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4-H FOOD MAGIC



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A FUN WITH FOODS PROJECT

Members Manual

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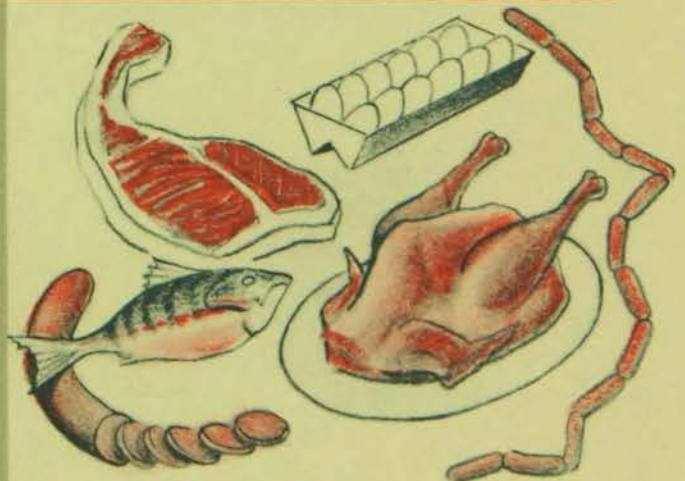
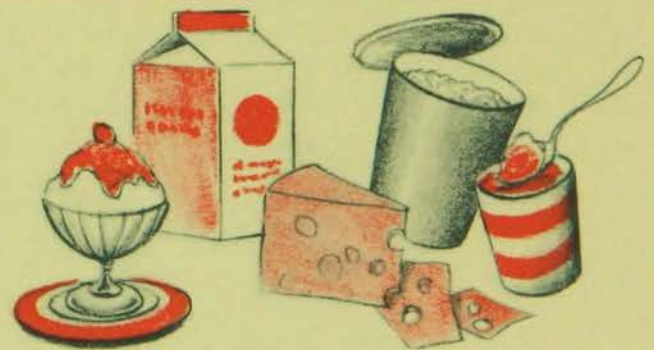
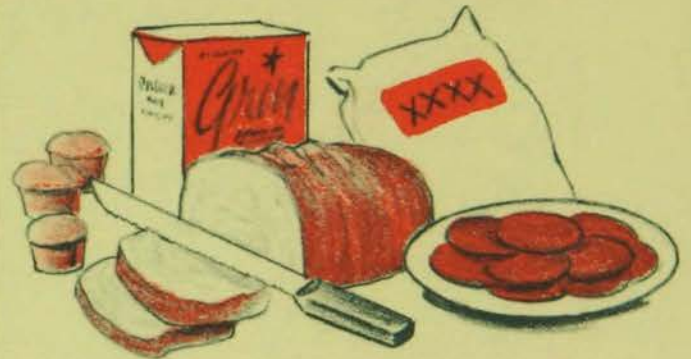
Tricks for Treats

YOU CAN BE A KITCHEN MAGICIAN! It's really very easy. And lots of fun. With just a little know-how you can turn a few basic ingredients into foods that are fun to fix, a treat to eat . . . good for you, too! Would you like to try a main dish? A snack? A yummy dessert? Try them all!

You may need a little help at first from your mother, your 4-H leader, maybe even your dad or big sister. You'll probably ask a lot of questions. Most beginning cooks (and beginning magicians) do. But very soon, you'll be able to prepare a whole meal, all by yourself.

Every good magician needs a book of tricks. This is yours. It tells you how to prepare many lip-smacking, taste-tempting treats. Even better, it explains how the cooking magic in each recipe works best. Follow the directions and helpful "tricks" and you'll find that each treat you try will turn out right every time!

Now . . . If you're ready to surprise your family and amaze your friends, let's head for the kitchen and begin.



Let's Set the Stage

HAVE YOU EVER NOTICED how carefully a magician sets his stage? Kitchen magicians do, too. Everything must be just so! Whenever you start to cook:

- 1** Protect yourself from spots and spills. Wear clothes that are clean and washable.
- 2** Make sure there's nothing up your sleeve, not even a little dirt! Clean hands, clean nails . . . that's an important rule.
- 3** No one likes to find hair in food! Before you begin to cook, comb your hair, hold it back with a band or pin, then keep your hands away.
- 4** Assemble all the ingredients and equipment you need. Use standard measuring cups and spoons—and pans that are the right kind and size for the job.
- 5** Know what you need to do and when. Read the recipe carefully. If you're ever in doubt, ask for help.

Is your stage just about set? Hands washed? Hair back? Clothes clean and washable? Then you're ready to tackle Treat No. 1, a supper that's really super!



Frankly Super Supper

TREAT I

LET'S START OFF BIG and pull a super supper out of the hat. How does this menu sound to you?

Grilled Frankfurter-Cheese Sandwiches

Carrots and Celery Strips

Fruit

Cookies

Milk

Sandwiches are easy to fix. Grilled sandwiches are especially good. Since hot foods taste best HOT and cold foods taste best COLD, we'll serve our sandwiches hot. Your leader will even show you how to warm the serving platter.

You will also be preparing the carrot and celery strips. These you want cold. So fix them first and place them in the refrigerator. They'll be crisp and crunchy when you're ready to serve.

Be Safe, Not Sorry! Save your fingers from cuts and burns. Use a board for cutting the vegetables. Use a turner when you turn the sandwiches or transfer them to a serving platter. Always peel carrots away from you!

CARROT STRIPS

1. Wash carrots. Then peel with a vegetable peeler or knife.
2. Place carrot on cutting board and cut in half cross-wise.
3. Cut in quarters lengthwise.

CELERY STRIPS

1. Scrub celery. Clean each stalk, inside and out.
2. Cut into pieces 3 or 4 inches long.
3. Now cut lengthwise into strips.



FRANKFURTER-CHEESE SANDWICHES

(Makes 6 sandwiches)

Ingredients:

- 12 slices of bread
- Butter or margarine
- 9 frankfurters
- 6 slices cheddar cheese

Equipment:

- Skillet
- Paring knife
- Pancake turner
- Potholder

1. Spread each slice of bread with butter or margarine. Then turn on waxed paper or paper toweling and spread the other side.
2. Split frankfurters in halves lengthwise.
3. Place 3 frankfurter halves on each of 6 slices of bread. Cover with a slice of cheese and then a second slice of bread.
4. Using a pancake turner, place the sandwiches meat side down in a heated skillet.
5. Cook slowly on one side until brown. Turn and brown the other side.
6. Take the sandwich from the pan with a turner.
7. Cut each sandwich into 4 triangles and serve.



HELPFUL TRICKS

Serving: Serve the sandwiches and relishes on separate plates. Try a little artistry. Arrange them as attractively as you can. Eye-appeal makes everything taste a little better!

Cleaning Up: Lucky you! Only three things to wash. You can clean up in no time at all. Use hot, sudsy water for the skillet, knife and turner. (Don't scour the pan if it's teflon!) Is your working place neat and tidy? Is everything put away?

Buying Tips: Before your next meeting, check the frankfurters at your grocery store. Read the labels. Are they all alike? What meat do they contain? All beef? Pork? Veal? A mixture? Have any ingredients other than seasonings been added?

USE MAGIC FORMULA 4-4-3-2 *For a Healthier, Stronger, Happier You!*

Did you know that your body is made up entirely of the building materials or food "nutrients" found in the 4-4-3-2 plan? Some of what you eat actually becomes a part of your body. That's why you need definite amounts of these nutrients to be healthy and to feel and look your best.

Turn back to the front of the book and you'll notice that the 4-4-3-2 formula includes four basic food groups. How many of these food groups are represented by what you prepared today? If you used cheese and meat . . . enriched or whole grain bread . . . vegetables for relishes, you must have included all four!



MAKING THE MAGIC WORK

EXPERIMENT 1: How do you prevent cheese from cooking tough and rubbery?
(Did yours?)

PROCEDURE: Cut a slice of cheddar cheese in half. Place the cheese on two pieces of foil in a skillet. Be sure the foil is flat against the bottom of the pan. Heat slowly until cheese is softened. Remove one slice. Increase the heat and continue cooking the other piece of cheese for a few minutes. Remove and examine both pieces.

CONCLUSION: Do you notice that one piece of cheese is rubbery? Which one? Can you explain why? Cheese contains a large amount of protein, as do eggs and meat. A high temperature and overcooking will cause the protein in cheese to get stringy and tough. Take another look at your grilled sandwich recipe. It says, "Cook slowly." Now you know why!

HOW DID YOU DO?

good need to improve

Is your sandwich:

- evenly browned but not burned on the edges?
- attractively served?
- not soggy?
- not tough and stringy?
- good tasting?

Are the carrot and celery sticks:

- cut in easy-to-eat sticks?
- even in size?
- attractively served?
- crisp and cold?
- good tasting?

Did you learn to:

- make carrot and celery strips?
- make grilled sandwiches?
- serve hot foods hot and cold foods cold?

