## Chapter -8-

## Nutrition and




As a result of participating in this segment of training, learners will be able to:

1. List the basic food groups
2. Find at least 1 benefit of each food group based on the guidelines of the USDA (ChooseMyPlate.gov)
3. Construct what counts for serving sizes of common foods using visuals and/or manipulatives
4. Take part in creating balanced \& complete menu plans on the Weekly Menu Plan form
5. Distinguish at least 3 important aspects of menu planning for someone with Diabetes
6. Defend how menu planning for someone with Diabetes would be integrated into a sample Weekly Menu Plan
7. Demonstrate how to read labels for nutrition value per portion size
8. Identify 3 ways to involve supported individuals in the menu planning process
9. Recommend at least 3 benefits of hydration
10. List 2 symptoms each of poor nutrition and dehydration, when and whom to report symptoms of concern
11. Distinguish different categories of fats
12. Recognize ideal sodium intake levels
13. Contrast empty and nutrient-rich calories
14. Associate careless food handling with the potential for foodborne illness
15. Illustrate 4 safe food handling practices
16. Generalize the purpose of a grocery store layout
17. Prepare a shopping list based on a created Menu Plan

# One Day Meal Plan 

Breakfast
Lunch
Dinner
Snacks
Beverages

## Portion Size

## Savvy

Match the serving size of each food by drawing a line to the picture that best represents what that size would look like.

# U <br> Servings per Food Group 

## EXAMPLES OF 1 SERVING

|  | Grains <br> At least half of your servings should be whole-grain. | 6 servings | 6-8 servings | - 1 slice bread <br> - 1 oz dry cereal (check nutrition label for cup measurements of different products) <br> - $1 / 2$ cup cooked rice, pasta, or cereal (about the size of a baseball) |
| :---: | :---: | :---: | :---: | :---: |
|  | Vegetables <br> Eat a variety of colors and types | 3-4 servings | 4-5 servings | - 1 cup raw leafy vegetables (about the size of a small fist) <br> - 1/2 cup cut-up raw or cooked vegetables <br> - 1/2 cup vegetable juice |
|  | Fruits <br> Eat a variety of colors and types | 4 servings | 4-5 servings | - 1 medium fruit (about the size of a baseball) <br> - 1/4 cup dried fruit <br> - 1/2 cup fresh, frozen, or canned fruit <br> - 1/2 cup fruit juice |
|  | Fat-free or low-fat dairy Products | 2-3 servings | 2-3 servings | - 1 cup fat-free or low-fat milk <br> - 1 cup fat-free or low-fat yogurt <br> - 1 and $1 / 2$ oz fat-free or low-fat cheese (about the size of 6 stacked dice) |
|  | Lean meats, poultry, and seafood | 3-6 oz (cooked) | Less than 6 oz | - 3 oz cooked meat (about the size of a computer mouse) <br> - 3 oz grilled fish (about the size of a checkbook) |
|  | Fats and oils Use liquid vegetable oils and soft margarine most often | 2 servings | 2-3 servings | - 1 tsp soft margarine <br> - 1 Tbsp mayonnaise <br> - 1 tsp vegetable oil <br> - 1 Tbsp regular or 2 Tbsp low-fat salad dressing (fat-free dressing does not count as a serving) |
|  | Nuts, seeds, and legumes | 3-4 servings | 4-5 servings | - 1/3 cup or 1 and $1 / 2$ oz nuts <br> - 2 Tbsp peanut butter <br> - 2 Tbsp or $1 / 2$ oz seeds <br> - 1/2 cup dry beans or peas |
|  | Sweets and added sugars | 0 servings per week | 5 or fewer servings per week | - 1 Tbsp sugar <br> - 1 Tbsp jelly or jam <br> - 1/2 cup sorbet and ices <br> - 1 cup lemonade |

## Food Group Benefits

Turn to the Food Group Benefits in the "Fundamentals" section to find the nutrients and health of benefits of each of the Five Food Groups.

