



Diabetes Self-Management Education and Support



Module 5
Healthy Eating
Revised July 2024

VA



U.S. Department of Veterans Affairs
Veterans Health Administration



U.S. Department of Defense

In This Module You Will:

- Identify key approaches to healthy eating.
- Describe how to use the Plate Method to create balanced meals and portions.
- Identify carbohydrate sources and how they affect blood glucose.
- Explain how reading the Nutrition Facts on a food label can help manage blood glucose.
- Recognize the Mediterranean and DASH styles of eating as healthy options.
- Explain the importance of managing weight.





Healthy Eating

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 levels. Then, you can make smart choices about what, when, and how much to eat.

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

What does healthy eating mean to you?

Where do you have the most food challenges?

NOTES:

Portion Control

Be aware of portion distortion. This is when you eat more if you are served more food. It is important to be mindful of the amount of food you are eating.

A portion is the amount of food you choose to eat for a meal or snack. Many packaged foods contain multiple servings. Therefore, you may be eating more than you realize.

Did you know that portion sizes have increased over time? Do you know the recommended serving sizes of foods that you prefer?



These days, portions at restaurants are quite a bit larger than they were several years ago. One entrée can equal 3 or 4 servings!

Estimating Portions



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 or snack. Measuring or weighing food is the most accurate way to estimate portions. Using the size of familiar objects can be helpful too!

Measure serving sizes to help manage your glucose levels and maintain your weight.

Food Group	Serving Sizes
Grains	1 cup cereal flakes = 1 adult fist 1/3 cup cooked rice, pasta, or potato = 1 tennis ball 1 oz. slice of bread = 1 cassette tape 1 oz. chips = 1 cupped hand
Fruits and Vegetables	1 cup salad greens = 1 softball 1 medium baked potato = 1 computer mouse 1 medium piece of fruit = 1 tennis ball ½ cup fresh fruit = 1 tennis ball ¼ cup raisins = 1 egg
Dairy and Cheese	1 ½ ounce cheese = 4 stacked dice ½ cup ice cream = 1 tennis ball
Meat and Protein Alternatives	3 oz. meat, fish, or poultry = 1 deck of cards 2 Tablespoons peanut butter = 1 golf ball 3 oz. Tofu = 1 deck of cards
Fats	1 teaspoon = 1 die or tip of a finger 1 Tablespoon = top of thumb to first knuckle.



Notes:

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Tips to Get Started

A great first step to eating healthy food is to work on changing the portion sizes.

Here are some portion size tips:

- **Measure** your bowls, plates, and cups to see how much food they hold. For example, pour breakfast cereal into the bowl as usual, and pour it into a measuring cup. Do the same with other foods and drinks to figure out how much you have been typically serving yourself. Check portions against the recommended serving sizes for that food.
- **Train** your eyes. It's important to learn what a standard serving size looks like so you can start to recognize when the food served is more than you need.
- **Read** the nutrition label to learn the size of one serving of that food. Talk to a dietitian, take a class, read a book, or look online to learn about standard portions of other foods. Use measuring cups to check portion sizes.
- **Consider** using smaller plates, bowls, and glassware.

Notes:

What are Carbohydrates or “Carbs”?

There are 3 macronutrients in food: carbohydrates, proteins, and fats. Carbohydrates turn to glucose after they are digested and provide your body with energy or fuel. Sugar, starches, and fiber are all sources of carbohydrates.

Sugar such as cookies, cakes, ice cream, and candy, are simple sugars and can quickly spike glucose.

Starches such as bread, cereals, pasta, starchy vegetables, dried beans and peas are complex carbohydrates.

