

My Diabetes Nutrition Plan During Pregnancy



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When you have diabetes and are pregnant, you need to eat small meals and snacks throughout the day to help manage your blood sugar. This also helps you get enough nutrients for a healthy pregnancy.

Calories come from carbohydrates, protein, or fat. Carbohydrates (carbs) have the largest and quickest effect on blood sugar. High carbohydrate food groups include:

- Whole grains and starchy vegetables
- Fruit
- Milk and yogurt



By following a carbohydrate controlled diet, you can manage your blood sugar better. This is important for you and your baby.

The amount of carbohydrates you need in your diet

- The amount of carbohydrates you need is based on your height, weight, activity level, blood sugar levels, and pregnancy nutrient needs.
- Ask your provider or dietitian about your specific carbohydrate needs. The best place to start is to make changes to the type and amount of carbohydrates you eat.
 - Most pregnant people do well with 30 to 45 grams of carbohydrates (2 to 3 servings of carbohydrates) per meal. 15 grams of carbohydrates = 1 carb choice or serving.
 - Snacks are also recommended to satisfy hunger and carbohydrate needs. Each snack should contain 15 to 30 grams (1 to 2 servings) of carbohydrates.
 - **With each meal and snack, combine a carbohydrate** (whole grains and starchy vegetables, fruit, or milk) **with a protein food** or a healthy fat for a better blood sugar response.
- Eat your meals and snacks at about the same times each day. This will help to keep your blood sugar in a healthy range for your health and the growth of your baby.

My nutrition plan

- Your calorie needs will vary throughout your pregnancy. **Talk to your provider or dietitian if you would like to know how many calories you should eat each day.** Many of your calories (35 to 40%) will come from carbohydrates. It can be helpful to know these numbers, but not every person needs to track calories or grams of carbohydrate during pregnancy.

- When managing your blood sugar, both the type and amount of carbohydrates you eat matters:
 - **Choose complex carbohydrates**, which are higher in fiber, vitamins, and minerals, and often have a lower blood sugar response. These foods include 100% whole grains (brown or wild rice, old-fashioned oats, barley, farro, quinoa), beans, lentils, whole fruits, whole wheat bread and pasta, as well as starchy vegetables like corn, green peas, and sweet potatoes.
 - **Limit refined carbohydrates.** Eating too much processed breakfast cereal, fruit juice, soda, and refined grain products (white flour, degermed cornmeal, white bread, or white rice) can lead to higher blood sugar levels.
- Remember to “**eat your carbs, don’t drink them**” with the exception of drinking fat free or low fat milk every day. Try to drink mostly water with meals and snacks.
- Spread out your carbs throughout the day rather than eating a large amount at 1 time.
 - **Eat a small meal or snack every 3 to 4 hours** to improve your blood sugar levels. Going long periods between meals can cause your body to release stored energy (glucose), leading to higher blood sugar levels.
 - **With each meal and snack, combine a carbohydrate** (whole grains and starchy vegetables, fruit, or milk) **with a protein food** or a healthy fat. Eating a carbohydrate with a protein food slows the digestion of carbohydrates, improving your blood sugar response.
- To keep your fasting blood sugars well controlled, if you eat an early dinner (more than 3 hours before bedtime), **eat a bedtime snack 30 to 60 minutes before bed (or 8 to 10 hours before breakfast/fasting blood sugar test)**. The snack should have 1 serving each of a carbohydrate and a protein food to keep blood sugar levels stable overnight.

Healthy meals for healthy blood sugar

The Plate Method

The Plate Method is a simple way to keep carbohydrates to a moderate amount to improve your blood sugar levels.

Calories come from carbohydrates, protein, or fat. Carbohydrates have the largest and quickest effect on blood sugar. Carbohydrate foods include:

- Whole grains and starchy vegetables
- Fruit
- Milk and yogurt

Sugar is a concentrated form of carbohydrates. **Limit foods high in sugar** in your diet.



A photo of a plate of food where $\frac{1}{4}$ is filled with **carbs** (brown rice), $\frac{1}{4}$ is filled with **protein foods** (chicken), and $\frac{1}{2}$ is filled with **non-starchy vegetables** (spinach and cucumber salad).

Follow These Steps to Eat Meals With the Plate Method

1. Fill half ($\frac{1}{2}$) of your plate with **non-starchy vegetables**. This is about 1 to 2 servings of non-starchy vegetables.