PLANNING FOR NEXT TIME

1. Who will bring glass measuring cups for a science experiment at the next meeting?
2. Who would like to give demonstrations (showing and telling how)? Here are some suggestions, based on what you learned at this meeting:

How to wash celery

How to peel carrots and cut strips

How to cut celery strips

How to warm serving plates

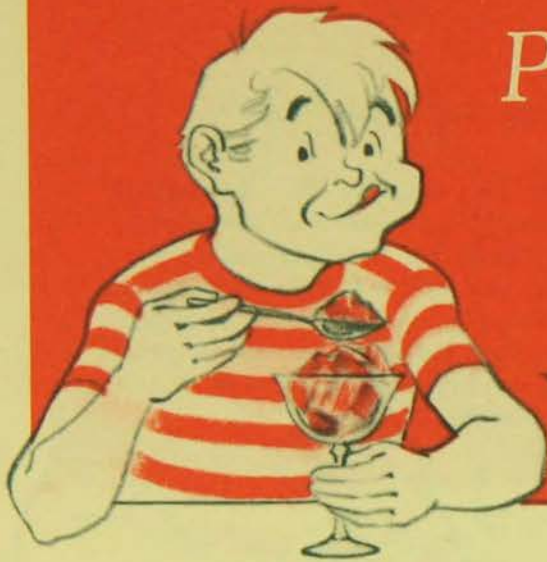
How to cut and serve grilled sandwiches

If you're giving a demonstration, practice at home before the next meeting.



Plain & Fancy Puddings

TREAT II



WHAT DID YOU LEARN about frankfurters at the grocery store? The next time you make a "Frankly Super" supper, use another kind of frankfurter. See if you notice a difference.

Would you also like to try a different dessert? Pudding is always a favorite. Leave it plain, or trim it fancy, the fixing's easy with a mix! All you really need to know is how to measure milk. (Recipes always call for *level* measurements. If you use standard measuring cups and spoons and follow the instructions in "Helpful Tricks" below, you won't have any trouble.)

Pudding mixes come two ways — regular and instant. Compare them. Make one of each in the same flavor. Then you can tell which you like better.

Be Safe, Not Sorry! Keep the pudding in the pan and off the floor. To prevent spills, turn the handle of the pan away from you. Never let it hang out over the edge of the stove.

HELPFUL TRICKS

Measuring Milk: Use a glass measuring cup with a spout for pouring and a space above the one-cup mark. Place the cup on a table

and pour in the milk. Read the liquid measurement at eye level.

Do's and Don'ts: Do watch that the spoon handle doesn't get too hot. It might burn your hand. Don't stir and taste with the same spoon.

Serving: Here's a great idea for a party! Serve a "do-it-yourself" dessert tray. Prepare the pudding several hours ahead and chill in an attractive serving bowl. Don't let a crust form on top! (See Experiment 3.) When it's time for refreshments, give each guest an individual serving plate, a dish for his pudding and a spoon. Then serve the bowl of pudding surrounded by several choices of topping, and let your friends help themselves. M-m-m. Delicious and fun!

Cleaning Up: Soaking pans right after use makes washing them later much easier. Use hot water for sweets, cold water for eggs and flour. Which would you use for the pudding?

Buying Tips: Which pudding do you prefer? Instant costs a little more, but your choice will probably be decided by taste and convenience. Keep track of preparation time on the chart (page 7). Compare the puddings and decide.

PUDDINGS PLAIN...

Ingredients:

Box of *regular* pudding mix
Milk (amount shown on box)

Box of *instant* pudding mix
Milk (amount shown on box)

Equipment:

(Can you fill this in?)

1. Follow the directions on the box of each pudding mix. Instant pudding needs no cooking. The regular pudding mix should be brought to a full boil in a saucepan over medium heat. Don't turn the heat too high! Pudding scorches easily. Stir the pudding all the time it is cooking.
2. Pour each pudding into a large bowl or into individual serving dishes.
3. Serve plain, with milk or cream, or your favorite topping.

HOW DO THE PUDDINGS COMPARE?

If you prefer chilled pudding, allow time for the cooked pudding to cool. Now fill in this chart.

If any of the pudding was kept in the refrigerator for a few hours or overnight, did liquid separate out? Did the puddings differ in thickness, texture, or the way they felt in your mouth? Did either leave a taste that you didn't like?

PUDDINGS FANCY

Who could resist these toppings and trims? The next time you want a fancy dessert for a special meal, try dressing up a plain pudding with one of these:

Chopped nuts	Frozen fruit
Whipped topping	Crushed pineapple
Crushed cookies	Fresh berries or peaches
Two or three small cookies stuck into the pudding	

Swirl any of these over the top or through the pudding:

Maple syrup	Apricot nectar
Chocolate syrup	Undiluted frozen orange juice
Grape juice	

Try layers of two different puddings.

PUDDING MIX:	TIME TO:		TASTE:
	Prepare	Cool	
Regular			
Instant			



MAKING THE MAGIC WORK

EXPERIMENT 2: Why should liquid measurements be read at eye level?

SUPPLIES:

- Pitcher containing about one quart of plain or colored water
- 3 measuring cups (usually glass) with spouts for pouring and space above the one-cup mark
- 1 teaspoon measuring spoon

PROCEDURE:

1. Hold or place the measuring cup so that the one-cup mark can be read at eye level. Measure one cup of water.
2. Now set the cup on a low surface so that the one-cup mark is below eye level. Without stooping, pour in water to the one-cup mark.

3. To measure the third cup of water, pour and measure water with the one-cup mark above eye level.
4. Read the measurements of the last two cups at eye level. Which one contains more than one cup? Which contains less? Using the measuring spoon, see how many teaspoons must be taken from one cup and added to the other to make just one cup of water in each.

CONCLUSION: Your eyes can fool you! Optical illusion makes it impossible to measure liquids accurately unless your eyes are level with the marking on the cup.



MAKING THE MAGIC WORK

EXPERIMENT 3: How can you prevent a hard crust from forming on cooked (not instant) pudding? (You may want to try this experiment at home.)

SUPPLIES:

About one cup of any kind of cooked pudding (not instant)
Small amount of granulated sugar
Four custard cups or sauce dishes
Waxed paper or plastic wrap

PROCEDURE:

1. Place a small amount (about $\frac{1}{4}$ cup) of pudding in each of the custard cups or sauce dishes.
2. Lightly sprinkle the top of one pudding with granulated sugar.

3. Place waxed paper or plastic wrap directly on top of the pudding in the second dish.
4. Place waxed paper or plastic wrap over the top of the third dish.
5. Leave the fourth pudding uncovered.
6. Let the four dishes of pudding stand for at least 30 minutes.

CONCLUSION: Did any of the puddings form crusts? Was the crust on one pudding hard? Which method or methods do you think are best to use? How do you explain the results? (If you're not sure, turn to page 34 for the explanation.)

USE MAGIC FORMULA 4-4-3-2 For a *Healthier, Stronger, Happier* You!

What would make **you** healthier . . . stronger . . . happier? Strong bones? Sound teeth? Muscle power? Lots of energy?

One food provides all of these—the food represented by the magic 3 of our formula. MILK. Bones and teeth need calcium to grow strong. Of all foods, milk supplies calcium best. Milk is also an important source of the muscle builder, protein.

Milk comes many ways, and all of them are nutritious. There's whole milk, nonfat milk (or skim milk), buttermilk, evaporated milk, and nonfat dry milk. Evaporated milk has about half of the water removed. Nonfat dry milk has all of the water and cream (fat) removed. Both cost less than whole milk. To use either evaporated or dry milk as fresh milk, just add the water that is missing.

Did you have at least three glasses of milk today? One serving of pudding equals about $\frac{1}{2}$ cup of milk. Cheese, cottage cheese and ice cream also count toward your daily quota of milk. Can you figure out why?

HOW DID YOU DO?

- good need to improve

Is your pudding:

- smooth with no lumps?
- free from a hard crust on top?
- attractively served with the same amount in each dish?
- thick enough but not too stiff?
- good tasting?

Did you remember to:

- wash your hands?
- take care of your hair?
- wear washable clothes?

Did you learn:

- to make puddings from packaged mixes?
- how to serve puddings attractively?
- to judge puddings?
- how much milk you need each day?
- the different forms in which milk is sold?

PLANNING FOR NEXT TIME

1. Find out the prices of one- and two-quart cartons of whole and skim milk.
2. Also price several size packages of nonfat dry milk. How many quarts will each size make?
3. Who will give a demonstration at the next meeting? Here are several possibilities

from what you learned at this meeting:

How to measure milk

How to make pudding from a packaged mix

How to serve pudding

How to store pudding

Tasty Toast & Cocoa

TREAT III



SERVE THIS TASTY TWOSOME to your family just once. They'll want you to make it often . . . for breakfast on a chilly morning, as a bedtime snack, or for a special treat almost anytime in between. Everyone will love your cinnamon toast and hot cocoa. (You will, too!)

Cocoa can be made in many ways. Let's compare two different methods. First, make a cocoa with fluid whole milk and then with nonfat dry milk. Use a chocolate syrup or cocoa mix, if you'd like. Or make a syrup from the recipe on page 10.

You'll want to serve the toast bubbly hot. So, before you start to cook, turn on the oven to 450 degrees. Let it "preheat" while you make the cinnamon mixture and two kinds of cocoa. Then, when you're ready to make the toast, the oven temperature will be exactly right.

Be Safe, Not Sorry! 450°F is really hot. Use a potholder and protect yourself from painful blisters.

Here's another good rule to remember:

Before you turn on any oven, make sure the racks are where you want them.

CINNAMON TOAST

(Makes 6 slices)

Ingredients:

- 1/4 cup sugar
- 1/2 teaspoon cinnamon
- 6 slices bread
- 2 tablespoons soft butter or margarine

Equipment:

- Measuring cup and spoons
- Waxed paper
- Knife or spatula
- Cookie sheet
- Potholder

1. Preheat oven to hot (450°F).
2. Mix sugar and cinnamon on waxed paper.
3. Arrange slices of bread on a cookie sheet and place in the oven. Remove from the oven when the bottom of the slices has browned.
4. Spread toasted side with butter or margarine.
5. Sprinkle with cinnamon and sugar mixture—about one tablespoon per slice.
6. Heat in oven again.
7. Remove toast from oven. Cut in strips, halves or quarters and serve immediately.

