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Introduction and Objectives

If you have completed the "It's Time for Breakfast" and "It's Time for Lunch" projects, you have already learned some important principles that will help you with this project. For example, you have learned about the food groups, kitchen safety, the importance of eating breakfast, how to serve food attractively, and many other things to get you started in this project.

Dinner is generally the third meal of the day. Like breakfast and lunch, it should provide your body with the energy it needs—energy to play, study, go to ball games, sleep, and even breathe.

As you probably have already learned, your body not only needs foods, it needs the right foods. Preparing a balanced diet is important and fun. In this project you will learn to:

• plan dinners that will meet the nutritional needs of your family.

- select foods and prepare them for different cooking methods, such as broiling, steaming, and stir frying.
- read food labels.
- count calories and understand how many calories you need.
- serve foods that complement each other in flavor, color, and texture.

As you plan your dinners, remember these four essential steps:

- 1. planning.
- 2. buying.
- 3. preparing.
- 4. serving.

Food Guide Pyramid

Plan for your family's nutritional requirements by following the Food Guide Pyramid. This pyramid tells you the kinds and amounts of food that make up a nutritious diet. It also lets you make choices according to the foods your family enjoys. The guide divides foods into five groups:

- bread, cereal, rice, and pasta.
- vegetables and fruits.
- milk, yogurt, and cheese.
- meat, poultry, fish, dry beans, eggs, and nuts.
- fats, oils, and sweets.

Bread, Cereal, Rice, and Pasta Group

This group of foods is valuable because it is an economical way to eat healthy foods. The group includes all food made from wheat, rice, cornmeal, barley, oats, and other grains or from whole grain or enriched flour.

You should eat four servings from this group each day because it is valuable for energy, B vitamins, iron, and protein. Some of the foods in this group are bread, muffins, noodles, spaghetti, rice, tortillas, cereals, and pizza dough. It is easy to get four servings from this group each day. You can have a slice of toast for breakfast, a pita bread/tuna sandwich for lunch, and spaghetti for dinner.

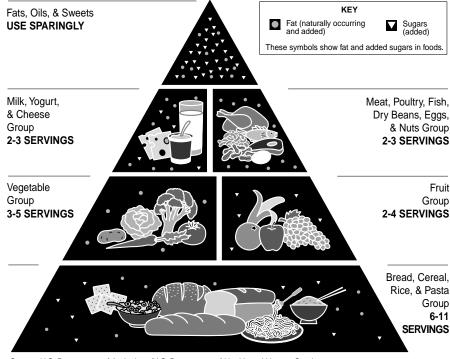
Choosing bread for your menu depends on the type of bread you want (such as whole wheat, white, rye), the cost, appearance, and how the bread complements the rest of your menu. Look at the label on a loaf of bread. Does the label indicate *enriched*? This means that the B vitamins and iron lost in the flour during milling have been replaced.

What are some different types of bread you have eaten or seen in the store?

You might want to make your own bread at home. Yeast breads have a good flavor and aroma. Start with white bread and then try other types of flour.

Food Guide Pyramid

A Guide to Daily Food Choices



Source: U.S. Department of Agriculture/U.S. Department of Health and Human Services

Vegetable and Fruit Group

Vegetables and fruits are valuable for providing vitamins A and C and fiber to the diet. Vitamin A helps keep the skin healthy. It helps you see better and protects against night blindness. It also helps the body grow.

The natural color of a vegetable gives you a clue to the amount of vitamin A it contains. If the vegetable is deep green or yellow, it usually is rich in this vitamin. Vitamin A doesn't dissolve in water, but heat and air may destroy it to some degree, so don't overcook it.

Vitamin C is needed for healthy gums and body tissue and to help the body resist infection. Vitamin C, sometimes called ascorbic acid, is more easily destroyed than any other vitamin. When a vitamin C food is heated, much of the vitamin is lost because it combines with oxygen in the air. To protect the vitamin C, refrigerate vegetables and fruits, cook them a short time, and serve them as soon as they are prepared.

Most fruits and vegetables are low in fat unless fat is added in cooking. People often eat lots of salads, fruits, and vegetables in an effort to lose weight. Don't forget, however, that many extra calories can be added with salad dressing or with sugar, fats, or cream sauce for seasoning. If you use three large tablespoons of salad dressing, it is possible to add as much as 350 calories to your salad. (The best way to lose weight is to combine a balanced diet with exercise. If you cut out the salad dressing and walk for an hour every day, you'll eliminate 500 calories a day. That means one pound a week, and your doctor will likely agree it is a safe, sensible way to lose weight.)

Milk, Yogurt, and Cheese Group

Milk and milk products provide calcium and riboflavin and contribute protein and other B vitamins. Milk is also fortified with vitamin D. When fortified with vitamins A and D, low-fat milk has about the same nutrients as whole milk but fewer calories.