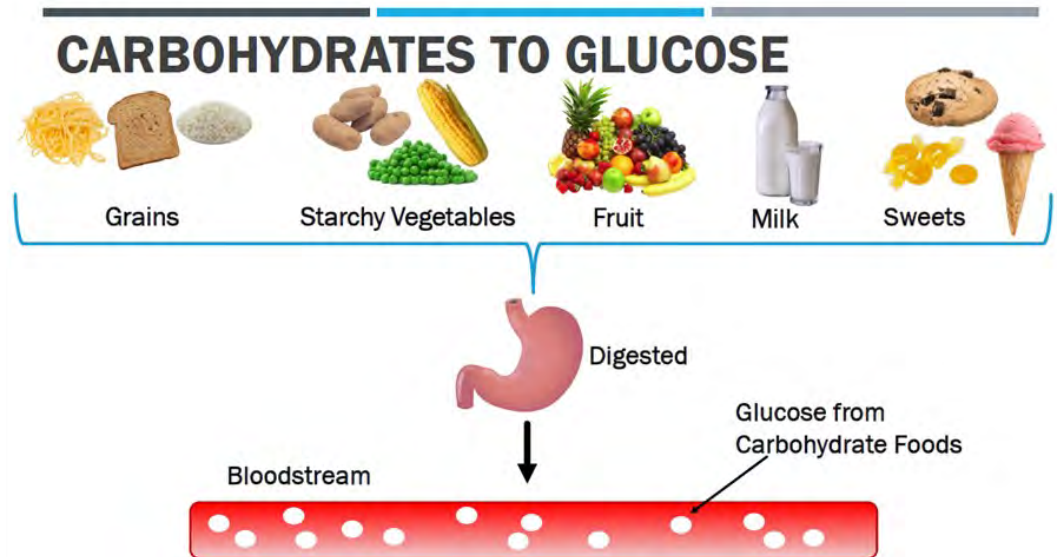
Fiber is also a complex carbohydrate. It occurs naturally in fruits, vegetables, whole grains and cooked dried beans and peas.

Carbohydrates should be eaten in moderation. Portion size is key! They do not need to be avoided. Healthy eating is balancing carbs, protein, and fats.

Estimating Carbs

Reading the Nutrition Facts on a food label for the Total Carbohydrates is the most accurate way to know how many carbs you are eating. However, you can also estimate your carbs if a label is unavailable.

For most carbohydrate foods, ½ cup or 1 serving = 15 grams of carb. Refer to the chart on page 10, for examples of carb servings.



Creating Balanced Meals Using the Plate Method

The Plate Method can help keep high-carbohydrate foods in smaller portions on your plate. Grains (starch) and proteins should only equal one quarter of the plate each, while the other half should be filled with non-starchy vegetables. Don't forget to drink plenty of water to stay hydrated!

How Does this Plate Compare to Yours?

Glass of water



Alcohol

Ask your provider if alcohol is safe for you.

Alcohol includes beer, wine, spirits, and cocktails. These drinks may increase your glucose levels. Mixers and medications can add concerns. However, if not drinking with a meal or drinking more than recommended, it could increase your risk for low glucose.

It is important to always eat when you are drinking alcohol. Be sure you include carbohydrate foods. Be aware that alcohol including light and non-alcoholic beer promotes weight gain.

Check with your provider for recommendations.

For more information on alcohol go to www.ownyourlimits.org



Recommendations:
Women – 1 drink a day or less with a meal
Men – 2 drinks a day or less with a meal

- Margarita= 2 alcohol drinks
- Long Island Iced Tea= 4 alcohol drinks
- Martini= 1.4 alcohol drinks
- Forty-ounce regular beer= 3 alcohol drinks
- Forty-ounce malt liquor= 5 alcohol drinks
- Pina Colada, 9 ounces= 2 alcohol drinks
- Bourbon and water, 6 ounces= 1.3 alcohol drinks

