## Prediabetes and Diabetes Nutrition Basics

## Why is nutrition important?

Making good food choices is an important part of blood sugar control. A healthy diet can help you feel better. It also reduces your risk of heart, kidney, feet, and eye problems.


## When should I eat?

- Try to have your first meal within 1 to 2 hours of waking up.
- Blood sugar is easier to control when you eat on a schedule. Meals should be no more than 4 to 6 hours apart.
- If meals are more than 4 to 6 hours apart or if you are more active than usual, a snack may help to keep your blood sugar more stable.
- A light evening snack may be helpful if there is at least 4 hours between your evening meal and bedtime. A healthy snack should have a high fiber carb with protein or fat.
- Skipping meals will not help you control your blood sugar.
- If you take mealtime insulin, it is important to talk with your care team about the timing of your meal after giving your insulin.


## What should I drink?

- Remember beverages can also have an impact on your blood sugars.
- Every $1 / 2$ cup (4 ounces) of a sweetened beverage is likely to raise your blood sugar 50 points within 15 to 20 minutes.


## Best choice:

- Water
- Aim for 64 to 80 ounces every day (unless you are on fluid restriction)


## In Moderation:

- Artificially sweetened drinks
- Unsweetened tea, coffee, fruit teas
- Sugar-free sports drinks
- Seltzer water


## Avoid:

- Sweet tea
- Regular sodas
- Lemonade made with sugar
- Flavored drinks made with sugar
- Regular sports drinks
- Fruit juice


## What should I eat?

- Choose foods that are higher in vitamins, minerals, and fiber.
- Eat whole grains, fruits, vegetables, low-fat dairy, lean meats, and heart healthy fats.
- Limit foods that are high in fat, sugar and salt, and excessive calories.
- Balance meals with carbohydrate, protein, and fat at each meal.

| Choose | Avoid or Limit |
| :---: | :---: |
| - Artificial sweeteners <br> - Whole grain bread, cereal, pasta, crackers <br> - Brown or wild rice <br> - Baked, grilled, roasted, steamed foods <br> - Skim or $1 \%$ milk <br> - Reduced fat cheese <br> - Fresh and frozen vegetables <br> - Lean meats, fish, and poultry <br> - Herbs, spices, seasoned salt, pepper <br> - Olive oil, nut or seed oils <br> - Snacking: Try unsalted nuts, whole grain crackers with cheese or peanut butter, fruit with cottage cheese, sugar-free gelatin/pudding/light Greek yogurt <br> - Fresh or frozen fruit, canned fruit in water <br> - Light popcorn or baked chips | - Sugar (white, brown), syrup, honey <br> - Refined white breads, cereals, pasta <br> - White and fried rice <br> - Fried foods <br> - Whole milk and cream <br> - Full fat cheese <br> - Fried and canned vegetables <br> - Fatty meats, bacon, and sausage <br> - Table salt <br> - Butter, fatback, lard, shortening <br> - Stick margarine <br> - Snacking: limit- pies, cakes, candy, ice cream <br> - Candy, baked goods (cookies, pastries) <br> - Sugar sweetened gelatin/pudding/yogurt <br> - Potato chips or cheese puffs |

## What are carbohydrates?

Carbohydrates include sugars, starches, and fiber. Carbohydrates are also called carbs. All carbs change into glucose (sugar) in our bodies. They provide our bodies with energy. When you have diabetes, it is important to limit the total amount of carbs you eat at each meal. If you are taking insulin, it is also important to balance the amount of insulin you take with the amount of carbs that you eat at each meal.

## How much carbohydrate should I eat?

- One Carbohydrate Choice $=\mathbf{1 5}$ grams

Women: 2 to 3 carbohydrate choices per meal ( 30 to 45 grams per meal)
Men: 3 to 4 carbohydrate choices per meal ( 45 to 60 grams per meal)
Snacks: men and women: 1 to 2 choices per snack (15 to 30 grams per snack)

| Main Carbohydrate Food Groups <br> Each Portion Listed is 15 Grams Carbohydrate <br> Use measuring cups and spoons or a kitchen scale to check portions. |
| :---: |
| Starches |
| - 1/2 cup lima beans, potatoes, corn, peas, winter squash, dried beans (cooked) |
| - 1/3 cup cooked rice or pasta, or quinoa |
| - 1 slice bread, 1 small roll, $1 / 2$ hamburger or hotdog bun |
| - 1 tortilla (6 inch) |
| - 6 crackers, 3 graham cracker squares, 2 rice cakes |
| - 3 cups light popcorn |
| - $1 / 2$ English muffin or $1 / 4$ large bagel |
| - $3 / 4$ cup unsweetened cold cereal |
| - $1 / 2$ cup of cooked oatmeal, grits or cream of wheat |
| Fruit |
| - 1 small piece of fresh fruit (about the size of a tennis ball) |
| - $1 / 2$ cup canned fruit (canned in juice or water) |
| - 1/2 large banana |
| - 1 cup berries or melon |
| - 15 to17 grapes |
| - 2 Tablespoons (Tbsp) dried fruit (such as raisins) |
| Milk |
| - 1 cup milk (whole milk, $2 \%$ milk, skim milk) |
| - 6 to 8 ounces (oz.) plain or light (artificially sweetened), non-fat yogurt |
| Mixed Dishes |
| - 1 cup soup |
| - 1/8 of 12 inch Pizza (thin crust) |
| - $1 / 2$ cup casserole or chili |
| Sweets and Desserts (limit - read label for carbohydrate information) |
| - 1/2 cup pudding |
| - $1 / 2$ cup ice cream |
| - 2 very small chocolate chip cookies |
| - $11 / 2$ inch square unfrosted brownie or cake |

