

Food and Nutrition

Eat Healthy



Diabetes
Foundation



Table of Contents

| | |
|---|-----------|
| Why Healthy Eating | 1 |
| About Food and Blood Sugar. | 3 |
| Carbohydrate Facts and Choices | 4 |
| Carbohydrate Smart Choices | 5 |
| Carbohydrate Substitution Challenge | 6 |
| Protein Facts and Choices. | 7 |
| Protein Smart Choices | 8 |
| Protein Substitution Challenge | 9 |
| Fat Facts and Choices | 10 |
| Fat Smart Choices | 11 |
| Fat Substitution Challenge. | 12 |
| A Healthy Plate | 13 |
| Navigating the Aisles | 14 |
| Nutrition Facts Label. | 15 |
| Healthy Snacking. | 16 |
| Tips for Eating Out. | 17 |
| Daily Food Log | 18 |

Why Eat Healthy?



OBJECTIVES:

To understand food groups, serving sizes and meal planning.

To provide access to resources and tools that will allow you to get—and stay—on track.

Studies show that even more so than clinical care, lifestyle choices impact long-term health, therefore, whether you are at risk or living with prediabetes or diabetes, there are vast benefits to your health when you focus on your food intake including:

- Maintain target blood sugar range throughout the day
- Provide energy to your cells
- Lessen your risk of heart disease
- Help your body to use insulin better
- Manage blood pressure and cholesterol levels
- Maintain a healthy body weight

About **Food** and **Blood Sugar**

Sugar comes from the food you eat. When foods are digested, they break down into sugar, also known as glucose, in your bloodstream. Glucose is used to fuel your body's cells. The sugar that isn't needed to fuel your body right away gets stored in your fat and muscle cells for later use. This may potentially lead to weight gain when carbohydrates are eaten in high quantities. Over time, this and other risk factors may contribute to insulin resistance.

Eating healthy is one of several tools to manage diabetes. Learning how to build and follow a personalized meal plan will help to keep blood glucose levels within your target range.

The tools and exercises in this guide are meant to provide personalized support, but are not meant to fully address the complexity of nutrition.

They are meant to empower you, not take away any type of food you enjoy. It is likely that you can eat all types of foods within your personal situation.



Carbohydrate Facts and Choices



Carbohydrates are essential. They are the body's main energy source. However, when eating, carbohydrates break down into glucose, and have the greatest impact on blood sugar levels. The type of carbohydrate—starch, fiber or sugar—effects how high and how fast your blood sugar will rise. All carbohydrate food sources may include one or more of the three types.

Fiber is a complex carbohydrate found in plant-based foods such as fruits, vegetables and whole-grain products. Fiber can't be digested so it helps clean out the digestive system, makes you feel full, and may lower cholesterol. High-fiber foods include: beans, legumes, fruits, nuts, seeds, whole-grain products (brown rice, oatmeal, quinoa, and whole wheat bread) and vegetables such as corn, lima beans, broccoli, brussels sprouts and squash.

Starches are also complex carbohydrates. It takes your body longer to break down starches and as a result, blood sugar levels may rise more slowly. Starchy carbohydrate sources include: starchy vegetables, such as potatoes and corn, breads and grains, such as rice, pasta, cereal and beans and legumes.

Sugars are a type of simple carbohydrate. Your body breaks down simple carbohydrates quickly, and as a result, blood sugar levels rise quickly. Sources of sugar include: fruit, including whole fruit & fruit juices, soft drinks and sweets, including candy, cookies, cakes, pies.



SMART CHOICES

Fruit and fruit juices have the same amount of carbohydrates per serving (for example, 4 ounces of juice and one piece of fruit have approximately the same amount of carbs), BUT choosing a whole fruit adds fiber which will slow the rate at which your blood sugar rises.

Space your carbohydrates throughout the day to help keep your blood glucose levels more consistent.

Keep in mind that refined starches such as white rice, white pasta, and some cereals do not have fiber and will raise your blood sugar more quickly. When you can, choose a whole grain substitute such as brown rice, quinoa or a starchy vegetable.

