

A pre-workout checklist

It's important to keep in mind that if you have diabetes, you always need to be prepared before exercising.

Always speak with your diabetes care team prior to starting a new fitness routine. Once you've been given the all clear for your workout regimen, ask yourself these questions prior to each workout.

What's my blood glucose level?

Check with your doctor to know what blood sugar levels are safe for you when developing an exercise plan. Before exercising, it's very important that you check your blood glucose to determine if it is low, high, or in a normal range. If it is low, have a snack with 15 grams of carbohydrate and wait 15 minutes for your glucose to return to normal. Check your glucose again in 15 minutes to make sure your glucose is rising. If it isn't, continue to follow the "15/15" rule (15 grams of carbohydrate for hypoglycemia and check glucose again in 15 minutes) until it is in a normal range. If your glucose is high (240 mg/dL or more), check your urine for ketones. If ketones are present, don't exercise.

Do I have fast-acting snacks in case of hypoglycemia (low glucose)?

Always be prepared for these situations when you're about to work out. Many drugstores carry fast-acting glucose snacks that rapidly increase your blood sugar and many of them are small enough to take to the gym or outside (depending on where you work out). Do not forget your water. It is important to stay well hydrated during exercise.

Do I have my glucose meter with me?

Ask your health care provider if you need to monitor your blood sugars during exercise. If so, bring your glucose meter, since you'll want to check your glucose after every 30 minutes of exercise.

Is there something I am wearing that identifies me as a person with diabetes?

Wear a necklace, bracelet, or carry something that identifies you as a person with diabetes. Also, indicate whether or not you take insulin and list an emergency contact as well.

Are my shoes comfortable?

When you have diabetes, finding comfortable footwear that's also supportive is key to avoiding foot problems in the future. It's also part of a healthy program for caring for your body.

If you're going outdoors for an extended period of time, you must be sure to bring extras of all of your supplies.

Diabetes Medicines

You have learned that diabetes is a disease in which the body does not make or fully use insulin. Insulin is a hormone that is needed to change sugar, starches and other food into energy needed for daily life. Diabetes cannot be cured, but it can be managed.

People with type 1 diabetes must take insulin to live because their bodies cannot produce insulin. Although most people with type 2 diabetes take either diabetes medication, insulin, or both, a few can keep their blood sugar in control with careful meal planning and regular activity.

Taking more medicine or different medicine doesn't always mean your diabetes has gotten worse. Remember, the key is controlling blood sugar levels, and changing medicines may help you do that.

All diabetes medicines work to lower blood sugar. Each kind of diabetes medicine works in a different way. Sometimes more than one medicine is needed. Talk with your health care provider to learn more about your medicines.

Be informed

Some things to know about your medicine:

- The name of each medicine and why you should take it.
- When and how much medicine you should take.
- If you should take them with food or on an empty stomach.
- Any side effects medicines may cause and what you should do about them.
- If you should stay away from some foods, other medicines, or alcohol.

• What to do if you miss a dose.

- How to store the medicine.
- How long your supply will last and how to get more.
- Make sure you bring and have enough of your diabetes medication with you when you travel.

Make a list of your medicines

Keep track of how to take your medicines. Your list should include your prescriptions, over-the-counter medicines and/or vitamins. Take this list each time you see a health care provider.

Remember:



All medicines can have side effects.

Do not start or stop taking any medicine without talking to your health care provider first. Over time, your health care provider may ask you to:

- 1. Take more of the same medicine.
- 2. Change your medicine to a new one.
- 3.Add another medicine.

Talk with your health care provider about what medicine is best for you.

By taking your medicine the way your health care provider tells you helps you stay healthy.

Tips to help you remember

- Ask family or friends to help.
- Use a pill box organizer.
- Set an alarm clock.



• Make a chart to check off when you have taken your medicine.

See the medication list in the back of this booklet.

Low Blood Sugar (hypoglycemia)

When your blood sugar falls below 70 mg/dL, you may have low blood sugar (hypoglycemia). When this happens, most people don't feel well and can have physical and emotional symptoms. These symptoms can come on quickly.

Hypoglycemia is usually easy to treat. However, if it is not dealt with right away, the symptoms can get worse, including passing out or having seizures. Talk with your health care provider about what steps to take in case of a low blood sugar emergency and most importantly, how to avoid one.

Hypoglycemia can happen when a person eats too little food, takes too much insulin or diabetes medicine, or is more physically active than usual. Often hypoglycemia happens suddenly and sometimes there is no explanation for why it occurs. When this happens, a person may have some or all of these symptoms:

• Fast heartbeat

• Feeling anxious

• Weakness or feeling very tired

Sweating

• Hunger

Dizziness

• Vision problems

- Headache
- Feeling irritable

Since hypoglycemia can be life-threatening, it must be treated immediately! People with diabetes should work with their health care provider to develop a plan to treat hypoglycemia.

