A Self-Care Guide for Teens with Diabetes

Helping you to manage diabetes in your life.

Visiting Nurse Service of New York
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WHAT IS DIABETES?

Diabetes is a condition that occurs when your body is not able to properly use the energy that comes from the foods you eat. The breakdown begins in the pancreas, an organ located near the stomach, which contains special cells called beta cells. These beta cells make insulin, a hormone that helps “feed” all the cells in your body with glucose (or sugar). All of your cells need energy and they get this energy from glucose.

For example, when you eat an apple, your body takes the glucose from the apple and sends it into your bloodstream. The glucose then travels through your blood into your cells where it’s used for energy. However, in order for the cells to use glucose as energy, they need help from insulin. In people with diabetes, the body is not making insulin at all, not making enough insulin, or the cells are not using the insulin well. The end result is the cells cannot get the glucose they need to function.

The Two Types of Diabetes

**TYPE 1** diabetes, once known as “juvenile diabetes,” typically occurs in children or young adults. In type 1 diabetes, the beta cells in the pancreas cannot make insulin at all. People with this type of diabetes must take insulin by injection or use an insulin pump for their cells to be able to use glucose.

**TYPE 2** diabetes used to be known as “adult-onset” diabetes and typically occurs in people 35 years of age or older. In recent years, type 2 diabetes has been seen more and more frequently in children and adolescents, especially those who are overweight. In this type of diabetes, the pancreas can still make insulin, but it does not make enough or the cells cannot use the insulin very well. People with type 2 diabetes may need to take pills, receive insulin injections, or both, in order to for their cells to get enough glucose.
FACTS ABOUT ME AND MY DIABETES

I have type...........................................diabetes
My Diabetes Doctor is.......................................
My Diabetes Doctor’s phone number is:
(       ).................... - ...........................
My Certified Diabetes Educator (CDE) is:

Cut the card to keep in your wallet or survival shoebox.
Diabetes can be treated with medications (such as insulin), activity and a healthy diet.

 Teens with type 1 diabetes need to take insulin. There are many different kinds of insulin available to help keep your blood sugar under control. There are also different ways to take insulin, including insulin vials and syringes, pens, and pumps, as well as various schedules of when it should be taken. Teens with type 2 diabetes may be treated with diet and exercise, and/or a combination of medications, which can include pills, insulin, or other medications that are injected.

 Physical activity/exercise is important for everyone's health and well-being, but it's even more important for teens with diabetes. Exercise can help your body to use insulin better. Walking with your friends, dancing, or playing your favorite sport are just some examples of ways to get exercise.

 Teens with diabetes have the same nutritional needs as anyone else. Along with exercise and insulin, nutrition is important for good diabetes control. By eating well-balanced meals in the correct amounts, you can keep your blood glucose level as close to normal as possible.
HYPOGLYCEMIA: WHAT YOU NEED TO KNOW

Hypoglycemia, or low blood sugar, is a condition that results from a low glucose level in the blood. When you have hypoglycemia, your body does not have enough energy to function normally.

Hypoglycemia may be a result of:
1. Too much insulin
2. Too little food/carbohydrates
3. Too much exercise
4. A combination of all of the above

The symptoms of hypoglycemia vary from one individual to another. They may also vary in one individual from hypoglycemic episode to hypoglycemic episode.

Note: Your physician will instruct you on what your individual high and low blood sugar limits are.

Remember: Carbohydrates ("carbs") come in many forms. Just because a food or drink doesn’t taste sweet does not mean there are no carbs in it! All carbohydrates (no matter how they taste) are converted by your body into glucose.

Is it the same thing when my doctor talks about "sugar" and "glucose"?
Yes! Glucose is the more specific scientific word for sugar, but glucose and sugar are the same thing.
The symptoms of **mild hypoglycemia** are a sign that the body is in a state of sugar deficiency. Symptoms of mild hypoglycemia may include the following:

- Headache
- Shakiness
- Tremors
- Dizziness
- Extreme hunger
- Clammy skin
- Increased heart rate/palpitations
- Lethargy (sleepiness)
- Pallor (change in skin color)
- Behavior/personality changes
- Sweating
- Anxiety
- Dilated pupils (large pupils)

Mild hypoglycemia can usually be treated easily and effectively. Most episodes of hypoglycemia are considered “mild.”

