

Patient Self-Care Workbook Diabetes



Welcome

Welcome to the SGCMH diabetes workbook, a guide to learning to live better and healthier with diabetes. Diabetes can be controlled with the right treatment and lifestyle changes. You can feel better with fewer symptoms and reduced hospitalizations. This booklet will help you understand **your role** in keeping your diabetes under control and it will help you to work more closely with your health care team. Controlling your diabetes will help you lead a normal life, and you'll be able to do more of the things that matter to you.

Manage Your Diabetes

Diabetes means that you have too much sugar (glucose) in your blood. High blood sugar levels can lead to serious health problems. Keeping your blood sugar under control is very important. Use this document to help manage your diabetes and understand what to do when your levels rise too high or low, as directed by your doctor.

WHAT HAPPENS WHEN YOU HAVE DIABETES

Your cells need sugar for energy. Sugar from food makes your blood sugar level go up. Insulin lowers your blood sugar level by helping sugar move from your blood into your cells.

When you have diabetes:

Your pancreas does not make any insulin, or it does not make enough insulin (and over time will make less and less), or your body prevents the insulin you do make from working correctly.

As a result, sugar can't get into your cells. So it stays in your blood. That's why your blood sugar gets too high. Following your diabetes care plan helps keep your sugar and insulin in balance.

BLOOD SUGAR (GLUCOSE) GOALS

Your doctor or primary care provider will decide the blood sugar and A1c numbers that are best for you.

Fasting blood sugar 80–130 mg/dl This is the blood sugar level when I wake up in the morning before I eat or if I have not eaten for at least 8 hours. My fasting blood sugar goal is mg/dl.
Post-meal blood sugar less than 180 mg/dl (2 hours after eating) My goal is mg/dl 2 hours after I eat a meal.
A1c test result less than 7 The A1c test is a blood test that measures my average blood sugar level over the past three months. My A1c goal is

FOLLOW THE ABCs OF DIABETES

A: A1c level less than 7

B: Blood pressure less than 140/90

C: Cholesterol

- Total less than 200.
- LDL less than 100
- HDL greater than 40 (men)
- D: Doctor appointments
- E. Eye and foot exams annually

- HDL greater than 50 (women)
- Triglycerides less than 150

TIPS TO IMPROVE BLOOD SUGAR

- 7% weight loss
- Improve diet and nutrition

- Stay active
- Take medications as prescribed

Diet and Nutrition

Foods with **carbohydrates** (carbs) make your blood glucose level go up. The right amount and type of carbohydrate is important to provide you with daily energy while controlling blood glucose. Do not avoid all carbohydrates; instead, eat moderate amounts of healthy carbs. Your dietitian can help find what amount of carbs works for you.

IMPORTANT STEPS:

Common sources for foods and drinks containing healthy carbohydrates:

- a. Grains & starches: rice, pasta, bread, tortillas, crackers
- b. Starchy vegetables: corn, peas, potatoes, sweet potatoes
- c. Beans & Legumes: black beans, pinto beans, kidney beans
- d. Fruit, fruit juice, dried fruit
- e. Dairy: milk and yogurt

Common sources for foods and drinks containing unhealthy carbohydrates:

- f. Snack foods: popcorn, chips, granola bars, snack cakes
- g. Sweets with sugar & desserts: donuts, cakes, pie, cookies, ice cream, jelly, honey
- h. Sugar-containing drinks like soda, sweet tea, some alcohol
- Not all foods contain carbohydrates or in lesser amounts, such as meats, some dairy, fats, non-starchy vegetables and zero-calorie beverages.
- Read the food label or a food guide to learn how much carbohydrate is in your serving of food or drink, then determine the total carbohydrate in your meal and snack.
- **Meal Plan:** Eat three meals per day, about the same amount of carbs at each meal.
- **Eat a mixed meal or snack:** have a high fiber carbohydrate food along with vegetables, protein and a healthy fat.

Avoid or limit 'added sugar' and sweets:

- a. Do not add sugar, honey or maple syrup to your foods or drinks. Instead, use a sugar substitute, stevia or monk fruit.
- b. Read ALL food labels for 'added sugar': Aim for less than or equal to 4 grams per serving of food.

Choose high fiber foods:

- a. Whole grains, legumes, fruit and nonstarchy vegetables
- b. Aim for less than or equal to grams dietary fiber per serving of food

PLAN YOUR MEALS USING THE PLATE METHOD?

The **plate method** is a simple, visual way to meal plan, control portions and limit the amount of high-carbohydrate foods while getting enough nonstarchy vegetables and lean protein.

