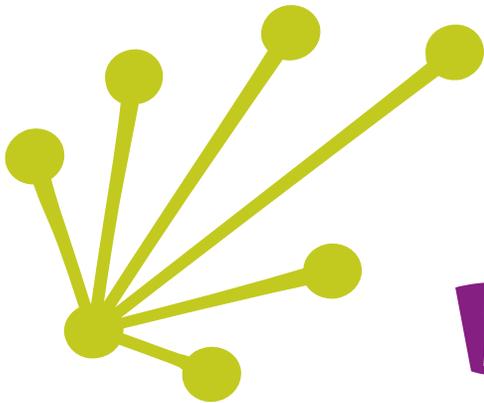


TIPS FOR KIDS

WITH TYPE 2 DIABETES



Be Active



Why is being active so important?

Exercise is good for everyone, whether you have type 2 diabetes or not. Being active keeps your body healthy and strong. It can help you stay at a weight that's right for you or help you lose weight slowly.

Physical activity can make you feel better if you're in a bad mood, relax you, and help you sleep well. If you have diabetes, exercise can help your body use glucose (GLOO-kos) for energy and lower your blood sugar or glucose.

What types of activity are good to do?

There are many ways you can stay active.

- ★ Walk the dog, take a hike, or ride a bike.
- ★ Roller skate, in-line skate, or ice skate.
- ★ Dance, swim, or jog.
- ★ Check out an aerobics tape from the library and work out at home.
- ★ You can play basketball, baseball, softball, golf, soccer, tennis, or volleyball.
- ★ Take the stairs instead of the elevator, skip rope, fly a kite, throw a disc, or play hopscotch.

Think of other things you can do and just move it! **Don't forget to have fun!**

Make exercise a part of your daily life. Be active with a friend or family member—it is easier and more fun when you have a buddy.

What should you do before exercising?

Talk to your doctor about what physical activity is good for you.

- ★ Ask if you need to check your blood glucose before starting any activity or after you are done.
- ★ Ask if the medicine you take can make your blood glucose get too low during exercise. If so, keep a snack with you when you exercise.

How much exercise do you need to do?

If you haven't been very active, start slowly. Try a few minutes each day. Slowly work up to 30 to 60 minutes almost every day. Be sure to do something you like to do.



How can your family and friends help?

Ask your family members and friends to be active with you—it's good for everyone and helps to get rid of stress. **It can be a good way for families to spend time together, too.**

Ask your family to take a walk after dinner, instead of watching TV. Instead of playing computer games, put some music on that everyone can dance to. Help your mom or dad carry groceries, clean the house, cut the grass, do garden work, rake leaves, or shovel snow.

What if you don't like to exercise?

There are a lot of things you can do to be more active. Try these: do sit-ups, lift light weights, or jump rope while you watch TV. Take the stairs when you can, run around during recess at school, or walk fast around the mall a few times when you go shopping. **You don't have to play a sport or go to a gym.**

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 and you can add a little more each week.

Make a list of some things you like to do. Hang it in your room as a reminder.

Take Charge of Your Diabetes

Remember, if you have type 2 diabetes, you need to choose healthy foods, be active every day, take your medicine, check your blood glucose as often as your doctor suggests, and stay at a healthy weight. Taking care of your diabetes will help you stay healthy, feel better, and keep your blood glucose where you want it to be.



A joint program of the National Institutes of Health and the Centers for Disease Control and Prevention



DIABETES PREVENTION AND CONTROL PROGRAM
Working together for prevention and control
Massachusetts Department of Public Health

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What are some things parents can do to help promote physical activity for kids in their community?

- ★ Talk to your child's school about having more active time for students.
- ★ Ask if the school can be used for physical activities during after-school hours.
- ★ Involve your child in active programs with the YMCA, 4H, the Scouts, or Boys and Girls Clubs.
- ★ Talk to community leaders about providing safe and active places for kids to play.
- ★ Volunteer to help create or fix up community playgrounds.