One 8-ounce cup of plain milk or one cup of yogurt counts as a serving. While the Food Guide Pyramid suggests two to three servings daily from the milk, yogurt, and cheese group, children under 9 should

have two to three servings daily, children 9 to 12, three servings; teens, four servings; adults, two servings; pregnant women, three servings; and nursing mothers, four servings.

Keep milk and other dairy products:

- Cold...in the refrigerator.
- Clean...protect the milk products from spoons with other foods on them or spoons from which you have eaten.
- Covered ...so bacteria, yeasts, and molds will not be added.

Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts Group

Many people think protein comes only from animal foods like meat, cheese, fish, or eggs. That's not true. Dry beans, dry peas, lentils, peanuts, and other nuts are also members of this group.

Protein comes from a Greek word meaning *of first* rank. And protein does rank first in your body. Nearly all the solid parts of your body—from your brains, to your bones, to your biceps—are made, in part, of protein. And your body's cells are constantly being replaced as they wear out. As your cells need repair or replacing, your body uses protein in the formation of new cells.

Your body also needs protein while you're growing. Eating high-protein foods can help you develop healthy muscles, but it takes exercise as well to make muscles strong.

You should eat two daily servings of 2 to 3 ounces each from this group. A cup of chili and a tuna sandwich would add up to your two daily servings.

The choice of the meat you will prepare for dinner depends on how much you want to spend and how you want to cook it. If you have plenty of time, cook a roast or a pot roast. For a quick meal, choose chops, steaks, hamburger, or fully cooked meats.

Fats, Oils, and Sweets Group

This group of foods includes fats, oils, and sweets such as butter, margarine, salad dressings, candy, syrup, sweet toppings, and soft drinks and other beverages with large amounts of sugar.

Planning Attractive Meals

In planning food for dinner or other meals, plan around the Food Guide Pyramid. Also plan for flavor, color, and texture. Variety not only helps you prepare attractive meals, it helps supply you with nutrients—plenty of vitamins and minerals.

As you plan your dinner meals, give them the picture test. Picture the plate or platter of food as it will look when you have it ready to serve. How will it taste? Do the flavors go together well? Is the food too much of the same texture (all soft, crisp, or chewy)?

Food colors help make your meals more attractive. Meals aren't quite as appealing when foods are all one color. A dish of cauliflower has less appeal served with potatoes than with a green vegetable.

List some of the colorful foods you know. For example:

White	Rice,
Green	Broccoli,
Red	Beets,
Yellow	Sweet potatoes,

Some foods are soft, others are crisp, still others are chewy. Foods of different textures and shapes enhance the appearance of your meal. When you plan your meals, use foods with different textures and shapes as well as different colors.

List as many foods as you can think of with a different texture. For example:

Mashed potatoes,
Celery,
Roast,
Roast,

Planning Tips

- 1. Use the Food Guide Pyramid to make sure your dinner menu supplies at least one-third of your daily food needs.
- 2. Plan meals to fit the needs of your family. Active 4-H'ers need more food than adults who do light work.
- 3. Plan meals to suit the season, and use foods that are plentiful.
- 4. Think about colorful foods for every meal, especially green and yellow vegetables.
- 5. Include both crisp and soft foods in your meal.
- 6. Include a variety of flavors, such as strong, mild, sweet, sour, and spicy.
- 7. Do not include similar types of food in the same meal. For example, do not have potatoes and macaroni or rice and spaghetti at the same meal.

Now, Let's Plan Some Menus!

Before you actually start preparing complete din-
ners, you need to spend some time planning menus.
Think about all the things you have learned up to now,
and plan at least three menus.
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Menu 1 Now, let's score your menu. Give yourself up to 10 points for each of the four basic food groups. Deduct 10 points for each essential food group that is missing. Do not deduct for not including the fats, oils, Menu 2 and sweets group; likewise, do not add points for including it. **Food Groups:** Bread, cereal, rice, and pasta Vegetables and fruits Milk, yogurt, and cheese Meat, poultry, fish, dry beans, eggs, and nuts Variety: Color Menu 3 Flavor **Texture**

Now, as a group and with the help of your leader, evaluate your menus and your scoring. See if the group agrees with your evaluation of your menus.

Total

A Trip to the Grocery Store

Using your menu plans, take a trip to the grocery store to get some ideas about how much your meal will cost. If you learn to be a wise shopper, you will save time and money.

- 1. Before you go to the store, read the grocery ads in the newspaper. See what the specials are. Make a list.
- 2. As you visit the store, read and learn to understand the labels on the food.
- 3. Compare the prices of similar items, and ask the manager questions when you don't understand.
- 4. Look at prices of fresh, frozen, and canned vegetables. Pay attention to the ones that have much of the preparation already done. Compare the prices of the vegetables in the various stages of preparation.
- 5. Compare the prices of one vegetable, such as a pound of potatoes, in different forms—raw, canned, frozen (French fries), or dried instant.

(You may have to compare the number of servings.) Which is the better buy, all things considered?

