

# Diabetes and Nutrition

DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT



## Objectives:

- Recognize the impact various foods have on your glucose values
- Identify carbohydrates in food
- State how many carbohydrate servings to have at each meal
- Identify elements of a food label
- Develop a healthy diet and meal plan





# Diabetes and Nutrition

DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT

You don't have to stop eating the foods you like to manage your diabetes. The more you know about food, the better you'll understand how it affects your blood glucose (sugar) levels. Then, you can make smart choices about what, when, and how much to eat.

Making healthy choices will keep your glucose in a safe range.

There are five key parts to healthy eating:

1. Portion control (how much to eat)
2. Meal planning (timing of food)
3. Food quality (how healthy the food is for your body)
4. Mediterranean Style dietary approach
5. Carbohydrate counting (how much the food will change your blood glucose (sugar))



# Diabetes and Nutrition

DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT

## Portion Control

Serving sizes have increased over time. When you're used to seeing restaurant-size portions, it can be hard to retrain your eyes.

You may be eating more than you realize. Some foods raise your blood glucose more than others.



## Using the Plate Method

Use the picture of the Mediterranean Diet Healthy Plate to remind yourself of how to eat a healthy, balanced meal



**DOWNLOAD Mediterranean Placemat**

**Too much food, especially too much snack-type food, like chips, at one time raises your blood glucose (sugar) levels.**

**Too much food provides excess Calories, which can increase your weight.**



# Diabetes and Nutrition

DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT

## Portion Control

A serving size is a fixed amount of food that provides a certain number of nutrients. Learning about serving sizes will help you decide how much to eat at a meal. Use the size of familiar objects to remind you of size portions:



Vegetable or salad portion similar to the size of baseball or light bulb (1/2 cup)



Starchy carbohydrates portion similar to the size of a computer mouse (1/2 cup)



Protein (cooked meat) portion similar to the size of a deck of cards (2 - 3 ounces)



Fat portion similar to the size of a dice (1 tsp)

Using portions will help you feel satisfied, help control your blood glucose levels, and maintain your weight.

TIPS TO GETTING STARTED

# Diabetes and Nutrition

DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT

## Meal Planning

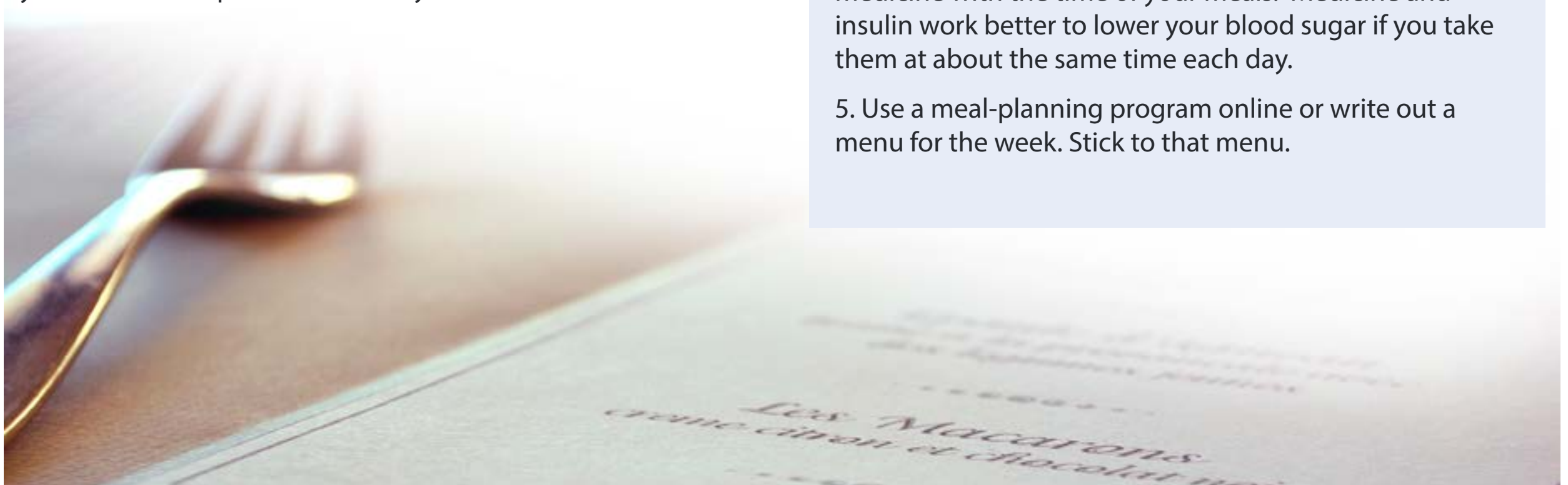
Meal planning is important to help control blood sugars. Planning regular meals and snacks helps keep your blood sugar steady all day. Planning your meals in advance will help you make better food choices.

