Quick Meals
A 4-H Food-Nutrition Project Members' Manual

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CLUB_____________________
BIRTHDATE_________________
YEAR IN PROJECT___________
YEARS IN 4-H___________
This 4-H food-nutrition unit is based on material prepared by Frances Cook, Dorothy Duncan, Christine Groppe and Robert F. Davis, University of California, Berkeley, Extension Service and Evelyn B. Spindler and Fern S. Kelley, Extension Service, United States Department of Agriculture.

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a guide for every day

These foods are the foundation of a good diet. Plan your meals everyday to include foods from each group and in the amounts suggested. To round out meals and satisfy appetites, you can eat more of the foods in this daily plan, or add foods not mentioned, such as butter, margarine, sugars and grain products.

milk group

Some milk for everyone

- Children under 9: 2 to 3 cups
- Children 9 to 12: 3 or more cups
- Teenagers: 4 or more cups
- Adults: 2 or more cups

Cheese and ice cream can replace part of the milk.

meat group

2 or more servings

Beef, lamb, veal, pork, poultry, fish, eggs
Occasionally, as alternates: dry beans, dry peas, nuts, peanut butter

vegetable-fruit group

4 or more servings

A citrus fruit or other fruit or vegetable important for vitamin C—every day
A dark-green or deep-yellow vegetable for vitamin A—at least every other day
Other vegetables and fruits, including potatoes

bread-cereal group

4 or more servings
Whole-grain, enriched or restored
What's happening in the kitchen? A revolution! The foods we use, the meals we enjoy and the ways we prepare them have all changed substantially in your lifetime.

New ways of preparing meals using mixes, canned and frozen foods, dehydrated ingredients and new equipment such as nonstick pans and microwave ovens have helped to take the old fashioned drudgery out of meal preparation.

This new way of cooking is also creative. With a mix or a basic recipe you can add a cup of this or a sprinkle of that and make a new dish with a pleasing change of taste.

This 4-H food-nutrition unit will help you learn to make meals that are more varied, interesting and easily prepared. You will learn to plan a meal including foods from each of the four food groups. You will learn to be time conscious when preparing meals. You will learn to prepare energy saving meals. And you will do experiments to learn how to prepare more nutritious, better tasting and time saving meals. Good luck with your "quick meals."

Our country is involved in another revolution—the change to metric measurements. Some of the recipes in this unit are given in both customary U. S. measures and in metric measures. You may wish to find other recipes to help you start thinking metric. Instead of teaspoons, tablespoons and cups, you will be measuring both liquid and dry ingredients in milliliters and liters. Some ingredients such as meats, cans and packages will be given in gram weights. Temperatures are given in degrees Celsius and pan sizes in centimeters.

Think About Yourself
You're no longer a novice in the kitchen. You like to cook. Perhaps you cook often. Do you use all the good-cook techniques you learned previously? If you can check "yes" to each of the questions listed below, you'll be more sure of success whenever you cook.

Do You
wear clean and suitable clothes?  
wash your hands before you start?  
read each recipe completely?  
assemble ingredients and equipment before preparing the food?  
measure ingredients accurately?  
know how to use equipment?  
plan so that all foods are ready to serve at the same time?  
serve the food attractively?  
serve hot foods hot and cold foods cold?  
store leftover foods properly?  
wash dishes and equipment thoroughly?  
clean up kitchen and dining area?

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5 ml is about 1 teaspoon

15 ml is about 1 tablespoon

250 ml is about 1 cup

1 kg is about 2.2 pounds

175° C is about 350 F

200° C is about 400 F

1 cm is about 2.5 inches
in a hurry?
use a mix!

It's 5 o'clock... the most important game of the season starts at 7:00... and you've just been asked to fix dinner. Don't panic! There's a way you can prepare a good meal, sit down to enjoy it, and still leave in time to get to the game. How? Do it with a mix.

Take a look at the wide variety of dinner- and supper-dish mixes available today. Many of them use macaroni, spaghetti, and other "pasta" products. Once you know how to cook these foods, you can prepare dozens of different meals—all of them quick and delicious.

You can be creative even when you use a mix. Because macaroni-type products are bland in taste, they combine well with other foods. Start with a mix, add meats, vegetables or toppings, and you can turn out a variety of taste-tempting dishes—each distinctively your own.
Planning Guide
This meeting gives you a chance to practice cooking macaroni. Decide first what you will prepare. A macaroni dish from a mix, perhaps with carrot and celery sticks? Or a simple meal? A menu like this would be easy:
*Macaroni and Cheese
   Frozen Broccoli (or other green vegetable)
   Carrot and Celery Sticks
   Bread
   Butter or Margarine
   Canned Peaches (or other fruit)
   Milk
   Coffee or Tea
If the carrots and celery have not been washed, do this first. While the macaroni cooks, peel the carrots, cut them and the celery into sticks and place in ice water to chill. When you're ready to serve, drain and arrange attractively on a dish.

Cooking Macaroni
Macaroni, spaghetti and other pasta products are usually cooked alone in water before combining with other ingredients or adding a sauce. Always use a large amount of boiling, salted water. To keep the water from boiling over, add about one teaspoon of cooking oil.

Cook the macaroni product until tender but still firm and chewy. Taste for doneness, or press a piece against the side of the pan with a fork or spoon. The macaroni should give some resistance, yet break cleanly and evenly. Drain, but do not rinse for most mixes. Follow package instructions.

Safety Pays!
Watch out for the steam when you drain the macaroni.

Shopping Wisely
Compare the cost of several brands of macaroni mixes. Can you tell the ingredients that cause some to be higher in price? Compare the cost of a macaroni mix with the cost of making the macaroni dish* below. Which costs the most? Which takes the longest to prepare?

Macaroni and Cheese (makes 6 servings)
8 ounces elbow macaroni
½ cup butter or margarine
¼ cup enriched flour
1 teaspoon salt
½ teaspoon pepper
2 cups milk
8 ounces (2 cups) cheddar cheese, grated

2. While macaroni is cooking, melt butter in a medium saucepan; remove from heat.
4. Bring to boil, stirring constantly. Reduce heat and simmer mixture one minute. Remove from heat.
5. Stir in cheese and macaroni. Let set 5 minutes to melt cheese. Stir before serving.

*Macaroni and Cheese
Follow the package directions in preparing the macaroni. To create a dish, add one or more of the following to the cooked macaroni:
- Drained canned tuna fish
- Sliced frankfurters or Vienna sausages
- Cubes of cheese
- Cubes of cooked ham or luncheon meat
- Leftover or canned boneless chicken or turkey
- Drained canned mushrooms
- Minced parsley or chives
- Sliced green, stuffed or ripe olives
- Can of cream soup

For an appealing change of texture and taste, dress up your dish with a topping:
- Buttered crumbs
- Crushed crackers (those with seeds or special flavor add variety)
- Crushed cereal flakes
- Crushed corn or potato chips
- Chinese noodles
- Can of sauce

Or try one of the tasty tested variations suggested on the package label.
You've heard a lot about nutrition, but how would you define it? Nutrition involves all the processes by which we eat and digest food and use the nutrients in food to live and grow. Nutrients nourish our bodies. They are the substances our bodies must have for energy, to build and repair tissues and to function properly. Foods differ in the kinds and amounts of nutrients they provide. So what we eat is important and can make a difference in how we look, feel and grow.

What kinds and amounts of foods should you be eating? Check your meals against the daily food guide on page one. If you follow this guide in choosing your meals and snacks, you can be reasonably sure of getting all the nutrients you need.

Did you notice that instead of three glasses of milk you needed each day when you were younger, you now should have four? Your body is growing very rapidly, and the extra milk and milk products are needed to meet your calcium requirements.

How many of the food groups are represented by the foods you prepared today? That will depend on whether the macaroni was enriched and also on how complete a meal you prepared.

How Did You Do?

Did you learn:
☐ to plan so that all foods were ready to serve at the same time?
☐ to cut and arrange carrot and celery sticks attractively?
☐ how to cook macaroni so that it didn't boil over?
☐ how to test macaroni for the desired stage of doneness?

Things to Do For Next Time

1. Check at the markets on the kinds and cost of uncooked macaroni, spaghetti and noodles available. Note how many are enriched.

2. Check at a market on the cost and can sizes of such tomato products as juice, soup, sauce, paste and canned stewed tomatoes. By reading the labels, notice which products contain special ingredients such as spices or other vegetables.

3. Also check the cost and number of servings of convenience-type macaroni products.

4. Plan for demonstrations. Here are some ideas based on what you learned at this meeting:
   - How to cut carrot and celery sticks and arrange them attractively for serving.
   - How to keep macaroni from boiling over.
   - How to test a macaroni product for doneness,
   - How to vary a packaged macaroni product.
What smells so good in the kitchen? Spaghetti! With the help of canned and precooked products you can make an Italian spaghetti sauce that's so easy and good-tasting you'll want to share it with your friends. The next time the gang gets together, why not serve spaghetti Italian style? Add a little extra—a green salad and a crisp, crunchy bread.
Planning Guide

Decide whether to prepare and serve a complete meal today or just the meat sauce and spaghetti. If you prepare a meal, a menu like this would taste great and be nutritious, too:

* Spaghetti with Meat Sauce
  Tossed Green Salad
  Fruit
  Bread Sticks or Garlic Bread
  Milk

Notice that no equipment list is given with any of the recipes in this manual. Before you start to prepare a recipe, take a few minutes to think of what you will need and to assemble the equipment and ingredients. Select equipment that will help you save time and conserve energy. Select appliances that are adaptable for different uses.