To learn more

American Alliance for Health, Physical Education, Recreation and Dance
703-476-3400 • www.aahperd.org

American Diabetes Association
1-800-DIABETES (1-800-342-2383)
www.diabetes.org/wizdom

Kids Walk to School (CDC Program)
www.cdc.gov/nccdphp/dnpa/publicat.htm

Massachusetts Diabetes Prevention and Control Program
617-624-5070 • TTY 617-624-5992 • www.mass.gov

Massachusetts Health Promotion Clearinghouse
To view, download, or order free diabetes education materials online go to:
www.maclearinghouse.com

National Association for Health and Fitness
317-955-0957 • www.physicalfitness.org

President's Council on Physical Fitness and Sports
202-690-9000 • www.fitness.gov

Walkability Checklist
www.walkinginfo.org/walkingchecklist.htm

YMCAs of the USA
1-800-872-9622 • www.ymca.net

TIPS FOR KIDS WITH TYPE 2 DIABETES

What is Diabetes?

Diabetes means that your blood sugar, or glucose (GLOO-kos), is too high. Glucose comes from the food you eat and is also made in your liver and muscles.

Your blood always has some glucose in it because your body needs glucose for energy. But too much glucose in the blood isn't good for your health.

An organ called the pancreas (PAN-kree-as) controls the amount of glucose in the blood. The pancreas makes insulin (IN-suh-lin) which helps glucose get from food into your cells. Cells take the glucose and make it into energy you need for life.

In a person with diabetes, the pancreas stops making insulin or the body doesn't make or use insulin very well. So glucose builds up in the blood and can't get into your cells. Your blood glucose gets too high and diabetes can then damage your body.

What types of diabetes do kids get?

In **type 1 diabetes**, the pancreas stops making insulin. With type 1 diabetes, you need to get insulin from a shot or a pump. Type 1 used to be called "insulin dependent" or "juvenile diabetes."

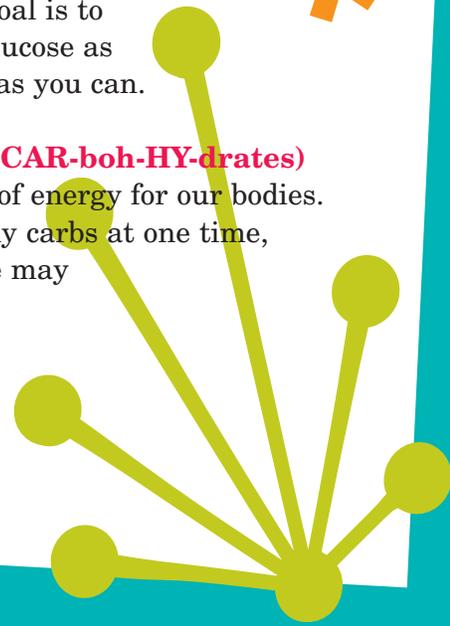
In **type 2 diabetes**, the pancreas still makes some insulin but the body can't use it very well. Type 2 used to be called "adult onset diabetes" but now more kids are getting type 2.

How do you manage diabetes?

The key to taking care of diabetes is to keep your blood glucose as close to normal as possible. The best way is to **eat healthy foods, get exercise every day, stay at a healthy weight, take your medicine, and check your blood glucose** to see how you are doing. Kids with type 2 diabetes may need to take insulin or pills to help the body's supply of insulin work better.

Your doctor will tell you what blood glucose level is good for you and will teach you how to use a meter to check it. Your goal is to keep your blood glucose as close to this level as you can.

Carbohydrates (CAR-boh-HY-drates) are a good source of energy for our bodies. If you eat too many carbs at one time, your blood glucose may go up too high.





Many foods contain carbs. Whole grain foods, low-fat milk, fresh fruits, and vegetables are better carb choices than white bread, whole milk, fruit juice, soda pop, potato chips, sweets, and desserts. Learn to eat the right amount at meals and snack times to keep your blood glucose in balance.

Eat small servings of food and be active to prevent weight gain and to keep your blood glucose in a healthy range.

Illness and stress also can make your blood glucose go up. Things that make your blood glucose go down are insulin or pills and exercise.

Why do you get type 2 diabetes?