Starches	Fruit	Milk	Sweets	Non-Starchy Vegetables	Protein	Fats
1 serving = 15 grams of carb	1 serving = 15 grams of carb	1 serving = 12 grams of carb	1 serving = 15 grams of carb	1 serving = < 5 grams of carb		
<p>Healthy Choices 1/3 cup brown rice ¼ lg. sweet potato ½ cup mashed potato 1 small baked potato ½ cup beans/peas (cooked) ½ cup corn 3 cups popped popcorn ½ cup cooked oatmeal ¾ cup dry cereal ½ cup bran cereal 1 slice whole grain bread</p> <p>Less Healthy 1/3 cup rice or pasta ¼ large bagel ½ hamburger bun ½ English muffin ½ large biscuit 6 crackers 4" pancake or waffle 10 french fries 12=15 chips</p> <p>Combo Foods 1 cup soup 1 slice thin pizza ½ cup casserole 2"square lasagna 2-3 chicken strips</p>	<p>1 small piece</p> <ul style="list-style-type: none"> • apple • pear • peach • orange <p>1 cup melon cubes</p> <ul style="list-style-type: none"> • cantaloupe • honeydew • watermelon <p>1 cup berries</p> <ul style="list-style-type: none"> • strawberries • blueberries • raspberries <p>1/2 banana 15 grapes or cherries ½ cup canned fruit (light syrup or juice) 2 Tbsp. raisins 3-4 prunes ¼ - ½ cup fruit juice</p>	<p>1 cup whole milk 1 cup 2% milk 1 cup skim milk</p> <p>6-8 oz. yogurt (varies by brand, check the label)</p> <p>Milk Alternatives 1 cup oat milk 1 -1 ½ cup soy milk 1 cup almond 1 cup coconut</p>	<p>½ cup ice cream ½ ice cream bar ¼ cup sherbet ½ doughnut 6 vanilla waters 2 Oreo cookies 2" unfrosted brownie 3 graham cracker squares 3 peppermint candies 5 chocolate kisses ½ cup gelatin 1 small granola bar 1 popsicle 9 jelly beans</p>	<p>1 cup raw or 1 cup cooked</p> <p>asparagus green beans beets broccoli brussel sprouts cabbage carrots cauliflower celery cucumbers greens lettuce mushrooms okra onions peppers radishes squash spinach tomatoes turnips zucchini</p>	<p>chicken turkey beef pork fish shellfish bison venison cheese eggs tofu</p>	<p>Monounsaturated canola oil olive oil peanut oil nuts avocado olives</p> <p>Polyunsaturated soybean oil corn oil sunflower oil margarine mayonnaise salad dressing pumpkin seeds sunflower seeds</p> <p>Saturated butter shortening cream cheese sour cream lard</p>

Meal Planning

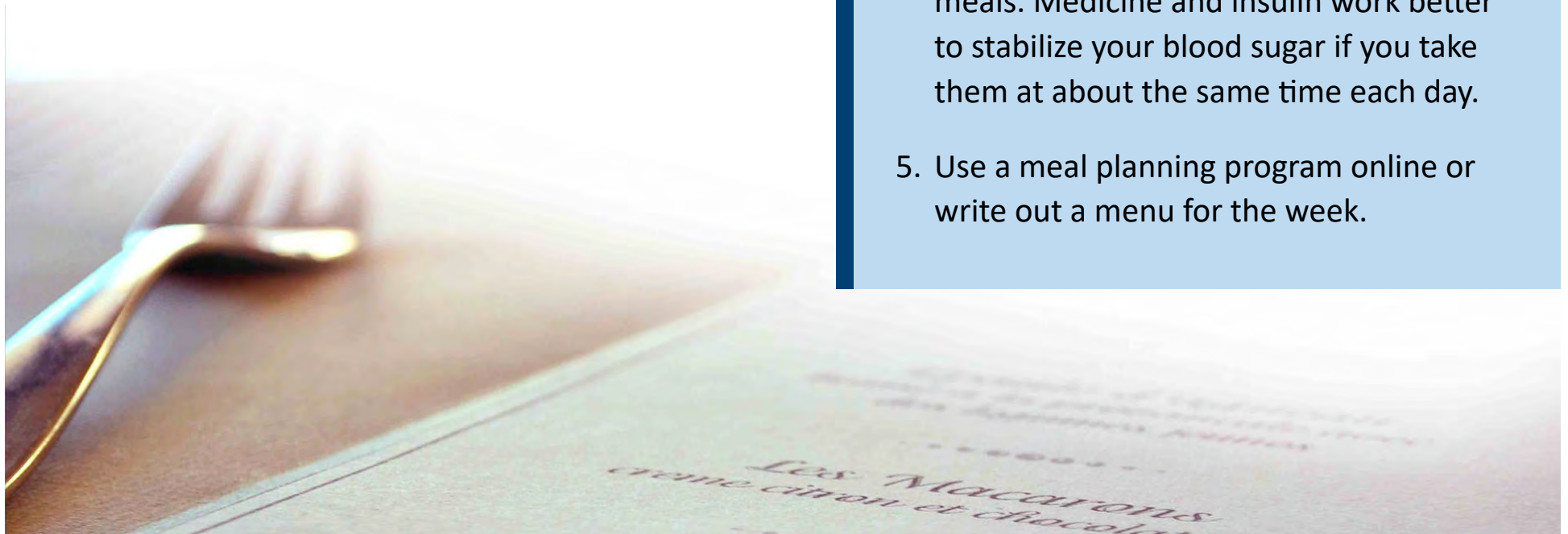
Planning meals in advance may help manage glucose and assist with better food choices. You can also prepare meals in advance.