Preparing Spaghetti

Use a large pan of salted, boiling water (about 3 quarts (1.5 l)(1) of water and 1 tablespoon (15 ml) salt for 8 ounces (227 g) of spaghetti). Break long spaghetti into pieces and add slowly to the boiling water. Or add the whole pieces by dipping the ends into the boiling water and then, as they soften, coiling the remainder into the pan. Cook until tender but still firm and chewy (about 15 minutes for long spaghetti).

As soon as the spaghetti is cooked, drain in a strainer and rinse well. Rinse with hot water for a hot dish, and cold water for a cold dish. (Why rinse the pasta in this dish when you didn’t do so in the previous lesson?)

Spaghetti with Meat Sauce

(Makes 6 servings)

1 pound (½ Kg)(1) ground beef
1 medium-sized onion, finely chopped
1 clove garlic, minced*
½ teaspoon (2 ml) oregano*
1 teaspoon (5 ml) salt
¼ teaspoon (1 ml) pepper
1 can (6 oz. or 170 grams) tomato paste
1 can (15 oz. or 425 grams) tomato sauce
1 cup (425 g) water
1 bay leaf*
8 ounces (227 g) uncooked spaghetti
½ cup (125 ml) grated Parmesan, Romano or other cheese

*May be omitted.

1. Crumble ground beef into 4-quart (4 liter) saucepan. Add onion, garlic, oregano, salt and pepper. Heat to brown meat.
2. Add tomato paste, tomato sauce, water and bay leaf. Bring to a boil. Then simmer, uncovered, over low heat about 45 minutes.

(1) Metric measurements

3. While sauce is simmering, cook spaghetti. Drain and rinse.
4. Place hot spaghetti on a platter. Cover with meat sauce. Sprinkle with cheese.

In place of tomato paste, you may substitute an extra can of tomato sauce.

To save time, use instant minced onion or garlic instead of fresh.

To store for later use: If spaghetti, or any cooked macaroni product, must stand for some time before serving, add enough oil to keep the pieces separated. If you cook more than you need, the rest may be stored in the refrigerator.

Shopping Wisely

How many different shapes of uncooked macaroni, spaghetti and noodles were available at the markets? Were all of them enriched? How did they vary in price?

What did you learn about the cost and can sizes of various canned tomato products? Discuss how these products differ and how to use them.

How did the various packaged, canned and frozen macaroni dishes compare in cost per average serving? The prices may seem high, but similar dishes homemade would be higher if more expensive ingredients were used.

Serving

It’s hard to be formal eating spaghetti! Set an informal table using pottery rather than dainty china, and paper napkins in place of cloth. Keep table decorations informal, too—perhaps a basket of the fruit to be eaten for dessert.

As a group, decide how you will serve the main course. Cafe-style lends itself to this kind of a meal because spaghetti is hard to serve. Spaghetti and salad are served from the kitchen and set at each place. Bread is passed.

Decide ahead of time who will clear the table after the main course, refill water glasses and serve the dessert and beverage.
Why are macaroni products added slowly to a large amount of rapidly boiling salted water?  

You'll Need  

- ½ cup elbow macaroni  
- ¼-cup measuring cup  
- 2 pieces waxed paper  
- 2-quart saucepans  
- Glass measuring cup  
- Water  
- Salt  
- Set of measuring spoons  
- Cover for two saucepans  
- 1 fork  

What To Do  

1. Measure two ¼ cups of macaroni and place each on a piece of waxed paper.  
2. Measure one quart of cold water and ½ teaspoon salt into each saucepan.  
3. Heat water until rapidly boiling in one of the pans. Uncover pan and slowly add ¼ cup macaroni. Stir with a fork to keep macaroni from sticking together or to the pan. Cook uncovered until macaroni is barely tender.  
4. Heat water until rapidly boiling in the second pan. Uncover pan and dump in ¼ cup macaroni. Cook uncovered and without stirring until macaroni is barely tender.  

Conclusions: Did you have trouble with the macaroni sticking together or to the pans? Did all the pieces of macaroni in each pan reach the desired stage of doneness at the same time? Which method gave better results? If you are not sure why your results varied, turn to page 32.  

On macaroni products, as well as refined breads and flour, look for the word "enriched". This is your assurance that the product is nutritionally comparable to whole wheat. In the enriching process, four important nutrients, lost in milling, are replaced: iron, riboflavin, thiamine and niacin. These are nutrients our bodies must have every day for vitality and good health. Macaroni products that are not enriched lack these nutrients.  

Did you have four or more servings of whole-grain or enriched foods from the Bread-Cereal Group yesterday? Each of the following, if whole grain or enriched, may be counted as a serving:  

- 1 slice bread  
- ½ to ¾ cup ready-to-eat cereal  
- ½ to ¾ cup cooked cereal, cornmeal, grits, macaroni, spaghetti, noodles or rice  

Macaroni and other cereal products are also a source of certain proteins, but they do not provide all of the amino acids our bodies need for growth and repair. Add a small amount of meat, cheese or eggs, or serve milk with the meal, then they do provide all the amino acids.  

How Did You Do?  

Very well □ Need to improve □  

- Is the spaghetti cooked enough, but not mushy?  
- Is the spaghetti sauce well blended, with a pleasing flavor?  
- Does the spaghetti look attractive and appetizing?  
- Is the spaghetti served piping hot?  

Did you learn:  

- how to cook spaghetti and other pasta products?  
- about the cost and uses of various canned tomato products?  
- about differences in convenience forms of pasta products?  
- How to read metric measurements for a recipe?  

Things to Do For Next Time  

To save energy: Cook vegetables in the oven with other parts of meal.  

Soup hits the spot on so many occasions—after school, as a start for lunch or supper, or as a meal in itself. Wouldn't a steaming bowl of stew taste great on a crisp and chilly afternoon? Perhaps after ice skating with your friends? Invite them over for a stew-after-skating supper, topped off with cherry cobbler!
Have you ever prepared a really big dinner with separate meat and vegetable dishes and a hot bread, straight from the oven? Here's your chance to try one. You'll find it's surprisingly easy when you "tune in" on the time plan good cooks use, turn on your oven...and tuck in most of the foods you're planning to serve. While your oven does the cooking, you're free to set the table and prepare other foods.

The vegetables give a pleasing contrast of color, texture and taste...and add those all important nutrients needed every day.
Planning Guide

What will you prepare at this meeting? You could concentrate on vegetables, learning different ways of cooking them. Or try a big oven dinner. Here's a well-balanced meal you can prepare to perfection. Wouldn't your family or your guests be pleased?

* Oven Chicken
  * Baked Potatoes with Cheese Topping
  * Panned Cabbage
  * Rolled Biscuits

Butter or Margarine
Ice Cream or Sherbet
Milk
Coffee or Tea

If you prepare this menu, most of the foods will be baked. Check the recipes for the temperature and time required. Be sure that all the foods to be baked need the same temperature. Foods that take the longest to cook, such as chicken and baked potatoes, should be prepared and placed in the oven first.

While oven foods are cooking, you can pan the cabbage and set the table.

Safety Pays!

The baked potatoes and chicken will be very hot, so use potholders—not a dishtowel—to remove them from the oven. Be sure the potholders are dry.

Whether you use a long knife and a cutting board, or a shredder for the cabbage, be careful of your fingers!

* Oven Chicken (Makes 4 servings)
  2 to 4 tablespoons butter
  2 to 2½ pound fryer-broiler, cut into serving pieces
  Salt and pepper
  1 teaspoon paprika, if desired
  1. Preheat oven to 400F (hot).
  2. Melt butter in shallow baking pan (11¾ x 7½ x 1¾ inches) in oven.
  3. Remove pan from oven. Turn chicken pieces over in the melted butter to coat.
  4. Place chicken skin side down in baking pan, allowing space between pieces. Bake 30 minutes.
  5. Turn chicken pieces over. Sprinkle with salt and pepper, and paprika, if desired.
  6. Bake chicken 10 to 15 minutes longer, or until tender.

* Baked Potatoes
  1. Preheat oven. Potatoes usually are baked in a hot oven (400F) for 45 minutes to one hour, depending upon their size.
  2. Choose potatoes that bake well (not new potatoes). Be sure they are as nearly the same size and shape as possible so that all will cook in the same length of time.
  3. Scrub potatoes and cut out any bad spots. Place potatoes on a baking sheet, a piece of aluminum foil or a shallow pan. Bake until done. Prick with fork to tell when tender.
  4. When done, cut an X in the top of each with a knife. Gently squeeze each potato to fluff.

**For a cheese topping:** Place a thin piece of cheese, or grated cheese on top of the baked potato. Then put the potato back into the oven for several minutes until the cheese melts.

**Try these toppings, too:** Instead of cheese, top baked potatoes with crisp bacon bits, or with sour cream mixed with chopped chives or circles of green onion tops.

**To bake sweet potatoes:** Follow the directions as for white potatoes. Sweet potatoes will cook tender in 40 to 45 minutes in a 400F oven.