Here's the easy way to make cinnamon toast for just yourself: Toast bread in the toaster, spread with soft butter or margarine and sprinkle with cinnamon sugar.



HELPFUL TRICKS

Measuring Cocoa or Cinnamon: Before you measure, stir to break up any lumps. Dip in the measuring spoon and fill. Level off with a knife or spatula.

COCOA

(Serves 6)

Ingredients:

- 1 quart (4 cups) milk
- Chocolate syrup or cocoa mix (use amount shown on container or recipe for syrup below)

Equipment:

- Medium-sized saucepan
- Measuring cups and spoons
- Small spatula or knife
- Large spoon
- Potholder

1. If you use the syrup recipe, make that first.
2. Combine syrup and milk in saucepan.
3. Heat the cocoa, but do not let it boil.
4. If you like a foamy top on cocoa, beat with a rotary eggbeater before serving.

To make cocoa with nonfat dry milk: Follow the directions on the box to make one quart fluid milk. Then add syrup and heat.

To make a cocoa syrup: Mix the following ingredients together in a saucepan and stir until smooth:

- 4 tablespoons (1/4 cup) sugar
- 1/4 teaspoon salt
- 4 tablespoons (1/4 cup) cocoa
- 1 cup water

Cook over low heat, stirring constantly. When the mixture comes to a boil, remove from heat. For cocoa, add one quart milk. You may also add 1/2 teaspoon vanilla for extra flavor.

Add a treat: Float a marshmallow in each cup. Or use a peppermint stick as a stirrer.

Buying Tips: Were you surprised by the different prices of milk? Which costs less, fluid whole milk or skim? Would the price of a quart of either be less if you purchased a two-quart (half-gallon) carton?

What did you learn about the price of nonfat dry milk in different size packages? How much would it cost to make a quart of milk from each size package?

Serving: Serving cocoa to your family or friends? Set a good example! Use a teaspoon to stir your cocoa. Then take it out of your cup and lay it on your saucer. No spoon sips or slurping. Just nice quiet drinking.



CLEANING UP

Kitchen Magicians never leave a mess—but what a mess this is! Dirty dishes. Lots of pans. Probably some spills. Can you ever get the kitchen clean? Yes! This 1-2-3 way, it's easy.

- 1.** Look around carefully. Any spills? Wipe them up with a damp paper towel.
- 2.** Are your supplies still out and on the table? Put them all back where they belong. (Doesn't everything look better already?)
- 3.** Now let's tackle the dishes.

Rinse or scrape the dirty dishes, then stack according to size and kind. Put cups together, silverware together, pots and pans together.

Wash and dry, or drain. Pour a sink or pan of

hot, sudsy dishwater. Put in enough detergent to make good suds—but not too much! If the water gets dirty, start again.

Use a clean dishcloth or sponge. Wash any glassware first. Then do the silverware—each piece separately, please! Forks take the most time. Next do the cups and then the other dishes. Wash pots and pans last.

Rinse the dishes inside and out with very hot water. Wipe with a clean dry towel, or let them drain. If you drain them, dry the glassware and silverware with a towel.

Put everything back in place. Hang the dishcloth and dishtowel up neatly to dry. Now take one last look around. Worktable, range and sink should be tidy and clean.

Aren't you surprised how the kitchen shines? And won't your mother be pleased? The next time you want to cook, she won't mind a bit!



MAKING THE MAGIC WORK

EXPERIMENT 4: Sometimes cocoa has a scum. Can it be prevented?

SUPPLIES:

Two small saucepans
Double boiler (or a small covered saucepan and a larger saucepan for water)
One-cup measure with pouring spout
Set of measuring spoons
Rotary eggbeater
2¼ cups of milk
1/3 to ½ cup cocoa syrup or mix

PROCEDURE:

1. Pour ¾ cup milk in top of double boiler and cover with a lid. Place over boiling water (in bottom of double boiler or larger pan). Cook for 10 or 15 minutes so that milk reaches a temperature just below boiling. Stir in 2 or 3 tablespoons of cocoa syrup or mix. Keep the cocoa warm for a few minutes and observe.
2. Heat ¾ cup milk in a small saucepan until the milk starts to steam and new bubbles begin

to appear around the edges. The temperature of the milk should be about the same as in step 1. Stir in 2 or 3 tablespoons of chocolate syrup and turn the heat very low. Keep cocoa warm on low heat for about 10 minutes. Observe.

3. Again heat ¾ cup milk as you did in step 2. Add 2 or 3 tablespoons chocolate syrup. Beat with the rotary beater until the surface is covered with froth. Observe. Then allow the cocoa to stand for a few minutes and observe again.

CONCLUSION: What did you observe? Heating milk to a temperature just below boiling is sometimes called *scalding*. Did a scum form on all the milk during scalding? Which method is easiest to use? Can you be more sure that no scum will form with one of the methods? On which cocoa did a scum form? Can you explain these results? (If you're not sure, you'll find the explanation on page 34.)

USE MAGIC FORMULA 4-4-3-2

For a Healthier, Stronger, Happier You!

Happier? You bet! Aren't you happier if you don't get tired half-way through the morning? A good breakfast gives you the energy you need until noon. Breakfast means just what it says: "Break fast."

Do you know what a really good breakfast is? It's one that:

- you enjoy eating
- fits your schedule, and your family's
- includes milk; a fruit with lots of Vitamin C; enriched or whole-grain bread, toast or cereal, and sometimes egg or meat.

Would cinnamon toast and hot cocoa make a good breakfast for you? Look back to the

front of the book and see how many of the 4-4-3-2 foods are included. What else might you include to make the breakfast complete? Write your breakfast menu here. Then try it some morning soon!

Cinnamon Toast

Cocoa

HOW DID YOU DO?

good need to improve

Are you proud of your cocoa?

- Is it free from scum on top?
- Is the cup just full enough?
- Did you spill any cocoa on the saucer?
- Is the cocoa well mixed, with no settling in the bottom?
- Is it hot?
- Does it have a pleasing, mildly sweet taste?

How about your cinnamon toast?

- Is it evenly browned?
- Is the topping spread evenly over the entire slice?
- Does it have the right amount of topping so that it's easy to eat?
- Is it as soft or crisp as you like it?
- Is it attractively served?
- Is it hot?
- Does it have a good flavor?

Did you learn:

- what to eat for a good breakfast?
- to make cocoa with whole milk?
- to make cocoa with nonfat dry milk?
- to make cocoa with chocolate syrup and whole milk?
- what causes scum to form on milk and cocoa?
- how to toast bread in an oven?
- how to make cinnamon toast?

PLANNING FOR NEXT TIME

1. Who will find out what grades and sizes of eggs are sold in a store?
2. Who will find out how many different kinds of enriched white and whole-wheat breads are available?
3. Who would like to give a demonstration next time? Here are some ideas:

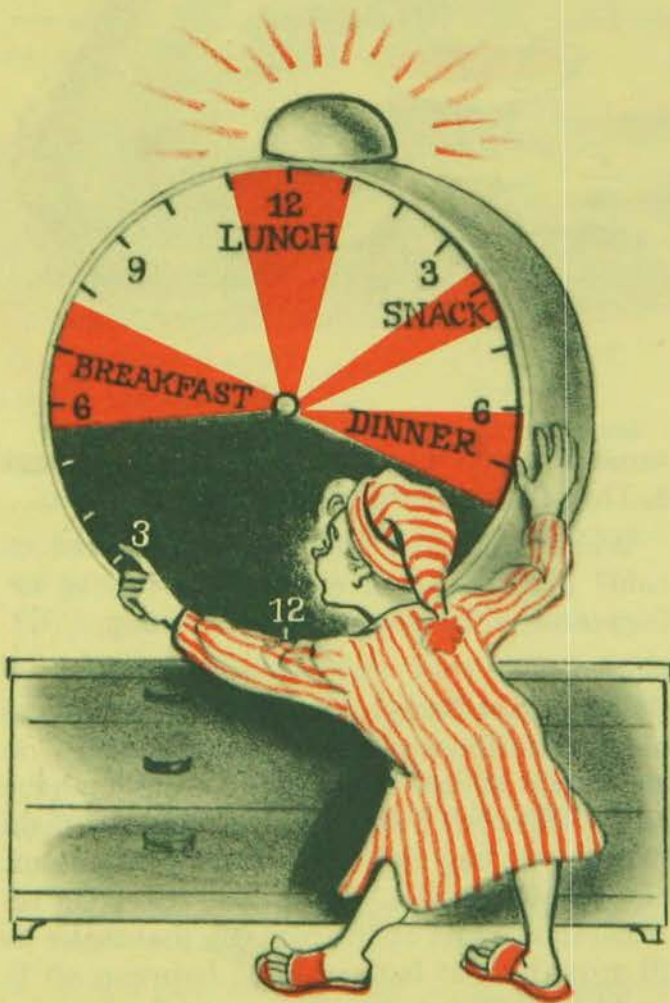
How to measure cocoa

How to make cocoa with whole milk

How to make cocoa with nonfat dry milk

How to make cocoa with chocolate syrup and whole milk

How to make cinnamon toast



How many hours does your body go without food before breakfast? Breakfast is important! Your body needs the nutrients found in a good breakfast.

