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 foods that contain carbohydrate (carbs), protein, and fat every day will help your blood glucose stay in balance and keep your weight where you want it to be.

**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.

Why do you need to eat healthy foods?

- For energy to learn, play, and live.
- To grow at a healthy rate.
- To help keep your blood sugar or glucose (GLOO-kos) levels in balance—not too high or too low.
- To help you lose weight slowly if you need to.
- 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 kids with diabetes are great for everyone in the family.
These are good carb choices. They have lots of fiber.

- Whole grain foods
- 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
- White rice
- Sweetened fruit drinks
- 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. Having protein in your meal can help you feel less hungry.

Foods that are a good source of protein include:
- Meat and poultry without the extra fat or skin
- Fish, low-fat cheese, and eggs
- Dried peas or beans such as kidney, white, split, or blackeye
- Soy products and nuts.

Fats are a good source of fuel for the body. Small amounts of fats can be part of a healthy meal plan. Small portions of salad dressing, low-fat mayonnaise, and margarine in a plastic tub and nuts, avocados, and olive oil are all good fats to choose. Fats help you feel less hungry.

Fats are a good source of fuel for the body.

Choose these high fat foods less often:
- Fried foods such as potato chips and french fries
- Butters, stick margarine, and regular mayonnaise
- Nuts, olives, and vegetable oil
- Avocados.

Foods that are a good source of protein include:
- Meat and poultry without the extra fat or skin
- Fish, low-fat cheese, and eggs
- Dried peas or beans such as kidney, white, split, or blackeye
- Soy products and nuts.

Drinks that are a good source of protein include:
- Milk
- Yogurt
- Cheese
- Eggs

Desserts such as cakes, muffins, pies, 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.

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 your healthy weight. Everyone is different. Talk to your doctor or dietitian about how much to eat, especially if you need to lose weight.

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 lose weight. Being active and eating smaller amounts of food and fewer sweet or fatty foods can help over-weight kids lose weight in a healthy way. You will keep your heart healthy, too.
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.

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.

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 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.

**Foods to limit**

- Soda Pop, Candy, Cookies, and Desserts

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)
Putting it all together!

* Eat meals and snacks at about the same time each day. Try not to skip meals.
* Be physically active for at least 60 minutes almost every day
* 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. Follow the tips in this brochure and know that it will make a difference in your life.

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 healthy eating tips and the Kids Walk to School Program
www.cdc.gov/nccdphp/dnpa/publicat.htm

The Dietary Guidelines for Americans that help promote health and reduce disease risk through diet and physical activity.

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

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