* Rolled Biscuits

(Makes about 12 biscuits, 1¾-inch size)
  2 cups sifted enriched flour
  1 tablespoon baking powder
  1 teaspoon salt
  ¾ cup shortening
  ¾ cup milk
  *If you use self-rising flour, omit baking powder and salt.
  1. Preheat oven to 400F (hot). Note: The slower oven gives a crustier biscuit.
  2. Sift flour, baking powder and salt into the mixing bowl.
  3. Cut in shortening until mixture looks crumbly.
  4. Stir in milk slowly to make a soft but not sticky dough. Enough milk has been added when the flour mixture just clings together in a ball.
  5. Lightly flour a work surface, board or pastry cloth, and turn dough out on it. Knead gently for about ½ minute.
  6. Gently roll or pat dough until ½-inch thick. Cut with a long, sharp knife into squares or diamonds, or cut with a floured biscuit cutter. Cut straight up and down. Bake on ungreased baking sheet 10 to 15 minutes. Place close together for biscuits with soft sides, or an inch apart for crusty biscuits.

**For more nutritious biscuits, add ¼ cup nonfat dry milk to the dry ingredients.**

In a hurry? Use a biscuit mix. Follow directions on the box.
Panned Cabbage (Makes 4 servings)
1 1/2 tablespoons butter or margarine
1 quart finely shredded cabbage
1/2 teaspoon salt
2 tablespoons water.
1. Melt butter or margarine in a heavy saucepan or skillet.
2. Add cabbage and sprinkle with salt. Add water.
3. Cover pan with a tight-fitting lid to hold in steam.
4. Cook over low heat until cabbage is tender (6 to 8 minutes), stirring occasionally to prevent sticking.

For variety: Cook a small amount of finely chopped onion or green pepper with the cabbage. Or, when the cabbage is nearly done, add crisp bacon bits or a sprinkling of parsley or chives.

These vegetables are also good panned: Carrots, sliced summer squash, thinly sliced green beans and most leafy greens.

To save energy: Cook vegetables in the oven with other parts of meal.

Shopping Wisely
How many kinds of fresh vegetables did you find in the market? Did you know the names of all of them and how they are cooked and served? Were there any you had not tasted? It might be fun to learn how to fix them. Try them at home or at another meeting.

What varieties of potatoes were available at the market? Nonmealy potatoes hold their shape and are good for boiling, salads, casserole dishes and hash browning. Meaty varieties are better for mashing and baking. Because of their high starch content, potatoes that are boiled and left in hot water after cooking, or baked and not opened when done, will be heavy and soggy.

Courtesy
Dinner may be the only time your family is together. You can do many things to help make the meal pleasant and enjoyable. When you are called to a meal, go promptly. A "just a minute" answer can annoy the most patient cook! Clean hands, face and clothing are as important for family meals as when guests are present. If a girl must have her hair in curlers or rollers, she can wear an attractive covering. Most families do not object to this occasionally.

Practice good manners at home until you feel at ease in any situation. Boys can pull out chairs for mothers and sisters at the table. If served an unfamiliar food, try some before you pass Judgment. You may find you like it!

Does it make a difference in texture or baking time if a potato is greased or wrapped in foil before baking?

You'll Need
3 medium-sized baking potatoes
Vegetable brush
Fat or oil
Aluminum foil
Potholders
Crayon or marking pencil
3 small plates
Paring knife
Fork

What To Do
1. Preheat oven to 400F.
2. Scrub potatoes. Rub the outside of potato #1 with fat or oil. Wrap potato #2 in aluminum foil (dull side out) with folds pressed flat. Do not grease or wrap potato #3.
3. Place the potatoes in the preheated oven, leaving enough space between them for heat to circulate.
4. Bake potatoes only until done. One potato may take less time to bake than the other two. Therefore, start testing for doneness in about 40 minutes. How? Prick with fork to tell when tender. Remove each potato from the oven as soon as done.
5. Mark the three plates with corresponding numbers. Remove foil from the wrapped potato. As soon as each potato is done, cut it open and gently squeeze to fluff.

Conclusions: Did each potato require the same baking time? If not, why was there a difference? Did you notice any difference in the skin, inside appearance and texture? Which method or methods resulted in the best baked potatoes? Can you explain why the inside appearance and texture varied? If not sure, turn to page 32.
Vegetables and fruits provide many of the nutrients our bodies need to grow, keep healthy and function well. We depend on fruits and vegetables for vitamins A and C. Vitamin A is needed for growth and for a smooth and healthy skin. This vitamin also helps you see in the dark. Vitamin C is needed to help heal wounds and keep the walls of blood vessels strong. Without enough vitamin C your gums may bleed.

Did you have four or more servings of foods in the Vegetable-Fruit Group yesterday? You should have included these:

One serving of food high in vitamin C.
One serving of food high in vitamin A at least every other day. (If a food is a good source of both vitamins A and C, you may count it both ways.)
Other fruits and vegetables to make at least four servings daily.

For extra ACTION

In the lists below, underline the sources of vitamins A and C that you eat frequently. Check those important for both vitamins.

**Important Sources of Vitamin C**

- Grapefruit or grapefruit juice
- Tangerine or tangerine juice
- Watermelon
- Asparagus tips
- Cabbage, raw
- Collards
- Garden cress
- Kale
- Kohlrabi
- Mustard greens
- Tomatoes or tomato juice
- Spinach
- Turnip greens

**Important Sources of Vitamin A**

- Apricots
- Mango
- Broccoli
- Persimmon
- Cantaloupe
- Pumpkin
- Carrots
- Spinach
- Chard
- Sweet potatoes
- Collards
- Turnip greens and other
- Cress
- dark green leaves
- Kale
- Winter squash

**How Did You Do?**

Very well □  Need to improve □

**Is your chicken:**

- cooked just enough, neither overcooked nor underdone?
- moist and tender, with a crisp, golden brown skin?
- good-tasting and well-seasoned?

**How is your baked potato?**

- Is the skin clean and as crisp or tender as you like?
- Is it cooked and mealy throughout?
- Does it taste good?

**How is the cabbage?**

- Did it keep its original color?
- Is there enough liquid but not too much?
- Is the cabbage tender but still slightly crisp?
- Is it good tasting — neither flat nor overseasoned?
- Is the cabbage attractively served?

**How are your rolled biscuits?**

- Are they uniform in size and shape with level tops and straight sides?
- Do they have crisp, evenly browned crusts?
- Are they light for their size?
- Are they flaky with an even, medium-fine grain?
- Do they have a pleasing flavor?

**Did you learn:**

- how to choose potatoes for baking?
- how to bake potatoes to give the type skin and texture you like?
- how to pan a vegetable?
- how to bake chicken?
- how to make rolled biscuits?
- how to judge and serve the products you prepared?

**Things to Do For Next Time**

1. Decide who will collect prices at one store for one kind of soup that is available in different ready-prepared forms, such as canned (requiring no extra liquid), condensed, dehydrated and frozen. Check the number of average servings each form will provide.

2. Plan demonstrations. Here are some ideas based on what you learned at this meeting:

- How to choose potatoes for their intended use.
- How to prepare potatoes for baking.
- How to prepare and pan cabbage.
- How to measure ingredients for rolled biscuits.
- How to mix, knead and roll or pat dough for rolled biscuits.
Soup hits the spot on so many occasions—after school, as a start for lunch or supper, or as a meal in itself. Wouldn't a steaming bowl of stew taste great on a crisp and chilly afternoon? Perhaps after ice skating with your friends? Invite them over for a stew-after skating supper, topped off with cherry cobbler!
Planning Guide

The soup suggested for this meeting is an easy-to-make ground beef and potato stew. It’s a favorite with the teen crowd, but choose another if you prefer with the teen crowd, but choose another if you prefer. Soups offer an almost endless variety of hot satisfying dishes, some thick, some thin, some clear, some hearty. Most soups are made with a base of “stock” or milk. Stock is simply water in which beef, poultry or fish has simmered. Or you can make a delicious stock in minutes, with bouillon cubes or meat extract.

Stews, along with cream soups, chowders, and bisques are made from milk. Cream soups combine a thin white sauce with mashed or finely cut vegetables, poultry or fish. Bisques are rich cream soups, originally made with shellfish. For chowders and stews, the milk is not thickened and the soup includes vegetables, meat, poultry or fish.

To plan a filling, nutritious meal around a thin soup, add a meat, cheese, egg or peanut butter sandwich. With a hearty soup like stew, crisp crackers and a simple dessert are often enough. Would your friends or family enjoy a stew supper like this?

*Beef and Potato Stew
Relishes Assorted Crackers
*Cherry Cobbler
Milk

If you prepare the complete menu now or later, fix the relishes first so they will be crisp and cold. Put the cobbler in the oven before starting the stew.

Safety Pays!

Choose a large enough pan so that the vegetables won’t boil over. If you use a heavy, rather than lightweight pan, the milk and potatoes will have less tendency to scorch or stick. Also to prevent scorching, lower the heat after adding the milk to the chowder.

*Beef and Potato Stew

(Serves 4)
2 cups diced potatoes
1 small onion, sliced
(or 1½ teaspoons instant minced)
1½ cups hot water
½ pound ground beef
2 cups milk
½ teaspoon pepper
2 tablespoons finely chopped fresh parsley
(or 1 tablespoon dried parsley flakes)
1¾ teaspoons salt

Add sliced vegetables such as carrots, peppers and celery if desired.