Submarines an' Soup

TREAT IV



LOOK WHAT YOU CAN DO with a hot-dog bun. Stuff it with a hearty sandwich filling and Presto! You have a "submarine". Submarines will become one of your favorite sandwiches. They're fun to make and delicious. Does this menu make you hungry? You can fix it next.

Soup of your choice
Tuna Salad Submarines
Fruit Milk

Since the sandwich is a mixture, select a soup that is smooth and one-flavored. Cream of tomato would be good. Use canned or packaged dry soup mix. That will give you plenty of time to make the sandwiches.

The tuna salad filling calls for hard-cooked eggs. Those should be cooked first. At the

same time you might want to try Experiment 5. Then finish the filling and stuff the buns.

Would you like your submarines hot or cold? Place them in either the oven or refrigerator while you prepare the soup.

Be Safe, Not Sorry! Always keep salad-type sandwich fillings in the refrigerator until you are ready to use them. If you should have sandwiches left over, wrap them or put them in a plastic bag and store in the refrigerator. Do you know the temperature of your refrigerator? Most of the bacteria that make us ill grow best at temperatures between 40°F. and 140°F. This is another reason for keeping hot foods hot and cold foods cold.

Use a cutting board for chopping eggs, celery and pickle. A sharp knife makes chopping easier. *Be careful!*

HARD-COOKED EGGS

Hard-boiled eggs? Not these! Boiling makes eggs tough—just as high heat toughened the cheese in our first experiment. We'll hard-cook them instead.

1. Take eggs out of the refrigerator and place carefully in a saucepan.
2. Add cold water so that there is at least one inch above the eggs.
3. Cover pan and set on range.
4. Heat quickly to a vigorous boil.
5. Remove pan from heat. Leave eggs in the covered pan for 15 minutes.
6. Put pan in sink, and let cold water run over eggs until they are cold.

To remove the shell: Crack the shell. Roll egg between hands, then start peeling at the large end. Dip egg into cold water to help ease off the shell.

TUNA SALAD SUBMARINES

(Makes 6 to 8 sandwiches)

Ingredients:

- 1 6-7 ounce can tuna
- 2 hard-cooked eggs, chopped
- ½ cup chopped celery
- ¼ cup chopped sweet pickle or relish
- ½ cup salad dressing or mayonnaise
- ½ teaspoon prepared mustard
- 6-8 hotdog buns
- Soft butter or margarine

Equipment:

- Medium-sized mixing bowl
- Can opener
- Fork
- Cutting board and knife
- Measuring cups and spoons
- Knife

1. Place tuna in mixing bowl. Break up any chunks with a fork.
2. Add chopped eggs, celery, pickle, salad dressing and mustard. If using pickle relish, drain it well before adding or the filling will be "soupy."
3. Toss with a fork to mix well.
4. If the buns are not already split, cut them in half lengthwise.
5. Spread buns with softened butter or margarine. Then stuff with filling.
6. Tuna salad submarines are also good warmed. You may even like them better this way! Wrap them in foil and heat for 15 minutes in a moderate (350°F.) oven.

Variations: Instead of tuna, use 1 cup frankfurters, ground bologna, or cooked ham. In place of the 2 eggs and tuna, use 6 hard-cooked eggs plus ¾ teaspoon salt. The fillings can be spread on buttered bread for sandwiches.

HELPFUL TRICKS

Buying Bread: Have you ever noticed how much space a large supermarket uses to display bread and rolls? Notice how many kinds of bread there are! Look for the words "enriched," "whole grain" or "milk solids added." These have the most food value.

Buying Eggs: What did you find out about the grades and sizes of eggs in a store? Were the eggs displayed in refrigerated cases? Eggs keep their quality better when refrigerated.

Serving: Sandwich bars are fun! Arrange all the fixings on the table or serving counter. Then let each person make his own sandwich. A taste-tempting, eye-catching sandwich bar might include one or more kinds of bread, several fillings, lettuce and pickles. Try one when the gang gets together at your house!

Cleaning Up: Did you wipe up spills? Wash the dishes and pans? Put everything away? Then your kitchen is neat and clean!

USE MAGIC FORMULA 4-4-3-2 For a Healthier, Stronger, Happier You!

Do you know why the 2 in our formula makes you stronger? Protein is the answer! Look at page one and see what foods are included in the meat group of our basic food plan. These foods are rich in protein. You need two servings of them daily.

Protein is found in every cell of your body. Cells need more protein to grow. Your muscle and nerve cells need protein. Your blood cells need protein. So do the cells of your hair, skin, and nails. Give your body the material it needs to grow strong.

Your submarine sandwich had lots of protein in it. Can you explain why?



MAKING THE MAGIC WORK

EXPERIMENT 5: Why do the yolks of some hard-cooked eggs have a greenish coating? Can this be prevented?

SUPPLIES:

- 3 eggs
- Covered saucepan
- Potholders
- 3 small plates
- Knife
- Crayon or marking pencil

PROCEDURE:

1. Place two eggs in a saucepan and add enough cold water so that there is at least one inch above the eggs. Cover saucepan and heat quickly until water comes to a vigorous boil. Boil rapidly for 15 minutes. Remove one egg and cool under cold running water. Mark this egg No. 1.
2. Continue boiling the remaining egg for another 15 minutes. Pour off hot water and cool thoroughly in cold running water. Mark egg No. 2.

3. Repeat experiment with a third egg. After heating quickly until water comes to a vigorous boil, turn off heat (remove from heat if using an electric range). Leave egg in covered pan for 15 minutes. Pour off warm water and thoroughly cool egg in cold running water. Mark egg No. 3.

4. Remove the shell from each of the eggs. On plate No. 1, place egg No. 1; on plate 2, egg No. 2, and on plate 3, egg No. 3. Cut each egg in halves. Now observe two things: the color of the yolks and the tenderness of the whites. Is the white of one egg tough and rubbery? Does one of the yolks have a green coat? Does one of the other yolks have a slight greenish cast? Taste a sample of each egg. Does one yolk taste like sulfur or an "old" egg?

CONCLUSION: What do you observe? Have you any idea what happened? You'll find the explanation on page 34.

HOW DID YOU DO?

Is your submarine sandwich:

- attractively served?
- appetizing in appearance?
- good tasting?
- easy to eat?

Did you learn to:

- hard-cook eggs?
- make salad sandwich filling?
- chop celery and hard-cooked eggs?
- judge the soup and sandwiches?
- store leftover sandwiches or fillings?
- know which foods are high in protein?

good

need to improve

Is the soup:

- attractively served?
- hot enough?
- good tasting?

PLANNING FOR NEXT TIME

1. What kinds of apples are available? Who would like to find out?
2. Who will give a demonstration? Here are several ideas:

How to hard-cook eggs

How to chop celery and hard-cooked eggs

How to make a salad sandwich filling

How to store left-over sandwiches or sandwich filling

Fun-to-Fix Fruit Desserts

FRUITS TASTE SO GOOD and are so colorful that we like to serve them often—at any time and in many ways. A good breakfast usually includes a juice or fruit. Fruit crisp makes a fine dessert.

Here's a tasty dinner your mother might like to fix for the family:

Meat Loaf
Baked Potatoes Cole Slaw
Milk Coffee
Fruit Crisp

A meal like this takes lots of preparation. You could offer to make the dessert! The recipe below is for fresh-apple crisp. Let's make that now. Another time you might want to try one of the variations. All of them are delicious.

Be Safe, Not Sorry! Don't forget to adjust the oven racks before you turn on the heat. Do remember to use a potholder when you take your fruit crisp from the oven!

TREAT V



APPLE CRISP

Ingredients:

- 1 cup rolled oats
(quick-cooking or regular)
- ½ cup sifted enriched flour
- ½ cup brown sugar,
firmly packed
- ¼ teaspoon salt
- 1 teaspoon cinnamon
- ½ cup (1 stick) butter
or margarine
- 4 cups peeled, sliced,
tart apples

Equipment:

- Medium-sized
mixing bowl
- Measuring cups
and spoons
- Flour sifter
- Knife or spatula
- Pastry blender or fork
- Paring Knife
- 8 x 8 x 2-inch or
2-quart baking dish
- Potholders

1. Preheat oven to moderate (350°F).
2. Place rolled oats, flour, sugar, salt, and cinnamon in the bowl and mix to blend.
3. Add soft butter or margarine and blend well with pastry blender or fork.
4. Arrange peeled, sliced apples in buttered baking dish.
5. Spread oatmeal mixture on top of apples, and press down lightly.
6. Bake about 30 minutes or until topping is brown and apples are tender when tested with a fork.
7. Serve warm or cold with milk, cream, or ice cream.

Variations: In place of the fresh apples, use 4 cups sliced fresh apricots, or peeled sliced fresh peaches, or cut rhubarb, or 3 cups canned apple slices, drained.

HELPFUL TRICKS

Measuring Regular Brown Sugar: Use a $\frac{1}{2}$ cup metal or plastic measuring cup. Pack the sugar down in the cup before you level it off.