## What foods have less effect on my blood sugar?

Non-Starchy Vegetables: Unlimited portions - start your meal with these

- These are not counted as carbohydrates.

| Salad | Summer Squash <br> (Zucchini or Yellow) | Cucumbers |
| :---: | :---: | :---: |
| Green beans | Spinach | Peppers |
| Collard greens | Broccoli | Sugar Snap Peas |
| Carrots | Tomatoes | Asparagus |
| Cabbage | Cauliflower | Onions |

Protein: Monitor portion size for heart health

| Chicken/Poultry | Fish | Tofu |
| :---: | :---: | :---: |
| Eggs | Cheese | Red Meat |

Fat: Monitor portion size for heart health

| Salad Dressing | Avocado | Nuts/Nut Butter/Seeds |
| :---: | :---: | :---: |
| Butter | Oils | Mayonnaise |

Want a simple place to start? Try using the Healthy Plate Model below and the carb choices from the chart on page 3.


## 9-inch plate

How do I use a food label?

| Nutrition Facts |  |
| :---: | :---: |
| 8 servings per container |  |
| Serving size 2/3 cup (55g) |  |
| Amount per serving Calories | 230 |
|  | \% Daily Value* |
| Total Fat 8 g | 10\% |
| Saturated Fat 1 g | 5\% |
| Trans Fat 0 g |  |
| Cholesterol Omg | 0\% |
| Sodium 160mg | 7\% |
| Total Carbohydrate 37g | 37 g 年13\% |
| Dietary Fiber 4g | 14\% |
| Total Sugars 12g |  |
| Includes 10g Added Sugars | ed Sugars 20\% |
| Protein 3g |  |
| Vitamin D 2mcg | 10\% |
| Calcium 260 mg | 20\% |
| Iron 8 mg | 45\% |
| Potassium 235mg | 6\% |

*The \% Daily Value (DV) 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.

Serving Size: This is the first thing you should look for on the label. All other information on the label is based on this portion.

Total Fat: Try to keep levels of Trans and Saturated fat low. The Trans-fat should be zero!

Sodium:

- Aim for 600 to 700 mg per meal.
- Try to limit to 2300 mg total per day.
- (Note: 1 teaspoon of table salt contains 2300 g sodium)

Total Carbohydrate (includes all sugars and starches):

15 grams = 1 carbohydrate choice
30 grams $=2$ carbohydrate choices
45 grams $=3$ carbohydrate choices
60 grams $=4$ carbohydrate choices

Dietary Fiber: aim for $\mathbf{3}$ grams or more per serving.

- High fiber foods = if 5 grams or more
- For patients on insulin: subtract $1 / 2$ of fiber from the total carbs

Sugar Alcohol: Best to avoid these "sugar free" products.

Protein: 7 grams = 1 ounce
21 grams of protein $=30 z$ (size of deck of cards)

## What are some sample meal plans?

- Meals: 3 Carb Choices ( $\mathbf{4 5}$ g), Snacks: 1 Carb Choice (15 g)

| Breakfast | 2 slices toast <br> 1 tablespoon jam <br> 2 eggs | 2 carb choices $(30 \mathrm{~g})$ <br> 1 carb choice $(15 \mathrm{~g})$ |
| :--- | :--- | :--- |
| Lunch | 1 cup tomato soup <br> 6 saltine crackers <br> Side salad <br> 5 chocolate kisses | 1 carb choice $(15 \mathrm{~g})$ <br> 1 carb choice $(15 \mathrm{~g})$ |
| Snack | Small apple <br> Peanut butter | 1 carb choice $(15 \mathrm{~g})$ |$⿻$| Dinner |
| :--- |
| 1 cup rice <br> Baked chicken <br> Stir-fried non-starchy veggies |
| 5 wheat crackers <br> Cheese |

- Meals: $\mathbf{4}$ Carb Choices ( $\mathbf{6 0}$ g), Snacks: $\mathbf{2}$ Carb Choices ( $\mathbf{3 0}$ g)

| Breakfast | 1 cup oatmeal <br> 1 banana <br> Almond slivers | 2 carb choices $(30 \mathrm{~g})$ <br> 2 carb choices $(30 \mathrm{~g})$ |
| :--- | :--- | :--- |
| Lunch | $1 / 2$ cup corn <br> $1 / 2$ cup beans <br> 26 -inch tortillas <br> Lettuce, onions, tomato salsa <br> Cheese | 1 carb choice $(15 \mathrm{~g})$ <br> 1 carb choice $(15 \mathrm{~g})$ <br> 2 carb choices $(30 \mathrm{~g})$ |
| Snack | 6 ounces plain yogurt <br> 1 cup berries | 1 medium baked potato <br> Salmon <br> Green beans |
| Dinner | 3 cups popcorn choice $(15 \mathrm{~g})$ <br> Small handful peanuts | 4 carb choices $(60 \mathrm{~g})$ |
| Snack |  | 1 carb choice $(15 \mathrm{~g})$ |