Being overweight increases the risk of getting type 2 diabetes. Kids who are not active or who have a family member with diabetes are more likely to get it. Some racial and ethnic groups have a greater chance of getting diabetes—American Indians, African Americans, Hispanics/Latinos, Asian Americans and Pacific Islanders. You do not get diabetes from eating too much sugar.



Why do you need to take care of your diabetes?

After several years, diabetes can lead to health problems. Blood vessels get damaged and cause heart attacks in young people. Damage to organs in your body can cause blindness, kidney failure, loss of legs or feet, and gum problems or loss of teeth.

The good news is that when you take care of your diabetes, you can avoid these problems. How? Eat healthy foods, be active every day, stay at a healthy weight, take your medicine, and check your blood glucose. You can do all the things your friends do and live a long and healthy life.



To learn more about diabetes

American Diabetes Association

1-800-DIABETES (1-800-342-2383)
www.diabetes.org/wizdom

Juvenile Diabetes Research Foundation International

1-800-223-1138 • www.jdrf.org

Massachusetts Diabetes Prevention and Control Program

617-624-5070 • TTY 617-624-5992 • www.mass.gov

Massachusetts Health Promotion Clearinghouse

To view, download, or order free diabetes education materials online go to:
www.maclclearinghouse.com

National Diabetes Education Program

1-800-438-5383 • www.ndep.nih.gov

National Diabetes Information Clearinghouse

1-800-860-8747 • www.niddk.nih.gov

To find a diabetes educator near you:

American Association of Diabetes Educators

1-800-338-DMED (1-800-338-3633)
www.diabeteseducator.org

To find a dietitian near you:

American Dietetic Association

1-800-366-1655 • www.eatright.org



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DIABETES PREVENTION AND CONTROL PROGRAM
Working together for prevention and control
Massachusetts Department of Public Health



**Think Balance—
in food,
in being active,
in all you do!**



Putting it all together!

- ★ Eat meals and snacks at about the same time each day. Try not to skip meals.
- ★ Be as active as you can.
- ★ Drink more water instead of juice or soda.
- ★ Learn more about foods and how much you need to eat.
- ★ Ask your doctor or dietitian for help.
- ★ Take the right amount of insulin or pills at the right times if you need them to help manage your diabetes.

It's not always easy to eat healthy foods when others seem to eat whatever they want. Do the best you can and know that it will make a difference in your life.



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To learn more

A registered dietitian or a diabetes educator can help you and your family make the best food choices.

To find a dietitian near you, contact the **American Dietetic Association**.
1-800-366-1655 • www.eatright.org

To find a diabetes educator near you, contact the **American Association of Diabetes Educators**.
1-800-832-6874 • www.diabeteseducator.org

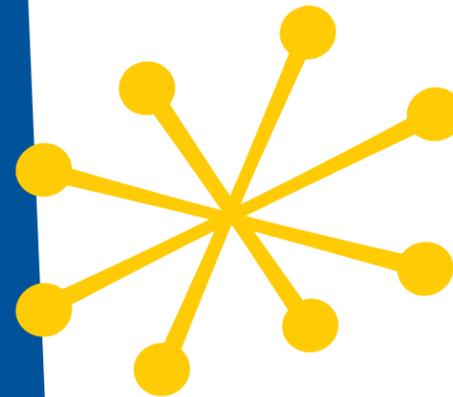
Also check out:
American Diabetes Association
1-800-DIABETES (1-800-342-2383)
www.diabetes.org/wizdom



CDC's Nutrition and Physical Activity website for more information on healthy eating tips as well as the Kids Walk to School Program at www.cdc.gov/nccdphp/dnpa/publicat.htm.

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www.maclclearinghouse.com



Eat Healthy Foods



Why do you need to eat healthy foods?

- ★ For energy to learn, play, and live.
- ★ To grow and develop at a normal rate.
- ★ To keep your blood sugar or glucose (GLOO-kos) levels in balance—not too high or too low.
- ★ To help you stay at a healthy weight or help you lose weight slowly.
- ★ To keep your body working properly.
- ★ To help you avoid other health problems caused by diabetes.

Do kids with diabetes need special foods?

