

DIABETES and KIDNEY DISEASE



What is **DIABETES?**

In the United States, 38 million adults have diabetes. Diabetes is a chronic (long-lasting) condition that affects how the body turns food into energy. Normally, when a person eats, the body breaks down food into sugar (glucose). The pancreas then makes a hormone called insulin to help the body turn the glucose into energy the body can use. With diabetes, this process doesn't work as it should.



There are two types of diabetes:

- Type 1 diabetes: With type 1 diabetes, the pancreas does not make *any* insulin, so glucose levels become too high. People with type 1 diabetes will need to take insulin every day to stay healthy.
- Type 2 diabetes: With type 2 diabetes, the pancreas does not make *enough* insulin, so glucose levels rise over time. About 90% 95% of people with diabetes have type 2 diabetes.

It is important for people with diabetes to learn how to control their blood sugar. Diabetes can lead to heart problems, kidney damage, and other issues if it is not controlled well. **Healthmap Solutions (Healthmap) is here to help people learn how to manage their diabetes and improve their overall health.**

How are **KIDNEY DISEASE** and **DIABETES** related?

Diabetes is the most common cause of kidney disease around the world. Over time, high blood sugar levels harm the kidneys and lead to kidney disease. This happens faster if diabetes is not controlled.

How is diabetes MONITORED?

A hemoglobin A1c test (also called a glycated hemoglobin, HbA1c, or A1c) is a blood test that doctors use to find out if a person has pre-diabetes or diabetes, and/or see how well treatment is working. Ideal A1c levels will vary from one person to another, but they are usually around or below 7.0%. Ask your doctor about your current A1c level. A1c levels higher than 8.0% may increase the risk of other health problems. Your A1c can also be used to give your doctor an idea of what your average blood sugar levels have been over the course of the past two to three months. This number is known as your estimated average glucose (eAG).

A1c Levels and Estimated Average Glucose (eAG) Levels		
	A1c (%)	eAG (mg/dL)
Normal	<5.7%	<117
Pre-diabetes	5.7% - 6.4%	117 – 137
Diabetes Higher A1c levels may increase the risk of other health problems.	6.5%	140
	7.0%	154
	7.5%	169
	8.0%	183
	9.0%	212
	10.0%	240
	11.0%	269
	12.0%	298
	13.0%	326

How is diabetes **MANAGED** or **TREATED?**

Having diabetes may feel overwhelming at times, but there are many steps you can take to keep your blood sugar controlled.

If you have questions about whether you have diabetes or questions about your treatment plan, please call or visit your doctor.

Check your **BLOOD SUGAR**

Your doctor may tell you to check your blood sugar at home. This will help you and your doctor find out if your treatment plan is working well. There are two ways you can check your blood sugar:



Finger sticks: Talk to your doctor about how often you should use a finger stick test. Write these numbers down so you can review these with your doctor at your next visit. Your Healthmap Solutions Care Navigation team member can give you a Blood Glucose Log Sheet to help keep track of your numbers.



Continuous glucose monitor (CGM): If you take insulin or have had high blood sugars (hyperglycemia) or low blood sugars (hypoglycemia) in the past, ask your doctor if a CGM is right for you. A CGM is a device that checks your blood glucose throughout the night and day. It can help avoid finger sticks as well as better manage your diabetes to avoid complications. If you use this type of device, bring these readings to your next doctor visit.

If you have not been told to check your blood sugar at home, your doctor will do blood tests, such as the hemoglobin A1c test, to make sure your sugar is controlled.



EXERCISE regularly

Regular physical activity helps lower your blood sugar and keeps both your mind and body healthy. If you haven't exercised in a while, it's okay to start small. Even light walking, housework, or lifting small weights will help. Talk to your doctor before you start a new exercise program to see what type of exercise will work for you.

Change your **DIET**

Some people with diabetes may need to change their diet. Learning how to eat right for diabetes might seem hard at first, but once you get used to the changes, it will be much easier. Consistency and portion control are key. Stay away from fad diets — even though they may seem to help in the short term, they do not work in the long run, and they can even be harmful to your health. A Healthmap registered dietitian can also help you learn about healthy eating and making changes to your diet.



Aim for WEIGHT LOSS

Some people with diabetes may need to lose weight. Losing just a few pounds may help lower cholesterol, blood sugar and blood pressure levels, and may help you feel better and move more easily. By eating a healthy diet and starting to exercise, you can achieve this goal. Some medications for diabetes can also help you lose weight and improve your overall health. Talk to your doctor to find out if any of these medications would be right for you.

Take MEDICATIONS AS PRESCRIBED

There are many medications to treat diabetes, and treatment plans can vary from person to person. For example, one person may only need one medication to control their diabetes, but another may need several. Your doctor may change your medication regimen and doses over time. If you are not sure which medications to take and when, ask your doctor for help.



Some medications will help treat diabetes and slow kidney disease progression at the same time. Talk to your doctor to see if these medications are right for you. Cholesterol-lowering medications may also be helpful. These don't treat your diabetes, but they help lower your risk of cardiovascular problems such as heart attacks and strokes.

Even though you may feel well, taking your medications as prescribed every day is important to keep you healthy. If you don't like the way your medications make you feel, have questions about why you need to take them, or have difficulty affording them, talk to your doctor before you stop taking them. If it is hard for you to remember to take your medications, try using a calendar, pillbox, or an app on your phone to remind yourself. A reminder on your bathroom mirror is often helpful to keep you on track with your medications.

QUIT SMOKING

If you smoke, work on a plan to quit. Quitting will help keep your body and blood vessels healthy, and it will also lower your risk of having a heart attack or stroke. Quitting can be hard, but you can do it! There are many resources available to help you make a plan and deal with the challenges of quitting. Talk to your doctor for more information on these resources.



Keep your **MEDICAL APPOINTMENTS**

Although life gets busy, it's important to see your doctor regularly if you have diabetes. This will ensure your healthcare team is keeping an eye on necessary laboratory tests and referring you for recommended health checks. If you have other conditions, such as kidney disease or high blood pressure, you may need to see multiple doctors. Talk to your Healthmap Care Navigation team member if you are having a hard time keeping track of your appointments.

Managing diabetes can feel challenging at first, but with effort and support, many have learned to take control of their diabetes. Healthmap is here to help. For help with your health goals, call the Healthmap Care Navigation team at 1-800-481-0474.