1. Combine potatoes, onion and water in a heavy saucepan. Boil until vegetables are soft. Mash slightly.
2. Brown ground beef and drain fat.
3. Add ground beef, milk and seasonings to potato mixture. Heat thoroughly and serve.

Non-fat dry milk may be “reconstituted” (mixed with water) and used in place of whole milk in the chowder.

In a hurry? Save time by using frozen or dehydrated diced potatoes, or by adding ground beef and minced onion to a packaged potato soup mix. Instant mashed potatoes can also be used if thinned enough with milk.

*Cherry Cobbler

(Makes 4 to 6 servings)

Topping
1 cup biscuit mix
1 tablespoon sugar
1 tablespoon butter or margarine
½ cup milk

Filling
½ cup sugar
2 tablespoons cornstarch
2 cups (1-pound can) pitted, red sour cherries
⅛ teaspoon almond extract*
Few drops red food coloring*
1 tablespoon butter or margarine

*May be omitted.

1. Preheat oven to 425F.
2. Combine biscuit mix and 1 tablespoon sugar. Cut in 1 tablespoon butter or margarine.
3. Add milk and stir together until well moistened. Set aside.
5. Remove from heat. Add flavoring, food coloring and butter or margarine. Blend together.
6. Pour into 1½-quart casserole.
7. Drop biscuit dough by spoonfuls onto hot cherry mixture.
8. Bake 15 to 20 minutes or until filling bubbles and topping is lightly browned.
In a hurry? One can (1 pound, 5 ounces) of cherry
dish filling may be substituted for the cherries, ½ cup
sugar, cornstarch, extract and coloring. Heat to boil-
ing before adding butter or margarine. Continue as
in step 6.

To use sweetened canned fruit (cherries, peach
slices or berries) use ½ cup syrup from fruit in place
of ½ cup sugar. Drain the fruit and add one table-
spoon lemon juice.

Shopping Wisely

How did the prices compare of different ready-pre-
pared forms of the same kind of soup? How many
average servings would each give? How much would
each serving cost?

Serving

If you invite friends for an after-skating
supper, what can you do ahead of time, and how will
you serve the food? With advance planning and
preparation, you can avoid confusion and have every-
thing on the table in a jiffy.

Do ahead as many jobs as possible before the
party. For example:

Bake the cobbler early in the day and serve it cold.
Or place the fruit, sugar and cornstarch in a pan and
combine the mix, sugar and butter or margarine in
a mixing bowl. When you get home, preheat the oven
and finish the cobbler.

Prepare and refrigerate a plate of relishes.

Assemble equipment and ingredients for the
stew. Peel potatoes and onion and cover with
cold water to prevent darkening. You may also brown
ground beef, measure salt and pepper and chop the
parsley ahead of time if you wish. Be sure to put
ground beef in refrigerator.

Decide where and how to serve the supper.

Arrange the dishes, silver, napkins and other items
you plan to use on the table or serving area. Also
decide how you will keep the soup hot.

You could have a very informal meal with guests
serving themselves in the kitchen. If so, set the pot of
chowder on the range over a low heat. It will stay
piping hot for second helpings.

Courtesy

Do you know how to “eat” soup? What to do with the
spoon? How to handle crackers? Follow these guides:

Sipping Soup: To avoid burning your tongue with hot
soup, take half-spoonfuls from the surface. Dip the
spoon away from you and eat from the side of the
spoon slowly and quietly. Don’t duck your chin to
meet the spoon halfway! You may drink a thin soup
that is served in a cup with a handle, but not a thick
soup—even if served in a cup.

Soup Spoon: After you finish eating soup, rest the
spoon on the plate on which the cup or bowl of soup
was served. If the soup bowl is shallow, the spoon
may be placed in the bowl.

Crackers: Put crackers on your bread-and-butter
plate, if you have one, or on the plate under the soup
bowl. Wafer-sized crackers may be eaten whole, but
large crackers should be broken in half. Oyster
 crackers or croutons may be dropped into soup, a
few at a time. Large crackers should never be broken
into soup.

Would nonfat dry milk, added to increase the food
value, change the flavor or appearance of cream
soup or chowder?

You’ll Need

Equipment and ingredients to make two recipes
of chowder

½ cup instant nonfat dry milk powder

What To Do

1. Prepare Beef and Potato following the recipe
   on page 14.

2. Prepare another Beef and Potato Chowder,
   using the same recipe, but add ½ cup instant nonfat
   dry milk to the two cups of fluid milk before adding
to the potato mixture.

Conclusions: Is there a difference in the color, thick-
ness of the liquid or flavor of the soup? How much
does the dry milk increase the food value of the soup?
Milk is an important source of three essential nutrients:
- Calcium—needed to build and maintain strong bones and teeth;
- Proteins—necessary to form the tissues that make up our bodies and keep them repaired, and
- Riboflavin (also called vitamin B2)—to help change food into energy.

Without an adequate amount of milk or products made from milk, it would be very hard for you to get all the calcium or riboflavin your body needs. How much milk should you have every day? Nutritionists recommend three or more cups (8-ounce glasses) of milk daily for 9- to 12-year-olds and four or more cups for teenagers. These dairy products provide the same amount of calcium as one cup of fluid whole milk:
- 1 cup low-fat, skim milk or buttermilk
- ½ cup evaporated milk
- 6 tablespoons instant nonfat dry milk
- 2 slices cheddar cheese
- 1½ cups ice cream
- 1 cup ice milk

The milk used in preparing foods can also count toward the recommended daily total. An average serving of Frankfurter and Potato Chowder will provide ½ cup milk. Adding the ½ cup instant nonfat dry milk would double the amounts of protein, calcium and riboflavin. For extra nutrition, ½ cup instant nonfat dry milk can be added to each cup of fluid milk used in mashed potatoes, cereals and other cooked foods.

How Did You Do?
Very well ☐ Need to improve ☐

Is your stew:
☐ attractive with no scum on the surface or drops of soup on the edge of the bowl or plate?
☐ piping hot?
☐ pleasingly thick and hearty?
☐ well-blended in flavor, neither overseasoned nor scorched?

Does your cobbler:
☐ look attractive, with enough topping for the fruit
☐ have a tender, golden-brown topping?
☐ taste good, neither flat, nor scorched, nor too sweet?
☐ seem moist enough but not too juicy?

Did you learn:
☐ about foods suitable to serve with different kinds of soup?
☐ how to keep milk and starchy foods from scorching or sticking?
☐ the difference in cost of ready-prepared soups?
☐ the importance of calcium?
☐ what foods provide calcium?
☐ how to simplify last-minute food preparation and service?

Things to Do For Next Time
1. Learn the cost of different types and container sizes of oil and vinegar at one market.
2. Check the cost of different kinds and brands of French dressing at one market.
3. Decide who will hard-cook the egg for the Chef's Salad.
4. Decide who will borrow the six test tubes and test tube rack (or bring six small bottles) for the science experiment.
5. Decide who will bring six sets of measuring spoons for the science experiment.
6. Plan for demonstrations. Here are some ideas based on what you learned at this meeting:
   - How to select a proper pan for making soup
   - How milk and milk products compare in calcium content
   - How to arrange food, dishes, silver and napkins for a buffet supper featuring soup
   - How to keep soup hot for a buffet meal
You've fixed tossed salads to accompany a meal — now try one that's a meal in itself. Whenever the weather's too hot to cook a meal, or you're too hurried to spend a lot of time in the kitchen, serve Chef's Salad. This happy blend of crisp and hearty foods, tossed with a tangy dressing, makes a refreshing main dish for lunch or supper. And it's ready to eat in minutes.

Counting calories? The salad, with a low-calorie dressing, could appear often in your meal plans.
Planning Guide

Chef's Salad gives you a chance to be creative and practical at the same time. Most Chef's Salads combine several raw vegetables, tossed or covered with a thin, tart dressing and topped with two or more protein foods. The vegetables can be crisp greens or others, like celery and tomatoes, that give a pleasing contrast of color and texture. Some cooked or canned vegetables may also be used. For the hearty topping, you can use meat, fish, poultry, cheese, hard-cooked or deviled eggs. Many cooks plan a Chef's Salad to include small amounts of leftover cooked vegetables and meat.

Check over the salad recipe and decide which ingredients you will use today. Wash salad greens and other raw vegetables as much ahead of time as possible. Drain thoroughly. Store in the refrigerator to chill and crisp.

A true Chef's Salad can be the feature attraction of a lunch or supper. The menu below would be perfect for a summer day. You may like to try the salad with cheese bread.

*Chef's Salad with French Dressing

Cheese Bread
Butter or Margarine
Ice Cream
Cookies
Milk
Coffee or Tea

*Chef's Salad (Serves 4 or 5)

1 1/2 quarts salad greens, coarsely torn
1 cup sliced celery
1 cup cheese strips or cubes
2 hard-cooked eggs, in slices or wedges
1 1/2 cups cooked ham, chicken or other meats or fish
(cut in strips or cubes)
Tomato wedges, if desired

1. In a large bowl, toss together salad greens and celery. If possible, use at least two different greens, such as head lettuce, leaf lettuce, endive, spinach, escarole or watercress. Be sure salad greens are crisp and well dried.

2. Add barely enough French dressing to coat each piece. Toss lightly. Or serve the dressing separately to be added by each person.