No, they don't! Meals that are healthy for children with diabetes are great for everyone in the family.

How does food affect your body?

Food is the fuel that our bodies use for energy. The three main sources of fuel are carbohydrates (CAR-boh-HY-drate), protein, and fat. The body changes them into glucose for energy or stores them as fat. A car uses gas for energy—we use glucose! Eating a balance of all these foods every day will help your blood glucose stay in balance and keep your weight where you want it to be.

Carbohydrates (carbs) are a good source of energy for our bodies. Many foods contain carbs. Some are better for you than others. If you eat too many carbs at one time, your blood glucose may go up too high. Learn to eat the right amount at meal and snack times to keep your blood glucose in balance.



These are good carb choices:

- ★ Whole grain foods
- ★ Low-fat or nonfat milk and cheese
- ★ Fresh fruits and vegetables from every color of the rainbow—red, orange, yellow, white, green, blue, and purple.

Choose these carbs less often:

- ★ White bread and potato chips
- ★ Whole milk and fruit juice
- ★ Sweets and desserts

Protein foods help to build strong muscles and bones.

Protein foods do not make the blood glucose go up like some carbs do. Protein helps you feel less hungry.

Foods that contain protein include:

- ★ Meat and poultry without the extra fat or skin
- ★ Fish, low-fat cheese, and eggs
- ★ Dried beans or peas such as kidney, white, split, or blackeye
- ★ Soy products and nuts

Fats are a good source of fuel for the body

and help you grow. Fat does not make blood glucose go up but too much fat can make you gain weight.

Choose fats that keep your heart healthy:

- ★ Small portions of salad dressing, “lite” mayonnaise, and margarine in a plastic tub
- ★ Nuts, olives, and vegetable oil
- ★ Avocados

Choose these high fat foods less often.

They are not healthy for your heart:

- ★ Butter, stick margarine, and regular mayonnaise
- ★ Fried foods such as potato chips and french fries
- ★ Meats with fat on them, including bacon and lunch meats
- ★ Cakes, cookies, pies, and other desserts

What about sugar, sweets, and desserts?

Everyone likes the taste of sweet foods! **Small amounts of foods that contain sugar can be part of a healthy meal plan.** Sugary foods include soda pop, fruit-flavored drinks, syrup, honey, and candy.

Desserts such as cakes, muffins, pies, cookies, and ice cream contain a lot of fat as well as sugar. If you choose to eat any of these sweet foods, just have a small amount at the end of a healthy meal. Have a piece of fruit if you are still hungry.

Drink water, sugar-free soda pop, and sugar-free fruit drinks if you are thirsty—instead of fruit juice, regular soda pop, sweetened fruit drinks, and sports drinks that are all high in carbs.

How much should you eat?

Your height, weight, age, whether you are a boy or a girl, and how active you are will affect how much food you need to eat each day to stay at a healthy weight. Everyone is different. Talk to your doctor or dietitian about how much to eat.

It's best to spread your food out over the day and eat breakfast, lunch, and dinner and a couple of snacks as well. You will have a ready supply of energy and you won't get too hungry.

If you take in more food than your body burns, you will gain weight.

If you take in less food than your body burns, you will lose weight. Being active and eating smaller amounts of food and fewer sweet or fatty foods can help overweight kids lose weight in a healthy way. You will keep your heart healthy, too.

For fun, take the “Portion Distortion Quiz” at <http://hin.nhlbi.nih.gov/portion/>. You will learn how today's portions compare to the portions 20 years ago and how much physical activity you will need to do to burn up the extra calories in today's food portions.

What should you eat?

Use the food groups and serving sizes below as a guide for making healthy choices. Serving sizes vary for different foods but these will give you an idea of the right amounts for most children and teens.

Your Healthy Food Guide



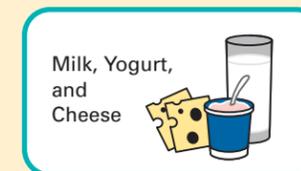
Vegetables

One serving equals

- 1/2 cup cooked
- 1 cup raw

How many servings?

5 or more a day



Milk, Yogurt, and Cheese

One serving equals

- 1 cup low-fat milk or yogurt
- 2 slices low-fat cheese

How many servings?