1 pound (16 oz.) raw potatoes =	
1 pound (16 oz.) canned potatoes =	
1 pound (16 oz.) frozen French fries =	
1 pound (or equivalent number of	
servings) instant dried potatoes =	

- 6. Practice reading labels on the trip through the store. On every label you will find:
 - the name of the food.
 - how much the contents weigh.
 - the form or style of the foods. Words like *condensed* or *evaporated* will appear on some products. If the product is packed with water or in syrup, that will be stated too.
 - the name and address of the manufacturer, packer, or distributor.

Nutrition information is being found on more and more labels. Here's what a nutrition label contains:

- Serving size.
- Servings per container
- Number of calories per serving.
- Percentages of U.S. Recommended Dietary Allowances.
- Protein per serving (in grams).
- Carbohydrates per serving (in grams).
- Fat per serving (in grams).



Nutrition Information per Serving as Packaged

Serving size: 3.3 oz Servings per package: 3 Calories 25 Carbohydrate5g Protein 2g Fat 0 Percent of U.S. Recommended Dietary Allowances Protein 4% Calcium2% Vitamin A 15% Iron4% Vitamin C 100% Vitamin B6 6% Thiamine 4% Phosphorus 4% Riboflavin 4% Magnesium 4%

Contains 0.9% non-nutritive crude fiber (0.9 grams per serving). Ingredients: broccoli florets, cauliflower florets, red peppers.

A sample nutrition label.

Niacin 2%

Studies show how much of each of these nutrients people of different ages need. These amounts are called the U.S. Recommended Dietary Allowances (RDAs). The numbers you see on the label are the percentages of the RDAs that this food gives you. Find a product that has a nutrition label. What three vitamins or minerals does this product provide in the largest amounts?

Spanish Style

TOMATO SAUCE

The Red Tomato Co. Baltimore, Maryland NET WT. 8 OZ. (227 grams)

Ingredients: tomatoes, green peppers, dextrose, citric acid, spices, flavoring.

A sample brand label.



Now find a package and do some label reading
The product label I am reading is for
The package weighs
The form or style of food is
The name and address of the manufacturer, packe or distributor is
The ingredients by amounts are

7.

How to Use Unit Pricing

In addition to getting foods of high nutritional quality, a wise shopper wants to get the "best buy." It is not always easy to figure what the best buy is. You can learn a lot by looking on the shelves of your store, where you often can find *unit pricing*. The unit price gives the cost per unit by ounces, pounds, or, for products like paper towels, even square feet. Many stores also include the date the price expires.

Fresh Orange Juice

1 gallon @ \$3.79 = .029¢ per ounce 1/2 gallon @ \$1.99 = .031¢ per ounce

(In this case, the gallon size is just slightly cheaper than the half-gallon size.)

Does your store use unit prices? ______ If so, find a product that comes in two or three sizes. What is the name of the product?

Fill in the spaces below for your product:

Size 1

Item _____

Price ______Unit Price

Size 2

Item_____

Price _____

Unit Price _____

Size 3

Item _____

Price ______
Unit Price _____

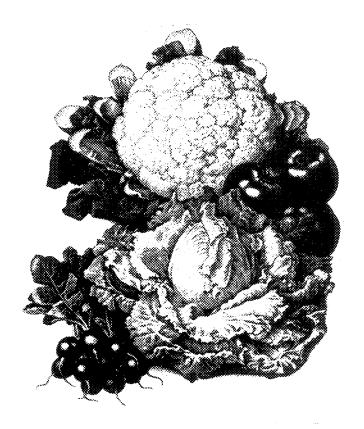
Which one is the best buy?

Remember—if you can't use all of the larger size, you might have to throw some away, so the smaller package may be a better buy for you. It depends on how much you can use and how much would be left to throw away.

Tips for Choosing Fresh Vegetables and Fruits

It isn't always easy to choose the best fresh vegetables and fruits. Study the tips below, and don't be shy about asking the produce sales person to help you choose.

- Fruits and vegetables are freshest in season. That's when they taste best and cost least.
- Check to make sure your fruits and vegetables are the colors they should be. Green beans should be green, not yellow. (But bananas should be yellow, not green.) Carrots should be orange. Look carefully at the fruits and vegetables each time you shop. That way, you will learn what colors they should be.
- Medium sizes are usually best. Small fruits and vegetables may not have much you can eat. Large ones may not taste good.
- Buy only fruits and vegetables that look fresh. Don't buy old or bruised items. Wilted leaves or stalks may mean the produce is old. Bruises can hurt both taste and texture.





Tips for Buying Meat

Meat is one of the most expensive items in your food budget. On your trip to the grocery store, look at the different kinds of meat. Think about how you might plan a menu around the different types. Remember the following tips:

- Plan your meals before you select the cut of meat.
- Read the label to determine cut, grade, and price. Ask the meat manager for help if you need it.
- Shop specials at the meat counter for better buys.
- The more tender cuts are from the top half of the animal (shoulder to rump area). Tender meat, which is from the least exercised animals, requires shorter cooking time.
- The less tender cuts are from the lower half of the animal. These cuts are usually lower in price and require longer methods of preparation.
- Plan for the following amounts:
 - Boneless meat—four servings per pound.
 - Meat with bone—two servings per pound.
 - Meat with large bone, gristle, and fat—one serving per pound.