When you cook/eat at home, you have more control over the meals you eat, the portions you choose, and extras added to your foods like salt, sugar, and fat.

Ask your healthcare provider to refer you to a dietitian to help plan meals that work best for you.

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 stabilize 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.



Dining Out Tips

Plan Ahead

- Look up menu online to review options before arriving at restaurant.

Choosing a meal:

- Grilled instead of fried
- Condiments/dressings on the side
- Substitutions of sides from starches to non-starchy vegetables. Are there other items not on the menu?
- Pass on the bread
- Do not “super-size”
- Avoid high calorie, sugary beverages

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 traditions which include food and drink that can impact your glucose levels. Working with your healthcare team, you can adjust medications and meals to accommodate and enjoy those traditions.

Shopping and Cooking Tips

Shopping:

- Choose seasonal fresh or frozen fruits and vegetables
- Choose lean proteins, such as chicken, turkey, fish, tofu, or beans.
- Avoid high-sugar, high-fat food aisles
- Choose whole-grain foods, low-fat dairy products, or milk alternatives
- Select unsalted nuts and seeds



Cooking at Home:

- Identify and adjust carbohydrate portions
- Consider trimming visible 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
- Minimize cooking in cream, coconut, or butter-based sauces



Food Quality

Eating healthy includes a variety of foods and will give your body the vitamins and minerals it needs.

Where to Start

Read food labels and choose nutrient dense foods with natural or unprocessed ingredients.

- Choose foods that are lower in calories, saturated fat, sugar, and salt.
- Eat more whole grains.
 - Aim for 3 grams of fiber per serving. The Dietary Guidelines for Americans recommends 48 grams of whole grains a day and **25 grams of fiber daily or more.**
 - 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 a serving of fruit when you crave something sweet.
- Select a salad for lunch or when you eat out.
- Drink water instead of regular soda.



You need to eat healthy fats. Here are some tips:

- Eat fatty fish (salmon, tuna, and sardines) twice a week
- Snack on lightly salted or unsalted nuts 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

Reading a Food Label

Serving Size

- The serving size is the portion size used for all the values on the label.
- Different foods have different serving sizes
- The serving size on the label is 1/2 cup of dry oatmeal.

This is a label for rolled oats or oatmeal.

Nutrition Facts	
About 113 servings per container	
Serving size	1/2 cup dry (40g)
Amount per serving	
Calories	150
% Daily Value*	
Total Fat 3g	4%
Saturated Fat 0.5g	3%
Trans Fat 0g	
Polyunsaturated Fat 1g	
Monounsaturated Fat 1g	
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 27g	10%
Dietary Fiber 4g	13%
Soluble Fiber 2g	
Total Sugars 1g	
Includes 0g Added Sugars	0%
Protein 5g	
Vitamin D 0mcg 0%	• Calcium 20mg 0%
Iron 1.5mg 8%	• Potassium 150mg 2%
Thiamin 0.2mg 15%	• Phosphorus 130mg 10%
Magnesium 40mg 10%	
* 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.	

Servings per container

- There are often more than one serving in a package
- In this package, there are 113 servings.