Section 1: Fill half the plate with non-starchy vegetables

Section 2: Fill 1/4 of the plate with a lean protein Section 3: Fill 1/4 of the plate with a carbohydrate Section 4: Choose water or sugar free beverage



CHANGE TO EATING HEALTHIER CARBOHYDRATE FOODS SUCH AS:

- Fresh fruits and nonstarchy vegetables
- Unsweetened frozen fruit and canned fruit in its own juice or lite syrup
- Unsweetened high fiber cereal, oatmeal, nuts, Greek yogurt
- Whole grains: whole wheat, barley, brown and wild rice, oats, quinoa, popcorn, whole grain crackers, high fiber breads and tortillas
- Sweet potato, butternut squash, green peas, corn
- Legumes, beans and lentils

WHEN DINING OUT OR WHEN ORDERING TO-GO:

- Choose 'healthy choice', 'whole grain', 'no sugar added'
- Ask for food to be prepared without added sugar
- Switch the side dish to a salad or steamed vegetables
- Avoid descriptions like: glazed, BBQ, honey, teriyaki, sweetened, fried, crispy, crunchy, golden, crusted, breaded
- Avoid creams, gravies, sauces, dressings - request served on the side

- Avoid salad dressings and instead use olive oil and vinegar
- Ask for sugar free syrups and jelly
- Order: baked, broiled, grilled, poached, roasted, steamed
- Split the serving in half for leftovers or to share

A GUIDE TO SUGAR CLAIMS ON LABELS:

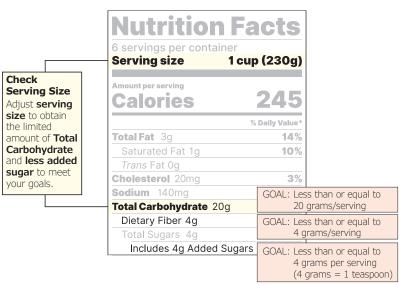
WHAT IT SAYS	WHAT IT MEANS
No Added SugarWithout Added SugarNo Sugar Added	No amount of sugar is added during processing or packaging, and the product does not contain an ingredient containing added sugars such as jam, jelly, or concentrated fruit juice.
 Sugar free Free of sugar Zero sugar Without sugar No sugar Sugarless 	The food contains less than 0.5 grams of sugar per serving
Reduced sugarLess sugarLower in sugar	The food contains 25% less sugar as compared to a similar product or a reference food that it replaces

READING FOOD LABELS

The following is a sample nutrition label. First, check the serving size. If your portion is greater or less than the serving size listed, the amount of total carbohydrates, fiber, and added sugars will adjust accordingly.

Match the label on the foods you buy to these goals:

- 20 grams or less total carbohydrate per serving.
- 4 grams or more dietary fiber per serving.
- 4 grams or less added sugars per serving.



Staying Active

Being physically active is a major step toward good heart health. Physical activity may lower blood glucose levels, control weight and improve response to insulin. Exercise also lowers stress and improves your mood. Speak to your provider before beginning any physical activity program.

CHOOSE AN ACTIVITY

30 minutes daily, 15 minutes twice a day, or 10 minutes 3 times a day



TIPS FOR ACTIVITY INCLUDE:

- Match your activity to your abilities. If standing or walking is not realistic, start with activities you can do sitting down.
- Think low-intensity and longer duration activity rather than high-intensity.
- Take rest breaks as needed. Perform a warm-up at the beginning and cool down at the end of your activity by reducing your speed for 5 minutes.
- Make activity a part of your day by parking your car a little farther from your destination or taking the stairs instead of the elevator.
- Some shortness of breath is expected during physical exertion, but you should be able to carry on a conversation with another person. If you are too short of breath to do this, slow your pace. Your goal is to have slight to moderate breathlessness during your activity.

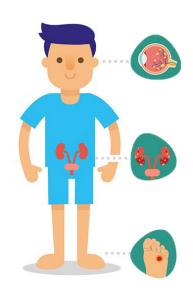
Call 911 if you have chest pain or discomfort in your chest, lightheadedness, heart racing, significant shortness of breath that doesn't improve with rest.

FOR MORE INFORMATION ABOUT EXERCISE PROGRAMS and ADULT FITNESS OFFERED AT SGCMH, CALL THE CARDIOPULMONARY DEPARTMENT AT 573-883-7743.

Chronic Complications

MICROVASCULAR

Diabetes might cause complications like nerve damage and kidney failure. To detect common microvascular (small vessel) diseases early, visit your provider regularly.



NERVE DAMAGE

Diabetes could lead to nerve damage and loss of feeling in the feet. Your feet can be injured without you feeling it, this increases your risk for ulcers and infections.

Steps to take:

A foot screening at home or with your provider

RETINOPATHY

Diabetes can lead to retinopathy damage to the blood vessels in the eye - which could lead to blindness.

Steps to take:

Visit an eye specialist for retinal photography

KIDNEY FAILURE

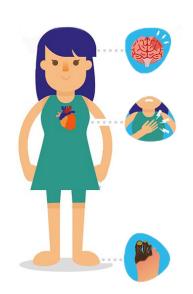
Diabetes increases your risk for kidney disease. It could lead to kidney failure and require dialysis to treat.