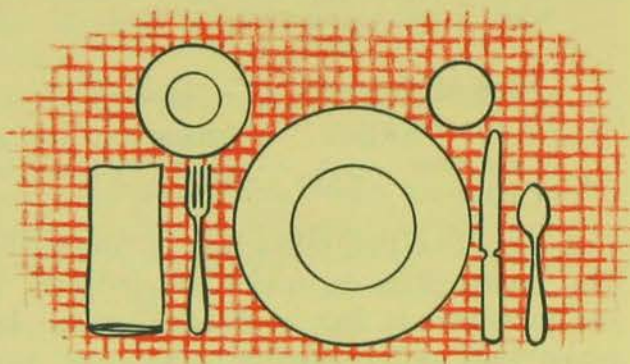
Measuring Regular Flour (not instant): Use a $\frac{1}{2}$ cup metal or plastic measuring cup. Place flour sifter on a piece of waxed paper. Put in flour and sift carefully onto the paper. Pile flour lightly into cup, heaping slightly. Level off with the edge of a knife or spatula.

Buying Tips: What kind of apples did you use in the crisp? Which varieties did you find in the market? Always look for apples that are firm and well shaped, a good color for the variety, and free from rotten spots or bruises.

Firm, tart apples are best for cooking. The Rome Beauty is noted as a baking apple and makes good apple crisp. Pippins are favorites, especially in late winter and spring. Winesaps, Jonathans, and Golden Delicious also are good.

Serving: Fruit crisp makes an attractive dessert. Serve it in sauce or dessert dishes. Then set each dish on a small plate. Make sure each person has a spoon.

Setting the Table: You can help by setting the table. It's not hard at all. At each place set all the china, glassware, silver and linen one person needs. Arrange each place setting like this:



MAKING THE MAGIC WORK

EXPERIMENT 6: Recipe directions often read "Sift flour before measuring." Have you ever wondered why?

SUPPLIES:

Flour, regular all-purpose
(not new granular type which
does not need sifting)
1-cup measuring cup (from a nested set)
Set of measuring spoons
Flour sifter
Tablespoon
Spatula or knife
Waxed paper

PROCEDURE:

1. Dip the measuring cup into the flour and fill heaping full. Level off with the edge of a knife or spatula. Place flour sifter on a piece of waxed paper and dump the measured cup

of flour into the sifter. After sifting, gently spoon into measuring cup until the flour runs over the top. Level off. Measure the extra flour from the waxed paper.

2. Spoon flour directly into the measuring cup and fill heaping full. Level with the straight edge of knife or spatula. Place flour sifter on a piece of waxed paper and dump the measured flour into sifter. After sifting the flour, gently spoon into the measuring cup until the flour runs over the top. Level off. Measure the extra flour left on the waxed paper.

CONCLUSION: How much flour was left on the waxed paper when you completed Step 1? Step 2? Why did it take less sifted flour than "dipped" or "spooned" flour to fill the cup? If you're not sure, find the answer on page 34.

HOW DID YOU DO?

- good need to improve

Does your fruit crisp:

- look attractive?
 have evenly browned topping, no burned spots?
 have evenly blended topping ingredients?
 have the right proportion of topping to fruit?
 have fruit that looks moist but not too juicy?
 have tender but not dry, tough or mushy fruit?
 have a good flavor?

Did you:

- wipe up all the spills?
 put everything away?
 wash the dirty dishes?

Did you learn to:

- measure brown sugar?
 sift and measure flour?
 select apples for crisp?
 make topping for fruit crisp?
 peel and slice fruit for crisp?
 judge fruit crisp?
 set the table?
 choose foods high in vitamin C?
 choose foods high in vitamin A?

CHECK-UP TIME!

Draw a picture of a plate. Divide it into four equal sections. Write the name of one of the food groups in each section. Now write down everything you ate and drank in the last 24 hours. Put all the foods that fit into a group on the plate.

Do you have some foods left over? Place these outside of the plate. We all eat foods, like candy, which do not "fit" into the basic food plan. These are fun-to-eat "extras," but we don't really need them. We do need the foods in the basic food plan, and we need them every day.

USE MAGIC FORMULA 4-4-3-2

For a *Healthier, Stronger, Happier You!*

Help yourself to better health! The first 4 in the formula tells you how. Do you remember what this number represents? Look back to the front of the book and see.

Fruits and vegetables are the best source of two very special body-building materials, vitamins A and C. These guard our health.

Vitamin C is needed for healthy gums and body tissues. Our bodies do not store vitamin C easily. That is why we need a fresh supply each day. Can you name six fruits and vegetables rich in vitamin C? List them here:

Do you have one of these every day?

Vitamin A is needed for good eyesight, growth and healthy skin. Perhaps you have heard that carrots help you see better in the dark. This is true. Carrots and other deep-yellow or dark-green vegetables and fruits rate high in vitamin A. Can you list some?

PLANNING FOR NEXT TIME

1. Are all canned tomatoes the same? Who would like to find out?
2. Who will find out about hamburger and ground beef?
3. Here are some ideas for a demonstration:
 - How to measure brown sugar
 - How to sift and measure flour
 - How to prepare topping for fruit crisp
 - How to choose foods high in vitamin C or vitamin A

One Pan Dandy



HERE'S A MAIN DISH you'll like for lunch or supper. You can mix it and cook it in just one pan! Add a hot bread and a green salad and you have a delicious, nutritious meal. How does this sound for a backyard supper?

Beef-Corn Dandy

Lettuce Wedges Choice of Dressings
Hot Rolls or Garlic Bread
Ice Cream Cones Milk

The bread and salad would be easy to fix. You can prepare them while the main dish is cooking.

Be Safe, Not Sorry! Wooden or composition handles on spoons, pancake turners and skillets do not conduct heat easily. They protect your hands from burns. Metal, however, is a good conductor. If you must hold a metal handle while cooking, always use a potholder.

BEEF-CORN DANDY

(Serves 4)

Ingredients:

- 1 pound ground beef
- 1 large onion, chopped
- 1 teaspoon salt
- ¼ teaspoon pepper
- 1 cup (8-ounce can) stewed tomatoes
- 1 can vacuum-packed whole kernel corn
- ¼ pound cheddar cheese, cubed

Equipment:

- Paring knife
- Cutting board
- 9-inch heavy covered skillet
- Pancake turner
- Measuring spoons
- Can opener
- Potholder

1. Place ground beef, onion, salt, and pepper in the skillet.

2. Cook and stir over moderate heat until meat is lightly browned and onion is soft. If much fat cooks out of the meat, spoon off the drippings before adding the other ingredients.
3. Add tomatoes and corn. Cover and simmer over low heat for about 30 minutes.
4. Stir in cheese cubes. (When you add these, tip the cover away from you to avoid steam.)
5. Cover the skillet. Turn off the heat and let stand a minute or two until the cheese melts.

Variation: Use 2 cups (two 8-ounce cans) of canned tomato sauce instead of 1 cup of canned stewed tomatoes.



HELPFUL TRICKS

Buying Canned Tomatoes: *Whole tomatoes . . . tomatoes . . . stewed tomatoes.* Did the labels on the cans confuse you? If you want to serve canned tomatoes in large pieces or whole, *whole tomatoes* would be your choice. But if the tomatoes are going to be mixed with other ingredients, those labeled only *tomatoes* would do just as well and cost less. *Stewed tomatoes* cost least of all and contain other vegetables such as chopped onion, celery and green pepper. Stewed tomatoes are fine for Beef-Corn Dandy.

Buying Hamburger: *Ground beef . . . ground chuck . . . ground round.* Did these names confuse you? And did you notice the different prices? In general, the higher the price, the less fat you buy. *Hamburger* or *ground beef* may contain up to 30 per cent fat. Some ground beef has less. Lower-priced ground beef usually contains more fat than the higher-priced meat. *Ground chuck* at a medium price has less fat than ground beef. It will have a good flavor and be juicy when cooked. Higher-priced *ground round* is extra lean.

Cleaning Up: Here's a good trick for cleaning a skillet. Let it cool. Then wipe out any excess grease with a paper towel before washing.

USE MAGIC FORMULA 4-4-3-2 For a Healthier, Stronger, Happier You!

Do you remember that every living cell in your body contains protein? The fact is that every living cell—plant and animal—contains protein. But some foods contain a great deal more protein than others or in a more complete form.

Animal sources supply protein best. Look back to page one and write a few of these animal-source protein foods here. Remember that milk comes from animals, too!

Top Protein Value

Certain other foods, including two of your favorites, give good protein. Look at the basic food plan, then complete this list:

High Protein Value

Peanut butter	
	Baked beans

Cereals, bread and vegetables also provide some protein, but of lower quality. You can increase their protein value by combining them with milk, eggs, meat or other foods from animal sources.



MAKING THE MAGIC WORK

EXPERIMENT 7: When frying certain meats, why are we often advised to pour off the drippings before adding other ingredients?

SUPPLIES:

- 1/4 pound each of ground beef, ground chuck and ground round
- 3 custard cups (label them 1, 2 and 3)
- 1 glass measuring cup
- Small skillet
- Pancake turner or large spoon
- Crayon or marking pencil for labels

PROCEDURE:

1. Place the sample of ground beef in the skillet. Cook and stir over moderate heat.
2. Carefully spoon out or pour all drippings and fat into custard cup number 1.
3. Repeat steps 1 and 2 with ground chuck and

ground round. Use cups No. 2 and No. 3.

4. Pour drippings and fat from first custard cup into the measuring cup. Measure drippings and fat cooked from this sample. Now measure the other two samples. How much difference was there in the amount of fat and drippings from the three kinds of ground meat? (Use the cooked beef for a main dish like Beef-Corn Dandy or mix with catsup for sandwiches.)