**Mild hypoglycemic episodes can be treated using the 15:15 rule.** If you are feeling symptoms of hypoglycemia, check your blood sugar. If your blood sugar is less than 70 mg/dl:

1. Take 15 grams of quick-acting carbohydrates, such as three glucose tablets, or ½ cup of juice, or ½ can of regular soda, or 15 jelly beans.
2. Wait 10 to 15 minutes and recheck your blood sugar.
3. If your blood sugar is still less than 70 mg/dl, repeat Steps 1 and 2.

Even if you are not feeling symptoms, you should follow the above steps when your blood sugar is less than 70 mg/dl.

If not treated promptly, a mild hypoglycemic reaction can quickly progress to a **severe reaction**, which may be characterized by:

- Yawning
- Restlessness
- Behavior/personality changes
- Extreme tiredness/fatigue
- Sudden crying
- Seizures, convulsions, jerking movements
- Confusion
- Irritability/frustration
- Dazed appearance
- Unconsciousness/coma
- Inability to swallow
- Gluagon: Glucagon can be used to treat severe hypoglycemia. If your diabetes care plan includes the use of glucagon, make sure to read the entire glucagon package insert **BEFORE** attempting to use it. Ask your health care team if you have any questions about how to use glucagon.

Onset and progression of hypoglycemic episodes can happen very quickly. Each individual will have his/her own set of common symptoms; your symptoms should be listed on your diabetes plan at school. Remember that early recognition and intervention is the best strategy to prevent progression to more serious symptoms.
Hyperglycemia, or high blood sugar, is a condition that results from a high glucose level in the blood. Despite all of this extra glucose in the blood, the body’s cells are actually starving; there is not enough insulin available to help the sugar get into the cells to provide energy.

Hyperglycemia may be a result of:
1. Too little insulin
2. Too much food/ carbohydrates
3. No exercise
4. Illness
5. Emotional or physical stress
6. A combination of all of the above

Note: Your physician will instruct you on what your individual high and low blood sugar limits are.
Generally, the onset of hyperglycemia is slow. An isolated high blood glucose reading is cause for concern, but not alarm. It is important to recognize that blood glucose is expected to be higher following a meal or snack. Hyperglycemia can occur more rapidly in people using insulin pumps; for instance, a pump may malfunction and deliver less insulin than it should, resulting in hyperglycemia.

Lack of insulin for any reason—forgetting to take insulin, insulin not working effectively, or a pump malfunction—can result in a breakdown in fat, causing the formation of ketones (a waste product). Ketones may build up in the blood and result in diabetic ketoacidosis (DKA), a dangerous state of insulin deficiency.

Hyperglycemia becomes an increasing concern when several consecutive readings have been high, or when they are accompanied by vomiting. Review your diabetes management plan, and ask yourself:

- Did you take your insulin?
- Do you have an infection that has not been treated? This could be anything from a toothache or sore in your mouth, a cold or flu, or a sore throat, to a bladder or yeast infection.

It is important to try to identify the cause of the problem. If you can not pinpoint what is wrong, let your parent, doctor, Certified Diabetes Educator (CDE) or other responsible adult know what is happening. Don't ignore the signs—getting help quickly is essential.

Ketones are toxic byproducts made when your body starts to use its own fat for energy (called diabetic ketoacidosis or DKA). Your body does this if you don't have enough insulin or you can't and/or don't eat the foods you need. When your body is making ketones, they show up in your blood first and then in your urine.

Having too may ketones in your body is very dangerous. If the ketone level gets too high, you can go into a coma (a deep sleep). If you're not treated quickly, DKA can kill you. This is a scary thought and very a dangerous situation; however, DKA can be prevented. Be prepared to take care of ketones before they happen!

If ketones are present, check your diabetes management plan on what you need to do.
# ALL ABOUT INSULIN

<table>
<thead>
<tr>
<th>Type of Insulin*</th>
<th>Insulin Name</th>
<th>Start Working</th>
<th>Peaks</th>
<th>Estimated Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rapid-acting</td>
<td>Humalog or Novolog</td>
<td>10-30 mins</td>
<td>1-3 hrs</td>
<td>3-5 hrs</td>
</tr>
<tr>
<td></td>
<td>Apidra</td>
<td>15 mins</td>
<td>30 mins – 2.5 hrs</td>
<td>5 hrs or less</td>
</tr>
<tr>
<td>Short-acting</td>
<td>Regular</td>
<td>30-60 mins</td>
<td>2-4 hrs</td>
<td>5-8 hrs</td>
</tr>
<tr>
<td>Intermediate-acting</td>
<td>NPH or Lente</td>
<td>1-2 hrs</td>
<td>2-12 hrs</td>
<td>14-24 hrs</td>
</tr>
<tr>
<td>Long-acting</td>
<td>Lantus</td>
<td>1.5 hrs</td>
<td>No peak</td>
<td>24 hrs</td>
</tr>
<tr>
<td></td>
<td>Levemir</td>
<td>1-2 hrs</td>
<td>Relatively no peak</td>
<td>Up to 24 hrs</td>
</tr>
</tbody>
</table>