Steps to take:

- Get a urine test for Microalbumin/Protein
- Follow-up with a blood test for kidney function

MACROVASCULAR

Diabetes may cause medium and large vessel (macrovascular) complications like heart attack and stroke. Listed are some common complications and what steps to take.



STROKE

Diabetes can damage blood vessels in the brain, which may lead to a stroke.

Steps to take:

Go to the hospital ER immediately

HEART ATTACK

Diabetes can cause damage and blockages to the blood vessels of the heart and lead to a heart attack.

Steps to take:

See a provider or go to a hospital ER if you are experiencing chest pains

REDUCED BLOOD CIRCULATION

Diabetes may reduce or block blood flow to our legs and can lead to gangrene (tissue death due to blood loss) and even amputation.

Steps to take:

See a provider immediately if you experience:

- Leg pain brought on by walking that is relieved with rest.
- Darkening skin (e.g. purplishblue, black)

To help prevent complications, exercise, lose weight and quit smoking.

Acute Complications

HYPOGLYCEMIA

Low blood glucose level

Low blood glucose (hypoglycemia) can be dangerous and occur suddenly.

Here are some symptoms to look out for, and what you should do.

SIGNS AND SYMPTOMS:

- Hunger
- Changes in your behavior
- Unconsciousness
- Tiredness/Fatique

- Trembling/Nervousness
- Sweating
- Dizziness/headache

Steps to take:

- Check your blood glucose levels. If it is low:
- Drink half a glass of a sweetened beverage (e.g.) juice
- Eat sweets or glucose tablets

HYPERGLYCEMIA AND SICK DAY MANAGEMENT

Diabetes means your blood glucose levels can be higher than normal (hyperglycemia). Being ill can cause it to raise even more and can lead to severe hyperglycemia and even a coma. Here are symptoms of severe hyperglycemia and tips to handle sick days.

SIGNS AND SYMPTOMS:

- Tired and weakness
- Nausea and/or vomiting
- Thirsty all the time

- Frequent urination
- Blurred vision

Steps to take when you are sick:

- Schedule a visit with your provider
- Get plenty of sleep/rest
- Eat regular meals
- Drink plenty of water

- Take medications/insulin as prescribed
- Check your blood glucose levels more frequently. (see your provider immediately, if unusually high)

Diabetes Action Plan

Follow the action plan below based on your symptoms.

DIABETES ZONES FOR SELF CARE

GREEN ZONE SYMPTOMS: ALL CLEAR	GREEN ZONE ACTION
 Maintain Check blood sugar times per day Most fasting blood sugar are between 80-130 Most 2 hour post meal blood sugar are less than 180 You are at your A1c goal: Your feet are free of cuts, cracks & injury You are taking your medication as prescribed You are able to pay for your medications You are coming to your healthcare visits You are feeling well 	 Keep up healthy behaviors such as Eat 3 balanced meals, moderate in carbohydrates a day Live an active lifestyle. 30 minutes per day Continue to take your medication as prescribed Daily foot checks Log and bring your blood sugars to your visits Manage stress: Get regular sleep, connect with friends and engage in activities that give your life meaning
YELLOW ZONE SYMPTOMS: CAUTION	YELLOW ZONE ACTION
 Caution Fasting blood sugars are above 130 or less than 80 2 hour post meal blood sugars are above 180 or less than 80 You are missing 1-2 medication doses a week You are not testing your blood sugar You are not able to pay for your medications You feel stressed about your diabetes or other health concerns You have a foot problem Your A1c is not at goal Haven't seen an eye doctor in the last year. 	Call your team To make an appointment You can also Meet with a diabetes educator/dietitian Review/Follow your diabetes plan Test your blood sugars more often Keep track of your blood sugar Eat balanced meals Talk with your provider about more affordable medications Attend a support group meeting
RED ZONE SYMPTOMS: MEDICAL ALERT	RED ZONE ACTION
 Concern Blood sugars are less than 70 or greater than 200 You aren't taking your medications You are feeling: dizzy, sweaty, shaky, nauseous or blood sugar <70 mg/dL, You don't feel well about your diabetes, in general or by other health issues You are feeling overwhelmed, or controlled by your health 	 Call your provider office or seek medical care: If your blood sugars are less than 70 mg/dL TREAT with 15 grams of carbs such as 4 oz of juice/4 glucose tabs or as instructed and recheck in 15 minutes. If this is happening more than twice a week call your team. To review the Diabetes Sick Day Guidelines If you can't get your medication If you are feeling overwhelmed. We can find a plan that works for you!

Blood Sugar Log

DATE	Fasting Blood Sugar	2 hours After Breakfast	2 hours After Lunch	2 hours After Dinner	NOTES TO SELF

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DATE	Fasting Blood Sugar	2 hours After Breakfast	2 hours After Lunch	2 hours After Dinner	NOTES TO SELF

