groups: 1) grains and starches 2) vegetables, 3) fruit, 4) milk and dairy products, 5) meat and meat substitutes and 6) fats, sweets and alcohol. The largest group, grains, sits on the bottom and should be the largest percentage of the diet. The smallest group, fats and sweets, is on the top of the pyramid, so they should be eaten in smaller quantities.

The main difference between the Diabetes Food Pyramid and the USDA Food Pyramid is their approach to carbohydrates in the diet. The Diabetes Pyramid groups food according to their amount of carbohydrate and protein instead of general classifications. For instance, in the Diabetes Food Pyramid, potatoes are grouped along with grains, beans and starchy vegetables instead of the vegetables group because of their carbohydrate content.

Two other clever meal planning approaches are Create Your Plate and carbohydrate counting. With the Create Your Plate approach, you divide a dinner plate into 3 sections. One large section is filled with non-starchy vegetables, like spinach, carrots or green beans. The two smaller sections are each filled with starchy foods (like pasta or cereal) and meat or meat substitutes, respectively. Carbohydrate counting involves learning how many

grams of carbohydrate are contained in the foods you enjoy. Meals are restricted to a specific number of grams of carbohydrate.

Another important approach involves using the the glycemic index of foods.

The glycemic index (or GI) is a rating that addresses how quickly foods raise the glucose level in the blood. For instance, a French baguette has a high GI of 95. Sweet corn has a medium GI of 48 and plain non-fat yogurt has a low GI of 14.

Treating the Disease

Knowing what to eat and how to plan your meals is good but doesn't entirely prevent type II diabetes. In many cases, exercising and taking prescription medications are just as important as diet. According to a 2002 study published in the New England Journal of Medicine, study participants were able to reduce the incidence of diabetes by 58 percent through exercise and lifestyle intervention. Taking the prescription drug metformin reduced the incidence by 31 percent.

Resources

- [Diabetes Food Pyramid](#)
- [Create Your Plate](#)
- [Carbohydrate Counting](#)