CONCLUSION: Both fat and drippings are extracted from ground beef during cooking. If the excess fat is not poured off, the main dish may taste greasy. Meats labelled *ground beef* contain more fat than ground chuck or round. But in a mixture such as Beef-Corn Dandy, ground beef gives excellent results and saves money.

HOW DID YOU DO?

- good need to improve

Is the Beef-Corn Dandy:

- attractively served?
- very hot?
- good-tasting?

Did you learn:

- to chop onions?
- to make Beef-Corn Dandy?
- to serve a main dish?
- some tips for buying ground beef and canned tomatoes?
- what foods contain protein?

Does the Beef-Corn Dandy:

- look attractive?
- seem moist enough, yet not too soupy?
- have no extra fat?
- or stringy cheese?

PLANNING FOR NEXT TIME

1. Who will check the labels of packaged biscuit mixes to find out how many of them are enriched?
2. Who will give a demonstration? Here are several good ideas:
 - How to chop onions
 - How to brown ground meat and onion
 - How to prepare Beef-Corn Dandy

Bake-Easy Biscuits

TREAT VII



WATCH THESE BISCUITS do a disappearing act! If you serve them steamy hot so that the butter sinks right in, they'll be going . . . Going . . . GONE in no time. Hot biscuits make a meal special. How would you like them for breakfast?

Orange Juice Scrambled Eggs
Hot Biscuits or Cinnamon Balls
Chocolate Milk

Whether you prepare biscuits from a recipe or a mix, they can be the "star attraction" of the meal.

DROP BISCUITS

(Makes about 14 biscuits)

Ingredients:

- 2 cups sifted enriched flour
- 1 tablespoon baking powder*
- 1 teaspoon salt*
- 1/3 cup shortening or lard
- 1 cup milk

Equipment:

- Flour sifter
- Measuring cups and spoons
- Knife or spatula
- Medium-sized mixing bowl
- Pastry blender or fork
- Cookie sheet
- Two teaspoons
- Potholders

*If you use self-rising flour, omit baking powder and salt.

1. Preheat oven to very hot (450°F).
2. Sift together flour, baking powder, and salt into mixing bowl.
3. Cut in shortening or lard until mixture looks like coarse meal.

4. Make a hole in the center of the mixture and pour in all the milk.
5. Stir until dry ingredients are barely damp.
6. Drop dough by spoonful onto the ungreased cookie sheet. Use one spoon to dip out the dough and the other spoon to push the dough onto the cookie sheet. Leave about 2-inch spaces between the biscuits. (Carry out Experiment 8.)
7. Bake in a preheated oven about 12 to 15 minutes. Serve hot.

Biscuits can also be made from a mix. To measure mix: Do not sift. Pile lightly into the measuring cup until mix runs over the top. Level with the edge of a knife or spatula. Add milk as directed on the package.

CINNAMON BALLS

(Makes about 24)

It's easy to make cinnamon balls from biscuit dough!

1. Combine 3 tablespoons sugar and 1½ teaspoons cinnamon on a piece of waxed paper.
2. Drop a teaspoon of biscuit dough at a time into

the sugar-cinnamon mixture. Roll dough around to coat the surface and gently shape into a ball.

3. Place coated balls of dough about 2 inches apart on a greased cookie sheet. Bake 8 to 10 minutes in a preheated hot oven (450°F).

HELPFUL TRICKS

Measuring Flour: Remember how? If not, look back to page 18.

Measuring Baking Powder: Dip measuring spoon into the baking powder. Then level off with a knife or spatula.

Measuring Fat: Pack shortening or lard into a measuring cup without a spout so there are no air spaces. Level with the edge of a knife. A rubber scraper helps remove all of the fat from the cup.

Serving: Here's the trick to serving biscuits hot. Timing is important. Read your recipe.

See how long the biscuits need to bake. Then pop them in the oven so they'll be done just when you're ready to serve. To keep your biscuits hot, wrap them in a napkin and serve from a plate or basket.

Buying Tip: Look on the bag of flour you used for your biscuits and find the word "enriched". Do you know what it means? Whole grains, like whole wheat, contain minerals and vitamins our bodies need. Some of these nutrients are lost when the grain is made into white flour. Enriched means that most of the food value that was lost when the grain was refined has been put back.



MAKING THE MAGIC WORK

EXPERIMENT 8: Why use a cookie sheet when baking biscuits?

SUPPLIES:

One recipe drop biscuits
2 teaspoons
2 small deep baking pans
Cookie sheet
Oven preheated to 450°F.
Potholders

PROCEDURE:

1. Drop about one-third of the dough by spoonful 2 inches apart on the ungreased cookie sheet.

2. Drop one-third of the dough by spoonful 2 inches apart on one of the deep baking pans.

3. Turn the other baking pan upside down and drop the rest of the dough by spoonful 2 inches apart on the bottom.

4. Bake the three pans of biscuits in the preheated oven about 12 to 15 minutes.

CONCLUSION: Were all the samples evenly browned on the bottom, top and sides? Can you explain your results? If you are not sure, turn to page 34.



USE MAGIC FORMULA 4-4-3-2 For a Healthier, Stronger, Happier You!

Breads and cereals! Think of all the different kinds there are. White breads . . . dark breads . . . biscuits . . . rolls . . . muffins . . . cooked and ready-to-eat cereals. Do they all count toward the bread-cereal group of our basic food plan? Yes—if they're enriched or whole grain, and give you the minerals and B vitamins you need from this group.

How nutritious are the breads and cereals you eat? Read the labels carefully. You need four servings of enriched or whole grain each day. Do your biscuits count? Of course—if the flour or mix was enriched. Here's a surprise: Cookies can count, too. Next time, let's stir up a batch and see how.

HOW DID YOU DO?

good need to improve

Are your drop biscuits:

- about the same size and shape?
- evenly browned?
- tender with crisp crusts?
- light in weight for size?
- good tasting with no noticeable flavor of salt, baking powder, or fat?
- served piping hot?

Did you learn to:

- measure ingredients for drop biscuits?
- mix biscuit dough?
- drop biscuit dough?
- choose baking pans for biscuits?
- read labels on flour, mixes, breads and cereals?
- serve biscuits hot?
- judge drop biscuits?
- know what "enriched" means?

PLANNING FOR NEXT TIME

1. How many different kinds of oatmeal cookies can you find in a bakery or super-market? Who will price them for us?
2. Who would like to give a demonstration? Here are several ideas:

How to measure ingredients for drop biscuits

How to mix drop biscuits

How to form drop biscuits

How to serve drop biscuits

TREAT VIII



Cum-an'-Get-um Cookies

COOKIES! COME AND GET THEM! But after lunch or dinner is better than before. Eating cookies and cakes too close to mealtime dulls your appetite so that you're not hungry for the meat, milk, fruits, vegetables and other foods your body needs. For this reason, cookies and other sweet foods are better eaten at the end of meals as desserts rather than as snacks.

Oatmeal cookies taste good and pack well. Why not take some along on a picnic? Here's a menu you're sure to like. You can fix it all by yourself!

Submarines	Relishes
Oatmeal Cookies	
Apples	Milk

OATMEAL DROP COOKIES

(Makes about 3½ dozen cookies)

Ingredients:

- 1 cup enriched flour
- ½ teaspoon soda
- ½ teaspoon salt
- ½ cup butter or margarine (be sure it's soft)
- ¼ cup sugar
- ½ cup brown sugar
- 1 egg, unbeaten
- 1 teaspoon vanilla
- 2 tablespoons milk
- 2 cups rolled oats (quick-cooking or regular)
- ½ cup raisins, chopped dates or nuts, if desired

Equipment:

- Flour sifter
- Waxed paper
- Measuring cups and spoons
- Spatula
- Medium-sized bowl
- Mixing spoon
- 2 teaspoons
- Cookie sheets
- Rubber scraper
- Cooling racks or paper toweling
- Potholders

1. Preheat oven to moderate (375°F).
2. Sift flour and measure.
3. Sift flour with soda and salt into mixing bowl.
4. Add butter or margarine, sugar, brown sugar, egg, vanilla and milk. Mix until smooth.
5. Add rolled oats (also raisins, nuts or dates, if used). Stir until mixed.
6. Drop by spoonful on ungreased cookie sheet about 2 inches apart. Use one teaspoon to dip out the dough and the other to push the dough onto the cookie sheet. (At the same time, you can carry out Experiment 9.)
7. Bake for 10 or 12 minutes. The cookies will be a light golden color when they are done. (They should be soft when you touch them lightly with your finger.)
8. Remove cookies from pan with a spatula. Place on racks or paper toweling to cool.

HOW DID YOU DO?

good need to improve

Are your cookies:

- about the same size?
- evenly browned, but not burned?
- light in weight for size?
- slightly rounded on top?
- attractively served?

Did you learn to:

- make oatmeal cookies?
- test cookies for doneness?
- remove cookies from the cookie sheet?
- judge your cookies?

HELPFUL TRICKS

Buying Tip: Oatmeal cookies are even easier to make from prepared mixes and doughs. Did you notice any of these in the store? What other kinds of oatmeal cookies did you find for sale? How did the costs compare?

Serving: Oatmeal cookies pack and keep well. They're a very good choice for lunch boxes. You can also serve them for desserts and snacks (but not too close to meals).

USE MAGIC FORMULA 4-4-3-2 For a Healthier, Stronger, Happier You!

Cookies put a smile on your face! They also can be very nutritious. These oatmeal cookies fit right into our basic food plan. Can you figure out why?

