



# Food for Thought

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## About this Module:

What constitutes a balanced diet? How do I prevent foodborne illnesses? These are some of the questions that will be answered in these materials. As you support people with meal planning and preparation, you will also need to help them develop habits that will ensure their health and safety.

## Objectives:

After working through this independent study module, you will be able to:

1. Plan meals to meet the dietary needs of the people you support.
2. Identify proper serving sizes.
3. Describe safe food handling and preparation techniques.
4. Identify common causes of foodborne illness.

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## Independent Study Module Plan

### Session Time:

The amount of time that it takes most people to complete this independent study module is 45 minutes. Everyone learns and reads at their own pace so the time may vary from person to person.


### Materials included in the Self-study Module:

- ▶ Reading / Interactive Material for Independent Study.
- ▶ Competency Evaluation.
- ▶ Answer keys for the Competency Evaluation.

### Materials needed for this Self-study Module:

- ▶ Menu

### Instructions:

1. Work at your own pace and read the materials.
2. Complete the interactive sections in the back of the workbook when you see the pencil symbol. 
3. Review the interactive material.
4. Take the Competency Evaluation.
5. Sign the Competency Evaluation form and return it to your supervisor.



## Part One Meal Planning

PLANNING AND PREPARING NUTRITIOUS MEALS CAN BE A SIMPLE TASK IF YOU KNOW SOME OF THE BASIC PRINCIPLES THAT WILL MAKE YOUR MEALS SAFE, HEALTHY AND COMPLETE.

MEAL planning is the foundation of everything else you will do with the food you prepare and serve. In some cases you may be actively involved in helping the people you support plan their menus and in other cases someone else may prepare the menus. In either situation, you need to understand some basics about what constitutes a balanced diet.

Let's begin by reviewing the dietary recommendations set forth in MyPyramid.



MyPyramid emphasizes foods from the five major food groups. Each of these food groups provides some, but not all, of the nutrients you need. Foods in one group can not replace those in another. No one food group is more important than another - for good health you need them all.

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The first section of MyPyramid is grains. This group contains breads, cereals, rice and pasta -- all food from grains.

The next group is vegetables. It is important to eat dark green and orange vegetables. Including dry beans is also an important part of a healthy diet.

The third group is fruits. When choosing fruits, it is important to select a variety of different ones. Choose fresh, frozen, canned or dried fruits.

The smallest section of MyPyramid is next. This section represent fats and oils. These are foods such as salad dressings, oils, cream, butter and margarine.



The next group is milk. Go low-fat or fat-free when you choose milk, yogurt and other milk products.

The last section is the meat group. Choose low-fat or lean meats and poultry. The healthiest ways to prepare these items is to bake, broil or grill them. Include more fish, beans, peas, nuts and seeds in your choices.

MyPyramid also allows for discretionary calories. These calories account for any additional calories a person may consume after accounting for the calories needed for all food groups.

The following chart will help you determine how many servings in each group should be served based on a person's individual requirements. The 1,600 calorie recommendation is correct for many sedentary women and some older adults. The 2,200 calorie group is right for most children, teenage girls, active women and many sedentary men. The 2,800 calorie group is about right for teenage boys, many active men and some very active women.

	1,600 Calories	2,200 Calories	2,800 Calories
Grains*	5 oz-eq	7 oz-eq	10 oz-eq
Vegetables	2 cups	3 cups	3.5 cups
Fruits	1.5 cups	2 cups	2.5 cups
Milk	3 cups	3 cups	3 cups
Meats*	5 oz-eq	6 oz-eq	7 oz-eq
Oils	5 tsp.	6 tsp.	7 tsp.
Discretionary Calories	132	290	426

\*Grains and meats servings are measured in ounce equivalents. One ounce equivalent of grain is a slice of bread. For meat it is one ounce of lean meat.



Please go to your worksheet and answer questions 1 and 2.



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Now that you understand how many servings a person should have, it is important to identify what constitutes a serving.

