

Diabetes: Managing Your Diet

Why is it important to manage my diet when I have diabetes?

If you have type 1 diabetes, your body makes little or no insulin. Insulin is a hormone that helps sugar enter the body's cells and controls the level of sugar in the blood. When there is not enough insulin in the body, the amount of sugar in the blood reaches very high levels and can be very dangerous, even leading to coma and death.

Type 1 diabetes is treated with insulin, but diet (food management) and exercise are still very important parts of managing the blood sugar and preventing complications. The goal of food choices is to try to keep your blood sugar at a normal level throughout the day. This is done by matching your insulin doses with the types and amounts of food you eat. Meal plans can be designed to fit your lifestyle.

In type 2 diabetes you are unable to use your body's insulin efficiently. This causes your blood sugar to rise. Sometimes you can control your blood sugar with just diet and exercise. Or you may also need to take oral medicine or insulin shots.

In all cases, understanding how the food you eat affects your blood sugar is an important part of taking good care of yourself.

What are the types of meal plans?

There are several ways to plan meals to help manage diabetes. Your diabetes care provider will help you find a meal plan that works for you. Most plans are based on measuring carbohydrates (carbs) in food because carbs have the biggest effect on your blood sugar level.

The most common types of meal plans are:

- ✓ **The Plate method:** This is an easy way to make healthy food choices and control portions, carbs, and calories. Fill half of a 9-inch plate with nonstarchy vegetables. The other half of the plate should be split between starches (such as whole grains and starchy vegetables like potatoes) and lean proteins (such as lean meat). A portion of low-fat milk or yogurt and fruit on the side can fit in. Small amounts of healthy fat can also be added. This way of planning your meals is focused on getting more vegetables and less starchy foods. This helps to control blood sugar.
- ✓ **Constant carbohydrate meal plan:** You eat the same amount of carbs each day to match a relatively consistent dosage of medicine.
- ✓ **Carbohydrate counting meal plan:** You figure out how many carbs you are going to eat at a meal and adjust your insulin dose accordingly. The amount of carbohydrate may vary from day to day.
- ✓ **Calorie-counting meal plan:** Your healthcare provider recommends a daily amount of calories for you based on your height, weight, age, activity level, and blood sugars. You eat a variety of foods (carbs, proteins, and good fats). Taking care to choose carbs that are least likely to raise your blood sugar and to spread them evenly throughout your day is part of this plan.

It is important to meet with a dietitian to develop a meal plan that fits your taste, budget, and lifestyle.

What are the principles for managing my diet?

All meal plans are based on the following principles:

- ✓ **Eat a well-balanced diet.** A healthy diet for someone with diabetes can be the same as it is for anyone. Focus on eating a balance of fresh vegetables and fruit, low-fat dairy, lean meats (including heart healthy fish at least 2 times a week), beans, whole grains, and heart healthy fats. (Examples of healthy fats are canola, olive, peanut, and flaxseed oil.)
- ✓ **Manage carbohydrates carefully.** Carbs make up half of the food you eat each day. Because insulin is needed for the body to use the carbohydrate, it is very important to keep track of how much carbohydrate is eaten and when it is eaten. If you take insulin and eat about the same amount of carbohydrates each day, your insulin and food will be in better balance. If you eat less one day, you may have too much insulin and have a low blood sugar reaction (hypoglycemia). If you eat more one day, you will have too little insulin and have high blood sugar.

If you are taking a relatively constant insulin dose or oral diabetes medicine, the constant carbohydrate food plan can help keep the daily amount of carbs consistent. The carbohydrate counting plan allows your carbs to vary and works well with adjustable insulin doses.

Sometimes the effect a carbohydrate has on blood sugar will be different depending on what other foods are eaten with it. Testing your blood sugar 2 hours after a meal will help you find out how eating different combinations of foods can affect your blood sugar.