Non-starchy vegetables:

- Give your body some carbohydrates, but much less than the high carbohydrate food groups.
- Help fill you up without having a large effect on your blood sugar.
- Provide the fiber, vitamins, and minerals your body needs to function well.
- Examples include:
 - Artichoke
 - Asparagus
 - Bean sprouts
 - Beets
 - Bok choy
 - Broccoli
 - Brussels sprouts
 - Cabbage
 - Carrots
 - Cauliflower
 - Celery
 - Cucumber
 - Green or yellow beans
 - Salad greens
 - Mushrooms
 - Onions
 - Peppers
 - Radish
 - Snow peas
 - Sugar snap peas
 - Tomatoes
 - Turnips
 - Yellow squash
 - Zucchini

Choose fresh or frozen vegetables that have no or little added salt, sugar, or fat in a variety of colors to get a variety of vitamins and minerals.

2. Fill a quarter ($\frac{1}{4}$) of your plate with **carbohydrates**, like whole grains, starchy vegetables (corn, peas, and sweet potatoes), or fruit. This is about 2 to 3 servings of carbohydrates.

1 serving (15 grams) =

- Bread – 1 slice
- Corn tortilla – 2 small
- Flour tortilla – 1 small
- Crackers – 6 small
- Apple, pear, orange – 1 small
- Banana – $\frac{1}{2}$ large or 1 small (6-inch)
- Grapes or cherries – 17 small or $\frac{1}{2}$ cup
- Graham crackers – 3 squares

$\frac{1}{3}$ cup:

- Cooked pasta
- Baked beans
- Cooked rice or quinoa

½ cup:

- Cooked cereal, like oatmeal
- Cooked beans or lentils – count as 1 serving of carbs and 1 serving of protein
- Starchy vegetables – potatoes, corn, or peas
- Canned fruit in water or juice
- Orange or apple juice
- Casserole

¾ cup:

- Unsweetened dry cereal
- Fresh fruit salad

1 cup:

- Berries or melon
- Soup

3. Fill a quarter ($\frac{1}{4}$) of your plate with **protein foods**. This is about 3 to 4 servings of protein foods.

1 serving =

- 1 egg, 2 egg whites, or $\frac{1}{4}$ cup egg substitute
- 1 ounce turkey breast or chicken breast, skin removed
- 1 ounce lean deli meat (with 3 grams or less of fat per ounce) – heat to steaming hot
- 1 ounce fish fillet, shellfish, or canned tuna in water
- 1 ounce lean beef, lamb, or pork (limit to 1 to 2 times per week)
- 1 ounce cheese
- $\frac{1}{4}$ cup nonfat or low fat cottage cheese
- $\frac{1}{2}$ cup cooked beans or lentils – count as 1 serving of carbs and 1 serving of protein
- 4 ounces tofu
- 2 tablespoons natural peanut butter
- $\frac{1}{4}$ nuts or seeds

4. Keep added fats to small amounts.

Fats improve the taste of many foods, help us feel full longer, and provide essential nutrients. All fats are high in calories, so keep portions small:

- 1 to 2 teaspoons of oil, margarine, butter, or mayonnaise
- 1 tablespoon of salad dressing
- $\frac{1}{4}$ of an avocado

5. Drink mostly water with meals and snacks.

Aim for at least 8 (8 ounce) glasses of water each day. Water:

- Is calorie free and has no carbohydrates.
- Is essential for your body's cells, tissues, and organs.

Plain coffee and tea are also calorie free and often will not raise your blood sugar. But during pregnancy, it is recommended to limit caffeine from regular coffee, caffeinated tea, soda, and energy drinks to no more than 200 milligrams (mg) or 1 (12-ounce) cup per day.

General tips

- Cook at home as much as possible, using low fat cooking methods, such as bake, broil, microwave, roast, steam, sauté, or grill. Restaurant foods and processed foods often have added sugar and more sodium.
- Choose fresh fruit or yogurt for dessert or try a low carbohydrate dessert recipe.
- Eat breakfast daily. Space your meals and snacks about 3 to 4 hours apart. Do not skip meals.
- Read food labels and ingredient lists on packaged foods. Avoid foods that have trans fats and partially hydrogenated oils.
- Follow these food safety tips during pregnancy:
 - Avoid raw or uncooked meat, poultry, eggs, and fish.
 - Avoid hot dogs and deli meats (unless heated until steaming hot).
 - Avoid raw or unpasteurized milk, and cheese and dairy products made with unpasteurized milk.
 - Avoid soft cheese, such as Brie and Camembert.
 - Avoid moldy blue cheeses, such as Gorgonzola.
 - Wash all produce well before eating or cooking.

Carbohydrate counting

Carbohydrate counting, also called carb counting, is a nutrition planning tool for people living with diabetes. Carb counting involves using food labels and estimating portion sizes of foods to keep track of the amount of carbohydrates you eat with each meal or snack.

