



## What is Diabetes?

Diabetes is a “chronic disease”, not like a cold that will be gone in a couple of days. It is a lifelong disease. There are different types of diabetes. Type 1 diabetes is what kids and young adults get most often, and happens when a person’s pancreas does not make any insulin. They need insulin shots every day to stay healthy. Type 2 diabetes is found mostly in older adults, but is being seen more often in kids and young adults with rates of obesity on the rise. With type 2 diabetes, a person’s pancreas makes insulin but not enough, and/or they may need help using the little insulin they make. Often, people with type 2 diabetes need medication to increase the production of insulin and to help the insulin work better.

Why is insulin so important anyway? Well, without it, sugar will build up in your blood, and your cells won’t get the energy you need to play or even do your schoolwork. Without insulin, you may feel too tired to do anything, your eyesight may go fuzzy, you may have to go to the bathroom all the time and be really thirsty and hungry. You might lose some weight, and may even be grumpier than usual! Your health care team will help you develop a plan to manage your diabetes well enough to live a very normal life.

So, you have to manage your diabetes. What does that mean? It means that although your health care team will help, YOU are the one in the diabetes driver’s seat. Here are some things for you to think about, and hopefully use as part of your diabetes tool kit:

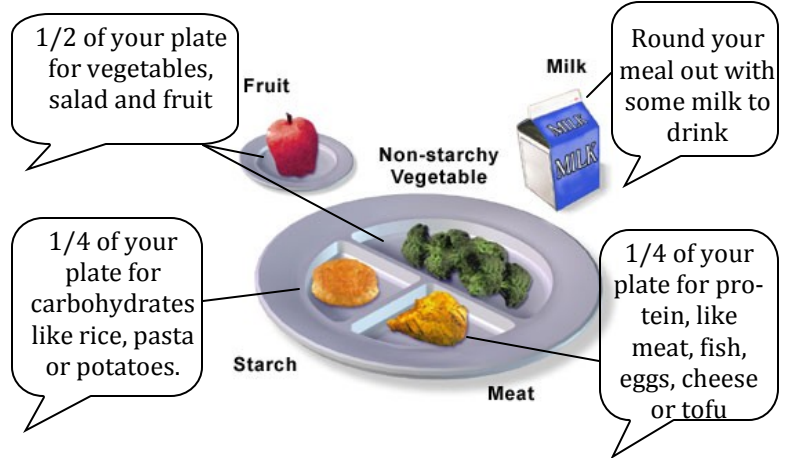
## Diabetes and Weight

One of the first things to think about is your weight. Do you weigh too much? Although this is hard to think and talk about, most kids with type 2 diabetes weigh more than they should. There are many reasons that you could be overweight: your family genes (and not the pair of pants passed down from Grandpa Ed!) affect the way your body stores fat. Your favorite foods may have a lot of calories, and if you eat them often, they can lead to weight gain. If you eat too much food, you will gain weight. Also, if you are sitting for most of the day instead of actively playing, this can lead to weight gain too. The more active you are, the more fat you will burn!

## Diabetes and Food

Before all of this medical technology, people with diabetes were very limited in foods they could have, and most of the approved foods had little or no sugar. Aren’t you glad those days are over? With insulin shots and diabetes medications, the options are almost endless for you! You just have to watch out for how much you eat of each food. Your food plan won’t be much different than what all of your friends should be eating too, so you can be a trend-setter!

Carbohydrates raise your blood sugar the most. One way to keep your carbohydrates in balance at every meal is to draw imaginary lines on your plate, with ½ of your plate for vegetables, salad and fruit, ¼ of your plate for carbohydrates, like rice, pasta or potatoes, and ¼ of your plate for protein, like meat, fish, eggs, cheese, or tofu. Your meal can be rounded out with some milk to drink and you have a balanced meal that will keep you feeling full and energized and will help keep your blood sugar under control.



There are many different categories of food, all of which you need for a healthy, balanced diet.

The first group is the grains. These include any food made from wheat, rice, oats, cornmeal, barley, or other cereal grains. Some examples are bread, pasta, oatmeal, breakfast cereal, tortillas, potatoes, corn and grits. You’ll need to eat 6-8 servings of these breads and grains every day. Of these grains, you want to eat as many whole grains as you can every day. Whole grains have more vitamins and fiber, which helps you stay full longer and slows down sugar from entering your blood. Look for the word “whole” on the package, for example “whole wheat tortillas”. Grains have carbohydrates in them, which turn into sugar in your body. You want to pay attention to this so you know how much sugar you’re putting in your body.

The second group is the vegetables. These are beautiful, colorful foods that can be a delicious and crunchy addition to your food plan! You are going to need to eat 2-2 ½ cups of veggies per day. Try to stay away from canned vegetables because they have lots of added salt, which is not good for your body.

The third group is the fruits, which is made up of whole fruit and fruit juice. Fruits also come in tons of colors and can be pretty sweet tasting. They have carbohydrates, like grains, that turn into sugar in your body. They also have tons of vitamins and minerals that help keep you healthy, too! You are going to need to eat 1 ½ - 2 cups of fruit per day. If you want canned fruit, find some that do not have any syrup, but are canned in unsweetened fruit juice instead.

Next is dairy- the milk, yogurt and cheese group. The foods in this group have lots of protein for strong muscles and calcium for strong bones! Most of the choices from this group should be fat-free or low-fat. Milk has carbohydrates in it too and will contribute some sugar to your body. You are going to need to eat around 3 cups per day of milk, yogurt and cheese (1 ½ oz cheese = 1 cup milk or yogurt).