Total Carbohydrates

- Indicates the total amount of carbohydrate (starch and sugar in one serving of this product).
- One carb choice or serving of a carbohydrate rich food has about 15 grams of carbs.
- This food has 27 grams of carbs per cup serving

Sugar-Free Foods

Foods labeled sugar-free do not mean they are carbohydrate free. While these foods can be part of your diabetes plan, it is important to look at the total carbohydrates on the nutrition facts label.

If the item has fewer carbs than the standard product, it might be the better choice. However, if there is little to no difference in the carbs, either choice is acceptable.

Many sugar-free foods contain sugar alcohols like mannitol, sorbitol, and xylitol. Sugar alcohols aren't always low in calories and carbs. Be aware that foods containing sugar alcohols can cause stomach upset and diarrhea.



Nutrition Facts	
about 16 servings per container	
Serving size 2 pieces (31g)	
Amount per serving	
Calories 130	
% Daily Value*	
Total Fat 9g	12%
Saturated Fat 5g	25%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 25mg	1%
Total Carbohydrate 18g	7%
Dietary Fiber 1g	4%
Total Sugars 0g	
Includes 0g Added Sugars	0%
Sugar Alcohol 15g	
Protein 2g	
Vit. D 0mcg	0%
Calcium 6mg	0%
Iron 1mg	6%
Potas. 66mg	2%

* The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day is used for general nutrition advice.

No Sugar Added Foods

Along with sugar-free foods, you might see “no sugar added” foods. For example, this 100% juice label contains fruit sugar (fructose) which is a carbohydrate. The “no-sugar added” implies this item is a healthy choice, but is actually high in total carbohydrates.

Always check the nutrition facts label on the package for the total carbohydrates.

100% JUICE	
Nutrition Facts	
12 servings per container	
Serving size 8 FL OZ (240mL)	
Amount per serving	
Calories 140	
% Daily Value	
Total Fat 0g	0%
Sodium 10mg	0%
Total Carbohydrate 37g	13%
Total Sugars 35g	
Includes 0g Added Sugars	0%
Protein <1g	
Calcium 30mg	2%
Potassium 140mg	2%
Vitamin C 90mg	100%

Not a significant source of saturated fat, trans fat, cholesterol, dietary fiber, vitamin D and iron.

No Artificial Flavors, Colors or Preservatives

INGREDIENTS: GRAPE JUICE FROM CONCENTRATE (FILTERED WATER, GRAPE JUICE CONCENTRATE), GRAPE JUICE, ASCORBIC ACID (VITAMIN C), CITRIC ACID (FOR TARTNESS)

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† Not a low calorie food. See Nutrition Facts for sugar and calorie content.
‡ Not made with genetically modified ingredients.
2 servings of fruit in every 8 oz. glass equals 1 cup of fruit.

Comments or Questions?
Call 1-800-340-6870
Weekdays 9 am - 4 pm ET WLA32942

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Mediterranean-Style Eating

The Mediterranean Diet has been shown to have numerous health benefits. These include weight loss, decreased risk of cardiovascular disease, better insulin sensitivity and improved anti-inflammatory effect.

Guidelines

1. Take time to enjoy food in the company of others.
2. Eat at consistent times.
3. Drink water with meals.
4. Use olive oil as your main dietary fat.
5. Include tree nuts, 2-3 servings each week.
6. Non-starchy, in-season vegetables, at least 2 servings a day.
7. Choose foods daily with more than 3 grams of fiber per serving like beans and whole grains.
8. Eat fish and seafood, 2-3 times per week or more.
9. Enjoy a small serving of fruit for dessert and limit sweets.
10. Have smaller portions of red meats and eat less often.
11. Avoid sugary drinks.



Olive oil is high in monounsaturated fats. Emerging research indicates that monounsaturated fats may lead to improved blood glucose.