3. Arrange meat, cheese, eggs and tomatoes attractively on top of the greens.

Variations: Create different Chef's Salads by using other vegetables: thinly sliced green onions, cucumbers, radishes, green pepper slivers, shredded carrots, flowerets of broccoli or cauliflower, or cooked peas or lima beans.

*French Dressing (Makes 1 cup)

1 teaspoon salt
1/2 teaspoon sugar, if desired
1/2 teaspoon dry mustard
1/4 teaspoon paprika
1/4 teaspoon pepper
1/4 cup vinegar or lemon juice
1/4 cup salad oil

Blend dry ingredients in a bottle or small bowl. Add vinegar or lemon juice and mix thoroughly. Add oil and shake or stir again. Always shake dressing just before using or serving.

You may prefer to buy packaged salad dressing mixes to be used with the oil and vinegar. These flavorings come in air-tight packages to protect their freshness. Many combinations are available for making Italian, French, herb or cheese dressings.

*Cheese Bread (Serves 8 to 12)

1 egg
1 1/2 cups milk
3 3/4 cups biscuit mix
1 1/2 teaspoons salt
1 cup (1/4 pound) finely shredded cheddar cheese
1 tablespoon instant minced onion
1 tablespoon poppy seed*

*May be omitted.

1. Preheat oven to 350F (moderate).

2. Grease the bottom of a loaf pan (about 9x5x3 inches) with oil or shortening. Greasing is optional if using a nonstick pan.

3. Place egg and milk in a medium-sized mixing bowl and beat until blended.

4. Add the other ingredients. Stir to blend and beat vigorously for one minute.

5. Pour batter into prepared baking pan. Sprinkle with poppy seed.

6. Bake for 50 to 60 minutes or until the top of the loaf springs back when touched with your finger.

7. Place on a rack to cool for 5 to 10 minutes before removing from the pan.

8. Slice and serve warm. Leftover bread is extra good sliced and toasted.

Shopping Wisely

What did you learn about the cost of different types and containers of oil and vinegar? To compare prices, figure the cost of one cup (eight fluid ounces) of each kind and container size.
Serving
Chef's Salad may be served in a large wooden, glass, china, pottery or plastic bowl. The greens may be tossed in the serving bowl. Or toss them first and then transfer them to a serving bowl lined with lettuce leaves. Each person will need a large plate for his salad. For individual salads, use dinner plates or shallow soup dishes on dinner plates.
Arrange a place setting for a salad lunch or supper. If a small plate is used for the cheese bread and butter or margarine, place it above and slightly to the left of the fork tip.

To Test Tube #1 — ½ teaspoon water
To Test Tube #2 — ½ teaspoon vinegar
To Test Tube #3 — ¼ teaspoon paprika
To Test Tube #4 — ½ teaspoon vinegar and ¼ teaspoon dry mustard
To Test Tube #5 — ½ teaspoon egg white mixture
To Test Tube #6 — ½ teaspoon egg yolk mixture

If bottles are used, the amounts of oil and other ingredients may have to be increased.

6. With thumb over the end of the tube, shake tube vigorously 50 times. Observe each tube immediately after shaking and after it has stood for 10 minutes. Conclusions: Did the oil and liquid separate in any of the tubes after shaking? In which tubes did the oil and liquid remain mixed after shaking? In which tubes did the oil separate out after standing? If you are not sure why the results differed, turn to page 32.

Why shake or stir French dressing just before using? You'll Need
6 test tubes and a test-tube rack
(or 6 small bottles)
Crayon or marking pencil
1 egg
4 small cups
2 forks
6 sets of measuring spoons
(or measure the ingredients in advance)
Water
Salad oil
Vinegar
Paprika
Dry mustard
Note: Six persons will be needed if all of the experiments are conducted at the same time.

What To Do
1. Number test tubes or bottles 1 through 6. Decide who will be responsible for the experiment with each test tube.
2. Separate the egg white from the yolk, placing each in a cup. Beat the white with fork until thick and thin portions are blended. Beat egg yolk slightly.
3. In a cup, blend together 1 tablespoon egg white and 1 tablespoon water. In another cup, blend 1 tablespoon egg yolk and 1 tablespoon water.
4. Measure 1 teaspoon oil into each test tube.
5. The following ingredients should be added to the test tubes at the same time. Each person responsible for a test tube should have the specified ingredient ready:

(The following experiment will be completed at your next meeting, but needs to be started today.)

Does it make a difference whether eggs are stored in the refrigerator or at room temperature?
You'll Need
4 grade A eggs from the same carton
(they should be from a market where eggs are kept in refrigerated cases)
2 empty egg cartons

What To Do
Basically, you will be storing the eggs in two different ways and examining them at your next meeting. Place two eggs in each carton. Be sure that the large end of each egg is up. Store one sample in the refrigerator and the second sample at room temperature. Mark the cartons to tell them apart when the eggs are later examined.
Salad greens and most other vegetables used for Chef's Salads contain a great deal of water. This makes them lower in calories than vegetables with more solids. If you use salad dressing, however, you increase the number of calories. Here are the calories furnished by one tablespoon of several dressings:

- Blue cheese: 80
- Commercial salad: 65
- French: 60
- Home cooked, boiled: 30
- Mayonnaise: 110
- Thousand Island: 75

Weight watchers who want to avoid the calories in dressing can use:
- less dressing (or none at all)
- lemon juice or vinegar with salt, pepper and herbs or garlic
- whipped cottage cheese or yogurt with salt, pepper and herbs
- dressings that contain no oil.

How Did You Do?
Very well ☐  Need to improve ☐

How is your Chef's Salad?
☐ Is it fresh-looking and attractively arranged and served?
☐ Are the ingredients in pieces that are easy to eat?
☐ If you tossed the salad, did you use just enough dressing to coat each piece?
☐ Does your salad taste good?

How is your Cheese Bread?
☐ Is the crust evenly browned, tender and thin?
☐ Is the top slightly rounded with few or no cracks?
☐ Is the loaf light in weight for its size?
☐ Is the bread moist with medium-fine texture and evenly distributed cheese, onion and seeds?
☐ Does the bread have a distinct, well-blended flavor?

Did you learn:
☐ how to cut or tear greens for a salad?
☐ how to make French dressing?
☐ why the oil separates from French dressing upon standing?
☐ how to prepare and serve a Chef's Salad?
☐ how to make Cheese Bread?

Things to Do For Next Time
1. Decide who will bring two plastic covers (5 inches or more in diameter) to complete the egg storage experiment.
2. Decide who will show the results of the egg experiment and hard cook an egg from each sample.
3. Plan for demonstrations. Here are some ideas based on what you learned from this meeting:
   - How to arrange a place setting for a salad supper
   - How to make a basic French dressing
   - How to tear or cut greens for salad
   - How to slice and serve a quick loaf bread
Omelets look elegant, but they're surprisingly easy to prepare, especially with a nonstick skillet. Once you've learned the technique of fixing and folding a plain or puffy omelet, you'll be serving omelets for lunch and supper too.
Planning Guide

Which will you prepare, a plain (French) omelet or a puffy one? Half of your club may want to make one kind and half the other. Both omelets take the same ingredients, but see what happens when different mixing and cooking methods are used!

For a French omelet, egg whites and yolks are beaten together and cooked on top of the range. For a puffy omelet, whites and yolks are beaten separately with the yolks folded into the whites. Puffy omelets are cooked on top of the range for a few minutes and then finished in a preheated oven.

Notice all the variations possible. Try one or two now and others later. You may also want to make rolled biscuits again. Here's a breakfast you can make for a special treat:

- Fruit Juice
- Omelets
- Choice of Toppings
- Rolled Biscuits or Toast
- Butter or Margarine
- Sausage
- Strawberry Jam
- Coffee
- Milk

Safety Pays!

Use only clean, sound eggs in such foods as omelets, scrambled eggs, French toast, custards, soft merengues, chiffon pies or puddings into which beaten egg whites are folded without cooking. Cracked or soiled eggs may contain bacteria that can produce food poisoning. Use such eggs only when they are thoroughly cooked.

*French or Plain Omelet
(Makes 1 or 2 servings)

3 eggs
3 tablespoons (50 ml) water
½ teaspoon (1 ml) salt
⅛ teaspoon (0.5 ml) pepper, if desired
1 tablespoon (15 ml) butter, margarine or oil

1. Beat eggs, water, salt and pepper with a rotary beater or fork until yolks and whites are well mixed.
2. Heat the butter, margarine or oil on medium heat in a 7- to 8-inch (17.5 to 20 cm) omelet pan or heavy skillet until just hot enough to sizzle a drop of water.
3. Pour in egg mixture all at once. The mixture should begin to cook immediately at the outer edges.
4. With a fork, carefully lift cooked portions at edges so uncooked mixture flows underneath. Slide pan rapidly back and forth over the heat to keep mixture in motion and sliding freely to avoid sticking.
5. Cook until the mixture is set. The omelet will be moist and creamy on top.
6. Allow the omelet to cook about another minute to brown the bottom slightly.
7. Fold or roll and serve promptly on a heated plate.

To fold or roll an omelet, hold skillet handle with one hand, thumb and finger on top. Then, with the spatula in your other hand, loosen the omelet and fold one side over the other, or roll. Gently shake the pan and use the spatula to slip omelet onto plate. Several small omelets, made one after another, are usually easier to manage than a single large one.