## The Five Food Groups

Grains
Vegुetables


## Healthy Eating \& Diabetes

## Define Your Plate

Use a rule of three. This can help you lose weight and manage your diabetes by eating more non-starchy foods. Divide your plate in half. Fill one side with vegetables like spinach, broccoli, carrots, or green beans. Next, divide the empty side into two halves. Use one for starchy foods such as potatoes, whole grains like brown rice or quinoa or whole -grain bread or pasta. In the last section, add meat or another protein. On top of that you can also have an 8 ounce glass of low-fat milk and a half-cup of fruit.

## Vegetables have little effect on blood sugar.

## Meats and other proteins can slightly raise blood sugar.

Grains and other starchy vegetables raise blood sugar.

## What are empty calories?

Currently, many of the foods and beverages Americans eat and drink contain empty calories - calories from solid fats and/or added sugars. Solid fats and added sugars add calories to the food but few or no nutrients. For this reason, the calories from solid fats and added sugars in a food are often called "empty calories."

Solid fats are fats that are solid at room temperature, like butter, beef fat, and shortening. Some solid fats are found naturally in foods. They can also be added when foods are processed by food companies or when they are prepared.

Added sugars are sugars and syrups that are prepared.


Solid fats and added sugars can make a food or beverage more appealing, but they also can add a lot of calories. The foods and beverages that provide the most empty calories for Americans are:

- Cake, cookies, pastries, and donuts (contain both solid fat and added sugars)
- Sodas, energy drinks, sports drinks, and fruit drinks (contain added sugars)
- Ice cream (contain both solid fat and added sugars)
- Sausages, hot dogs, bacon, and ribs (contain solid fat)

These foods and beverages are the major sources of empty calories, but many can be found in forms with less or no solid fat or added sugars. For example, low-fat cheese and low-fat hot dogs can be purchased. You can choose water, milk or sugar-free soda instead of drinks with sugar. Check that the calories in these products are less than in the regular product.

In some foods, like most candies and sodas, all the calories are empty calories. These are called "empty calorie foods." However, empty calories from solid fats and added sugars can also be found in some other foods that contain important nutrients. Look at the diagram below to see which foods have some empty calories, and which foods have no empty calories.

## Foods with few or no

 empty calories
## Foods with some

 empty calories

- Unsweetened applesauce
- Fat-free milk
- Baked chicken breast without skin
- Unsweetened cereal

- Sweetened applesause
- Whole milk
- Fried chicken
- Sweetened cereal
- Regular lean ground beef

- Extra lean ground beef (95\% lean or more)



# Nutrition Facts 

Serving Size 1 cup (228g) Servings Per Container about 2

## Amount Per Serving

| Calories 250 Ca | ies from Fat 110 |
| :---: | :---: |
|  | \% Daily Value* |
| Total Fat 12 g | 18\% |
| Saturated Fat 3g | 15\% |
| Trans Fat 3g |  |
| Cholesterol 30mg | 10\% |
| Sodium 470mg | 20\% |
| Total Carbohydrate 31g | 10\% |
| Dietary Fiber 0 g | 0\% |
| Sugars 5g |  |
| Proteins 5g |  |
| Vitamin A | 4\% |
| Vitamin C | 2\% |
| Calcium | 20\% |
| Iron | 4\% |

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:

|  | Calories: | 2,000 | 2,500 |
| :--- | :--- | :--- | :--- |
| Total Fat | Less than | 65 g | 80 g |
| $\quad$ Saturated Fat | Less than | 20 g | 25 g |
| Cholesterol | Less than | 300 mg | 300 mg |
| Sodium | Less than | $2,400 \mathrm{mg}$ | $2,400 \mathrm{mg}$ |
| Total Carbohydrate |  | 300 g | 375 g |
| Dietary Fiber |  | 25 g | 30 g |

6 Footnote with

## Daily Values (DVs)

- The footnote provides information about the DVs for important nutrients, including fats, sodium and fiber. The DVs are listed for people who eat 2000 or 2500 calories each day.
- The amounts for total fat, saturated fat, cholesterol and sodium are maximum amounts. That means you should try to stay below the amounts listed.


## 1 Serving Size

Check the serving size and number of servings.

- The Nutrition Facts Label information is based on ONE serving, but many packages contain more. Look at the serving size and how many servings you are actually consuming. If you double the servings you eat, you double the calories and nutrients, including the \% DVs.
- When you compare calories and nutrients between brands, check to see if the serving size is the same.