Another protein group is the meat and bean group. All food made from meat, poultry, fish, dry beans or peas, eggs, nuts and seeds are part of this group. Like the milk, yogurt and cheese group, the meat and beans you eat should be low-fat or "lean". You are going to need 5-6 ounce equivalents of meat and beans every day (1 ounce meat, 1 tablespoon peanut butter, ¼ cup dry beans, 1 egg, ½ ounce nuts = 1 ounce equivalent).

The last group is the fats, oils and sugars group, which are tasty, but shouldn't be eaten often. Foods included in this group are potato chips, candy, fast food, cake and cookies. Save these foods for special occasions, like a birthday or holiday. Even then, make sure to know the serving size and how much sugar is in that treat so you know how it will affect your blood sugar.

Here are two tasty snacks to get you through the afternoon:

**Cheesy Salsa Quesadilla (Serves 2)**

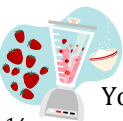
You'll need:

- 1 - 6" whole wheat tortilla
- 2 Tbsp shredded, reduced-fat cheddar cheese
- 1 Tbsp mild or medium salsa
- ¼ cup canned, drained and rinsed pinto beans



- STEP 1: Layer 1 Tbsp. cheese, salsa and beans on ½ the tortilla and top with remaining 1 Tbsp. cheese.
- STEP 2: Fold tortilla in half and microwave on a microwave safe plate for 30 seconds or until cheese is melted.
- STEP 3: Cut the quesadilla in half and enjoy it with a friend!! (makes 2 quesadilla wedges)

Calories: 150	Calories from Fat: 49	Fat: 5.5 g
Total Carbohydrates: 13 g		Protein: 12 g



**Yummy Yogurt Smoothie (Serves 1)**

You'll need:

- ¼ cup non-fat, low sugar, fruit-flavored yogurt (Light n'Fit)
- ¼ cup silken tofu (or additional ¼ cup yogurt)
- ¼ cup unsweetened, frozen fruit (any fruit you want, or make your own fruit blend!!)
- ½ cup non-fat, vanilla-flavored soy milk (or non-fat cow's milk)

- STEP 1: Add all 4 ingredients into a blender.
- STEP 2: Blend on high for 1 minute or until ingredients are completely blended.
- STEP 3: Pour smoothie into a cup and slurp it through a straw!! (makes 1 ¼ cup smoothie)

Calories: 119	Calories from Fat: 18	Fat: 2 g
Total Carbohydrates: 15 g		Protein: 7 g

Another easy way to know how much of each nutrient is in your food is to read a Nutrition Facts Label. Here is an example of one and how to read it:

**Start Here**

**Limit these Nutrients**

**Get Enough of these Nutrients**

**Footnote**

**Nutrition Facts**  
Serving Size 1 cup (228g)  
Servings Per Container 2

Amount Per Serving	Calories 250	Calories from Fat 110
	% Daily Value*	
Total Fat 12g	18%	
Saturated Fat 3g	15%	
Trans Fat 1.5g		
Cholesterol 30mg	10%	
Sodium 470mg	20%	
Total Carbohydrate 31g	10%	
Dietary Fiber 0g	0%	
Sugars 5g		
Protein 5g		
Vitamin A	4%	
Vitamin C	2%	
Calcium	20%	
Iron	4%	

\* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.

	Calories: 2,000	2,500
Total Fat	Less than 65g	80g
Sat Fat	Less than 20g	25g
Cholesterol	Less than 300mg	300mg
Sodium	Less than 2,400mg	2,400mg
Total Carbohydrate	300g	375g
Dietary Fiber	25g	30g

**Quick Guide to % DV**

5% or less is low

20% or more is high

**Diabetes and Exercise**

Exercise is one of the greatest ways to take care of your body... and it's probably the most fun, too! Exercise makes your body work more efficiently, so the insulin you have will also work better. You will be able to feel the effects of your hard exercise for up to 24 hours after the activity! Exercising every day can help you build muscle, which is also great because muscle burns more sugar than fatty tissue. But the best thing about exercise is you don't have to be a professional athlete to do it!

There are so many good things that happen to your body because of exercise. Exercise can help reduce your stress when you've had a really bad day (maybe the dog really did eat your homework!). You can use exercise as a way to reduce stress throughout your whole life. Exercise keeps you strong, improves coordination and helps build endurance, so you can play for longer periods without being tired. This is especially important to your lungs and heart, which both get a great workout while you exercise! You can also develop friendships because of exercise if you participate in sports and games.

Before you go scoring that winning goal, there are a few things to remember about exercising with diabetes. Make sure you test your blood sugar before, during and after your activity to make sure you're not too low or too high, and pay attention to how your body feels. You want to keep your blood sugar in a safe range during the whole activity. Like all your friends, make sure you have plenty of water and a snack, as well as a form of sugar like lifesavers candy. Finally, make sure your coach knows about your diabetes so that he or she can take good care of you while you're on the field.

With some weight loss, a healthy diet, and plenty of exercise, type 2 diabetes can be reversed... so get started today!

Sources  
 American Diabetes Association "Wizdom POD". <http://www.diabetes.org/for-parents-and-kids/pods.jsp>  
 United States Department of Agriculture "MyPyramid.gov". [www.mypyramid.gov](http://www.mypyramid.gov)