Section 5

Purpose

Section 5 describes the concept of organizing foods into groups as a way to watch what you eat and includes information on serving sizes.

Equipment and Materials Needed

- Reserve the computer lab. You will need one computer for each student.
- Earphones are recommended.

Procedure

- **Before class**: Make sure the computers are functional, and the website is open for the students to login.
- **During class**: Use the supplemental content to answer any questions that the students may have about the content.
- **At the end of class**: Help the students successfully log off and answer any questions they may have.

Supplemental Content

A. Why Are Foods Put Together in Groups?

The United States Department of Agriculture has developed healthy eating guidelines in the form of a plate, which visually represents how different food groups should be represented in a meal for it to be balanced. This is essentially the same as the Idaho Plate Method, developed as a way for people with diabetes to easily balance their meals. As with the previous representation of a healthy diet, MyPyramid, foods are divided into six groups depending on the nutrient content. These food groups are mostly the same as in the Food Guide Pyramid for Diabetes, except some of the foods such as starchy vegetables and cheese are placed in different groups depending on how they affect the blood glucose levels. In the standard food groupings, corn and potatoes are in the vegetable group but in the diabetes food pyramid they are included in the starches group. Cheese is placed in the meat list in the diabetes pyramid as opposed to being in the dairy group. This is a general and flexible method to eat healthy and helps to manage weight, blood glucose control, diet composition, carbohydrate intake, and portion size.

The USDA provides a range of servings recommended for each food group: 6 to 11 servings from the breads and starches; 3-5 servings from the vegetables; 2-4 servings from the fruits; 2-3 servings from the milk; 4-6 ounces from the meats; no servings from the fats, sweets, and alcohol. The number of servings will depend on the child's age and physical activity level.
The **orange wedge** represents the grains group. A minimum of six ounces is recommended with half the grains coming from whole grain breads, cereals, and pasta.

**Whole Grains**

- brown rice
- buckwheat
- bulgur (cracked wheat)
- oatmeal
- popcorn
- whole grain barley
- whole grain cornmeal
- whole rye
- whole wheat bread
- whole wheat crackers
- whole wheat pasta
- whole wheat sandwich buns and rolls
- whole wheat tortillas
- wild rice

*Ready-to-eat Breakfast Cereals*

- whole wheat cereal flakes
- muesli

Examples of one ounce equivalents are a slice of bread, 1 cup dry cereal or ½ cup of cooked rice, cereal, and pasta.
½ cup cooked rice is a cupcake wrapper full
1 cup of potatoes and rice is a tennis ball
1 cup of pasta, spaghetti, cereal is a fist

The **green wedge** represents the vegetable group. The recommendation is to consume 2-2.5 cups (4-5 servings) of a variety of vegetables, emphasizing orange and dark green vegetables and beans and peas. Examples of serving sizes are ½ cup cut up or cooked vegetables and 1 cup leafy vegetables.

1 cup green salad is a baseball or a fist
½ cup cooked broccoli is a small computer mouse
¾ cup tomato juice is a small Styrofoam cup

The **red wedge** represents the fruit group. The recommendation is again to consume 2-2.5 cups (4-5 servings) of a variety of fresh, canned, frozen and dried fruits and to go easy on juices. Examples of serving sizes are 1 medium sized fruit, ½ cup fresh, frozen and canned fruits and ¼ cup dried fruits.

1 medium size fruit is a tennis ball or a fist
½ cup of grapes is a light bulb

1 teaspoon butter is a thumb tip
2 tablespoons salad dressing is a ping pong ball.

The **blue circle** represents the milk group. The recommendation is to consume 3 servings of low fat or fat free milk and milk products. Examples of serving sizes are 1 cup of milk or yogurt, 1 ½ ounces of fresh cheese and 2 ounces of processed cheese.

1 cup of milk is an 8-ounce carton
1 oz of cheese is a pair of dice

The **purple wedge** represents the meat and beans group. The recommendation is to eat low fat and lean meat and poultry and to vary your choices by consuming more fish, beans, peas, nuts and seeds. The recommended allowance is 5 to 6 ounces of meat and beans

2 tablespoons peanut butter is a ping pong ball
3 oz cooked meat is a deck of cards or the palm of a hand

The oils and fats group is not represented in the picture. The recommendation is to consume 6-7 teaspoons of oil/fat and limit solid fat intake.

Don’t forget to exercise! The recommendations are to be physically active for 30 minutes each day and adolescents and kids should be physically active for 60 minutes each day.
C. Serving Size Guide

We sometimes think of what we put on our plate as a *portion* and a *serving*. While what we put on our plate may be considered a *portion*, it usually isn’t a *serving* in the way that dietitians think of servings. To care for yourself and your diet, you will need to begin thinking like a dietitian, and recognize that portions and servings are different.

Since portion sizes can vary from person to person, they are not a good measure of how much you should eat in one day. Serving sizes, however, are much more strictly defined and do not vary from person to person. The American Dietetic Association and the American Diabetes Association have set serving sizes for foods in the various food groups. These serving sizes make it easier to identify how many calories, and how much carbohydrate, fat, and protein are in various foods.

It is important to remember that serving sizes may not be the same as the serving sizes listed on *Nutrition Facts* labels. Companies that make food products, for the most part, are allowed to decide what the serving size on their product should be. This serving size is often based on how much an average person would eat. For instance, a Nutrition Facts label on a package of bread might list one serving as two slices of bread with 110 calories and 21 grams of...
carbohydrate. However, one serving from the starch group is defined by the American Dietetic Association and the American Diabetes Association as one slice of bread with about 80 calories and 15 grams of carbohydrate. Serving sizes on Nutrition Facts labels vary depending on the product and the company that makes it. For this reason, it is always important to look at the calories and macronutrients as well as the serving sizes listed on the Nutrition Facts labels.

In the Nutrition Facts Label to the left, the serving size is 1 cup with 31 grams of carbohydrate. This would be 2 servings from the starch group.

**Supplemental Activity Online**: Have students visit the Fun place for games and activities to re-enforce concepts, especially HOT Review 1 for portions and Blast-Off.

**Supplemental Activities Offline**: Have students draw a circle on a piece of paper. Make a MyPlate with pictures or words of foods they eat, and see how they can fit in the MyPlate diagram. Think of foods that don’t fit easily into MyPlate, like pizza, and discuss how pizza can fit into MyPlate by overlapping some of the food groups.