CARBOHYDRATE SMART CHOICES

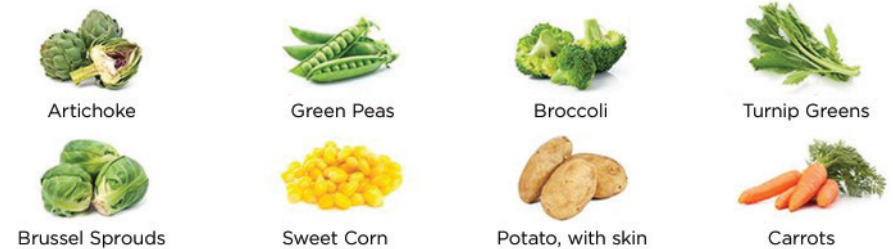
GRAINS, CEREAL, PASTA



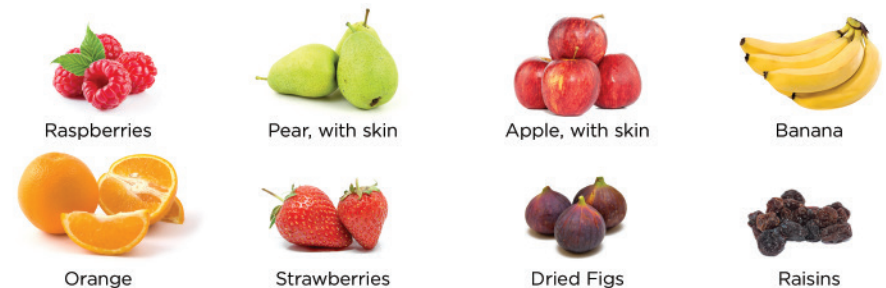
LEGUMES, NUTS, SEEDS



VEGETABLES



FRUITS



PROTEIN SMART CHOICES

LEAN MEAT



Chicken Breast



Tenderloin Steak



Tuna Steak



Salmon



Ground Turkey



Pork Chop



Swiss Cheese



Tuna



Greek Yogurt



Cottage Cheese



Mozzarella



Eggs

PLANT-BASED PROTEINS



Kidney Beans



Chickpeas



Lentils



Green Peas



Edamame



Quinoa



Tofu



Nut Butter



Almonds



Walnuts

Protein Substitution Challenge

What do you currently eat versus what can you enjoy as a substitute? The previous page provides some good choices that you can use to fill in the chart below and we've provided some examples to get you started!

Current Food Choice

- Hamburger
- Fried chicken
- Fried eggs
- Sloppy Joe

Good Substitution

- Turkey burger
- Grilled chicken thigh
- Scrambled egg whites
- Turkey Sloppy Joe

Better Substitution

- Black bean burger
- Grilled Chicken breast
- Tofu scramble
- Lentil Sloppy Joe

Want to up your protein game?

Try a piece of fish in place of a higher fat protein choice or throw some tofu into your stirfry.



| Current Food Choice | Good Substitution | Better Substitution |
|---------------------|-------------------|---------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

Fats Facts and Choices



Fats make up the membranes that surround your cells, and are an important source of energy. They can delay the stomach from emptying and slow the digestion of carbohydrates, which helps prevent spikes in blood sugar. Not all fats are the same, there are healthy fats and unhealthy fats.

Unsaturated Fats (Healthy) such as nuts, seeds, avocado, olives, oils (except coconut or palm) and nut butters are considered healthy fats because they can improve cholesterol levels and reduce the risk of heart disease when consumed in small quantities.

Omega-3 Fats (Healthy) are an essential polyunsaturated fat. They are known for anti-inflammatory health benefits.

Saturated Fats (Unhealthy) can cause cholesterol to build up in your arteries, increasing your risk for heart disease and stroke. Food sources of saturated fats are full fat cheeses and cold cuts, bacon, sausage, hot dogs, whole fat milk and cream, butter, coconut and palm oil.

Trans Fats (Unhealthy) are unsaturated fats that have been processed and now behave like saturated fats. Trans Fats may contribute to raising your LDL (bad) cholesterol level and lowering your HDL (good) cholesterol levels. Eating trans fats increases your risk of developing heart disease and stroke. Trans fats are labeled as “partially hydrogenated” oils on the food labels of some commercially processed desserts, cookies, crackers and shortening.

FAT SMART CHOICES



Olive Oil



Avocado



Olives



Fatty Fish or Fish Oil



Seeds (pumpkin, sesame)



Flaxseed



Chia Seeds



Nut Butter



Nuts



SMART CHOICES

Too much fat in your system can impact your digestion negatively by keeping your blood sugar higher for a longer period of time. This can be especially important when taking rapid acting insulin at mealtime.

Overall, be aware of portions, because fats are twice as high in calories per gram versus carbohydrates and protein.

Even if the food label says 0 grams of trans fat, search the ingredients for partially hydrogenated oils.

Keep intake of saturated fat to less than 10% of your daily intake of total fat and try and eliminate Trans Fats

Navigating the Aisles

Tips to Effectively Shop the Supermarket



Organize your Shopping List. Make a list ahead of time with ideas for each department.

