# **Diabetes: You Are In Control**

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### **Understanding Diabetes**

Diabetes is a common, costly, and serious disease. More than 34 million adults in the United States have diabetes, and one in five of them don't know they have the disease. A diagnosis of diabetes can be scary, but studies have shown that with healthful eating and modest regular physical activity, type 2 diabetes can be delayed, controlled, and even prevented.

Much of the food a person consumes is broken down into glucose and is used for energy to fuel the body. Glucose in the bloodstream is also called blood sugar. When the glucose level in the blood increases, it signals the pancreas to produce and release insulin. The hormone insulin helps glucose enter your cells to be used as energy. With diabetes, your body doesn't make enough insulin or the body can't effectively use the insulin that it produces. When there is a lack of insulin, blood glucose builds up in the blood and can result in health problems, or diabetes complications. A fasting blood glucose of 126 mg/dl or greater, when tested at least twice, is one way a diagnosis of diabetes may be made.

### Am I at Risk?

Since 2005, the number of adults diagnosed with diabetes has more than doubled. Type 2 diabetes accounts for over 90% of diabetes cases. Here are common risk factors to monitor for prediabetes or type 2 diabetes.



**Prediabetes** is a serious health condition in which blood glucose levels are higher than normal, but not high enough for a diagnosis of type 2 diabetes. (MF3449), *bookstore.ksre.ksu.edu/pubs/MF3449.pdf* 

**Type 1 diabetes** is usually diagnosed in children and young adults but can appear at any age. In this type of diabetes, the cells in the pancreas that are responsible for making insulin, have been destroyed.

**Type 2 diabetes** occurs when the body can't use the insulin that it produces. Over time, the pancreas can't produce enough insulin to keep the blood glucose level in control.

#### **Diabetes in pregnancy (Gestational**

**diabetes)** occurs during mid to late pregnancy. The symptoms of diabetes normally go away after the birth of the baby. The body doesn't produce or use all the insulin it needs during pregnancy.



Check the risk factors that describe you.

\_\_\_\_\_ Are overweight

\_\_\_\_\_ Are age 45 or older

\_\_\_\_\_ Have a parent, brother, or sister with type 2 diabetes

\_\_\_\_\_ Are physically active less than 3 times a week

Had diabetes while pregnant or gave birth to a baby weighing more than 9 pounds

Certain ethnic groups are at higher risk of developing prediabetes and type 2 diabetes. Groups at higher risk are:

- African Americans
- Hispanic/Latino Americans
- American Indians
- Alaska Natives
- Pacific Islanders
- Asian Americans

People in these groups are 1.5 to 3 times more likely to get diabetes than are non-Hispanic whites of similar age.

Check your risk by taking the American Diabetes Association 60-Second Type 2 Diabetes Risk Test at *diabetes.org/risk-test* 

## **Diabetes Self-Management**

What does it mean to self-manage your disease? Eating appropriate amounts of nutritious foods, getting the recommended amount of physical activity, as well as taking your medications and checking your blood glucose as instructed will help keep your blood glucose levels in the normal range. This will not only reduce your risk of complications in the future, such as heart and kidney disease, but will also provide you with more energy and help you feel better overall. Making healthy lifestyle changes can be difficult without the proper education and skillset to change your behaviors. These changes will lead to better



managing your diabetes. Talk to your health-care provider about meeting with a Registered Dietitian Nutritionist and attending a diabetes education class in your community to set yourself up for success.

# Self-Care Behaviors

Self-care behaviors identified and supported by the Association of Diabetes Care and Education Specialists (ADCES) are key to managing your disease. Following these seven steps will help you live a more healthful and active lifestyle.

## Healthy Eating

Knowledge is power! Knowing what foods will raise your blood glucose is an essential part of following a healthy meal plan. Familiarize yourself with the Plate Planning Method to better help you plan meals and snacks. This will also provide a consistent amount of carbohydrates, proteins, and fats to help maintain blood glucose levels. For more information on the Plate Planning Method and reading nutrition labels, visit: https://extension. umaine.edu/publications/wp-content/uploads/ sites/52/2018/07/4363.pdf



## Being Active

The importance of physical activity is not just for weight loss, but to decrease blood glucose and cholesterol, improve blood pressure, lower stress and anxiety, as well as improve your mood and energy level. Being active does not mean you have to join a gym, though a gym membership can help. Think of creative ways to be active during the day like walking, playing fetch with your dog, taking a walk on your lunch break with a co-worker, or taking a swimming class. By choosing activities you like to do, you are more likely to stick with them. Also, mix it up and try a few different activities so you don't get bored. You can start with just 5 to 10 minutes a day and work your way up to 30 minutes a day, 5 days a week. For persons with diabetes, being active for a short time after meals can not only increase daily activity, but also have a big impact on lowering post-meal glucose. Using the muscles increases insulin sensitivity, resulting in better use of insulin and lowering of glucose.

Consider adding physical activity to your calendar, which can help you make a plan and follow through!

#### Monitoring

To determine if your blood glucose is within your target goals, your primary care provider may require you to regularly monitor with a meter. The frequency of monitoring your blood glucose will be up to your diabetes care team. They should also educate you on how to use the meter and provide you with personal blood glucose goals. Knowing your blood glucose levels can help you adjust your nutrition and physical activity choices to help your body perform at its best. For example, if your blood glucose is low at bedtime, a snack may be necessary. Or if your blood glucose is high before lunch, a walk may be in order.