* Follow your insulin regimen as prescribed to prevent your blood sugar from dropping too low or going too high. If you have any questions about your insulin regimen speak with your health care provider or Certified Diabetes Educator (CDE).
MAKING A SURVIVAL “SHOEBOX”

Your “survival shoebox” is a box filled with all of the things you’ll need to treat your diabetes in an emergency. The box can actually be any kind of container, such as a shoebox, a plastic food storage container, or even a pretty box from a stationery store. (It could also be a drawer or shelf where the necessary supplies can be kept until you need them.) Below is a list of the items to include in your “survival shoebox.” Check off the items that you have added to yours:

- A sheet of paper with the names and phone numbers of your primary care doctor, diabetes doctor, and pharmacy; write the information in large letters and tape the sheet of paper inside the lid of the box or place it on top of everything else.
- 8-12 ounce can or bottle of calorie-containing clear liquids, such as ginger ale or clear fruit juice.
- 8-12 ounce can or bottle of non-caloric clear liquids, such as chicken broth, sugar-free gelatin, or diet soda.
- A thermometer.
- Aspirin, acetaminophen (Tylenol), or ibuprofen (Motrin) to bring down a fever.
- An extra box of blood glucose test strips.
- An extra box of lancets.
- A box of ketone test strips.
- Glucose tablets or glucose gel for treating hypoglycemia.
- A notebook (or several sheets of paper) and a pen or pencil for writing your blood glucose results and other important information you may need to record.
- An up-to-date list of all your medical conditions and medications, including typical doses.

If you use insulin, include:

- Extra syringes, pen needles or insulin-pump supplies
- One or more filled vials or pens of extra insulin.
SICK DAY STRATEGIES

If you’re a teenager with well-controlled blood sugar, you are not at greater risk for illnesses or infections. But when you get sick, it can cause your blood sugar to become out of control. For instance, a cold can raise your blood sugar. On the other hand, a stomach virus that involves nausea and vomiting can result in low blood sugar.

The best time to think through your sick-day plan? When you are feeling well! It’s a lot harder to come up with a smart strategy for coping with an illness when you have a fever or you’re busy coughing and sneezing. Take the time now to formulate a plan. After you do, talk about it with your health care team. Your team will help you make sure it’s right for you and managing your particular diabetes.

Helpful Hints

1. **Check and recheck your blood sugar.**
   Being sick can do strange things to your blood glucose—quickly. And since you’re not feeling well in the first place, you might not notice the highs or lows as easily, so check your blood sugar level frequently.

2. **Don’t skip an insulin dose.**
   You may be eating less, but your body still requires insulin so your cells have the extra energy to battle your illness. Unless someone on your health care team tells you to skip a shot of insulin, don’t do it.

3. **Check for ketones.**
   Ketones aren’t something you monitor every day, but you should check for them when you’re sick. If you haven’t done this before, ask a member of your health care team about how and when to check ketones.
When you’re not feeling well, just thinking about eating can make your stomach do flip-flops. And when you do eat something, your stomach might rebel and send it right back up. No matter what messages your stomach sends, it is important to try to eat so your blood sugar remains steady. Choose foods from your normal meal plan that will be easier on your stomach and try to eat foods with about 15 grams of carbohydrate every hour or so.

Here are some food ideas:

### A Few Words on Dehydration

If you have a fever and you’re throwing up, or you have diarrhea, you can easily become dehydrated, which means your body is losing too much fluid. To avoid this potentially dangerous condition, try to drink one cup (8 ounces) of fluid each hour in small sips. If your blood glucose is too high, opt for sugar-free liquids, like water, tea, sugar-free ginger ale, or broth without noodles (chicken, beef, or vegetable).
Even though taking insulin will help maintain your blood sugar level, a healthy meal plan is also a key part of controlling your diabetes. You might be wondering if this means eating “rabbit food” or flavorless, boring meals? Fortunately, eating right for your diabetes does not mean giving up foods you enjoy.