Tips for Buying Ground Beef

Ground beef is an item that can be used in many different ways. In your grocery store, did you notice how many different names and different prices there are for hamburger? You usually pay more money for beef with less fat. Hamburger or ground beef may be 30 percent fat. It usually costs the least. Ground chuck is medium-priced and contains less fat. Ground round and ground sirloin are the highest priced and have the lowest fat of all.

How do you decide which ground beef to buy? It depends on what you will be using the meat for. If you are going to cook hamburgers, you might want to buy the ground chuck or ground round. But if you are going to cook chili, ground beef may be just fine. Just pour off the grease!

You usually will get the greatest amount of protein for the lowest cost by buying ground beef. But remember to pour off the fat!

Whichever kind of ground beef you buy, here are some tips for getting your money's worth:

- Look for a package that is well wrapped and sealed tightly.
- Buy meat that has an even color all over. There should be no brown spots.

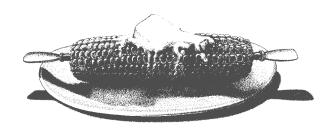


Try a New Taste

When you visit the grocery store, find one fresh, frozen, or canned fruit or vegetable that you have never tasted. Now, have a tasting party with your family.

My new fruit or vegetable	
was	
I prepared it by	
My family said	
about the new food.	

Start with Vegetables!



Vegetables are colorful, crunchy, flavorful, and an important part of a meal. They also make a delicious snack. How you prepare a vegetable depends on its flavor, color, texture, and intended use. The cooking time should be just long enough for the vegetable to be tender and remain crisp. Popular ways of cooking vegetables are steaming, stir-frying, and microwaving.

Steaming

Steaming is an excellent cooking method. Since only the steam is in contact with the vegetable's surface, less vitamins are lost than with other cooking methods, although the longer cooking time required does cause some loss. To steam, cook the vegetable above the water on a rack. Use a purchased steamer or a colander placed in a pan to hold the vegetable above the water. Cover and keep enough heat under the pan to create steam. To help avoid a steam burn, be careful raising the lid. Open the lid away from your hand and arm.

Try steaming one or more of the following vegetables until they are tender but still crisp. Season with salt, margarine or butter, lemon juice, or herbs.

Corn on the cob Brussels sprouts

Broccoli Carrots

Taste Test	
My steamed vegetable tasted	
The color was	
The flavor was	
My family said	

Microwave Cooking

Microwave cooking is an excellent way to prepare colorful vegetables with an abundance of nutrients and flavor. Cook the vegetables in a small amount of water until almost done. Stored heat from the microwaves will complete the cooking of the vegetables, but they will still be crisp tender.

Orange Carrots

6 to 8 carrots, sliced 1-inch thick (3 cups)

1/3 cup water

11/2 teaspoons cornstarch

2/3 cup orange juice

1 tablespoon butter or margarine

1/4 teaspoon salt

1/8 teaspoon ground ginger

dash of ground cloves

Place sliced carrots and water in a 1-quart casserole. Cover and cook in the microwave until tender, 9 to 10 minutes. Drain well.

Stir together cornstarch and orange juice, blend in butter, salt, ginger, and cloves. Add mixture to carrots. Microwave uncovered, 2 minutes; stir. Cook, uncovered, 1 to 1½ minutes longer. Yield: 4 servings.

Taste Test	
My microwave carrot dish tasted	
The color was	
The flavor was	
My family said	

Stir-Fry Cooking

The stir-fry way is an excellent method for preparing crisp, tasty vegetables. It makes nutritious vegetables because the food is not overcooked and most of the nutrients are left in. Wash the vegetables under running water. Cut them into bite-size pieces, and dry each piece with a paper towel to prevent splattering.

Stir-Fry Vegetables

1 teaspoon cornstarch

1/2 teaspoon ground ginger

1/8 teaspoon garlic powder

1 teaspoon soy sauce

1/3 cup water

2 tablespoons oil

2/3 cup carrots, sliced thin

²/₃ cup celery, sliced thin

2 cups broccoli, separated into flowerets

1/3 cup onions, sliced thin

1 cup bean sprouts (or you may use canned green beans), drained

Mix cornstarch, ginger, garlic powder, soy sauce, and water in a glass measuring cup and set aside.

Heat the oil in a large frying pan with a lid. When oil is hot, add carrots, onions, and celery. Cook for one minute, stirring constantly. Add broccoli and cook for 2 minutes, stirring constantly. The broccoli will turn bright green.

Add the liquid and continue cooking for one minute or until bubbly. Add the bean sprouts, reduce heat, cover the pan, and cook for 2 more minutes. The vegetables may be served over rice. Yield: 4 servings. *Note:* Frozen vegetables may be used. Defrost and pat dry with a paper towel.