Balance your Cart. Shop in each department and for all the ingredients for a balanced plate including non-starchy vegetables, high fiber carbohydrates, and lean proteins.

Focus on the produce section to fill your cart with non-starchy vegetables and seasonal fruit.

Check out the “Natural” Aisle if there is one available. Be sure to check ingredient lists for added sugars and opt for healthy snacks with at least 3 grams of fiber or more per serving

Shop your dairy and egg section to round out a balanced meal

Visit your meat section for lean protein options



SMART CHOICES

When choosing healthy food buy what's in season.

Look for fresh produce that is already chopped and peeled. It's easier to splurge on the prep work that's already done if you're less prone to doing it yourself.

FRUITS AND VEGETABLES: PRODUCE AISLE

Focus on non-starchy vegetables which should fill one half of your plate at lunch and dinner.

Options include leafy greens, broccoli, carrots, mushrooms, peppers, asparagus, and tomatoes. Starchy vegetables such as peas, corn, and potatoes count towards your carbohydrate intake.



Fruit is a great source of fiber, vitamins and nutrients and also count towards carbs. Keep the skins of the fruit on for fiber and make sure to include a rainbow of colors for a variety of health benefits!

WHOLE GRAINS: NATURAL FOODS AISLE



Purchase whole grains high in fiber such as farro, brown orzo, wild rice, or quinoa.

Portion control is key when consuming carbohydrates at each meal. 1/3 cup cooked grain is about 15 grams of carbohydrates.

DAIRY/EGGS: DAIRY AISLE

Opt for reduced fat dairy options.

Make low fat or fat free choices such as yogurt, kefir, cottage cheese and milk. These foods include protein to help stabilize blood sugar.



PROTEIN: MEAT, POULTRY AND FISH COUNTERS



Protein helps keep blood sugar stable after eating a meal.

Opt for lean protein options at every meal and snack such as nuts, seeds, fish, chicken breast, turkey breast, lean beef (90% lean or higher).

Nutrition Facts Label

Focus on:

1. Servings per container
2. Serving size
3. Total carbohydrates (which include dietary fiber, total sugars and added sugars)

To gain:

- An increased awareness of added sugars in foods
- Help with accurate calculating of carbohydrates
- Help in determining portion sizes
- Understanding of the nutrients in foods to help with meal planning

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

Healthy Snacking

Snacking is a great way to manage hunger in between meals, and choosing balanced snacks can help manage blood sugar levels. Tips to maintain a healthy diet through snacking include:

- **Plan ahead** so snacks are quick and accessible: Utilize measuring cups and pre-portioned snacks to ensure exact quantities being consumed
- **Pair nutrients together:** For example, balance out carbohydrate choices with sources of fat and protein to help promote optimal blood sugar levels
- **Utilize snack packs** and stay mindful of the nutritional information found in each package
- **Record all items eaten into a food journal.** Include snacks in carbohydrate planning and counting for the day