Meal planning works better when you are following a routine. One of the easiest ways to plan meals is to fix food at home. When you cook at home, you have control over what you add to your food.

People with diabetes should have their own meal plan. Ask your health care provider to refer you to a dietitian.

### Where to Start – Meal-Planning

1. Talk to a dietitian about the foods you like and how to make them fit into your plan.
2. Start each day with breakfast.
3. Try to eat meals and snacks at the same time each day.
4. Learn to balance the time you take your diabetes medicine with the time of your meals. Medicine and insulin work better to lower your blood sugar if you take them at about the same time each day.
5. Use a meal-planning program online or write out a menu for the week. Stick to that menu.



# Diabetes and Nutrition

DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT

## Meal Planning Tips

### DINING OUT

- Ask for a menu in advance to plan ahead
- Call ahead to request a special meal
- Ask questions about the food if needed

#### Ask for:

- Grilled meat instead of fried
- Steamed vegetables
- Condiments on the side
- No butter or salt to be added in preparing your food
- A change in “sides” from fries to salad or vegetables

### Choosing a meal

- Pass on the bread
- Do not “super-size”
- Be careful of alcohol and other high calorie, high sugar beverages
- If you want something sweet, share a dessert with a friend or order fresh fruit
- Ask your provider if you can include alcohol

#### If the serving sizes are too large:

- Share your portion with a partner
- Take leftovers home for another meal

### HOLIDAYS AND SPECIAL OCCASIONS

Parties and Holidays often involve special or traditional foods and drinks. Eating foods that aren't normally part of your meal plan can affect your blood sugar. But you can adjust your meal plan or insulin dose to allow for these foods. **ASK YOUR HEALTHCARE PROVIDER TO SHOW YOU HOW.** Remember to check your glucose often to see how different foods affect you. And talk to you healthcare provider and clergy about safer ways to fast during religious holidays.



**DOWNLOAD Dining Out With Diabetes**



# Diabetes and Nutrition

DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT

## Meal Planning Tips

### SHOPPING

- Look for brightly colored fruits and vegetables
- Buy lean meats, such as chicken, turkey and fish
- Avoid high-sugar, high-fat snack food aisles
- Look for whole-grain foods and low-fat dairy products
- Include small amounts of unsalted nuts and seeds which can help your cholesterol



### COOKING AT HOME

- Trim fat off meats before cooking
- Broil, steam, bake or grill meats and vegetables instead of frying
- Use olive, canola, or peanut oil instead of butter or lard for cooking
- Don't cook meat and vegetables in cream or butter-based sauces



DOWNLOAD Healthy Shopping Tips



DOWNLOAD Yummy Benefits Cookbook II

# Diabetes and Nutrition

DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT

## Food Quality

A healthy diet includes a variety of foods. When your body doesn't get what it needs, you feel hungry. You need to eat the right foods to feel satisfied. Healthier food choices give your body the vitamins and minerals it needs, so you are less hungry.



You need to eat healthy fats to remain healthy. Here are some tips for getting the right fats:

- Eat fatty fish (salmon, tuna and sardines) twice a week.
- Snack on lightly salted or unsalted nuts at night instead of potato chips
- Switch your cooking oil to olive oil, canola oil or peanut oil.
- Try an avocado on top of your salads or sandwiches.
- Avoid food with trans-fat.

### Where to Start - Food Quality

Food in its natural state is better for you. Read food labels – don't buy the food if you can't tell what's in it. Buy unprocessed foods and cook them yourself.

- Eat more whole grains.
  - Look for the whole grain stamp on the food label. The Dietary Guidelines for Americans recommends 48 grams of whole grains a day and at least 25 grams of fiber daily.
  - Purchase whole grain high fiber cereal, bread, rolls, buns, tortillas, and pizza crust.
  - Add whole grains to your recipes.
- Vegetables can add extra texture, flavors and colors to your day's meals and snacks.
- Eat more berries when you crave something sweet.
- Select a salad for lunch or when you eat out.
- Enjoy more beans and peas. Sneak them into recipes or on top of salads.
- Watch the salt in processed foods.
- Choose foods that are lower in calories, saturated fat, sugar, and salt.
- Drink water instead of regular soda.