General guidance for treating hypoglycemia

If you have any of the symptoms of hypoglycemia, check your blood glucose. If the level is 70 mg/dL or below, have one of the following guick-acting sources of sugar right away equal to 15 grams of carbohydrate:

- Three or four glucose tablets follow package directions
- One serving of glucose gel (equal to 15 grams of carbohydrate)
- 1/2 cup (4 ounces) of any fruit juice
- 1/2 cup (4 ounces) of a regular (not diet) soda
- Hard candies, jellybeans, or gumdrops (see package to determine how many)
- One tablespoon of sugar, honey or corn syrup

After 15 minutes, check your blood glucose again to make sure your level is 70 mg/dL or above. Repeat

these steps as needed. Once your blood glucose is stable, if it will be at least an hour before your next meal, have a snack that contains both carbohydrates and protein.

If you take diabetes medicines that can cause hypoglycemia, always carry a guick-acting source of sugar for emergencies. It's a good idea also to wear a medical identification bracelet or necklace. You can usually prevent hypoglycemia by eating regular meals, taking your diabetes medicine, and checking your blood glucose often. Checking will tell you whether your glucose level is going down. You can then take steps, like drinking fruit juice, to raise your blood glucose.

Most hypoglycemic reactions are mild and can be resolved within 10 to 15 minutes of receiving the treatments listed above. Sometimes, hypoglycemia can happen rapidly and may progress to a more serious stage where a person becomes unconscious, has a seizure, or is unable to swallow. If this happens, nothing should be given by mouth. This is an emergency situation and 911 should be called immediately.

What is glucagon?

Glucagon is a medicine that raises blood sugar and is important therapy for hypoglycemia. It is available as a shot, or as a nasal spray. If your blood sugar level gets so low that you pass out or can't swallow, you will need glucagon.

If you take insulin, your family, friends, co-workers and exercise partners should learn how to give you glucagon. When you need glucagon, you may not be able to give it yourself. Ask your health care provider about glucagon, because you will need a prescription for it.

When others should give you glucagon

Family, friends, co-workers or exercise partners should give you glucagon if:

 You are unconscious • You are unable to eat sugar or a sugar-sweetened product

Whenever possible, it is important to check blood sugar before giving glucagon

Glucagon is a safe drug. There is no danger of taking too much. However, it is for emergencies and should

be used only under the direction of your health care provider. As with hypoglycemia, nausea and vomiting may occur. Generalized allergic reactions have also been reported with glucagon use.

High Blood Sugar (hyperglycemia)

If your blood glucose stays over 180 mg/dL, it may be too high. High blood glucose, or "hyperglycemia," can happen if you miss taking your diabetes medicine, eat too much, or don't get enough exercise. Hyperglycemia can happen when diabetes medicine or activity level is not balanced with food intake. It can also happen because of stress or illness. When this happens, a person may have some, or all of these symptoms:

• Extreme thirst

• Dry skin

• Blurred vision

- Having to urinate often
- Hunger

• Wounds that are slow to heal

Sometimes, the medicines you take for other problems cause high blood glucose. Be sure to tell your health care provider about other medicines you take.

Having an infection, being sick or under stress can also make your blood glucose too high. That's why it's very important to check your blood glucose and keep taking your diabetes medicines when you're sick. If you're very thirsty and tired, have blurry vision or have to go to the bathroom often, your blood glucose may be too high. Very high blood glucose may also make you feel sick to your stomach.

If your blood glucose is high much of the time, or if you have symptoms of high blood glucose, call your health care provider. You may need a change in your diabetes medicines or a change in your meal plan.

It's important to treat hyperglycemia as soon as you detect it.

General guidance for treating hyperglycemia

Often, you can lower your blood glucose level by exercising. However, if your blood glucose is above 240 mg/dL, check your urine for ketones. If you have ketones, do NOT exercise.

Exercising when ketones are present may make your blood glucose level go even higher. You'll need to work with your health care provider to find the safest way for you to lower your blood glucose level. Cutting down on the amount of food you eat might also help. Work with your dietitian to make changes in your meal plan. If exercise and changes in your diet don't work, your health care provider may change the amount of your medication or insulin or possibly the timing of when you take it.

Ketoacidosis

If you fail to treat hyperglycemia, a condition called ketoacidosis (diabetic coma) could occur.

Ketoacidosis develops when your body doesn't have enough insulin. Without insulin, your body can't use glucose for fuel. So, your body breaks down fats to use for energy.

When your body breaks down fats, waste products called ketones are produced. Your body cannot tolerate large amounts of ketones and will try to get rid of them through the urine. Unfortunately, the body cannot release all the ketones and they build up in your blood. This can lead to ketoacidosis. Ketoacidosis is life-threatening and needs immediate treatment.

Symptoms include:

• Shortness of breath • Breath that smells fruity • Nausea and vomiting • A very dry mouth

Talk to your health care provider about having a plan on how to handle this condition. If you are experiencing these symptoms don't wait call your health care provider or 911 right away.