*Puffy Omelet (Makes 2 or 3 servings)

4 eggs, separated
½ teaspoon (2 ml) salt
3 tablespoons (50 ml) water
½ teaspoon (0.5 ml) pepper, if desired
1 tablespoon (15 ml) butter, margarine or oil

1. Preheat oven to 325°F (160°C).
2. Add salt and water to egg whites. Beat until stiff and shiny and whites leave peaks when beater is withdrawn.
3. Add pepper to yolks. Beat until thick and lemon-colored.
4. Fold yolks into egg whites.
5. Meanwhile, melt butter or other fat in a 10-inch (25 cm) skillet with a heat-proof handle. Heat skillet just enough to sizzle a drop of water.
7. Cook slowly until puffy and lightly browned on the bottom (about 5 minutes). Lift omelet gently at edge to judge color.
8. Place in preheated oven. Bake until knife inserted into center comes out clean, 12 to 15 minutes.
9. To serve, tear the omelet gently with two forks into pie-shaped pieces, or cut the omelet halfway through and fold. Turn the wedges over on a heated serving plate so that the browned bottom becomes the top.

For easier beating and greater volume, have egg whites at room (not refrigerator) temperature. Whites will not beat stiff enough if even a small amount of egg yolk, milk, cream, fat or oil is present. Be sure no fat is on the bowl or beater used to beat the whites. Some plastic bowls are porous enough to absorb fat from other products, and this will affect the volume and stiffness of egg whites beaten in them.

Use a piece of shell to remove any yolk that gets into the white. Use a fork, spoon or a larger piece of shell to remove any bits of shell.

When egg whites are beaten just right, they will be moist and glossy with peaks that stand straight but bend slightly at the tips.

(1) Metric measurements
To keep the omelet light and puffy, combine beaten egg whites with the other ingredients very carefully. Fold egg-yolk mixture into beaten whites with a spoon, plastic or rubber scraper or a wire whisk. Use an under-and-over motion starting at one side of the bowl and going down across the bottom, up the opposite side and over the top. Turn the bowl a quarter turn between each of these completed steps. Fold only until blended.

Omelet Variations

Cheese Omelet: Add three tablespoons grated cheese to the ingredients before cooking. Extra cheese may be sprinkled on the omelet before serving.

Herb Omelet: Add one teaspoon (5 ml) fresh minced or ¼ teaspoon (1 ml) dried herbs (such as basil, celery seed, chives, dill, marjoram, mint, onion or parsley) to ingredients before cooking.

Hearty Omelet: Sprinkle top of uncooked omelet with bits of crisp bacon, minced ham or luncheon meat or thin slices of frankfurters. Or mix any of these meats into an undiluted can of condensed cheese, cream of mushroom or celery soup. Heat and serve hot over cooked omelet.

Jelly Omelet: Spread tart jelly, marmalade or preserves on half of omelet just before serving.

Fruit Omelet: Use warm diced or sliced fresh or frozen fruit as a filling or topping. Or thicken canned fruit, such as apricots, cherries, mandarin oranges or peaches, and serve hot over omelet. Plain or spiced applesauce is also good served hot as a topping, filling or accompaniment.

Shopping Wisely

Did you know that the color of the egg's shell has no effect on the nutritive value, quality, flavor or cooking results of the egg? Neither does the fact that an egg is fertile or infertile.

Eggs are graded AA, A and B, depending upon the interior quality and condition and appearance of the shell. Higher quality eggs are ideal for all purposes and are the best choice for frying and poaching. Grade B eggs are good for general cooking and baking.

Eggs are also classified according to size — jumbo, extra large, large, medium and small. This is determined by minimum weight per dozen and has nothing to do with the grade of the egg. Most standard recipes are based on large or medium sizes. Eggs are included in the Meat Group and two eggs count as a serving. Like other foods in this group, eggs provide high-quality protein — protein that contains the essential amino acids needed to build and repair body tissues.

Does the method of storage affect egg quality?
You'll Need
- 2 egg samples stored as directed at the last meeting
- Crayon or marking pencil
- 2 small plates
- 2 plastic covers (each 5 inches or more in diameter)
- 1 egg from each sample, hard-cooked
- Paring knife
- Fork

What To Do

1. Mark each plate and plastic cover, but do not tell anyone else in the group how eggs were stored.
2. Peel hard-cooked eggs and note any difference in the size of the air cells at the large ends of the eggs so that you can report your findings to the group later. Place each egg on the properly marked plate. Cut each egg in half lengthwise.
3. Break each raw egg onto a marked plastic cover.

Conclusions: Is there a difference in the location of the yolks of the hard-cooked eggs? If so, what might have caused the difference? Which of the eggs would be preferable for slicing or deviling?

Which of the raw eggs spreads less, has more thick white that stands high and firm around the yolk? Which egg spreads more and has a thinner, more watery white? Which yolk stands high and is round and firm? (Use a fork or skewer to test the amount of pressure required to break the yolk.)

Can you explain the differences in the hard-cooked and raw eggs? If you're not sure, refer to page 32.
Egg yolks are also an important source of iron. If you are a girl between 10 and 18 years old, or a boy between the ages of 12 and 18, studies have shown that your body has high iron requirements. Although few foods are rich sources of iron, iron is found in a wide variety of foods. Other foods, besides eggs, that provide iron are lean meats, liver, dried peas and beans, dark green vegetables, many dried fruits and whole or enriched grain foods.

For extra ACTION
Listed below are foods three teenagers ate in one day. Compare these lists with foods recommended in the daily plan on page 1. How do these meals and snacks rate? What type of food do all three teenagers need to increase? How would you change the menus? If you aren’t sure, refer to page 32.

<table>
<thead>
<tr>
<th>JOANNE</th>
<th>MARGO</th>
<th>MIKE</th>
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<tbody>
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<td>Fried egg</td>
<td>Scrambled eggs</td>
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<tr>
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<td>Bacon</td>
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<td></td>
<td>Cocoa (1/4 cup)</td>
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<td>Hamburger sandwich</td>
<td>Pot roast with gravy</td>
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<td>Green beans and corn</td>
<td>Mashed potatoes</td>
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<td>Molded fruit salad</td>
<td>Cabbage slaw</td>
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<td>Chocolate pudding (1 cup)</td>
<td>Whole wheat bread (1 slice)</td>
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<td>Milk (8 ounces)</td>
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<td>Turkey slices</td>
<td>Peanut butter sandwich (enriched bread)</td>
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<td>Banana</td>
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<td>Hamburger patty French fries Peas Cornbread Apple Pie</td>
<td>Roast turkey, dressing Mashed potatoes, gravy Lime beans and corn Hot roll (enriched), butter</td>
<td>Pork Chops Mashed potatoes Buttered corn Chocolate ice cream (1/2 cup)</td>
</tr>
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</table>

How Did You Do?

Very well □ Need to improve □

Is your French or plain omelet:
□ delicately brown on the bottom with no dry, hard crust?
□ folded or rolled evenly and attractively?
□ served attractively on a heated plate?
□ tender, light, moist and creamy with no parts not set or overcooked?
□ good tasting?

Is your puffy omelet:
□ tender with a light golden-brown crust?
□ soft and moist, with fine, uniform air cells throughout?
□ puffy, with no separation into layers?
□ folded evenly or divided into uniform wedges?
□ attractively served on a heated plate?
□ good tasting?

Did you learn:
□ how to combine ingredients for a French omelet?
□ how to cook a French omelet?
□ how to roll or fold a French omelet?
□ how to separate eggs to avoid breaking yolks?
□ the best stage of beating whites and yolks for puffy omelets?
□ how to fold yolk mixture into whites to retain the most air?
□ how to vary omelets with added ingredients?
□ how to use metric measuring cups?

Things to Do For Next Time

1. Decide who will price all the brands and can sizes (based on weight) of baked beans and pork and beans available at a market. Make a note of the information given on labels that indicates a difference in types and amounts of ingredients.

2. Plan for demonstrations. Here are some ideas based on what you learned at this meeting:
   - How to store eggs.
   - How to select grades and sizes of eggs for different purposes.
   - How to cook a French omelet.
   - How to separate eggs and to remove bits of shell or yolk from whites.
   - How to determine the proper stage of beating whites and yolks for puffy omelets.
Two go-togethers—that's the best way to describe this baked bean casserole with its great old-fashioned beanpot flavor. It used to take hours of slow cooking to brew such savory goodness into baked beans. Now you can do it in 30 minutes or less—with a can of beans! For a perfect combo, prepare a pan of cornbread and serve it so hot that butter melts right in.
Planning Guide

Because the casserole is quickly prepared, you might like to fix a full meal. Or at least a bake-along hot bread. How does this menu sound for a backyard supper or an indoor lazy-day buffet?

*Frank 'n' Bean Casserole
Relishes
*Cornbread
Butter or Margarine
Ambrosia
Milk
Coffee or Tea

There are many kinds of cornbread. Some are made with cornmeal and no flour. Some have little or no sugar and fat. A recipe, like the one given, that calls for equal amounts of cornmeal and flour makes a bread that is less crumbly than one made from all cornmeal. Use a different recipe, if you prefer. Be sure it will bake at the same temperature as the beans.

Whenever you open a package of flour, cornmeal or other cereal product, store the contents in a tightly covered container. This will keep out dust, moisture and insects. If such foods must be stored at a high temperature, buy them in small amounts and inspect often for weevils.