Calories count, so pay attention to the amount.

This is where you'll find the number of calories per serving and the calories from fat in each serving.

- Fat free doesn't mean calorie-free. Lower fat items may have as many calories as full-fat versions.
- If the label lists that 1 serving equals 3 cookies and 100 calories, and you eat 6 cookies, you've eaten 2 servings or twice the calories and fat.


## Limit these

Know your fats and reduce sodium.
To help reduce your risk of heart disease, use the label to select foods that are lowest in saturated fat, trans fat and cholesterol.

- Trans fat doesn't have a \% DV, but consume as little as possible because it increases your risk of heart disease.
- The \% DV for total fat includes all different kinds of fats.
- To help lower cholesterol, replace saturated and trans fats with monounsaturated and polyunsaturated fats found in fish, nuts and liquid vegetable oil.
Limit sodium to help reduce your risk of high blood pressure.


## Look for foods that are rich in these nutrients.

- Use the label not only to limit fat and sodium, but also to increase nutrients that promote good health and may protect you from disease.
- Some Americans don't get enough vitamins A and C, potassium, calcium, and iron, so choose the brand with the higher \% DV for these nutrients.
- Get the most nutrition for your calories - compare the calories to the nutrients you would be getting to make a healthier food choice.


## 5 The \% Daily Value is key to a balanced diet.

- This section tells whether the nutrients (total fat, sodium, dietary fiber, etc.) in one serving contribute a little or a lot to your total daily diet.
- The \%DVs are based on a 2000 calorie diet. Each listed nutrient is based on $100 \%$ of the recommended amounts for that nutrient. For example, $18 \%$ for total fat means that one serving furnishes $18 \%$ of the total amount of fat that you could eat in a day and stay within public health recommendations. Use the Quick Guide to Percent DV (\%DV): $5 \%$ DV or less is low and $20 \%$ DV or more is high.


# chooseMyPlate 10 tips to a great plate 

Making food choices for a healthy lifestyle can be as easy as using these 10 tips. Use the ideas in this list to balance your calories, to choose foods to eat more often, and to cut back on foods to eat less often.
$\because-$


Find out how many calories you need for a day as a first step in managing your weight. Go to choosemyplate.gov to find your calorie level. Being physically active also helps you balance calories.

2
Enjoy your food, but eat less.
Take the time to fully enjoy your food as you eat it. Eating too fast or when your attention is elsewhere may lead to eating too many calories. Pay attention to fullness cues before, during and after meals. Use them to recognize when to eat and when you've had enough.

Avoid oversized
 portions.
Use a smaller plate, bowl and glass. Portion out foods before you eat. When eating out, choose a smaller size option, share a dish, or take home part of a meal.


## Foods to eat

 more often:Eat more vegetables, fruits, whole grains and fat-free or $1 \%$ milk and dairy products. These foods have the nutrients you need for health - including potassium, calcium, vitamin $D$, and fiber. Make them the basis for meals and snacks.

5Switch to fat free or low fat milk They have the same amount of calcium and other essential nutrients as whole milk, but fewer calories and less saturated fat.

## Make half your plate fruits and vegetables.

Choose red, orange, and dark green vegetables like tomatoes, sweet potatoes, and broccoli, along with other vegetables for your meals. Add fruit to meals as part of main or side dishes or as a dessert.

## 7

Foods to eat less often:
Cut back on foods high in solid fats, added sugars and salt. They include cakes, cookies, ice cream, candies, sweetened drinks, pizza, and fatty meats like ribs, sausages, bacon, and hot dogs. Use these foods as occasional treats, not everyday foods.

## Make half your

 grains whole grains To eat more whole grains, substitute a whole grain product for a refined product, such as whole wheat bread instead of white bread, or brown rice instead of white rice.
## Compare sodium

9in foods.
Use the Nutrition Facts label to be able to choose lower sodium versions of foods like soup, bread, and frozen meals. Select canned foods labeled "low sodium," "reduced sodium," or "no salt added."


Drink water instead of sugary drinks.
Cut calories by drinking unsweetened beverages.
Soda, energy drinks, and sports drinks are a major source of added sugars and calories.