Taste Tip on Seasoning

You may be eating much more salt than you really need. Some doctors believe that Americans eat two to five times too much salt. They also think that too much salt may lead to high blood pressure and heart disease.

Always taste food before adding salt. When you cook, add seasonings other than salt. Try lemon or lime juice and herbs and spices. Also try seasoned

Try This Menu

Try this menu with steamed, microwaved, or stir-fried vegetables:

Meat Loaf
Vegetable • Rice
Fresh Fruit Salad
Lime Sherbet
Hot Tea • Milk

margarine or butter. To ¼ cup of melted butter or margarine, add 1 teaspoon celery seed, 1 tablespoon horseradish, or 2 tablespoons lemon juice. (Drizzle the flavored butter or margarine over the cooked, drained vegetables.)

Herbs and spices enhance the flavor and odor of foods and make them more pleasing to the taste. As a rule, use ½ teaspoon of herbs or spices for four servings of food; for a pint of sauce, gravy, or soup; or to a pound of meat, fish, or fowl. You may want a different amount, but it is better to start with a small amount and add more if needed.

Taste Test	
My stir-fry vegetable tasted	
The flavor was	·
The appearance was	
The vegetables were:	
crunchy?	
bite size?	
attractive?	
My family said	

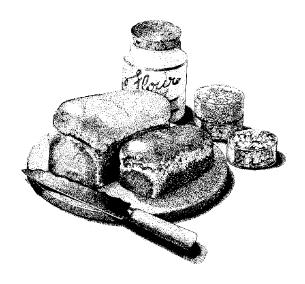
Now, Let's Make Bread!

You probably won't make bread for every meal. (In fact, you may not serve bread at every meal; just be sure you have the proper number of servings from the bread, cereal, rice, and pasta group each day.) You still will want to know how to make different kinds of bread. This time, let's make yeast bread!

Yeast Bread Ingredients

Each ingredient in yeast bread has a purpose:

- *Flour* is the main ingredient for all breads. All-purpose flour is usually used for bread; it is a mixture of two kinds of wheat—soft and hard.
- A liquid, such as water, milk, or sometimes potato water, is used for yeast bread or rolls. Milk adds food value and flavor and helps the crust to brown.
- Yeast is the leavening agent that changes the flour and liquid mixture into a porous, spongy dough. Many people are now using dry yeast, which can be stored without refrigeration for several weeks. The other type is a compressed cake, which must be refrigerated and keeps for just about a week.
- *Salt* brings out the flavor and helps control the fermentation (fermentation is the process the yeast goes through to make the bread rise).
- *Sugar* provides the yeast with food and helps it rise more quickly. It also helps give the crust the golden brown color and added flavor. Too much sugar will slow down the yeast.
- Fat and eggs add flavor and tenderness to the bread.



Special Techniques for Making Yeast Bread

Making the Dough: There are some general rules for making yeast bread dough. Study these rules before you start your bread.

- *Mixing:* Scald the milk in a small saucepan. (*Scald* means heat it until it bubbles around the edges.) Stir in shortening, sugar, and salt until dissolved. Let the mixture cool to lukewarm. (To test for lukewarm, drop a few drops on the inside of your wrist. It is ready if it feels neither warm nor cold.)
- *Dissolving Yeast:* Sprinkle the yeast in warm water. (Do not use hot water; heat kills the yeast.) Read the directions on the package of yeast for the best way to combine the yeast with the other ingredients.
- Adding Flour: Carefully measure the flour before you begin. Add enough flour to make a roughlooking dough that pulls away from the sides of the bowl. It will be sticky to handle but stiff enough to hold its shape.
- *Kneading:* Shape the dough into a round ball. Flour your hands and the board. Push the ball of dough away from you with the palms of your hand. Then pull the dough toward you with floured fingers. Repeat the process until the dough loses its stickiness. This will take at least five to eight minutes. This process develops the gluten that holds the gas bubbles formed by the yeast. (In batter breads, beating develops the framework.)
- *Rising:* Place the kneaded dough in a greased bowl. Grease the top of the ball of dough and cover. Let it rise until double in bulk. Punch the dough down with your fist and let it rise again. (Exactly how you proceed with this step depends on your recipe.)

Good yeast bread has:

- a sweet, nut-like flavor and a pleasant, sweet aroma.
- a soft, fine texture.
- evenly spaced air cells that are fairly uniform in size.
- a rounded top.
- a smooth crust, which is golden brown on top and has a slightly lighter color on the sides and bottom.
- no light or dark streaks inside.