Ambrosia is a simple dessert that tastes as heavenly as it sounds. To make ambrosia, sprinkle orange slices or sections with coconut and chill. Pineapple chunks, banana slices and grapes also are delicious mixed with the oranges.

*Frank 'n' Bean Casserole

(Makes 3 to 4 servings)
1-pound (454 grams) 1(1) baked beans or pork/beans.
½ medium onion, chopped fine
(or 1 ½ teaspoons (10 ml) instant minced onion)
¼ teaspoon (1 ml) salt
1 tablespoon prepared mustard (15 ml)
½ cup (75 ml) molasses or sorghum
½ cup (75 ml) chili sauce or ketchup
4 to 6 frankfurters, sliced
or
3 to 4 slices luncheon meat

1. Preheat oven to 400F (200°C).
2. Mix all ingredients but the meat in a 1-quart (1 liter) baking dish. Arrange the frankfurters or luncheon meat on top.
3. Bake about 30 minutes.

To save time, mix all ingredients together in a heavy skillet or saucepan. Cook on top of the range until the flavors are blended, about 10 or 15 minutes.

(1) Metric measurements

*Cornbread

1 cup (250 ml) sifted enriched flour
4 teaspoons (20 ml) baking powder
1 teaspoon (5 ml) salt
¼ cup (60 ml) sugar
2 eggs
1 cup (250 ml) milk
¼ cup (60 ml) oil or melted fat
1 cup (250 ml) enriched yellow cornmeal
1. Preheat oven to 400F. (200°C).
2. Grease the bottom of an 8- or 9-inch (20-22.5 cm) square baking pan.
3. Sift together the flour, baking powder, salt and sugar.
4. In a medium-sized mixing bowl, beat the eggs, milk and oil or melted fat until blended.
5. Add flour mixture and cornmeal and stir until batter is just smooth.
6. Pour into greased pan and bake about 25 to 30 minutes or until done. Serve hot.

To save time, use a cornbread mix. Follow directions on the box.

For variety cook cornbread in muffin or cornstick pans.

Shopping Wisely

What did you learn about the brands, can sizes and costs of baked beans and pork and beans?

Perhaps you noticed that the ingredients of a food product are sometimes listed on the label and sometimes not. Do you know why? No ingredients are listed if a governmental standard has been set for a product. However, if a company varies the kind or amount of ingredients from the standard, then all ingredients must be listed. When no standard has been set, the label must list all ingredients in descending order, according to amounts used.

Serving

You're probably an old hand by now at arranging a buffet meal. If you plan to serve the suggested menu buffet style, decide how you can keep the beans and cornbread piping hot and the relishes and ambrosia cold. You might want to preheat a second casserole of beans to bring out later. How would you keep them warm?
Wrapping the pieces of cornbread in a napkin would help hold in the heat. You could serve them in a basket. The raw vegetable felishes would keep crisp and cold in a bowl of crushed ice. The ambrosia, either in a large bowl or in individual dishes, can be refrigerated until time for dessert.

What To Do
1. Choose two persons to be responsible for each of the five bottles, one person to time the experiment and the other to record the results in the chart.
2. Number the bottles 1 through 5.
3. Measure one teaspoon baking soda on each of five pieces of waxed paper (each about 4” by 6”).
4. Pour ½ cup cold water into bottle #1, #2 and #3; ½ cup sour milk or buttermilk into bottle #4; and ½ cup molasses or sorghum into bottle #5.
5. Add three tablespoons of vinegar to bottle #2 and shake until blended. Add two teaspoons cream of tartar to bottle #3 and shake until dissolved.
6. Decide on the signal the timer will give to start the experiments. The moment this signal is given, each person adds the one teaspoon soda to his bottle. Immediately place a balloon over the mouth of each bottle. This can be done most easily if one person holds the bottle firmly on the table while the other places the balloon. The balloon must be placed quickly to capture all of the gas produced.
7. Shake each bottle until the soda dissolves completely.
8. Watch the bottles closely and tell the timer when the first gas bubbles start to form. The recorder writes this number in the chart, as well as the total time that gas is formed and the comparative size of each balloon.

### Find Out Why

Why is baking soda sifted with flour and not dissolved in a liquid?

**You'll Need**
- 5 small bottles (identical in size)
- Crayon or marking pencil
- Baking soda
- Waxed paper
- 3 glass measuring cups with pouring spout
- Cold water
- Sour milk or buttermilk
- Molasses or sorghum
- Measuring spoons
- Vinegar
- Cream of tartar
- 5 small balloons
- Stopwatch, or clock with a second-sweep hand

Note: Eleven, or preferably 12, persons will be needed to complete all of this experiment at the same time.

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Minutes Until First Gas Forms</th>
<th>Total Time Gas Forms</th>
<th>Balloon Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1 Water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#2 Water or vinegar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#3 Water and cream of tartar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#4 Sour milk or buttermilk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#5 Molasses or sorghum</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Conclusions: Did gas form in all of the bottles? Which treatment caused the gas to form most rapidly? Most slowly? Which treatment caused gas to form the longest? Which balloons became the largest? Why? What do you conclude about using soda in baking breads or cakes? If you are not sure why the results differed, turn to page 32.
Foods in the Meat Group of the daily food plan supply a good share of the protein our bodies must have to build and repair tissues. Foods such as meat, poultry, fish and eggs give high-quality animal protein. (Milk, cheese and other milk products are also good sources of animal protein but are usually counted in the milk group.)

Plant foods also provide some protein. Because baked beans, as well as other dishes made from dried beans or peas and nuts, are especially good sources of plant protein, they are included in the Meat Group. But because plant proteins do not contain all the necessary amino acids, at least a small amount of animal protein should be eaten at every meal.

Two or more servings are recommended daily from the Meat Group. Count any of the following as one serving:
- 3 ounces of lean, cooked boneless meat, poultry or fish
- 2 eggs
- 1 cup of cooked dried beans or peas
- ¾ cup of peanut butter

The cornbread recipe calls for enriched yellow cornmeal. Yellow cornmeal has vitamin A value, but white has only a trace.

How Did You Do?
- Very well □
- Need to improve □

How are your baked beans?
□ Do they seem moist enough but not too juicy?
□ Do they have enough but not too much meat?
□ Are the beans still firm?
□ Are the flavors well-blended with no flavor too pronounced?

How is your cornbread?
□ Is the top slightly rounded with few or no cracks?
□ Is the crust tender, thin and an even golden-brown in color?
□ Is the bread lightweight for its size?
□ Is it moist and tender but not too crumbly?
□ Does it have a medium-fine texture?
□ Does it taste good with flavors well-blended?

Did you learn:
□ which foods are included in the Meat Group and the amounts that count as a serving?
□ why some food labels list ingredients and others do not?
□ how the amount of acid affects the amount of gas formed?

Things to Do For Next Time
- Plan for demonstrations. Here are ideas based on what you learned at this meeting:
  - How different brands and can sizes of baked beans or pork and beans vary in cost per one-cup serving.
  - How to store opened packages of flour and cereals.
  - How to plan supper menus to save time.
  - How to arrange a buffet table and plan for serving the meal.
Extra Special Pie

A party calls for an extra special pie. So why not make one? Invite your friends, dust off the records, plan a few games... and have a great time. What's the occasion? Maybe a slumber party. Or a come-on-over-after-the-school-play affair. Or to celebrate vacation! In any event, a serve-yourself dessert would surely add to the fun.

Planning Guide

Party desserts are often fancier and richer than those served with a meal. Here's your chance to make an unusual dessert or to serve a more familiar one in a special way. In choosing a party dessert, consider such questions as these:

Is it one most people will like?

Will it be too expensive for the number to be served?

Is it one you can make with good results?

Do you have the necessary equipment and space to prepare and serve it?

Does it require much last-minute preparation?

Is it attractive? Will it still look good after some guests have served themselves?

Is it easy—and not messy—for guests to serve and eat?

If you serve this unusual pie made with fruit you'll find that it meets all the requirements for an easy-to-fix, easy-to-eat and delicious dessert. The only other food you'll need with it is a favorite beverage to drink.

Surprise Pie (Serves 8 to 12)

Topping:
- ½ cup brown sugar, firmly packed
- ½ cup sifted enriched flour
- ¼ cup (½ stick) butter or margarine
Crust:
- 2 cups sifted enriched flour
- 2 teaspoons baking powder
- 1 teaspoon salt
- ½ cup shortening
- ½ cup milk

Filling:
- 1-pound can sliced peaches (drained)
- 1-pound can red sour cherries (drained)
- ½ pound (2 cups) finely shredded or grated cheddar cheese

1. Combine brown sugar, ½ cup flour and butter or margarine for topping. Mix until well blended and crumbly. Set aside.
2. Thoroughly grease two 9- or 10-inch pie pans or a large pizza pan.
3. Preheat oven to 375F (moderate).
5. Add milk to make a soft dough. Knead lightly.
6. Press into pans so that the crust will be as thin as possible.
7. Cover crust with drained peaches and cherries, and then the cheese. Sprinkle on the topping mixture.
8. Bake in a preheated oven for 25 minutes. Cut into wedges. Serve either warm or cold.