Carbohydrates include starches, fiber, and sugars. Carb counting can help to keep your blood sugar levels in a healthy range because carbohydrates affect your blood sugar more than other nutrients.

How to Count Carbohydrates

When reading food labels, use these tips to help you count carbohydrates:

- 1. Check the serving size.** All nutritional information on the label is based on 1 serving. Look at the common measure, such as cups or tablespoons. The grams (g) listed are the weight of the serving.

The serving size for the product in the food label on the next page is 1 cup.

2. Look for total carbohydrates in grams.

This includes the fiber, sugars, and other carbohydrates in the food. Use this number when counting carbohydrates.

There are 22 grams of carbohydrates in this product per serving. If you ate 2 servings of this food, you would be getting 44 grams of carbohydrates.

- 3. Compare food labels.** Start comparing the serving sizes of products you eat, and then compare the grams of total carbohydrates. Look at the fiber and sugar content. Please note that products marked as “sugar free,” “reduced sugar,” or “no sugar added” are not necessarily carbohydrate-free. Read the product’s food label to understand how many carbs you are eating.



Nutrition Facts	
6 servings per container	
Serving size	1 cup (140g)
Amount per serving	
Calories	170
% Daily Value*	
Total Fat 8g	10%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 5mg	0%
Total Carbohydrate 22g	8%
Dietary Fiber 2g	7%
Total Sugars 16g	
Includes 8g Added Sugars	16%
Protein 2g	
Vitamin D 0mcg	0%
Calcium 20mg	2%
Iron 1mg	6%
Potassium 240mg	6%

*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Carbohydrates — serving sizes

If you have a food exchange book or list, you can use it to look up grams of carbohydrates for foods. Otherwise, read the product’s food label. If no food label is available, use the estimates on the next pages to calculate the carbohydrate grams for a food. Be aware that carbohydrate amounts can vary greatly between different types of the same food. For example, some breads are 15 grams a slice while others are closer to 25 grams.

Whole Grains and Starchy Vegetables Group

- **Choose whole grains** (like brown rice and whole wheat pasta) **over refined grains** (like white rice and pasta).
- 1 serving equals 15 grams of carbohydrate.
- 1 serving =
 - 1 slice of bread
 - 1 small roll
 - ¼ of a bagel
 - ½ of a hamburger bun or English muffin
 - 1, 6-inch tortilla
 - ⅓ cup cooked rice, pasta, barley, quinoa, or couscous
 - ½ cup cooked bulgur wheat, lentils or legumes (dried beans or peas)



- ▶ ½ cup corn, sweet potato or green peas
- ▶ 3 ounce baked sweet or white potato with skin
- ▶ ½ cup cooked cereal
- ▶ ¾ cup unsweetened dry cereal
- ▶ ¾ ounce of pretzels
- ▶ 3 cups hot air popped or microwave popcorn with no more than 3 grams of fat per serving

Fruit Group

- Pregnant people should eat fruit every day.
- 1 serving equals 15 grams of carbohydrate.
- 1 serving =
 - ▶ 1 cup fresh melons or berries
 - ▶ ¾ cup fresh pineapple
 - ▶ ½ cup fresh grapes
 - ▶ 1 small fresh fruit, such as an apple the size of a baseball
 - ▶ ½ of a large piece of fresh fruit, such as ½ of a large banana or large pear
 - ▶ ½ cup canned fruit in juice
 - ▶ 2 tablespoons of dried fruit
 - ▶ 4 ounces of 100% fruit juice, unsweetened



Milk Group

- Pregnant people should drink milk or eat yogurt every day.
- 1 serving equals 15 grams of carbohydrates.
- 1 serving =
 - ▶ 1 cup (8 ounces) fat free or low fat milk
 - ▶ 1 cup (8 ounces) of plain yogurt
 - ▶ 6 ounces of light yogurt or Greek yogurt



Sweets and Added Sugars

Limit the amount of sweets you eat. They are high in carbohydrates and often high in calories and fat. This includes limiting the amount of cake, ice cream, pie, syrup, cookies, candies, and doughnuts you eat. Try to avoid adding table sugar, honey, or other sweeteners to your foods or beverages. Limiting sweets will help to keep your blood sugar in a healthier range. Limit sugar to 6 teaspoons or about 100 calories per day (24 grams of sugar).

Fiber

A high fiber diet can help you have healthier blood sugar levels. Choose whole grains that are high in fiber as well as fruits, vegetables, beans, and lentils. Talk with your dietitian about how to increase fiber in your diet.