Parker House Rolls

- 1 cup milk (scalded)
- 2 tablespoons sugar
- 2 tablespoons fat
- 1 teaspoon salt

1 cake yeast (or 1 pkg active dry yeast, softened in ¹/₄ cup lukewarm water, 98° F or 37° C)

3 to 4 cups flour

Scald milk, then stir in sugar, salt, and margarine. Cool to lukewarm. Measure warm water into a large, warm bowl. Sprinkle (or crumble) in the yeast, stirring until dissolved. Add lukewarm milk mixture and flour, adding flour gradually. Beat thoroughly until no more can be worked in with a spoon. Cover tightly. Let rise to three times the original bulk. Turn onto a lightly floured board, knead slightly, and roll dough ¹/₄-inch thick. Cut with biscuit cutter. Brush with melted butter and make crease across each piece of dough. Fold each so top half overlaps. Press edges together at crease. Place close together on pan and bake in 400° F oven for 12 to 15 minutes.

My rolls look	ced	
The aroma w	ras	
The taste was	8	
My family sa	id	

Tips on Storing Bread

To keep bread fresh, store at room temperature. A cool, dry bread box is best. If you wrap the bread and place it in the freezer, it will keep nine to 12 months. Bread may mold in humid weather. It won't mold as quickly in the refrigerator, but it gets stale faster than in the bread box.

Try This Menu!

Plan a menu using foods from the bread, cereals, rice, and pasta group. Try this menu and then plan your own.

Chicken Casserole
Harvard Beets
Rolls
Butter
Peanut Butter Cookie

Chicken Casserole

1 cup elbow macaroni

11/4 cups white sauce

2 cups cooked chicken

1 cup shredded sharp American cheese

1 4-ounce can mushrooms (stems and pieces, drained)

1/4 cup chopped pimiento

Cook macaroni according to package directions; drain. Make white sauce in the microwave or on the range. Place macaroni in white sauce, add chicken, half the cheese, mushrooms, and pimiento. Mix well.

Turn mixture into a 2-quart casserole. Bake, covered, at 350° F for 50 minutes. Uncover and stir. Top with the remaining cheese; bake until cheese melts, two to three minutes longer. Yield: 6 servings.

Taste Test
I liked thedish best.
I thought the appearance and texture of the casserole were
I thought the combination of flavors in the meal was
My family said

Now for the Meat!

Meat contains lots of protein, but it can contain a lot of fat, too. Many doctors and nutrition experts think Americans eat too much fat. And too much fat is fattening! But doctors say too much fat may also lead to serious diseases in some older people, such as heart attacks. Does this mean you shouldn't eat meat? No. But you can do something to reduce the amount of fat in your diet. Choose lean meats. Cut off the fat from the meat. Whenever possible, bake or broil your meat instead of frying it.

Meat takes the largest share of your food money. If you overcook meat or cook it too fast, it shrinks, tends to be tough and dried out, and the flavor is not as good. The cut and grade of the meat shows how it should be cooked. The two methods for cooking meat are dry heat and moist heat.

Using Dry Heat

Cooking meat without the addition of water or other liquid is called the dry-heat method and is best for tender cuts of meat that need no tenderizing. Dry heat is used in broiling, pan-broiling, and roasting and gives a special flavor to meat. This method does not make meat tender and may even make it tougher. Lower grades of the tender cuts of meat may require tenderizing. High temperatures tend to toughen meat and cause shrinkage.

Using Moist Heat

Adding water or juice to a roast or steak will produce steam, which softens the connective tissue in the less tender cuts of meat. (Connective tissue is the part of the meat that holds the muscle fibers together.)

Tenderizing Meat

Less tender cuts of meat may be tenderized by using a commercial tenderizer, by soaking in a marinade (a liquid with vinegar, lemon juice, or tomato juice to soften the connective tissue), by pounding the connective tissue with a meat mallet, or by grinding.

In addition to understanding the two methods of cooking meats, you need to understand the techniques for cooking them: broiling, pan-broiling, roasting, pan-frying, and braising. Look in a cookbook for a description of these techniques.

Try This Menu! Italian Spaghetti Stir-Fried or Steamed Broccoli Congealed Citrus Salad Milk Custard Cookie

Taste Test
My meal was
The colors looked
The textures were
My family said

Tips for Storing Meat, Poultry, and Fish

Fresh meat, poultry, and fish are extremely perishable foods and should be stored in the coldest part of the refrigerator. Unwrap the airtight packages as purchased at the store, and wrap them loosely in waxed paper or meat paper. Airtight paper causes the bacteria to grow faster and may change the flavor.

Cured meat, such as ham, bacon, and sausage, may be kept wrapped tightly in the refrigerator in waxed paper or meat-wrapping paper. Use it within 10 days to two weeks.

Cooked meat should be tightly covered with a lid or plastic wrap and stored at once in the coldest part of the refrigerator. Do not let it cool to room temperature. Cover gravy before refrigerating and use it within three days.

Oven Meals!

Now that you have prepared several different meals, let's try an oven meal! There is one requirement for an oven meal that you don't have with other meals—the foods you select must require the same cooking temperature and time.

The meat or main dish will determine the temperature and timing of preparation of the other foods in the oven meal. Chops, chicken, and casseroles are some of the main dishes that you may want to prepare for an oven meal. Look in a cookbook for recipes, baking time required, and the temperature. For example:

Meat or Main DishTimeTemperaturePork Chops1 hour350° F

Any vegetable that can be baked is good for an oven meal. Fresh and frozen vegetables may be steamed in a buttered casserole. It takes two or three times longer to steam vegetables in the oven than it does to cook on top of the range.