The following list gives you some common examples of a single serving for that particular group.

- ▶ Grains: 1 slice of bread; 1 cup of ready-to-eat cereal;  $\frac{1}{2}$  cup of cooked cereal, rice or pasta



- ▶ Vegetables: 2 cups of raw leafy vegetables; 1 cup of other vegetables; 1 cup of vegetable juice
- ▶ Fruits: 1 small apple, 1 medium pear; 1 large banana or orange,  $\frac{1}{2}$  cup of chopped, cooked, or canned fruit; 1 cup of fruit juice
- ▶ Milk: 1 cup of milk or yogurt (low fat); 1.5 ounces of natural cheese; 2 ounces of processed cheese
- ▶ Meats: 1 ounce of cooked lean meat, poultry or fish;  $\frac{1}{2}$  cup of cooked dry beans; 1 egg; 1 tablespoon of peanut butter;  $\frac{1}{2}$  cup of nuts



Portion control is the key to making MyPyramid work. When portions are too large a person will gain weight. If they are too small, the person will lose weight.



Please go to your worksheet and answer question 3.

The guidelines we have looked at to this point account for the dietary needs of an average person. Some people, due to medical needs may need adjusted diets. For instance, if someone you support has diabetes, their food plan would need to be adjusted to reduce or eliminate sugar from their diet. The menus you use should indicate any adjustments that need to be made to accommodate special diets.



## Part Two Food Handling

THE U.S. FOOD AND DRUG ADMINISTRATION CENTER FOR FOOD SAFETY AND APPLIED NUTRITION RECOMMENDS FOUR PRINCIPLES TO BE FOLLOWED IN ORDER TO ENSURE THE SAFETY OF THE FOOD YOU SERVE. THEY ARE:

CLEAN, COOK, SEPARATE, CHILL

### A. Clean:

Bacteria are everywhere. They are on cutting boards, utensils, sponges, countertops and food. They are the cause of foodborne illness and if eaten can make people sick. There are several things you can do to help reduce or eliminate bacteria.

- ▶ **Wash hands:** Everyone preparing food should wash their hands before handling food and after handling raw meat. Ensure that soap and paper towels are always available. Follow good handwashing procedures.
- ▶ **Fruits and Vegetables:** Rinse raw produce under running water. Don't use soap, detergents or bleach solutions. For thick or rough skinned vegetables and fruits, use a small vegetable brush to remove surface dirt.

- ▶ **Surface Cleaning:**

1. Consider using paper towels to clean up kitchen surfaces and throw the germs away with the towels. If you use cloth towels, launder them often, using hot water.
2. Wash your cutting boards, dishes, utensils and countertops with hot, soapy water after preparing each food item and before you go on to the next food. Whenever possible, dishes should be washed in a dishwasher. If this is not possible, use one teaspoon of liquid chlorine bleach per quart of clean water to sanitize surfaces. The bleach solution needs to sit on the surface to be sanitized for about 10 minutes to be effective.
3. Replace excessively worn cutting boards. Bacteria can grow in the hard-to-clean grooves and cracks.
4. In your refrigerator, wipe up spills immediately. Clean refrigerator surfaces with hot, soapy water.



▶ Please go to your worksheet and answer number 4.



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## B. Cook:

Cooking food safely is a matter of degrees! Food safety experts agree that foods are properly cooked when they're heated for a long enough time and at a high enough temperature to kill harmful bacteria that cause foodborne illness. This temperature can vary from food to food.