While we used to think people with diabetes couldn’t eat any sugar, sweet treats, or carbohydrates (“carbs”), we now know this isn’t true. In fact, people with diabetes don’t need to eat “special” foods at all—you simply need to time your meals and snacks with your insulin schedule and exercise routine so your blood glucose level stays within your target range.
Food is the body’s source of energy. The three main types of fuel are the following nutrients: 1) carbohydrates (“carbs”), 2) protein and 3) fat. Eating a balanced amount of these nutrients can help keep your blood sugar under control. Here’s what you need to know:

**Carbs.** The body changes carbs into glucose (sugar) for energy. Whatever glucose is not used is stored as fat. Eating too many carbs at one time can make your blood sugar go up too high.

Carbs include breads, cereals, rice, pasta, fruits, and vegetables. The amount of carbs in these kinds of carbo-hydrate foods varies. Carbs can also be found in all milk varieties (whole, 2%, 1%, and fat-free), which all contain the same amount of carbs per serving. Yogurt also contains carbs, but the amount varies by flavor and brand.

**Protein.** The body uses protein to build strong bones and muscle. Proteins don’t raise blood sugar like carbs do.

Adding protein to your meal plan can help make you feel less hungry. Some good sources of protein include lean cuts of meat, chicken (without skin), fish, low-fat cheese, eggs, natural peanut butter, and soy products.

**Fats.** The body uses fats as fuel and for help with growth. Fat won’t cause your blood sugar to go up too much, but eating too many fatty foods can make you gain weight.

Some fats are better for you than others. Good sources of fat include nuts, fish, natural peanut butter, avocado, olives, and olive oil. Try to eat these kinds of fatty foods less often: butter, margarine, shellfish (crab, shrimp, lobster), fried foods, mayonnaise, bacon, hot dogs, cakes, cookies, pies, and ice cream.

**Point to remember:**

All carbs, but only small amounts of proteins and fats, are turned into sugar. However, fat and protein can slow down digestion.
A FOOD PLAN THAT FITS

Having a food plan is important—and so is choosing a meal plan that fits your lifestyle. Carbs are the focus of the meal plan because they most affect your blood sugar and will determine how much rapid-acting insulin you need. Two common meal plan options for people with type 1 diabetes are:

1. **Constant Carb**: This plan involves eating the same number of carbs for each meal and snack each day.

2. **Carb Counting**: Counting carbohydrates allows more flexibility than the Constant Carbohydrate option.

Carb-Counting Basics

1. Count the carb grams in each food before you start to eat.
   - Measure/estimate amounts.
   - One carbohydrate serving is equal to 15 grams of carbohydrates.
   - Use the Nutrition Facts label on packaged foods or look up nutrition information in a reference book or website to determine the number of carbs the foods you are about to eat. You should use the "Total Carbohydrate" number on the label. The number is shown in grams (e.g. 15g). (Note: Don’t use the number next to "Sugars").

2. Add all the carbs for each type of food together to get the total number of carbs in the meal.

3. Finally, give yourself the right amount of rapid-acting insulin, based upon your insulin-to-carb ratio. A common ratio when starting a carb-counting plan is one unit of insulin for every 15 grams of carbohydrate. (See the following example.) The insulin-to-carb ratio is personalized, so speak with your health care provider about yours, if you don't already know it.
EXAMPLE: Sample insulin-to-carb calculation:

John is going to have the following for breakfast:

- 1 cup of puffed rice cereal = 22 grams of carbs
- 1 cup milk = 12 grams of carbs
- 1 cup strawberries = 16 grams of carbs

John's Meal Total = 50 grams of carbs

John's insulin-to-carb ratio is 1 unit for every 10 grams (1:10 OR 1/10) of carbs.

What should he do next? John should multiply his insulin to carb ratio times the total grams of carb in his meal.

\[
\frac{1}{10} \times 50 = \frac{50}{10} \quad \text{OR} \quad \frac{50}{10} = 5
\]

OR

\[
\frac{50 \text{ grams of carbohydrate}}{10 \text{ grams of carbs per unit of insulin}} = 5 \text{ units of insulin}
\]

How many units of rapid-acting insulin will John need for this meal?

**Answer:** John would give himself 5 units of rapid-acting insulin for this meal

**Point to remember:** The more you know about carbohydrate counting and portion sizes, the more flexibility you will have with your meal plan.