# Diabetes and Nutrition

DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT

## Mediterranean Diet

The Mediterranean style diet is an overall healthy pattern of eating.

The characteristics that make up the Mediterranean Diet have been shown to have numerous health benefits, to include decreased risk of cardiovascular disease, better insulin sensitivity and improved anti-inflammatory effect.

In those with Type 2 diabetes, a Mediterranean style diet has been shown to help with weight loss and also to slow the time to beginning the first diabetes medication.

### The Mediterranean Diet Basics

1. Take time to enjoy food in the company of others
2. Drink water with meals
3. Use olive oil as your main dietary fat
4. Include tree nuts often, 2-3 servings each week
5. In season vegetables should be included at least twice a day
6. Eat fish and seafood often, two times per week or more
7. Eat fruit for dessert and limit other sweets
8. Have red meats and sweets less often
9. Limit Soda drinks



**DOWNLOAD Mediterranean Diet Sample Menu**



**DOWNLOAD Olive Oil Handout**

Olive oil is high in monounsaturated fats, emerging research indicates that monounsaturated fats may lead to improved blood glucose (sugar) control.

# Diabetes and Nutrition

## DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT

### Mediterranean Diet

Food	Goal
Recommended	
Olive Oil	≥ 4 tbsp. per day
Tree nuts and peanuts	≥ 3 servings per week
Fresh fruits including natural fruit juices	≥ 3 servings per day
Vegetables	≥ 2 servings per day
Seafood (primarily fatty fish)	≥ 3 servings per week
Legumes	≥ 3 servings per week
Sofrito†	≥ 2 servings per week
White meat	In place of red meat
Wine with meals (optional)	discuss with provider
Discouraged	
Soda drinks	< 1 drink per day
Commercial baked goods, sweets, pastries‡	< 3 servings per week
Spread fats	< 1 serving per day
Red and processed meats	< 1 serving per day

The Mediterranean Diet is based on the lifestyles and dietary habits of the countries bordering the Mediterranean Sea. This includes good choices like staying active and eating meals with others.

#### KEYS TO SUCCESS WITH THE MEDITERRANEAN DIET

- Moderation is key
- Drink water to stay hydrated
- Healthy snack with minimal impact on blood sugar like nuts and fresh vegetables
- Be active to keep a healthy weight and reduce stress





# Diabetes and Nutrition

DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT

## Carbohydrate Counting

Counting Carbohydrates, or carb counting is key to keeping blood glucose (sugar) within your glucose range. Reducing the percent of Calories from carbohydrate to 14-45% per day for those with Type 2 diabetes is advised, especially for those who do not choose to follow the Mediterranean diet.

When you eat, most foods with carbohydrate break down into glucose inside your body. This raises your blood glucose (sugar). Other foods can raise your blood glucose (sugar) a little, but carbohydrates (or carbs) raise it the most. You need carbs to stay healthy and give your body energy.

Plan the carb servings in your meals throughout the day to manage your blood glucose (sugar). One serving of carbohydrate is 15 grams.

Carb foods come in five types –sugars, starches, and fibers, plus fruit and milk.



Sugar-sweetened beverages, like regular soda, sports drinks, sweetened teas and flavored coffee all count as carbs. A quick way to decrease total carbs in your diet is to limit all sugar-sweetened beverages.

# Diabetes and Nutrition

DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT

## Carbohydrate Counting

Most people with diabetes should limit their total Carbohydrate intake. Talk to your healthcare team or a dietitian about the right amount for you.

There are several ways to count carbs.

- Checking food-carb lists
- Using computer and smartphone Apps
- Reading nutrition labels

1 choice = 15 grams carbohydrate				These foods are much lower in		
Bread, Grains, and Starchy Vegetables	Fruit	Milk	Sweets	Non-Starchy Vegetables	Meat and Protein	Use sparingly
1 choice =	1 choice =	1 choice =	1 choice =	3-5 servings/day	4-6 oz. per day	Use sparingly
1/4 large bagel	1 small piece of fruit:	8 oz. milk	1/2 cup ice cream	1 serving-1 cup raw or 1/2 cup cooked	Chicken	All fat
1 slice bread	• apple	6 oz. yogurt (artificially sweetened)	1/4 cup sherbet	Asparagus	Turkey	Unfat (1%)
1/2 hamburger or hotdog bun	• pear		1/2 glazed doughnut	Beans: Italian, Wax, Green	Beef	Oil
1/2 English muffin	• orange	12 oz. soy milk	6 vanilla wafers	Beets	Pork	Cal
1/2 large biscuit	1/2 large banana		2 Oreos	Broccoli	Fish	Veget
5-6 crackers	1 cup melon cubes:		1/2 cup sugar-free pudding	Brussels sprouts	Shellfish	Ser
4 inch pancake or frozen waffle	• cantaloupe			Cabbage	Cheese	
	• honeydew					
	• watermelon					