For variety, substitute other fruits such as canned, fresh or frozen apples, apricots, blueberries, pears, pineapple, plums or rhubarb.
Shopping Wisely

Next time you will be preparing a luncheon or supper for your family or friends. You need to decide now what you will serve, who will do the shopping, and who will assume other responsibilities. Perhaps only one or two will do the actual shopping, but making out the grocery list together will give all members a chance to review things learned about buying. To shop wisely:

- Decide how much money you will spend on food and other supplies.
- Write a complete list of the types and amounts of food needed. Include also napkins, tablecloths, decorations, detergent and any other needed supplies.
- Check the supply of food you have on hand.
- Make your shopping list, listing similar foods together to save time while shopping.
- Take the list to the market and check off each item listed, so you won't need to make an extra trip to buy things you forgot!

Courtesy

Good shoppers are thoughtful and considerate of others in a grocery store. Instead of several 4-H members shopping together, separate at least into pairs and have a central meeting place. You can accomplish more in the time available and won't block the aisles for other shoppers.

Pinching and rough handling of fresh produce will cause it to deteriorate rapidly. Such practices not only increase food costs but are unfair to others not having your knowledge of quality foods. Pick up food that falls to the floor and replace it on the shelf or counter.

What are some of the good and less desirable manners you've seen displayed in markets?

How many calories do you need? That depends on such things as your age, your sex, your size, how fast you are growing and how active you are. In general, girls aged 12 to 14 need about 2300 calories a day. Boys of the same ages need 2700 calories.

The following menus show you how calories add up to the total you might need in a day. If you like to eat snacks, what foods could you leave out so that you could add snacks without increasing calories? What snacks might you add to give the same or fewer calories? Your County Extension office will have charts that show calories for various foods. Try to choose snacks that give protein, minerals and vitamins as well as calories.

<table>
<thead>
<tr>
<th>Breakfast (610 calories)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange juice (1/2 cup)</td>
<td>60</td>
</tr>
<tr>
<td>Poached egg</td>
<td>80</td>
</tr>
<tr>
<td>Bacon (2 slices)</td>
<td>100</td>
</tr>
<tr>
<td>Whole wheat toast (2 slices)</td>
<td>110</td>
</tr>
<tr>
<td>Butter or margarine (2 pats)</td>
<td>100</td>
</tr>
<tr>
<td>Whole milk (1 cup)</td>
<td>160</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lunch (530 calories)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hamburger sandwich</td>
<td>280</td>
</tr>
<tr>
<td>Carrot sticks (1/2 carrot)</td>
<td>10</td>
</tr>
<tr>
<td>Celery sticks (1 stalk)</td>
<td>5</td>
</tr>
<tr>
<td>Dill pickle</td>
<td>5</td>
</tr>
<tr>
<td>Apple</td>
<td>70</td>
</tr>
<tr>
<td>Whole milk (1 cup)</td>
<td>160</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dinner (1,150 calories)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pot roast (3 ounces lean and fat)</td>
<td>245</td>
</tr>
<tr>
<td>Mashed potatoes (1/4 cup)</td>
<td>95</td>
</tr>
<tr>
<td>Green beans (1/2 cup)</td>
<td>15</td>
</tr>
<tr>
<td>Head lettuce (1/4 head)</td>
<td>10</td>
</tr>
<tr>
<td>Thousand Island dressing (2 teaspoons)</td>
<td>150</td>
</tr>
<tr>
<td>Whole wheat bread (1 slice)</td>
<td>55</td>
</tr>
<tr>
<td>Butter or margarine (1 pat)</td>
<td>50</td>
</tr>
<tr>
<td>Ice cream (1/2 cup)</td>
<td>150</td>
</tr>
<tr>
<td>Chocolate sauce (2 tablespoons)</td>
<td>100</td>
</tr>
<tr>
<td>Sugar cookie (3-inch diameter)</td>
<td>120</td>
</tr>
<tr>
<td>Whole milk (1 cup)</td>
<td>160</td>
</tr>
</tbody>
</table>

Total calories for three meals 2,290 calories

How Did You Do?
Very well □ Need to improve □

Does your Surprise Pie

□ look attractive with an evenly browned top and no tough or stringy cheese?
□ have a good proportion of filling, crust and topping?
□ have an evenly browned crust that is thin, tender and flaky with little or no soaking?
□ taste good with a well-blended flavor?

Did you learn:

□ how to plan a menu for a dessert party?
□ how to plan grocery shopping?
□ how to plan a day's meals and snacks considering calories?
□ how to show courtesy in the grocery store?
As a group, you now have the knowledge and skill to plan, prepare and serve a luncheon or supper that your guests, families, or friends will enjoy. If you apply all you've learned in this unit about planning meals, preparing them in easy, time-saving ways, serving and courtesy, the meal you serve will be a sure success.

Planning Guide

To plan a meal for family or friends, you'll need to decide many things: what to serve, where the luncheon or supper will be held, whether you will have entertainment — plus all the arrangements for inviting the guests, making them feel welcome, preparing the food, serving and cleaning up.

Think through your plans and the jobs that have to be done. Then make a chart so that each person will know exactly what he needs to do and when.
Answers to

find out why experiments

#1 (page 8) Why macaroni is slowly added to rapidly boiling water?

Since macaroni has a high starch content, it swells as it cooks and absorbs water. A large amount of water is needed for the macaroni to expand and to keep the pieces from sticking together.

Adding macaroni slowly to rapidly boiling water gives the pieces less chance to stick together or settle to the bottom of the pan. If macaroni is dumped into boiling water (especially if a small amount of water is used), at least some of the macaroni will tend to stick together or sink to the bottom.

#2 (page 11) How the preparation method affects baked potatoes.

Potatoes wrapped in aluminum foil tend to bake in a shorter time than unwrapped potatoes. This is because metal, especially with a dull finish, absorbs heat faster and holds it better than the potato skin. (Many restaurants bake potatoes in foil for this reason.) The tight foil wrapping holds in steam, resulting in a softer skin, but also may cause the potato to be heavy and soggy.

If you prefer fluffy, mealy potatoes, choose potatoes #1 and #3. The first potato will have a soft skin, while the skin on #3 will be more crisp and chewy.

Your preference in baked potatoes will probably depend on how your mother prepares them and your own personal taste. All three methods are acceptable. Prepare potatoes by the method that gives the results you prefer.

#3 (page 15) Affect of adding nonfat dry milk to Chowder.

The answer is given in the meeting.

#4 (page 19) Why shake French dressing just before using?

Why did the oil separate from the water and rise to the top as soon as you stopped shaking the tube? Because there was no emulsifying agent present to keep the oil separated into tiny drops. Your results were probably the same with the plain vinegar. Paprika and mustard help to keep the oil mixed with the vinegar for a short time, but unless you use large amounts of paprika or mustard, the oil will separate on standing. This shows why you should shake French dressing immediately before using.

Egg white helps to stabilize emulsions but is not as effective as egg yolk. Neither is used in French dressing. But the yolks or whole eggs, as well as dry mustard, are used in mayonnaise to keep the oil from separating.

Commercial salad dressings contain starch and egg to keep the oil from separating. Some modified French dressings contain gelatin or other ingredients that keep the oil from separating.

#5 (page 23) How storage methods affect egg quality.

The egg stored in the refrigerator spreads less, has a thicker white and a higher, firmer and more rounded yolk. In the hard-cooked refrigerated sample, the yolk was at or near the center of the white.

The egg stored at room temperature showed a marked thinning of the white and a flattening of the yolk. Yolk membrane broke with less pressure. In the hard-cooked sample, the yolk was closer to one side of the white. The air cell in this egg was larger than in the refrigerated egg.

When an egg is freshly laid, the shell is completely filled. The air cell at the large end forms as the white and yolk contract during cooling and as moisture is lost through the pores in the shell. A high-quality egg has only a small air cell. The yolk is well centered, and a large proportion of the white is thick. The yolk is supported in the center of the white by two cordlike, twisted strands of albumen (protein). In high-quality eggs, these strands are usually thick and firm.

Refrigeration controls temperature and humidity and helps maintain egg quality. The egg carton is a good refrigerator container. It covers the eggs lightly and holds them in the preferred position — large end up, to help keep the yolks centered.

#6 (page 27) How baking soda reacts with acid.

Baking soda (sodium bicarbonate) plus an acid and water produces the gas carbon dioxide. All of the bottles, except #1, included varying amounts of acid. The first bottle contained only water and, for this reason, produced little or no gas.

Other acid-containing foods, in addition to those used in the experiment, with which soda can be used include milk with added vinegar or lemon juice, sour cream or fruit juice. Foods used with soda vary in the amount of acid they contain. Only enough soda should be used to neutralize or balance the acid in the liquid. Too much soda results in baked products with a yellowish color and a bitter or "soapy" taste. Many sour-milk-soda recipes include baking powder to make products light enough without causing an off-flavor.

When using soda in a recipe, sift it with the flour. Dissolving it in warm water or in the acid ingredient will cause more gas to be lost before the baking begins.

Answer to Question (page 24)

Fruits and vegetables high in vitamin A need to be increased. Dark-green and deep-yellow vegetables and a few fruits high in vitamin A are: apricots, broccoli, cantaloupe, carrots, chard, collards, cress, kale, mango, persimmon, pumpkin, spinach, sweet potatoes, turnip greens, and winter squash.
Plan a day's meals

Use the handy chart below to plan a full day's meals for yourself and your family. Be sure to include foods from each of the four groups in the daily guide (page 1) and in the proper amounts.

breakfast

lunch

dinner or supper

snacks (if desired)