My Insulin to Carb Ratio is:______________________________________________________
So, for every________________________grams of carbohydrate I eat, I need________________________units of insulin.
### Sample label for Macaroni & Cheese

**Nutrition Facts**

**Serving Size:** 1 cup (228g)  
**Servings per Container:** 2

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
<th>Calories from Fat 110</th>
<th>% Daily Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories 250</td>
<td>Calories from Fat 110</td>
<td>18%</td>
</tr>
<tr>
<td>Total Fat 12g</td>
<td>12g</td>
<td>18%</td>
</tr>
<tr>
<td>Saturated Fat 3g</td>
<td>3g</td>
<td>15%</td>
</tr>
<tr>
<td>Trans Fat 3g</td>
<td>3g</td>
<td>15%</td>
</tr>
<tr>
<td>Cholesterol 30mg</td>
<td>30mg</td>
<td>10%</td>
</tr>
<tr>
<td>Sodium 470mg</td>
<td>470mg</td>
<td>20%</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>31g</td>
<td>10%</td>
</tr>
<tr>
<td>Dietary Fiber 0g</td>
<td>0g</td>
<td>0%</td>
</tr>
<tr>
<td>Sugars 5g</td>
<td>5g</td>
<td>0%</td>
</tr>
<tr>
<td>Protein 5g</td>
<td>5g</td>
<td>0%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Calories:</th>
<th>2,000</th>
<th>2,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fat</td>
<td>Less than 65g</td>
<td>80g</td>
</tr>
<tr>
<td>Fat</td>
<td>Less than 20g</td>
<td>25g</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>Less than 300mg</td>
<td>300mg</td>
</tr>
<tr>
<td>Sodium</td>
<td>Less than 2,400mg</td>
<td>2,400mg</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>300g</td>
<td>375g</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>25g</td>
<td>30g</td>
</tr>
</tbody>
</table>

**Quick Guide to Daily Value (DV):**
- 5% or less is Low
- 20% or more is high

**Use this number when counting Carbs ("Total Carbohydrates").**

**Start Here**

**Check Calories**

**Limit these Nutrients**

**Get Enough of these Nutrients**

**Footnote**
CARBOHYDRATE CONTENT OF COMMONLY EATEN FOODS (in grams (g))

- ½ cup of rice or pasta = 22.5 g
- 1 cup rice or pasta = 45 g
- ½ cup of beans = 15 g
- 1 cup of beans = 30 g
- ½ cup corn = 15 g
- 1 cup corn = 30 g
- 1 medium potato = 30 g
- ½ cup mashed plantain, cassava = ~ 30-35 g
- One 6” tortilla = 15 g
- 1 cup of milk = 15 g
- 1 slice of bread = 15 g
- 2 slices of bread = 30 g
- 1 serving spoon of potato salad = 30 g
- ½ cup juice = 15 g
- 1 cup of raw salad = 5 g
- 1 medium fruit (orange, apple, pear, peach) = 15 g
- Bagel (large) = 60-80 g
- McDonald’s medium fries = 48 g
- McDonald’s medium Sprite Soda = 55 g

Point to remember: The key to carb counting is learning to read food labels and measuring your food!
PLATE METHOD

The Plate Method shows you a simple way to set up food on your plate. The picture of a nine-inch plate, divided into three parts, illustrates how it works. The key here is portion control.

The biggest part of your plate should be set aside for low-carb foods, like leafy green vegetables, broccoli, cauliflower, carrots, green beans, tomatoes, and cucumbers. You can eat more of these foods because they won't make your blood sugar go up as much as higher carb foods.

Now, there are two smaller areas remaining on your plate.

One of those areas should be devoted to your protein-containing foods, like chicken, meat, fish, eggs, and tofu. Remember, protein doesn't raise blood sugar as much and it helps keep you full.

The last part of your plate is for high-carb foods, such as rice, potatoes, pasta, bread, and plantains. If you don’t keep a close eye on the portion sizes of high-carb foods, your blood sugar can go up too high.

My Plate Planner: Methods of Use

- Fill 1/2 of your plate with vegetables such as broccoli, carrots, cauliflower, and salad.
- Fill 1/4 of your plate with lean meat, chicken or fish; this is about 3 ounces.
- Fill 1/4 of your plate with a starchy choice such as 1/2 cup mashed potatoes.
- Add 1 serving of milk or water.
- Add margarine or oil for preparation or addition at the table.
- Add other portions as needed to round out your meal plan.