- ✓ **Eat meals at the same time each day.** Insulin and oral diabetes medicines will be working to lower your blood sugar whether you eat or not. This means that when you are using a set insulin dose, it's important not to miss meals. You should eat at about the same time each day to prevent low blood sugar. Carry snacks for emergencies, such as a sudden change in your schedule that affects your mealtime. If you take an adjustable insulin, you can be more flexible with your eating schedule and the carb counting food plan should work well for you.
- ✓ **Use snacks to prevent insulin reactions.** Snacks help to balance insulin activity. Peaks in insulin activity vary from person to person. You will learn from experience when you need a snack. Different types of snacks have different effects. Sugar from fruit will last only 1 or 2 hours, so fruit is good for a morning or afternoon snack. Carbohydrates eaten with proteins, such as low-fat cheese or meat, change to sugar more slowly. If you have low blood sugar during the night, you can add a lean protein or healthy fat to your carbohydrate snack. This can help the sugar last through the night. Milk and yogurt are a natural mix of carbohydrate and protein and make a good bedtime snack choice.
- ✓ **Limit cholesterol, saturated fat, and trans fat in the diet.** Eating too many foods high in cholesterol, saturated fat, or trans fat can lead to high levels of cholesterol and triglyceride in the blood. High cholesterol increases your risk for heart disease. People who have diabetes have a higher risk of getting heart disease, so it is important to watch the cholesterol and fat in your diet. Cholesterol is in animal foods and is particularly high in egg yolks, organ meats, and large portions of high-fat red meat (for example, prime rib). Like cholesterol, saturated fats are found mostly in animal products. Trans fats are another type of fat in animal products and also many processed foods, such as cakes, cookies and potato chips.

It is best to limit cholesterol to 300 mg/day, or less than 200 mg/day if you have high cholesterol. Twenty to 35% of the calories in your daily diet should come from fat. Saturated fats, such as butter and red meats should provide less than 7% of your calories. Try to also avoid trans fat.

Blood cholesterol and triglyceride levels can become high if blood sugar levels are too high. Your blood cholesterol level and triglyceride level should be checked at least once a year. If a high level is found, your dietitian can make suggestions to help lower it.

- ✓ **Maintain an appropriate weight.** Ask your dietitian how many calories you need to have in your daily diet to maintain a normal weight. If you are overweight, talk to your dietitian about making a plan for gradual weight loss. Losing weight will make controlling your sugar easier.
- ✓ **Eat more fiber.** Fiber is the roughage in our food that is not absorbed into the body. Adding fiber may help lower blood sugar levels. For example, your blood sugar may not be as high 2 hours after eating 2/3 cup of beans (30 g of carbohydrate) as it is 2 hours after eating 2 slices of white bread (30 grams of carbohydrate). Raw fruits, vegetables, legumes (beans), high-fiber dry cereals, oatmeal, and whole-wheat breads are the most effective high-fiber foods.
- ✓ **Avoid foods high in salt (sodium).** It's important not to eat large amounts of salt. Eating a lot of salt may raise your blood pressure. Increased blood pressure is a risk factor for stroke and heart, eye, and kidney complications of diabetes. Try to eat no more than 1500 milligrams (mg) of sodium (about two thirds of a teaspoon of salt) each day. Talk to your dietitian about salt.
- ✓ **Avoid eating too much protein if you have kidney problems.** Eating too much protein can be a problem if you have kidney disease. Follow your healthcare provider's recommendation for how much protein you should eat. A dietitian can help you plan a lower protein diet.

Is it OK for people with diabetes to drink alcohol?

If you have diabetes, you should be cautious about drinking alcohol. Too much alcohol can make blood sugar levels fall too low. Drinking even a small amount of alcohol on an empty stomach can lead to a very low blood sugar. If you take insulin or diabetes pills, you have an even greater risk for low blood sugar because alcohol increases the effects of the medicine. Also, some medicines, including those for diabetes, can interact with alcohol and cause serious and potentially life-threatening problems. Always ask your healthcare provider about possible drug interactions before you drink alcohol.

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