**The best way to keep your food safe is to use the "hot" food safety tips.**

- ▶ **Cook it Right:** Color is not a sure indicator of whether food is safe to eat. The only way to know that meat, poultry, casseroles, and other foods are properly cooked all the way through is to use a clean food thermometer.
- ▶ **Ground Beef:** Oftentimes, when meat is "ground up" to make hamburger, bacteria that may have been present on the surface of the meat can end up inside the burger. When this happens, bacteria are less likely to be killed by cooking if the proper temperature is not achieved. Cook ground beef to at least 160° F. Use a food thermometer to check temperature.
- ▶ **Meat and Poultry:** Cook roasts and steaks to an internal temperature of at least 145° F. Whole poultry should be cooked to 180° F.
- ▶ **Seafood:** Cook fish until it's opaque and flakes easily with a fork.
- ▶ **Eggs:** Cook eggs until the yolks and whites are firm. Don't use recipes in which eggs remain raw or partially cooked.
- ▶ **Leftovers:** Leftovers should be reheated to 165° F. Bring sauces, soups and gravies to a boil.

## Microwave Musts:



1. Cover food with plastic wrap or a glass covering and add a little liquid to food. This creates steam, which readily kills pathogens.
2. To ensure uniform heating, turn the dish several times during cooking. Stir soups and stew periodically during reheating to ensure even heating.
3. Make sure food is hot and steaming. Use a food thermometer and test the food in 2 or 3 different areas to verify that it has reached a safe internal temperature.
4. When defrosting food in the microwave, cook the food immediately.

Please go to your worksheet and answer number 5.

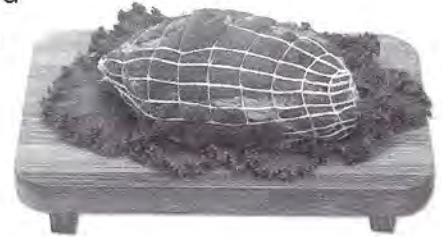
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## C. Separate:

Improper handling of raw meat, poultry and seafood can set the stage for cross-contamination. Here's how to prevent harmful bacteria from spreading.

▶ **Safely Separate:** Separate raw meat, poultry and seafood from other foods in your grocery store shopping cart and in your refrigerator.



▶ **Take Two:** If possible, use one cutting board for raw meat products and another one for fresh fruits and vegetables. If not possible, sanitize the board after using it for cutting raw meat.




▶ **Lather Up:** Always wash hands, cutting boards, dishes and utensils with hot, soapy water after they come in contact with raw meat, poultry, seafood, eggs and unwashed fresh produce.

▶ **Clean Your Plate:** Place cooked food on a clean plate. If you put cooked food on an unwashed plate that previously held raw meat, poultry or seafood, bacteria from the raw food could contaminate the cooked food.



▶ **Seal It:** To prevent juices from raw meat, poultry or seafood from dripping onto other foods in your refrigerator, place these raw foods in sealed container on the bottom shelf of the refrigerator.

▶ **Marinating Mandate:** Don't use sauce that was used to marinate raw meat, poultry or seafood on cooked foods unless it is boiled before applying.

 Please go to your worksheet and answer number 6.



## D. Chill:

Keep perishables in the refrigerator! At room temperature, pathogenic bacteria in food can double in number every 30 to 40 minutes. The more bacteria there are, the greater the chance for people to become sick.

### Follow these "cool" rules.

- ▶ Refrigerate food quickly because cold temperatures keep most harmful bacteria from multiplying.
- ▶ Set your refrigerator no higher than 40° F and the freezer at 0° F.
- ▶ Refrigerate or freeze perishables, prepared food and leftovers within 2 hours.
- ▶ Divide large amounts of leftovers into shallow containers for quick cooling in the refrigerator.
- ▶ Marinate foods in the refrigerator.
- ▶ Don't pack the refrigerator too full. Cold air must circulate to keep food safe.



### Follow the "thaw law".

- ▶ Never thaw foods at room temperature. You can safely thaw food in the refrigerator.
- ▶ You can thaw food in the microwave, but if you do, be sure to cook the food immediately after it's thawed.



Please go to your worksheet and answer question 7.

## Conclusion

Food safety and good nutrition is everyone's responsibility. As you support people with menu planning and food preparation, you also need to be teaching about good nutrition and safe food handling. Use the principles you have learned in these materials to help people have the best possible nutrition and know how to handle food safely.