For breakfast, use only half the plate. For lunch and dinner, use the whole plate.
7 HEALTHY EATING TIPS

Keep the following seven tips in mind when you’re deciding what to eat—it can help you make the best choices for your health and well-being.

1. Choose carbs that are packed with fiber, such as:
   - Whole-grain foods, like whole-wheat bread, crackers, oatmeal, brown rice, and cereals.
   - Beans, which are also a good source of protein.

2. Opt for fresh fruits and vegetables. Many non-starchy vegetables are relatively low in carbs, and fruits, like pears, apples, oranges, and berries, are good sources of fiber.

3. When eating out, bring along a calorie guide, such as Calorie King.* A guide takes the guesswork out of calorie counting and can help you figure out how many carbs are in the foods you eat at restaurants and fast food establishments.

4. Don’t skip meals or carbs to lower your blood sugar.

5. Try not to eat carbs by themselves. Combining a carb and a protein will help you to stabilize your blood sugar between meals.

6. Always enjoy a protein-rich food with your meals and snacks.

7. Keep sugary foods or glucose tablets on hand for times when your blood sugar is low.

Finally, follow the 15:15 rule (see page 7).

Smart Snacking Ideas

At a loss when it comes to what to nibble between meals? Get inspired by these tasty ideas:

1-2 slices of whole-wheat bread (15-30 grams of carbs), with one of the following:
   - 1-2 tablespoons of peanut butter (3-6 grams of carbs), or
   - Fruit spread (1 tablespoon = 15 grams of carbs), or
   - 1 slice of low-fat cheese and/or your favorite deli meat (0 grams of carbs)

1 cup low-fat plain yogurt (15 grams of carbs) with ½ cup frozen blueberries (~10 grams of carbs) or 1 mini whole wheat English muffin (26 grams of carbs)

* Or try accessing Calorie King online at www.calorieking.com to get carbs on thousands of different foods from wherever you happen to be!
If you’ve just learned that you have diabetes, you might be concerned about getting shots or medical tests and worried about how diabetes will impact your future health. After being diagnosed with diabetes, many people don’t think they will ever be able to test their blood sugar or give themselves the insulin injections they need to stay healthy. Working with your healthcare team to learn more about diabetes and how to care for your condition will help make managing it easier. Over time, testing your blood sugar and giving yourself shots will become part of your daily routine.

Here are some tips for coping with the emotional side of diabetes:

**Deal with feelings.** Having diabetes can stir up a wide range of emotions. For instance, you might feel jealous of your brother or sister who doesn’t have to do math every time he or she eats. You may feel embarrassed when you have to give yourself an insulin shot in front of others, even wondering if they think you are a drug user. You might blame yourself, thinking you deserve diabetes for doing something wrong. All of these emotions are normal and many people have them, but as you adjust to having diabetes and make the strategies here part of your life, coping with them will become easier.
Open up to people you trust. If you feel sad, mad, embarrassed, or worried, talk about it with a close friend, parent, nurse or doctor. At first, it might be difficult to open up and talk about having diabetes. Try to name your feelings and define what has you feeling that way. Many times, just telling someone who will listen and understand your feelings can help a difficult emotion to pass.

Tell your teachers. Letting your teachers know that you have diabetes can help put your mind at ease in some ways. For example, you may want to tell your teacher that you need to check your blood sugar or have a snack at a certain time each day. That way, you can leave class without drawing extra attention to yourself. If your teacher knows you have diabetes, he or she can also be on the lookout for signs and symptoms of diabetes-related problems and can call for help if you need it.

Get more support. If you're having a tough time, or if you think you may be depressed, tell an adult. Some signs of depression are sleeping or eating all the time (or not at all) and feeling sad or angry for long periods. The support and care of a counselor or a mental health professional can be a helpful addition to your routine. Also, ask your healthcare team if there are any support groups available so you can talk to other kids who have diabetes.

Get more support from your friends and family.
Caring for your diabetes can feel like a hassle, but keeping it in check will reduce the stress it causes. Good control includes taking care of your diabetes at all times, including while you’re in school. (FYI: A federal law requires schools to provide accommodations for kids and teens with diabetes.) Keeping the lines of communication open with your principal, school nurse and your favorite teachers will help you to maintain your blood sugar all day, every day at school.