BALANCED SNACK RECOMMENDATIONS

Almonds +
1 piece of small fruit

Raisins + Walnuts

Cottage cheese +
berries on top

Cucumber slices +
tzatziki

Hummus + carrot sticks

Plain yogurt +
high fiber cereal on top

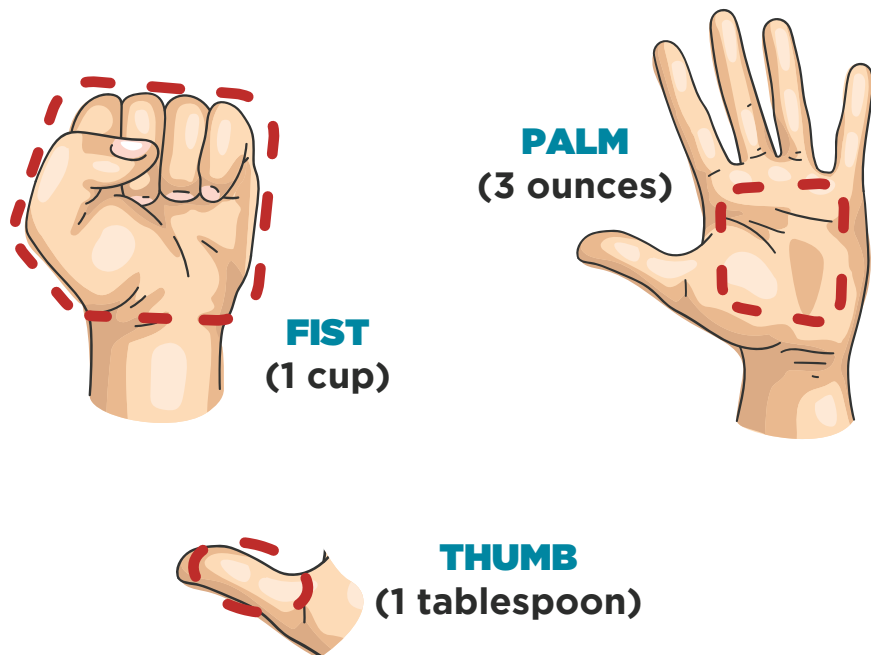
Whole grain crackers +
peanut butter

Low salt pretzels +
hard boiled egg

Tips for Eating Out

Managing choices when eating out allows you to maintain a healthy diet, while enjoying a well-deserved meal out with family and friends. Tips for eating out include:

- **Ask for an extra small plate** to cut down on portions; restaurant portions are typically double what is suggested.
- **Utilize the plate method** when selecting sides and entrees
- **Take extra portions to go**
- **Estimate sizes by using portion control:**
 - 1 cup = a loose fist
 - 3 ounces = the palm of your hand
 - 1 tablespoon = the size of your thumb
- **Plan your time out** to coincide with when insulin dosage will to be taken
- **Suggest sharing meals** with dinner companions
- **Order an appetizer or small entree** instead of an entire meal



Daily Food Log

Managing choices when eating out allows you to maintain a healthy diet, while enjoying a well-deserved meal out with family and friends. Tips for eating out include:

Writing down your daily food intake can be helpful in learning how different choices affect your blood glucose (blood sugar). It can also help keep you motivated!

Use the log on the next pages to help you keep track of what you eat. Record a variety of days, including weekdays, workdays, weekends, etc., and make any relevant notes in the comments section.

Remember to test your blood sugar levels before and after each meal. The chart below shows recommended goal ranges.

| Time of Check | Goal Ranges/Averages with Diabetes* |
|---|-------------------------------------|
| Before Breakfast (fasting) | 80 - 130 |
| Before Lunch and Dinner | 70 - 130 |
| Two hours after meals | < 180 |
| Bedtime | 90 - 150 |
| A1c (also called glycosylated hemoglobin A1c, HbA1c or glycohemoglobin A1c) | < 7% |

* American Diabetes Association Guidelines

Day of Week: _____ Date: _____

| | | Food | Drink | Total Carbs | Blood Sugar | Comments |
|-------|-----------|------|-------|-------------|-------------|----------|
| DAY 1 | Breakfast | | | | | |
| | Snack | | | | | |
| | Lunch | | | | | |
| | Snack | | | | | |
| | Dinner | | | | | |
| | Snack | | | | | |

Day of Week: _____ Date: _____

| | | Food | Drink | Total Carbs | Blood Sugar | Comments |
|-------|-----------|------|-------|-------------|-------------|----------|
| DAY 2 | Breakfast | | | | | |
| | Snack | | | | | |
| | Lunch | | | | | |
| | Snack | | | | | |
| | Dinner | | | | | |
| | Snack | | | | | |

Our mission is to support your journey to better health.

The Diabetes Foundation provides direct services to New Jersey children, adults and families living with diabetes. Our programs are designed to prevent diabetes onset, and delay or avoid long-term complications.

Visit the Diabetes Foundation to get the support and connections you need to manage your diabetes. Our programs are free with thanks to dedicated outside funding. Programs can be found in English or Spanish.



MEDICATION ASSISTANCE

Free two month supply of insulin, oral medication and/or non-insulin injectables



FREE A1C SCREENING

Free screening for children and adults at a BioReference Laboratory location near you



SUPPLY ASSISTANCE

Free two month supply of glucose testing and insulin administration products, including glucometers, test strips, sensors and pods



KIDS CAMP SCHOLARSHIPS

Allows your child to attend a summer camp dedicated to empowering boys and girls living with type 1 diabetes



TRANSPORTATION ASSISTANCE

Free round trip transportation to your endocrinologist, primary care physician or a blood-testing lab



EDUCATION

Diabetes Self-Management Education and Support (DSMES) Program, encompassing all key aspects of diabetes care



VIRTUAL SUPPORT GROUPS

A chance to connect with others living with diabetes to discuss issues and share concerns and accomplishments



RESOURCE SOLUTION SPECIALISTS

One-on-one support to help find local resources for medication and supplies, or for building a diabetes healthcare plan that works for you

VISIT US ONLINE

diabetesfoundationinc.org

CALL US

(201) 444-0337

EMAIL US

info@diabetesfoundationinc.org



VISIT US ONLINE
diabetesfoundationinc.org

CALL US
(201) 444-0337

EMAIL US
info@diabetesfoundationinc.org