Canned or cooked vegetables may be baked, buttered, creamed, or scalloped in an uncovered casserole for 30 to 40 minutes.

To steam frozen vegetables in the oven, place them in a casserole dish, add 2 or 3 tablespoons butter and a dash of salt, cover tightly, and bake until tender. Frozen vegetables cooked at 375° F will take around 40 minutes. (Greens and cabbage should be cooked on top of the range to retain more color and vitamin C, so they are not a good choice for your oven meal.)

Baked desserts can be a real treat. They include the fruit type, such as cobblers, upside-down cakes, brown Betty, or fruit crisps. Other types, such as cakes, puddings, and pudding cakes, also go well in oven meals.

Some breads, such as fruit breads (banana, orange, apricot, cranberry), may be baked with the rest of the meal. Bake other breads after the rest of the meal is removed from the oven.

In this menu the pork chops, scalloped potatoes, green beans, and baked apples are placed in the oven at the same time. You can prepare the tossed salad while the oven meal is baking, refrigerate it, and add the dressing to it just before serving. Remember to change the oven temperature before baking the rolls. Refer to your favorite cookbook for recipes.

Pork Chops Scalloped Potatoes Green Beans Tossed Salad Rolls • Butter Milk Baked Apple

Make a schedule. If you plan to serve your meal at 6:15 p.m., the food must be prepared enough ahead of time for it to be in the oven one hour before serving time. Set up your schedule like this:

4 p.m.—Prepare pork chops; place in buttered casserole, and set aside. Make out rolls and allow to rise. 4:15 p.m.—Prepare scalloped potatoes; set aside. Prepare salad dressing and refrigerate. Set table and make tea.

4:45 p.m.—Prepare apples for baking.

4:55 p.m.—Arrange oven shelves while the oven is cold. Put chops, potatoes, and apples in the oven; set the oven temperature, and begin cooking.

5 p.m.—Wash the lettuce and other greens; drain. Break into bite-sized pieces. Wash and prepare other vegetables. Cover and refrigerate. Toss lightly with dressing just before serving.

6 p.m.—Remove chops, potatoes, and apples from the oven. Increase oven temperature and put rolls in to bake.



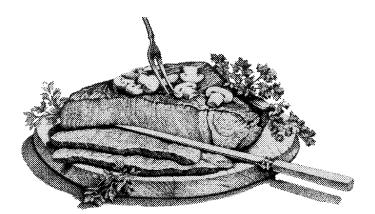
Taste Test
iked this meal because
got all the food ready at the same tin
ne food tasted
ne meat was juicy and plump
shrank just a little
was tender
y family said

Using a Meat Thermometer

If you have a meat thermometer, use it to help determine cooking time required for a roast.

Place the thermometer in the meat so that the bulb of the thermometer is in the center of the thickest part of the meat. If the thermometer touches the bone, move it to another spot. Bone will keep it from showing the correct temperature of the meat.

You may also look up the times for meat to cook in a chart in a family cookbook. This chart will give you the number of minutes for cooking per pound of meat and will help you figure out the approximate time required to cook a piece of meat if you do not use a thermometer.



Tips for Using the Oven

Oven meals are a way to prepare dinner that saves time and money. Spend some time learning to operate the oven before you plan and prepare your own meal. Since ovens are different, get to know yours before you start cooking.

- *Oven racks*. Ovens have racks that can be placed high, middle, or low in the oven. Read recipes first to see where the oven racks should be placed. Put the racks in place before you heat the oven.
- *Preheating the oven*. For many recipes you should preheat the oven so the temperature will be correct as soon as the food is put into the oven. This will help it cook evenly and not burn. Preheat the oven only for breads, pies, or pastry.
- Saving energy. Plan to have your food ready to put in the oven as soon as it is preheated. An empty oven wastes energy. To be able to have your food ready, first test your oven to see how long it takes to heat to 350° F. Some newer ones take less than five minutes to preheat, while older models may take 15 minutes. Opening the oven door during cooking wastes energy and makes the cooking uneven. Open the door only when necessary to stir or turn the food. Be sure to turn the oven off when you're done.

How about a Pizza Meal?

Most pizzas contain foods from each of the five food groups. All the food we eat can be put into one of these groups. Do you remember these groups of food? Are they all in your pizza?

•	Milk,	yogurt,	and	cheese	group.
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1. The food in pizza from this group is ___

• Bread, cereal, rice, and pasta group.

2. The food from this group is

• Vegetable and fruit group.

3. The food from this group is

• Meat, poultry, fish, dry beans, and eggs group.

4. The food from this group is ______.

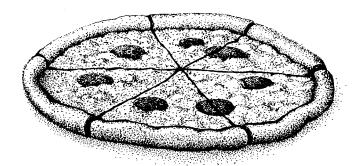
• The fats, oils, and sweets group.