Be sure you have a plan for managing your diabetes at school. Talk to your parents and health care team if you don’t have a plan in place, aren’t sure or don’t know what’s in it. Your plan may include:

- Making sure you’re able to have a snack, leave the room, or check your blood sugar, as needed.
- Establishing a place where your glucose meter is kept and used.
- Determining the times when your parent should be notified and where he or she can be reached.
- The changes necessary for you on gym days, for sports practices, other activities and events, etc.

**Helpful Hints**

- Update your plan each year or each time your insulin changes (or when something else about your diabetes changes).
- Talk to your teachers. They can help make checking your blood glucose and taking your insulin easier by knowing what you need to do and when you need to do it.
- Tell at least one friend who you see throughout the day about your diabetes, so he or she will be aware if something is wrong. You’ll also have someone to talk to about your diabetes.
- Have your diabetes supplies with you at all time. Stash them in your backpack and always keep it with you.
EXERCISE, SPORTS AND DIABETES

Kids with diabetes can play and succeed at sports just like their peers. Avoiding hypoglycemia is a goal you can achieve through smart planning and constant attention. Good planning includes:

1. Monitoring your glucose both before and after exercise, or any sports activities
2. Always keeping glucose tablets or a high-energy snack on hand for unexpected lows
3. Drinking plenty of water to prevent dehydration

If pre-exercise testing reveals an unexplainable high blood glucose number, it may mean there is not enough insulin in your body for you to exercise safely. In that case, refer to your diabetes management plan for next steps. You may have to test for ketones if your blood sugar is higher than your target range before exercise. You can check for ketones through a simple urine test. Exercise is fine, as long as ketones are negative; if your urine tests positive for ketones, you should postpone exercise until you are able to take insulin and your blood glucose number comes down.

Helpful Hints

• Be sure your blood glucose monitoring equipment is available at the location where you will be exercising.

• Avoid injecting insulin into a muscle that will be active during exercise, since this will cause insulin to circulate faster. (Faster circulation of insulin may lower your blood sugar excessively and can cause hypoglycemia.)

• Be aware that hypoglycemia can occur during and after physical activity and that a change in your behavior (being more irritable or aggressive than usual, having slurred speech, poor coordination, and/or blurry vision) could be a symptom of blood glucose changes.

• When going to gym class, sport practices, or during games, always carry a quick-acting source of carbohydrate, like juice or glucose tablets, to treat a low blood sugar episode. You should also carry a snack, like a granola bar, to prevent the occurrence of low blood sugar episodes. Refer to your target blood sugar range to know what to do before, during, and after exercise.

• Talk with the school nurse and your healthcare team about any concerns you have regarding sports.

• Let your coach or your exercise buddy know about your diabetes.
Alcohol

Drinking alcohol when you’re under the age of 21 is illegal in the United States. For a teen with or without diabetes, drinking alcohol can cause serious health problems. Despite the legal and health dangers, some teenagers still drink alcohol. If you do, the best thing for your health is to stop.

If you continue to drink, you can do so more safely by staying awake and aware. It’s important to know that alcoholic beverages may or may not change your blood sugar level, but they can cause “delayed hypoglycemia,” which can last for many hours after alcohol is consumed. If you choose to drink, following these steps can help you to do so more safely:

• Do not drink more than two alcoholic beverages and eat something before you go to bed.
• Always wear your medical ID.
• Getting drunk can cause serious problems, including low blood sugar that occurs hours later, especially if you pass out without eating. If you drink too much, make sure your companions don’t let you just "sleep it off."
• If you drink too much, you may throw up and feel like you can’t eat. However, just as when you’re sick with a stomach virus, you still need insulin.
• If you are drinking, drink with friends who are aware of your diabetes. If you’re among strangers or new acquaintances, tell someone and don’t have more than two drinks.
• Don’t drink and drive. It’s dangerous for anyone, but driving while intoxicated is compounded by diabetes and the possibility of low blood sugar. You could become disoriented very quickly and cause an accident, hurting yourself and/or others.
Illegal Drugs

The dangers of illegal drugs, such as marijuana, cocaine, Ecstasy or “X”, crystal meth and heroin, are serious and can be life threatening for anyone. For a person with diabetes, there are even more risks. Some drugs lower blood glucose and others raise it, and the symptoms of hypoglycemia can be masked by the effect of the drug. Illegal drugs can also be highly addictive, causing you to take risks and threatening your health in a variety of ways. If you decide to use illegal substances in spite of these dangers, plan ahead and take the following precautions:

- Set a limit in advance. Ask a friend who’s not taking drugs to watch you for signs of hypoglycemia.
- Check your blood glucose often.
- Always wear your medical ID.
- Marijuana can make you want to eat more (the “munchies”). This can lead to high blood sugar, which requires more doses of insulin.
- Cocaine increases blood sugar levels, but it also has side effects that can mimic the symptoms of hypoglycemia, causing shakiness, sweating and disorientation. These effects can cause you to miss a real low blood sugar level.

