Today, more kids have type 2 diabetes than ever before. This brochure will tell you about type 2 diabetes and how you can lower your risk of having it.

**What puts you at risk?**

Kids with type 2 diabetes often
- Are overweight
- Are not physically active enough
- Have a mom or dad or other close relative who has type 2 diabetes
- Are African American, Hispanic or Latino American, American Indian, Asian American, or Pacific Islander

**What is type 2 diabetes?**

Diabetes means that blood sugar, or glucose (GLOO-kos), is too high. Glucose comes from the food we eat and also is made in our liver and muscles. After several years, if it is not controlled, the high blood glucose can damage many parts of the body such as the heart, eyes, kidneys, and nerves. The key to taking care of diabetes is to keep the blood glucose as close to normal as possible. Some people think that eating too much sugar causes diabetes but this is not true.

**What are the warning signs?**

Some kids don’t notice any warning signs. They find out they have diabetes when they go to their doctor for a check-up.

If you have type 2 diabetes, you might
- Urinate a lot
- Lose weight without any reason
- Be very thirsty
- Feel tired
- Have thick dark skin on the neck or under the arms.

**What can you do to lower your risk?**

Lots of things:
- Eat the right amounts of healthy foods to get to a healthy weight.
- Take action now and follow the tips in this brochure. Share them with your friends and family. They work for everyone.

A message from UT Extension and the National Diabetes Education Program, jointly sponsored by NIH and CDC.
Here’s what you can do to be more active.

If you are overweight, check with your doctor before you start a physical activity program.

* Set small goals to start. Don’t get upset if you can’t do a lot or if you get out of breath at first. Keep trying. Any amount of activity will help. Add a little more each week.

* Get up and play hard for at least 60 minutes almost every day. You don’t have to do it all at once — 20 minutes at a time, three times a day is okay, too. There are lots of ways to move around more. Walk, ride a bike, dance, play ball, or shoot hoops. You choose!

* Sign up for sports and physical education classes. Ask a grown-up or your teacher about sports or dance programs that you could join.

* Cut your TV and video game time to less than 1 hour a day. Be more active in your free time.

You don’t have to play a sport or go to a gym to move more. There are lots of things you can do at home and during the day. Use the Activity Guide below for more ideas.

Here’s what you can do to eat well and get to a healthy weight.

Choose a mix of healthy foods each day. If you are overweight, check with your doctor before you start a weight loss program. To lose some weight, you need to eat less and be more active each day. Here are some ways to do it.

**How can you cut some calories?**

The number of calories in a food shows how much energy you can get from it. To lose weight, try to eat 200 to 300 calories less than usual each day. Here are some simple ways to cut calories:

* Drink water instead of a 20-ounce soda or juice drink. You can cut about 250 calories.

* Eat a small serving of french fries or share a big one—and cut about 250 calories.

* Eat a piece of fresh fruit (apple, orange, or banana) instead of a candy bar or a bag of chips. You will cut about 200 calories. If you want something crunchy to chew on, fruit is a good choice because it fills you up.

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**Your Activity Guide**

![Activity Guide Diagram](Source: USDA Team Nutrition (www.fns.usda.gov/tn))
What are some healthy eating tips you can follow?

- Take your time when you eat. Wait 15 minutes before eating second helpings. It takes about that amount of time for your stomach to tell your brain that you are full.
- Eat the right amounts of food. Follow the Healthy Food Guide.
- Don’t skip meals. For breakfast, try a couple of slices of whole grain toast with a tablespoon of peanut butter, or a hard-boiled egg, or a piece of low-fat cheese.
- Pack a lunch of healthy foods. Make a sandwich with turkey or lean beef. Use mustard or a little low-fat mayonnaise. Add fruit instead of chips.

- Choose healthy snacks such as a small bowl of cereal with nonfat or low-fat milk or a piece of fruit.
- When eating out, order kid-sized meals and drink water, nonfat or low-fat milk, or diet soda. Split a larger meal with a friend.
- Fill up half of your plate with salad or vegetables. Use small amounts of margarine or salad dressing.
- Ask if you can help plan or make family meals sometimes to learn more about healthy eating.