5. The food from this group is ______.

(Caution: Don't eat too much or too often from this group.)

Answer:

I. cheese 2. crust, 3. tomatoes and mushrooms, 4. pepperoni, salami, sausage, etc., 5. oil to grease the pan. (Meat for pizza also has a lot of fat. The fats we eat are often parts of other foods.)



You can buy a roll mix to make the pizza or make your own. Read the recipe before you start. Make sure you have everything you'll need. The recipe below is for Snack Pizzas.

Snack Pizzas

Oil

1 package flaky refrigerator biscuits

1/2 cup tomato sauce

1 teaspoon oregano

¹/₃ cup chopped fresh or canned mushrooms or salami Grated cheese—mozzarella or cheddar

Try This Menu!

Pizza
Garden Salad
Milk
Fresh Fruit Cup

Equipment:

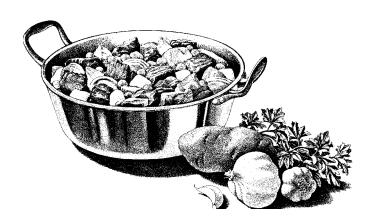
Baking sheet 1 liquid measuring cup Measuring spoons

- 1. Check to make sure the oven racks are in the middle of the oven. Preheat the oven to 400° F.
- 2. Put a little grease or oil on the baking sheet.
- 3. Pat each biscuit into a 4-inch circle. Put each circle on the baking sheet.
- 4. Mix the tomato sauce and the oregano in a measuring cup. Spoon some on each biscuit.
- 5. Spoon the mushrooms over the tomato sauce.
- 6. Put a few slices of the meat on top of the mushrooms.
- 7. Sprinkle with the cheese.
- 8. Bake about 8 minutes, or until the crust is lightly brown.
- 9. Use a potholder to take the baking sheet out of the oven!

Ta	ste Test
This meal tasted _	N/LO
The meal looked _	
The textures were	
My family said	

Keep On Cooking!

You may be completing your dinner project, but your cooking experiences are just beginning! You can continue to build on your cooking skills and have fun doing it. Good cooking is creative—an art. Use your imagination! Remember the importance of good nutrition! And have fun! Ask your 4-H agent if you need more information. If you need additional information, ask your 4-H agent to provide Family and Consumer Sciences leaflets.



4-H Activities and Demonstrations

Citizenship Activities

Citizenship is a part of every 4-H project and a part of every day we live. Complete some of these activities:

- Do a display of a day's menus showing the importance of a balanced diet. Place the display in your school, home, or a place of business such as a grocery store or cafeteria.
- Present a food/nutrition demonstration to community groups such as the Extension homemakers club.
- Do radio spots or programs on good nutrition and meal planning.
- Assist a person with meal preparation who has difficulty preparing food (a disabled and/or elderly person).

Leadership Activities

Developing leadership is also an important part of 4-H. The suggestions below provide good ideas for leadership development:

- Assist with day camps.
- Help other 4-H'ers with food demonstrations and records.

- Lead a project group on food-nutrition, bread, or dairy foods.
- Assist an adult or teen leader with project group.
- Enter food and nutrition exhibits at a rally day or the county fair.
- Serve as a judge for club or other local food/ nutrition and bread exhibits.
- Coordinate the planning and preparation of a meal for the families of your project group or club members.

Demonstrations

If you have completed other 4-H projects, you know how much you can learn through demonstrations! Use one of the following topics or one of your own:

- Planning and Preparing an Oven Meal.
- Meat-Buying Tips.
- Techniques for Preparing Vegetables.
- Comparison Shopping Techniques.
- Shaping Yeast Rolls.
- Stir-Frying Vegetables.
- Casserole Dishes.



It's Time for Dinner

Project Record Form

Name		Birth Date			
Address		County Leader's Name			
School					
1. Size and Scope of Project:					
List Meals You Prepared	No. Of Times Prepared	No. Of People Served	Comments		
Total Meals Prepared List other dishes prepared, such a	as casseroles, desse	rts, etc.			
Total Other Dishes Prepared					
2. List new things you learned in	n this project:				

3. - -	List demonstrations, talks, exhibits, radio and television appearances, newspaper articles written, tours, workshops, camps, judging events, and field trips that you participated in through this project or activity.
- 4. - -	List awards, trips, medals, plaques, trophies, ribbons, scholarships, and other recognition received in this project or activity.
5.	List your leadership participation in this project or activity. Include things you have done by yourself and in cooperation with others in planning 4-H programs; leading discussions; helping younger members with demonstrations, talks, and exhibits; and assisting with camps, achievement shows, and workshops. Show the number of 4-H members you have assisted and give your specific responsibilities.
- 6. - -	List your citizenship and community service experiences in this project or activity. Include those things that contributed to the welfare of your club or group, other individuals, or your community, and give your specific responsibilities.
- 7.	Write a story on a separate sheet of paper. Tell about things you learned, things you enjoyed, and what was hard about this project.

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