Foods that have little effect on blood sugar

Non-starchy Vegetables Group

- Have little effect on blood sugar.
- 1 serving equals 5 grams of carbohydrates.
- 1 serving =
 - 1 cup raw vegetables or salad greens
 - ½ cup cooked vegetables
 - ½ cup vegetable juice
- Examples include:

<ul style="list-style-type: none"> ▸ Artichoke ▸ Asparagus ▸ Bean sprouts ▸ Beets ▸ Bok choy ▸ Broccoli ▸ Brussels sprouts ▸ Cabbage 	<ul style="list-style-type: none"> ▸ Carrots ▸ Cauliflower ▸ Celery ▸ Cucumber ▸ Green or yellow beans ▸ Salad greens ▸ Mushrooms ▸ Onions 	<ul style="list-style-type: none"> ▸ Peppers ▸ Radish ▸ Snow peas ▸ Sugar snap peas ▸ Tomatoes ▸ Turnips ▸ Yellow squash ▸ Zucchini
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Protein Foods Group

Avoid meats that are high in saturated fat, such as bacon and sausage.

1 serving =

- 1 egg, 2 egg whites, or ¼ cup egg substitute
- 1 ounce turkey breast or chicken breast, skin removed
- 1 ounce lean deli meat (with 3 grams or less of fat per ounce) – heat to steaming hot
- 1 ounce fish fillet
- 1 ounce shellfish
- 1 ounce canned tuna in water
- 1 ounce lean beef, lamb, or pork (limit to 1 to 2 times per week)
- 1 ounce cheese
- ¼ cup nonfat or low fat cottage cheese
- ½ cup cooked beans or lentils – count as 1 serving of starch (carbs) and 1 serving of meat (protein)
- 4 ounces tofu
- 2 tablespoons natural peanut butter
- 2 tablespoons seeds
- 1 ounce nuts



Fats Group

Limit fried foods in your diet. Try to bake or broil your foods more often.

Moderate fat intake during pregnancy is ideal. Do not follow a very low fat diet. If you have questions about the fat in your diet, talk to your dietitian or nurse.

1 serving (5 grams of fat) =

- 1 teaspoon oil (vegetable, corn, canola, olive, etc.)
- 1 teaspoon butter or margarine
- 1 teaspoon mayonnaise
- 1 tablespoon salad dressing
- 1 tablespoon cream cheese
- ¼ of an avocado
- 8 to 10 large olives
- 1 slice bacon



Sample menu

- A sample menu is provided on the next page to help you get started. If you need help creating a nutrition plan, please speak with your dietitian or nurse.
- Your nutrition plan should include a moderate amount of **carbohydrates** (whole grains and starchy vegetables, fruit, or milk) and a variety of **non-starchy vegetables** and **protein foods**.
 - Meals should include 2 to 4 servings or 30 to 60 grams of carbohydrates per meal.
 - Snacks should include 1 to 2 servings or 15 to 30 grams of carbohydrates per snack.
 - Include a protein food with each meal and snack.

Breakfast				
1 whole wheat waffle	or	1 slice of toast	=	15 grams
1 cup low fat milk	or	1 tablespoon jelly	=	15 grams
½ large banana	or	1 small orange	=	15 grams
2 tablespoons natural peanut butter	or	1 hard boiled egg	=	0
Snack				
1 small apple	or	1 cup strawberries	=	15 grams
2 tablespoons natural peanut butter	or	1 boiled egg	=	0
Lunch				
3 ounces tuna fish	or	2 tablespoons natural peanut butter	=	0
½ bagel (2 ounces)	or	2 slices of bread	=	30 grams
1 tablespoon light mayonnaise	or	2 tablespoons hummus	=	0
½ cup cooked broccoli	or	1 cup celery sticks	=	0
½ cup fruit cocktail	or	¾ cup blueberries	=	15 grams
Snack				
5 to 6 whole wheat crackers	or	½ cup peaches	=	15 grams
1 ounce cheese	or	½ cup low fat cottage cheese	=	0
Dinner				
1 medium baked potato (6 ounces)	or	2 small dinner rolls	=	30 grams
3 ounces grilled chicken	or	3 ounces steak	=	0
1 tablespoon fat free sour cream	or	1 tablespoon salad dressing	=	0
½ cup California mixed vegetables (broccoli and carrots)	or	1 cup salad	=	0
1 cup strawberries	or	1 cup low fat milk	=	15 grams
Snack				
1 cup sugar snap peas	or	½ cup grapes	=	15 grams
½ cup hummus	or	1 ounce cheese	=	0
Total grams of carbohydrates for day			=	180 grams

This handout is for informational purposes only. Talk to your healthcare provider if you have any questions about your care.

For more health information, go to wexnermedical.osu.edu/patiented or contact the Library for Health Information at 614-293-3707 or health-info@osu.edu.