The right foods in the right amounts make you strong and wide-awake—full of pep for work and play. A certain amount of cookies and other sweet foods have a place in your diet. These foods contain carbohydrates (sugar and starch) and fat, which your body needs for energy. But too many rich foods can make you fat!

Too many sweets are also bad for your teeth. Sugar, working with bacteria, may speed up decay. That's why you should brush your teeth after eating sweets.



MAKING THE MAGIC WORK

EXPERIMENT 9: A recipe may advise a lower baking temperature when a dark pan is used. Why?

SUPPLIES:

Oatmeal drop cookie dough	2 teaspoons
Oven preheated to 375°	2 plates
Cooling rack or paper toweling	Potholders
Crayon or marking pencil	Spatula

Dark metal baking pan, shiny metal baking pan
(Both pans should be as similar in thickness or weight as possible.)

PROCEDURE:

1. Drop 4 spoonful of dough 2 inches apart on both the ungreased dark and the shiny metal baking pans. If you use deep baking pans, turn them upside down and drop dough on bottoms.

2. Bake the two pans of cookies in the preheated oven for 10 to 12 minutes.

3. Remove cookies from the baking pans and place on racks or toweling to cool.

4. Label one plate dark pan the other shiny pan. Place the 4 cookies from each sample on a labeled plate.

CONCLUSION: Were the bottoms of one sample too brown or burned? On which pan were these baked? Can you explain the results? If you're not sure, you will find the explanation on page 34.

PLANNING FOR NEXT TIME

Who will give demonstrations at the next meeting? Here are some good ideas:

How to mix cookies

How to remove cookies from cookie sheet

How to cool cookies

How to test cookies for doneness

Ways to arrange cookies for serving

TREAT IX

Kool Kabobs



PERHAPS YOU HAVE EATEN cubes of meat and vegetables cooked on skewers as the main part of a meal. But have you ever had kabobs as a snack? They're fun to make and to eat.

For really cool kabobs, choose fruits and other foods that need no cooking. Cut them in cubes or other small pieces . . . mix pleasing flavors and colors . . . and string them on a skewer. Your skewers might be of metal or wood. For smaller-sized servings, try toothpicks! Think how quickly you could prepare this treat as a snack for your friends:

Frank—Cheese—Pickle Kabobs

Assorted Crackers

Milk

Be Safe, Not Sorry! String the food, not your fingers! Metal skewers have a sharp point on one end. This makes it easy to put the bite-size foods on the skewers. This also makes it easy to stick a finger while stringing! Be careful. Because of the sharp point, kabobs on skewers should not be served to young children.

FRUIT KABOBS

1. For each skewer choose at least two fresh, canned or dried fruits that have a nice contrast in color, flavor and texture. Avoid soft or messy fruits.
2. Cut large fruits into bite-sized pieces.
3. Drain canned fruits well and blot any extra juice on paper towels.

MEAT KABOB COMBINATIONS

Meat and cheese make hearty kabobs. Since you will not cook these after you put them on the skewers, use cubes of cooked, canned, or ready-prepared meat, poultry or fish. Here are some good combinations:

Chunks of frankfurter, cheese cubes and pickle

Ham cubes, pineapple chunks, and green pepper squares

Roast turkey chunks, small whole tomatoes, and pitted olives

Luncheon meat chunks, cheese cubes and stuffed olives

HELPFUL TRICKS

BUYING TIPS: Fresh fruit should be ripe but not soft when you buy them. Look them over carefully for soft or dark spots.

STORING KABOB FOODS *Fresh fruits:* Store all fresh fruits except bananas in the refrigerator until you use them.

Dried fruits: Unopened packages of dried fruit should be stored at room temperature. After opening, store them in the refrigerator, in a tightly closed container.

Cheese: Always store cheese tightly wrapped in the refrigerator. Use plastic wrap, aluminum foil or a plastic bag after the original wrap has been removed.

SERVING: Let everyone make his own kabobs! Arrange several foods from which to choose. Then pass out skewers and plates. Glass or china plates are nice to use with fruit kabobs. Pottery plates are attractive for heartier kabobs. If a large group is to be served, paper plates could be used for either kind.

Except for small kabobs or those served at a very casual party, slip the pieces of food from the skewer onto your plate before eating. Use a fork to eat soft or juicy food.

4. If you use light-colored fresh fruit that tends to darken, such as apples, apricots, bananas, and pears, dip them in lemon juice. (You may wish to do Experiment 10 first, to decide if some other method is best.)

Take your choice! These make good kabobs:

Unpeeled apple wedges

Fresh apricot halves

Dried apricots, figs or prunes

Banana sections

Pitted dates

Melon cubes

Orange sections

Chunks of canned fruit

Fresh plum halves

Pineapple chunks

Whole strawberries

USE MAGIC FORMULA 4-4-3-2 For a Healthier, Stronger, Happier You!

Everyone loves a snack! Do you?

A snack is really a little meal. It should be light and nutritious. The best snacktime for most people is about midway between two meals so that appetites won't be spoiled. Snacks can give you a good part of your daily food needs . . . if you choose them carefully. How do the following rate as snacks? Fruit kabobs . . . hearty meat-on-a-stick . . . oatmeal cookies . . . cinnamon toast and cocoa. You can make them all!

Now it's checkup time again. How well are **you** using the magic formula for health and strength and happiness? Are you getting enough protein and whole-grain cereals? Drinking all the milk your body needs? Choosing foods rich in vitamins A and C? How do you rate? Turn to page 35 and see!

HOW DID YOU DO?

- good need to improve
- Are the kabobs attractively served?
 - Does each kabob have a pleasing contrast in color, shape and flavor?
 - Is the color of all foods bright and attractive with no darkening?
 - Is the right amount of food used on each skewer? Neither too skimpy nor too crowded?
 - Are the pieces of food bite-sized?
 - Do the foods taste good, with enough but not too much contrast in flavor?
 - Did all of the pieces stay on the skewer until you were ready to take them off?



MAKING THE MAGIC WORK

EXPERIMENT 10: Can you prevent light-colored fresh fruits from browning after they've been peeled?

SUPPLIES:

3 custard cups	Salt
4 saucers	Water
Apple or ripe banana	Paring knife
Lemon juice	Fork
Pineapple juice	Crayon or marking pencil

PROCEDURE:

1. Pour lemon juice in one custard cup, pineapple juice in another and a salt solution (pinch of salt to $\frac{1}{4}$ cup water) in the third custard cup.
2. Peel the fruit and cut into four pieces.
3. Place one piece on a saucer and label C for "control."

4. Dip one piece in lemon juice. Drain, place on a saucer, and mark the saucer LJ.
5. Dip one piece in pineapple juice. Drain and label PJ.
6. Dip the remaining piece in the salt solution. Drain, place on a saucer and label SS.
7. Allow the pieces of fruit to stand at room temperature for 30 to 60 minutes.

CONCLUSION: Compare the color of the pieces of apple or banana. Which one has darkened the most? Did the salt or added juice change the flavor of the fruit. What do you conclude? If you are not sure, turn to page 34.

Did you learn to:

- keep light-colored fruits from turning dark?
- choose foods for kabobs to give a pleasing contrast in color, flavor and texture?
- prepare foods to use on kabobs?
- string foods on a skewer?
- serve kabobs as snacks?
- judge the snacks you prepared?



PLANNING FOR NEXT TIME

Here we are at the end of the unit. Let's have a "Tricks for Treats" party for mothers! Just think of all of the treats you can make and the "tricks" that you've learned this year. A party will give you a chance to share them with your mother. A party will also help you learn more about entertaining. Now, to make your planning perfect, ask:

Who? Where? When? What? and How?

WHO will be invited to the party? Perhaps you will wish to invite only your mothers, but let your leader help you decide if you should invite others.

WHO will invite the guests, and how?

WHO will buy groceries . . . greet guests . . . serve refreshments?

WHO will wash dishes, clean up and put things away after the party's over? Each club member will need to have duties.

WHERE will the party be held?

WHEN would be a good time?

WHAT will you do at the party? Will you have a program? One or two demonstrations might be good to show what you have learned.