Fish	Oils	Nuts, Beans, Seeds, and Legumes	Vegetables	Fruits	Grains	Herbs and Spices
Make fish a choice at least twice a week.	Choose unsaturated fat sources.	Try to eat 3-6 servings per week.	Choose 4+ servings per day. Make 1 serving raw.	Choose 3 or more servings per day.	Choose whole grains 2-3 servings per day.	Use in place of salt to season foods.
Salmon Sardines Cod Mackerel Herring Lake trout Tuna	Olive oil Walnut oil Canola oil Flaxseed oil Avocado oil	Flax seed/Chia seed Beans: black, black eye, kidney, chickpeas, lima, pinto Lentils Walnuts/Pecans Pistachios/Cashews Sunflower seeds	Eggplant, Squash broccoli, cauliflower Peppers, Onions Lettuce, All Greens Celery, Tomato Leeks, Kohlrabi	Apples Oranges Peaches Pears Pineapple Grapes Mango Pomegranates	Oats Whole wheat bread Rye Barley Couscous Whole wheat pasta Quinoa Brown rice Farro	Cloves Mustard seed Marjoram Tarragon Cumin Garlic Mint

Poultry: Choose daily or weekly in place of red meat.

Dairy: Choose lower fat options, use with moderation.

Alcohol: If you choose to drink, consider one 5oz. glass of red wine per day.

Diabetic Kidney



Limiting dietary sodium is important for blood pressure and kidney health. This is especially important for African Americans and Hispanics.

Recommendations:

- Eat vegetables, fruits, and whole grains
- Include fat-free or low-fat dairy products, fish, poultry, beans, nuts, and vegetable oils
- Limit foods that are high in saturated fat, such as fatty meats, full-dairy products and tropical oils like coconut, palm kernel and palm oils
- Limit sugar-sweetened beverages and sweets
- Limit sodium to 1500-2300 mg/day. Discuss with your provider or a dietitian.



DASH Eating Plan

The Benefits: Lowers blood pressure & LDL “bad” cholesterol.

 **Eat This**

 **Limit This**

 Vegetables	 Fatty meats
 Fruits	
 Whole grains	 Full-fat dairy
 Fat-free or low-fat dairy	
 Fish	 Sugar sweetened beverages
 Poultry	
 Beans	 Sweets
 Nuts & seeds	
 Vegetable oils	 Sodium intake

www.nhlbi.nih.gov/DASH



NIH National Heart, Lung, and Blood Institute



Aim for a Healthy Body Weight

Losing 3-5% of weight and keeping it off, will result in health improvements. It may also result in taking less medication.

- Make lifestyle changes that you can maintain. Quick fixes resulting in rapid weight loss are not sustainable.
- Make healthy choices. Choose a wide variety of nutrient dense foods. Avoid processed foods that are high in calories.
- Be active! Do something you enjoy to get moving more.
- Set goals that you can reach. Your goals should be SMART – specific, measurable, achievable, relevant, and time-bound.
- Discuss your desire to achieve or maintain a healthy weight with your provider or healthcare team.
- Make an appointment with a Registered Dietitian.
- Ask your family, friends, or healthcare team for support.
- Celebrate your success! Take time to reward yourself.

What are your current eating habits?

What is one eating habit you would like to change?

Do you have a plan or a SMART goal?

Summary

This session explained the key approaches of eating healthy and how to use the Plate Method to create balanced meals. Module 5 also reviewed carbohydrate sources, their affect on blood glucose, and how to read a Nutrition Facts label to find the serving size and total carbohydrate grams. Finally, in this session, you learned that the Mediterranean style of eating and limiting dietary sodium are healthy eating options. Also, maintaining a healthy weight is important.

Key Points

- Create balanced meals using the Plate Method.
- Carbohydrates raise blood glucose but should not be avoided.
- Carbohydrate intake should be individualized.
- Starches, sweets, milk, and fruit have carbohydrates.
- Nutrition Facts labels provide important information on serving sizes, carbohydrate grams, and sodium content.
- A Mediterranean style diet may help to improve blood glucose, body weight, and blood pressure.
- Dietary sodium (salt) impacts blood pressure, especially those with diabetes. Limiting salt might help to lower blood pressure and protect the kidneys.

Before Next Class

- Review **Module 6: Being Active**
- Write down your questions
- Work on your healthcare goal or changing a habit/behavior



Notes:



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