Tobacco

Smoking is a factor in thousands of lung-cancer and heart-disease deaths every year. It can also cause or worsen asthma, sinus infections, allergies, and other health problems.

Smoking is double trouble for people with diabetes, because having diabetes already increases your risk of heart disease and kidney problems at any age. Some people think that chewing tobacco is safer than smoking. In fact, the opposite is true: Your body absorbs even more nicotine from chewing tobacco than it does from cigarettes. Chewing tobacco and snuff are also linked to mouth and nose cancer. If you already smoke or chew, quitting now can protect you from further damaging effects of tobacco. It can be difficult to quit, so talk to your healthcare team about the best ways to kick the habit.
The rate of car accidents for people with diabetes is higher than the national average, and most of these accidents are due to the effects of low blood sugar. To stay safe on the road, keep the following tips in mind:

- Always check your blood sugar before getting behind the wheel if you haven’t recently had a meal or a snack.
- Never drive immediately after giving yourself insulin, unless you have eaten.
- Always keep a quick-acting carbohydrate and snack in your glove compartment for treating low blood sugar.
- If you feel your blood sugar is low while driving, always pull over and treat it. Don’t continue driving until your blood sugar has returned to normal.
- Always wear your medical ID; it might be the only way for someone to tell that you have diabetes and are not drunk or otherwise impaired.
- If you are going to be driving for more than four hours, be sure to stop and rest, get a snack and check your blood sugar.

Driving With Diabetes

Check your blood sugar before you drive.

If your blood sugar is low, pull over and treat it.

Always wear your medical ID.

Always wear your medical ID; it might be the only way for someone to tell that you have diabetes and are not drunk or otherwise impaired.
SEXUAL ACTIVITY AND PREGNANCY

The risks of being sexually active are generally the same for individuals who have diabetes and those who don’t. Unplanned pregnancy and sexually transmitted infections (STIs), such as syphilis, chlamydia, herpes and HIV, are some of those risks.

The safest way to avoid sexually transmitted infections and unplanned pregnancies is not having sex. This is called abstinence. Some teenagers who choose abstinence face pressure from friends and dates. You might think “everybody’s doing it” except you, but many teens decide not to have sex for a number of reasons: to protect themselves against disease and pregnancy, to pursue their academic/career goals, or to adhere to their moral beliefs.

If you decide to have sex, it’s important to do everything you can to protect yourself from the risks. While there’s no such thing as 100 percent safe sex, there are ways to have safer sex and reduce your risk of an STI or pregnancy. Girls and women should talk with their doctor and see a gynecologist to discuss birth control options that are best for your diabetes (the hormones in some methods may affect blood sugar levels).

Aside from abstinence, condoms are the only method of birth control that prevent sexually transmitted infections, so talk with your partner about who is going to be responsible for having them available. Since sexual activity is a form of physical activity (exercise), be sure to check your blood sugar levels so that they do not drop. Keep a rapid-acting carbohydrate available at all times.

If you’re a young woman with diabetes, you can become pregnant almost as easily as a woman without diabetes. However, poorly controlled diabetes can result in complications during pregnancy, which can negatively impact both mom and baby. This is why it’s important for women with diabetes of any age to plan their pregnancies carefully. It’s recommended that a woman’s blood sugar be well controlled for at least three months before getting pregnant.
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U.S. Food and Drug Administration. How to Understand and Use the Nutrition Facts Label.


Sanofi-Aventis. Meal Planning for People with Diabetes. 2007. Print

Vanderbilt University. The ABC’s and 123’s of Diabetes Care.

Web-based Resources:

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

Children with Diabetes
www.childrenwithdiabetes.com

Diabetes Life
www.dLife.com

Health Central
www.healthcentral.com

Joslin Diabetes Center.
www.joslin.org

The Juvenile Diabetes Foundation International
(JDF) - 1-800-223-1138
www.jdfcure.com

National Diabetes Education Program
www.ndep.nih.gov

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