WHAT will you serve for refreshments? Remember, you will want to show your mothers some of the things you have learned from this unit. You might choose one of these:

Help-Yourself Pudding Tray

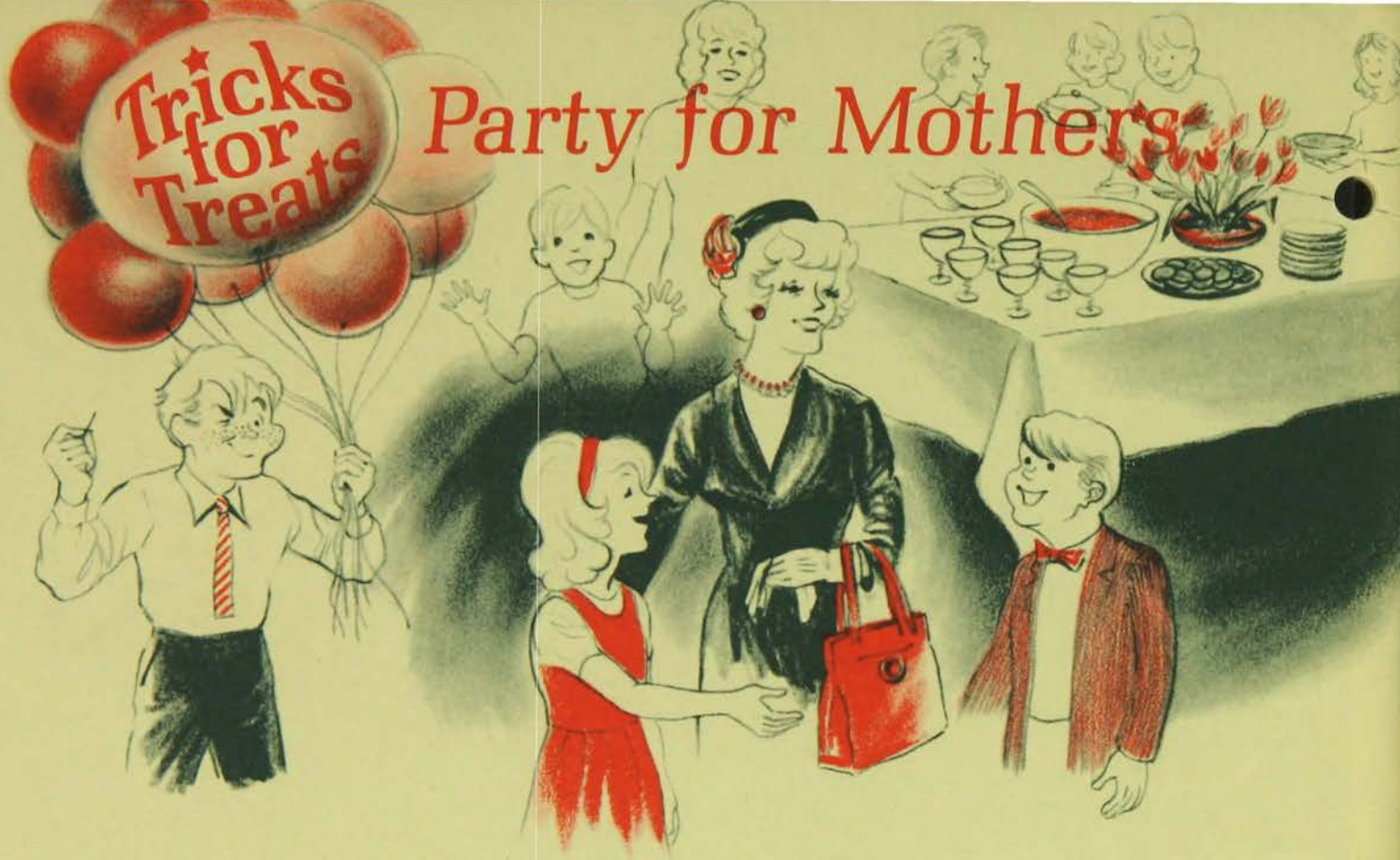
Sandwich Bar with Cocoa

Cookies with Milk

Fruit Kabobs, Cinnamon Toast Strips, Milk

HOW will you serve the refreshments? Buffet style? Or will everyone be seated at tables? Will you want flowers or decorations? Are there enough dishes, silver, linen, tables, and other equipment at the place you plan to have your party? If not, how will you get the extra things that you need?

On the following pages you'll find planning charts and suggestions for making your party a success. Fill in the charts, follow the tips. Good luck . . . and have fun!



Party for Mothers

Tricks
for
Treats

MAKE IT SIMPLE

A party is fun when you keep everything simple!

- Do only as much as you can do easily and well. Plan foods that don't take too much last-minute preparation. Serve only one or two.
- Be cheerful and be friendly. Remember that your mothers want to enjoy your company.

CHOOSE SUITABLE FOODS

Select foods that both your mothers and the club members will enjoy.

- If younger brothers and sisters are coming, plan food that will be easy for them to eat, like cookies and milk.
- Choose foods that are suitable for the time of day.

PLAN AHEAD

How will you make your guests feel comfortable?

- Be sure that all the mothers have a chance to visit with other guests.
- See that your mother meets everyone. You can say, "Mother, this is my friend, Jimmy." (In making introductions, always say the older person's name first.) A good host or hostess thinks of others. If you are busy thinking of your guests, you will forget about yourself and not feel shy.
- Plan to have one member greet guests and show them where to put their wraps.

Write down what jobs must be done and who will do them. Then divide the duties so that everyone has a responsibility. Use the planning charts on the opposite page. Think of all the jobs that must be done on the day of the party. You'll need many teams. Ask for volunteers. Then make up your own "Day-of-the-Party Do-ers Chart".

PARTY PLANNING CHART

Number of guests,

including leader _____

Number of members _____

Total number _____

MENU

DATE _____

HOUR _____

PLACE _____

AHEAD OF TIME JOB	PERSON TO DO IT	GROCERIES TO BUY	EQUIPMENT NEEDED

DAY-OF-THE-PARTY DO-ERS CHART

TEAMS

DUTIES AND RESPONSIBILITIES

Food Fixers:	
Table Setters and Servers:	
Front-Door Greeters:	
Demonstrators and Entertainers:	
Cleaner-Uppers:	
Odd-Jobbers:	

ANSWERS TO MAKING THE MAGIC WORK



EXPERIMENT 1 (page 5) Answer follows experiment.

EXPERIMENT 2 (page 7) Answer follows experiment.

EXPERIMENT 3 (page 8) Crust on puddings

Pudding exposed to the air dries out as it cools, causing a crust to form. Sugar sprinkled on hot pudding will melt, coating the top of the pudding so that air cannot dry out the pudding and form a crust. If you place waxed paper or plastic wrap on the surface of the pudding, air doesn't have a chance to dry out the pudding and form a crust. If you place the waxed paper or plastic wrap over the top of the dish, a thin film may form on the top of the pudding because some air would remain in the dish.

EXPERIMENT 4 (page 12) Why scum forms on cocoa

Heat causes part of the protein in the milk to thicken and form a scum. This thickened protein, along with some of the mineral and fat particles, rises to the top of the cocoa. Beating breaks up the scum, but the scum will soon form again. If you use a covered double boiler to make cocoa, it will help prevent the formation of scum.

EXPERIMENT 5 (page 16) Why hard-cooked egg yolks develop a greenish coat

Egg yolks contain iron. The whites contain sulfur. When heated a long time or at too high a temperature, the iron and sulfur combine. Where the white of the egg touches the yolk, the chemical compound, iron sulfide, forms. The egg is all right to eat—but you may not like the taste or appearance. The same thing happens when you cool eggs in the cooking water or use old eggs.

EXPERIMENT 6 (page 18) Measuring flour

The fine particles of regular flour pack easily. Sifting helps separate these packed particles and makes it easier to get about the same amount of flour each time you measure it. One pound of sifted flour measures four cups. But if the measuring cup is dipped into the bag and the flour is not sifted, one pound measures three cups.

EXPERIMENT 7 (page 22) Answer after experiment.

EXPERIMENT 8 (page 24) Baking pans for biscuits

Biscuits dropped two inches apart on a cookie sheet brown on top, bottom and sides.

Biscuits baked in a pie or cake pan have soft sides and brown on the bottom and top.



If you have no cookie sheet and want biscuits brown all over, turn a pie or cake pan upside down and drop biscuits on the bottom.



EXPERIMENT 9 (page 27) How a pan can affect the cooking

Shiny metal baking pans reflect heat. However, many of them have slightly dull, rough outside bottom surfaces to improve browning. Dark metal pans absorb heat faster than shiny ones. As a result, the bottom crusts of the cookies baked in a dark pan were browner or even burnt. If these cookies had been baked in a 350° F. oven, the bottom crusts would have been the same as those baked in the shiny pan at 375° F.

Foods baked in thick metal pans—especially if the baking time is short—do not brown as much as those baked in thinner pans.

Adjust the baking temperature to the pan used. To assure evenly browned cookies or other baked products, avoid using shiny and dark metal or thick and thin pans in the oven at the same time.

EXPERIMENT 10 (page 30) Why cut surfaces of light-colored fresh fruits darken

Foods contain substances called enzymes. When cut food is exposed to air, the enzymes cause a darkening. Some fruit juices, as well as a salt solution, prevent discoloration.

In the experiment, the fruit that had no treatment and was left exposed to the air has started to darken. However, there has been no change in the color of the pieces dipped in lemon or pineapple juice, and probably the color of the one dipped in the salt solution will not be changed. If light-colored peeled fruits are to stand awhile before serving, they should be protected from darkening.



How Do You Rate ?

Are you eating the foods you need to make you feel good, look your best, and have energy for work and play? Make a list of all the foods you ate and drank for the past 24 hours. With this list as a guide fill in the chart below. How are you doing? Do you need to improve?

FOODS

HOW MANY SERVINGS DID YOU HAVE?

<p>FRUITS AND VEGETABLES</p> <p>At least four servings. One serving citrus fruit, tomatoes, strawberries, melon, raw cabbage or salad greens. One serving dark green or dark yellow vegetable, at least every other day. Two or more servings of other fruits or vegetables, including potatoes.</p>	<p>FRUITS AND VEGETABLES</p>
<p>BREADS AND CEREALS</p> <p>At least four servings of whole-grain, enriched or restored. Count one slice of bread as a serving.</p>	<p>BREADS AND CEREALS</p>
<p>MILK GROUP</p> <p>Three or four cups to drink and to "eat."</p>	<p>MILK GROUP</p>
<p>MEAT GROUP</p> <p>Two or more servings, including meat, poultry, fish and eggs. Also count dry beans and peas or nuts as alternates.</p>	<p>MEAT GROUP</p>
<p>OTHER FOODS</p>	<p>OTHER FOODS</p>

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