#### **Taking Medication**

In addition to making healthy food choices and being physically active, you may need to take medication or insulin to manage your blood glucose levels more effectively, which will be at the discretion of your primary care physician. Since diabetes increases your risk for a variety of chronic diseases, it's important to tell your doctor about all medications and supplements you are already taking. This communication will help avoid potential interactions with medications taken for other health conditions. Be sure to take your medication or insulin at the appropriate times as well as eat and exercise as instructed. Additionally, learn how to handle drops in blood glucose and inform your family, friends, and co-workers should you need their assistance.

### **Problem Solving**

Learning how to maintain your blood glucose is a continual process as unexpected things happen that can cause them to fall outside of your normal range. When this happens, it's important to evaluate the situation and problem-solve to prevent it from happening again. Diabetes can also change as you age, which may require you to adjust your plan if your previous solutions are no longer working. Selfmanagement will never be perfect. Reflect on what caused the high or low blood glucose level such as stress, traveling, or sickness. Determine how to correct the problem in a way that works for you and move forward. Always remember to discuss problems and possible solutions with your diabetes care team. Most importantly, keep trying new solutions and determine what works for you.

#### **Reducing Risks**

By eating nutritious foods, being physically active, and taking your medications (if needed), you can reduce your risk of diabetes-related complications such as heart attack, stroke, kidney and nerve damage, and loss of vision. Additionally, it is important to quit smoking, have regular check-ups by your physician, have an annual eye exam, visit the dentist every 6 months, take care of your feet, and most importantly, listen to your body. If something doesn't seem right, call your doctor.

### Healthy Coping

Part of self-care is caring for your emotional health as well as physical health. As managing diabetes can be overwhelming at times, finding ways to manage that stress in a healthy manner is essential because stress can raise blood glucose levels. Getting adequate sleep is one way to help manage stress. Lack of sleep raises stress hormones in the body, which increases glucose levels. Talk to your diabetes care team, consider increasing your physical activity, meditate, participate in faith-based events or activities, partake in a hobby, or attend a diabetes support group. It's normal to feel overwhelmed at times, so reach out to your support system to help you cope because you are not alone.

You can learn more about each of the seven behaviors discussed above at: https://www.diabeteseducator.org/living-with-diabetes/ aade7-self-care-behaviors

## Help is Available...Don't Hesitate to Ask

Adapting one's life each day to control a chronic disease can be difficult and stressful. People with diabetes can recruit family members, friends, and others to assist them with things like getting to appointments or paying their bills. Knowing how and when to seek help is important. Talk about it with your health-care team.

Diabetes care partners include doctors who specialize in treating diabetes, diabetes educators, general practice doctors, nurses, dietitians, social workers, pharmacists, exercise trainers, vision specialists, foot specialists, mental health counselors, home health-care providers, and others. Printed materials, podcasts, videos and other information, such as cookbooks or exercise plans, can be obtained. Ask for help from a diabetes organization, diabetes support group, senior center, local research and extension service staff, county health department, hospital, pharmacy, or clinic.

Managing diabetes can be challenging, but help is available. **Just remember: You are in control!** 

#### **Informational Resources:**

American Diabetes Association. diabetes.org

Academy of Nutrition and Dietetics Association. eatright.org

American Heart Association. heart.org

Healthy Dining Finder. healthydiningfinder.com

Calorie King Food Database. calorieking.com

Diabetes Food Hub (Recipes). diabetesfoodhub.org

National Diabetes Education Program. cdc.gov/diabetes/ndep/index.html

National Institute of Diabetes and Digestive and Kidney Diseases. niddk.nih.gov/health-information/diabetes

University of Georgia – Diabetes Resources. fcs.uga.edu/extension/food-diabetes

USDA Dietary Guideline. choosemyplate.gov/

#### **Phone Apps**

My Fitness Pal (Basic app free) Blood Sugar Monitor by Dario Diabetes Management Diabetes Connect (Basic app free)

Glucose Buddy Diabetes Tracker (Basic app free)

MySugr (logging/tracking functions are free)

Sugar Sense Diabetes App (free)

Calorie King (free)

#### **References:**

Academy of Nutrition and Dietetics Complete Food and Nutrition Guide. 5th Edition, 2017.

American Association of Diabetes Educators https://www. diabeteseducator.org/living-with-diabetes/aade7-self-carebehaviors

American Academy of Family Physicians www.familydoctor.org/ diabetes-and-nutrition/

American Diabetes Association www.diabetes.org/diabetes

Center for Disease Control and Prevention, Chronic Disease Prevention and Health Promotion www.cdc.gov/ chronicdisease/resources/publications/factsheets/diabetes prediabetes

National Diabetes Prevention Program www.cdc.gov/diabetes/ prevention/

"A Snapshot — Diabetes in the United States," Centers for Disease Control and Prevention (CDC), Division of Diabetes, 2020. https://www.cdc.gov/diabetes/library/socialmedia/ infographics.html https://www.cdc.gov/diabetes/pdfs/library/socialmedia/ diabetes-infographic.pdf

#### Acknowledgement:

Some content of this publication was first written by Mary l. Meck Higgins, PhD., R.D., L. D., CDE, Diabetes Awareness and Management, Fact Sheet (*MF2478*)

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