2 to 3 a day

One serving equals

- 1 medium apple or orange
- 1/2 cup chopped, cooked or canned fruit
- 1/2 cup fruit juice
- 1/4 cup dried fruit

How many servings?

2 to 4 a day



Fruits

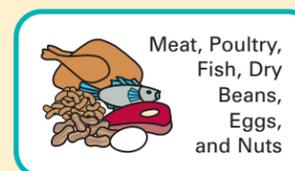
One serving equals

- 2 to 3 ounces meat, fish, or chicken
- 1 egg
- 2 tablespoons peanut butter

- 1/3 cup cooked beans or peas such as kidney, white, split, or blackeye

How many servings?

2 to 3 a day



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

If you choose to eat these foods, have a very small serving.



Soda Pop, Candy, Cookies, and Desserts

One serving equals

- 1 teaspoon vegetable oil
- 1 teaspoon butter or tub margarine
- 5 large olives or 1/8 avocado
- 1 tablespoon “lite” mayonnaise or salad dressing
- 1 to 2 tablespoons nuts

How many servings?

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.



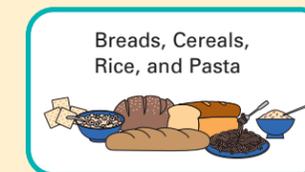
Heart-healthy Fats

One serving equals

- 1/2 cup of cooked cereal
- 1/3 cup rice or pasta
- 3/4 cup ready-to-eat cereal
- 1 slice of whole grain bread
- 1/2 bagel

How many servings?

6 or more a day



Breads, Cereals, Rice, and Pasta



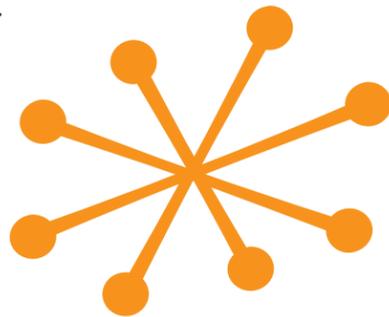
What about fast-food restaurants?

Try not to super-size your meals, unless you plan to share them with the family or a friend! Order smaller child-sized meals and drink water, low-fat milk, or diet soda pop.

A grilled chicken sandwich or a simple hamburger is a better choice than a burger that is covered with secret sauce, cheese, and bacon. A baked potato with a little butter or sour cream is a good choice, too.

If you are eating pizza, order thin or medium crust instead of deep dish or stuffed crust pizzas. Eat only one or two slices and add a salad with a little dressing.

Try a small bag or a handful of baked chips or pretzels instead of the regular kind of chips.



Follow a healthy eating and exercise plan.

To learn more

To find a dietitian near you, contact the **American Dietetic Association**. 1-800-366-1655 • www.eatright.org

To find a diabetes educator near you, contact the **American Association of Diabetes Educators**. 1-800-832-6874 • www.diabeteseducator.org

Also check out the **CDC's Nutrition and Physical Activity website** for more information on healthy eating tips as well as the Kids Walk to School Program. www.cdc.gov/nccdphp/dnpa/publicat.htm

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TIPS FOR KIDS WITH TYPE 2 DIABETES



Stay at a Healthy Weight



Why is staying at a healthy weight good for kids?

A healthy weight means you are not too fat or too thin. Your doctor may have said that you should not gain more weight or that you need to lose a few pounds. If you have diabetes and are overweight, you are not alone.

The steps you take to manage your weight will help you feel better and may improve your blood sugar or glucose (GLOO-kos) levels. Staying at a healthy weight when you are young can help you manage your weight for life. It also can help prevent problems like heart disease and high blood pressure.

How can you get to a healthy weight?

If you want to lose some weight or stay at the weight you are right now, **you need to eat fewer calories each day and be more active**. Here are some ways to succeed.

1. Be active almost every day for 30 to 60 minutes to burn up extra calories and get fit. Play tag or go for a bike ride instead of playing computer games. Ask a friend or family member to join you on a walk instead of watching TV.