DOWNLOAD Carbohydrate Counting Placemat





# Diabetes and Nutrition

DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT

## Carbohydrate Counting

### The FDA Food Label

#### What Does the Food Label Tell Me?

Food labels can be found on most food packages. Reading the label tells more about the food and what you are getting. What you see on the food label – the nutrition and ingredient information – is required by the government. This picture shows what the food label looks like and explains some of its features.

#### 1. Look at the serving size

Notice there may be more than one serving in a package

#### 2. Determine the amount of carbohydrates in one serving

Find the "Total Carbs" (in grams) per serving  
15 grams = 1 carb choice

Total Carbohydrates = Starch + Sugar + Fiber

#### 3. Decide if it's heart healthy

Saturated fat + Trans fat = Unhealthy fats  
Decrease your heart risk by limiting unhealthy fats.

Your saturated fat should be:  
- less than 12 grams per day for women  
- less than 15 grams per day for men

Aim for food with at least 3 grams of fiber per serving

Nutrition Facts	
8 servings per container	
Serving size	2/3 cup (55g)
Amount per 2/3 cup	
<b>Calories</b>	<b>230</b>
% DV*	
12%	Total Fat 8g
5%	Saturated Fat 1g
	Trans Fat 0g
0%	Cholesterol 0mg
7%	Sodium 160mg
12%	Total Carbs 37g
14%	Dietary Fiber 4g
	Sugars 1g
	Added Sugars 0g
	Protein 3g
10%	Vitamin D 2mcg
20%	Calcium 260mg
45%	Iron 8mg
5%	Potassium 235mg
* Footnote on Daily Values (DV) and calories reference to be inserted here.	



DOWNLOAD Changes to New FDA Food Label

## Carbohydrate Counting

### The Glycemic Index - Not All Carbohydrates Are Alike

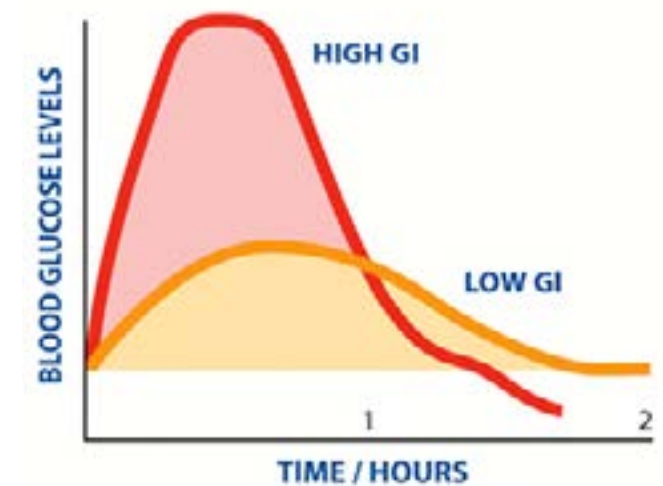
The Glycemic Index (GI) is a measure of how fast different types of carbohydrates raise your blood sugar levels. During digestion, some types of foods that contain carbohydrates will break down slowly and some will break down fast. This causes your blood sugar to rise at different rates even if you eat the same portion size.

Foods with a high GI value (over 50) raise your blood sugar quickly.

Foods with a low GI value (under 50) raise your blood sugar slowly.

Eating low GI foods on a daily basis can help lower your blood sugar values. Take a look at the attached Glycemic Index list. Foods that are listed below the thick black line raise your blood sugar slower.

For those with Type 2 contemplating pregnancy or those with gestational diabetes, this is very important. Remember, it is still important to pay attention to the total amount of carbohydrates you eat at each meal.



**DOWNLOAD Glycemic Index Chart**



# Diabetes and Nutrition

DIABETES SELF-MANAGEMENT EDUCATION AND SUPPORT

## Homework Activity: Create Your Own Balanced Plate

Practice creating your own healthy plate!

Select the link below to try making a balanced plate of your own with the interactive tool!

You can "reset" your plate and try different choices, if you like; the combinations are endless!



**DOWNLOAD Create Your Plate**