What should you eat?

Use the Healthy Food Guide below to make healthy choices. The amounts to eat will vary for different foods but these will give you an idea of the right amounts for most kids aged 9 to 13. If you are older than 13, go to www.mypyramid.gov to find the right amounts for you.

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### Your Healthy Food Guide

**Vegetables**

**Aim for** 2 to 2 1/2 cups a day. Here are choices that equal 1 cup:
- 1 cup cut up cooked or raw vegetables
- 2 cups leafy salad greens
- 1 cup vegetable juice

Choose dark green and orange vegetables as often as you can.

**Fruits**

**Aim for** 1 1/2 cups a day. Here are choices that equal 1 cup:
- 1 cup cut up raw or cooked fruit
- 1 cup fruit juice
- 1/2 cup dried fruit

Choose fresh whole fruits as often as you can.

**Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts**

**Aim for** 5 ounces a day. Here are choices that equal 1 ounce:
- 1 ounce lean meat, fish, or chicken
- 1 egg
- 1 tablespoon peanut butter
- 1/4 cup cooked dry peas or beans such as kidney, white, split, or blackeye
- 1/4 cup tofu
- 1/2 ounce nuts

If you choose to eat these foods, have a very small amount and not every day.

**Milk, Yogurt, and Cheese**

**Aim for** 3 cups a day. Here are choices that equal 1 cup:
- 1 cup nonfat or low-fat milk or yogurt
- 1/2 ounces cheese

**Breads, Cereals, Rice, and Pasta**

**Aim for** 5 to 6 ounces a day. Here are choices that equal one ounce:
- 1/2 cup of cooked cereal
- 1/2 cup cooked rice or pasta
- 1 cup ready-to-eat cereal
- 1 slice of whole grain bread
- 1/2 small bagel or 1 small muffin

Choose whole grain foods for at least 3 of your 6 choices.

**Soda Pop, Candy, Cookies, and Desserts**

**One serving is**
- 1 teaspoon vegetable, olive, or canola oil
- 1 teaspoon tub margarine
- 5 large olives or 1/8 avocado
- 1 tablespoon low-fat mayonnaise
- 2 tablespoons low-fat salad dressing

**How much should you eat?**
You get most of the fat your body needs from other foods you eat—so choose only a few extra servings of these heart-healthy fats each day.

Source: USDA (www.usda.gov)
What's the payoff?
If you lower your risk for type 2 diabetes, you also will:
★ Have more energy.
★ Have more fun.
★ Feel good about yourself.

Is research being done about this problem?
Yes, people are looking for ways to help prevent and manage type 2 diabetes in kids.

The SEARCH for Diabetes in Youth Study will find out how many young people have type 2 diabetes.
www.searchfordiabetes.org

The TODAY Trial will find out the best ways to treat type 2 diabetes in kids and teens.
http://www.todaystudy.org

The STOPP-T2D Study will test a program to lower risk factors for type 2 diabetes in middle school students.

Special thanks to the kids who helped us make this tip sheet.

How can I learn more?
Find out more from these contacts.

American Diabetes Association
For help with type 2 diabetes:
http://diabetes.org/youthzone/youth-zone.jsp

American Dietetic Association
To find a dietitian near you: 1-800-366-1655
www.eatright.org

MyPyramid Plan
To learn what and how much to eat.
http://www.mypyramid.gov/

National Association for Health and Fitness
www.physicalfitness.org

National Diabetes Education Program
To learn more about diabetes and how to prevent it: www.ndep.nih.gov

President's Council on Physical Fitness and Sports
www.fitness.gov

USDA Team Nutrition
To make healthy food choices and stay active.
www.fns.usda.gov/tn/Students/index.htm

VERB
The VERB program makes it cool and fun for young people to be active every day.
www.verbnow.com

We Can! (Ways to Enhance Children’s Activity & Nutrition)
www.nhlab.i.nih.gov/health/public/heart/obesity/wecan

WIN – Weight-control Information Network
For weight control help:
www.win.niddk.nih.gov