2. Cut some calories. The number of calories in a food shows how much energy you can get from it. To lose weight, you need to eat about 200 to 300 calories less than usual each day.

Here are some simple ways to cut calories:

- ★ Drink water instead of a big glass of juice or regular soda pop. You can cut about 150 calories!
- ★ Eat a small serving of french fries instead of a big one—and cut about 250 calories!
- ★ Eat a piece of fruit instead of a candy bar. You will cut about 200 calories!





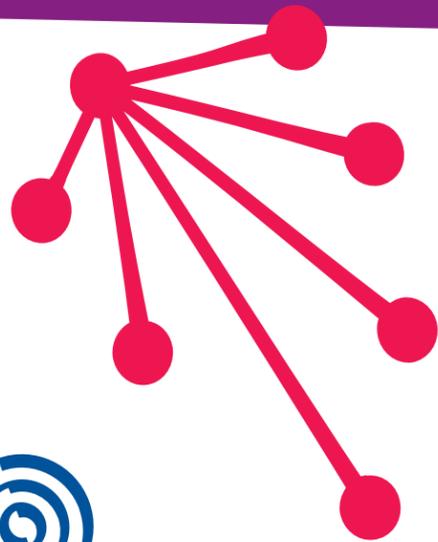
3. Eat smaller portions of food and drink water at meals and snack time.

4. Drink lots of water. It has no calories! Sugar-free fruit drinks or sugar-free soda pop are also good choices when you are thirsty.

5. Ask your doctor to help you find a dietitian or a diabetes educator. He or she can help you and your family make the best food choices.

If you eat less and get more active, you should lose about one pound a month—and feel great. It's best to be slow and steady in your weight loss because you are still growing.

Very low-calorie diets are not healthy for growing children and teens. Kids who do not eat enough food may not grow or develop the right way.



What are some healthy eating tips you can try?

- ★ Take your time when you eat. Wait 10 to 15 minutes before eating second helpings at mealtime. It takes about 15 minutes for your stomach to tell your head that you are full!
- ★ Ask if you can help plan, shop, or make the family meals sometimes. This can be fun for the whole family.
- ★ Fill up half of your plate with salad or vegetables. Use small amounts of butter, margarine, or salad dressing.
- ★ If you eat sugary foods, sweets, desserts, or candy, eat only a small serving at the end of a meal. Don't eat them very often.

What about breakfast?

One bowl of whole grain cereal, low-fat milk, and a piece of fruit are a great way to start the day. You can do better at school when you eat breakfast!

When you don't have much time before school, 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.

A small breakfast bar and a glass of low-fat milk is another fast meal that can go a long way.



What about school lunches?

If you get your lunch at school, choose fried foods less often. Choose low-fat milk instead of chocolate milk and a piece of fresh fruit instead of a cookie.

Many schools have salad bars; just take it easy with the salad dressing or choose low-calorie dressing.

Small deli or sub sandwiches made with lean turkey or beef are healthy choices, too. Use mustard or a little "lite" mayonnaise.

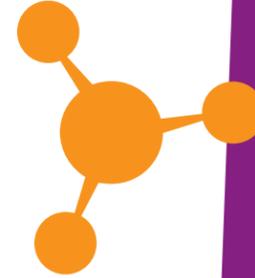
If you have time in the morning, you could pack a lunch of healthy foods to take to school. Or you could make your lunch the night before.

What about after school snacks?

Most kids need an after school snack.

Choose healthy snacks. The trick is not eating too much.

Use a small plate or a bowl for your snack instead of eating out of the bag or box. It will be easier to keep track of how much you eat. It's best not to snack while watching TV or at the computer—you may eat too much.



Snack ideas:

- ★ A piece of fresh fruit
- ★ Half a turkey or ham sandwich, easy on the mayo
- ★ A small bowl of cereal with low-fat milk
- ★ A small bowl of vegetable soup and a few crackers
- ★ One small tortilla with one or two slices of shredded low-fat cheese or turkey
- ★ 3 to 6 cups of low-fat or "lite" microwave popcorn, one handful of pretzels, or a few rice cakes

Remember to drink a couple of glasses of water, too.

