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Are You Today's Girl?

- Are you eating right for that extra ounce of pep and energy?
- Are you having fun cooking—hamburgers, fried chicken, salads, soups, bread and desserts?
- Are you helping your family?
- Are you entertaining friends—with a flair, with a dash, with an easy touch?
- Are you making yourself as attractive as possible?
- Are you becoming tomorrow's homemaker?

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**MAKING THE MOST OF WHAT YOU KNOW**

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“Mirror, mirror on the wall, who is fairest of us all?”
Every girl, everywhere, secretly hopes to be pretty, peppy and popular. If she just had curlier hair, or a straighter nose, or a taller figure, or —?
But here you are with your own special “looks,” and no extra-special magic but your own desire to do your very best to look your very nicest. This means you will care about your physical and mental good health and what you can do to be your healthiest, prettiest and most likeable self. Important to you are:
— medical attention (regular physical examination)
— dental care (regularly)
— good food in the proper amounts
— exercise
— plenty of sleep and rest
— clean (sanitary) surroundings.
Of course, this booklet is about the right food and what it means to you. Good food—in the proper amounts—helps you to feel energetic and peppy, to improve your appearance and to resist disease. To assure yourself that you are getting the necessary nutrients, eat a variety of different foods. There is no one “perfect” food. “Helpers for Health” is a guide for good eating.

**Helpers for Health**

The nutrients found in foods are hard-working little helpers for health. You might call them “prize packages” because they do so much for you. You know these nutrients by more familiar names—the vitamins... minerals... proteins... carbohydrates, and fats.
Some foods are richer in these hard-working nutrients than others. This is why you especially need milk, meat, eggs, fruits, and vegetables in your meals every day.
How can you be sure of this? Here is one guide to good eating. Each day choose foods from each of these four basic food groups for your meals.

**The Basic Four**

1. **Milk and Milk Products**
   Four glasses or servings—whole or skim milk, cheese, cottage cheese, ice cream.

2. **Meat or Other Protein-Rich Foods**
   Two servings:
   1. eggs, fish, poultry, and red meats contain animal protein.
   2. cereals, nuts, dried peas, and beans are rich in plant protein.

3. **Vegetables and Fruits**
   Four servings each day. One of these should be high in vitamin C—such as citrus fruit, strawberries, cantaloupe, green pepper, broccoli, tomatoes.
   Every other day, choose a food high in vitamin A.
   1. dark green vegetables such as broccoli, spinach, asparagus.
   2. darker yellow vegetables such as sweet potatoes, carrots, squash. Or yellow fruits such as apricots or peaches.

4. **Whole-Grain or Enriched Bread or Cereal Products**
   Four servings.
Good Morning

Breakfasts

Everyone should have a good breakfast. Of course, you know that! But do you know that even a 10-minute breakfast can be a good one? And do you know what a really “good” breakfast is?

It’s one you’ll eat and enjoy eating.

It fits your schedule and your family’s.

It’s one that includes: Milk and/or a protein-rich food; a fruit — vitamin C-rich, if possible (see page 4); and an enriched or whole-grain cereal.

Everyday and Special Breakfasts

Are you the traditional type?
Orange juice
Soft-cooked egg
Toast and Milk
(takes only 10 minutes to prepare)

Tomato Juice
Enriched cold cereal with bananas
Toast and Milk
(takes only 5 minutes to prepare)

Are you the daring type?
Fresh strawberries
Cottage cheese
Toast and Milk
(5 minutes to prepare if berries are already cleaned)

Orange Wedges
Cheese and crackers
Hot chocolate
(takes 15 to 20 minutes to prepare)

Want a special breakfast for Sundays or holidays?

WINTER
Broiled grapefruit half
Sausages
Raisin bread toast and Milk

SUMMER OR FALL
Sliced tomatoes
Cheese scrambled eggs
Apple muffins and Milk

SPRING
Fresh fruit cup
Cooked whole-wheat cereal with cinnamon sugar
Bacon strips and Milk

SCIENCE WHY’S

Why is it so important to eat some food containing vitamin C every day?

The body does not build up large reserves of vitamin C. So you need some vitamin C-rich food each day.

How did we find out that vitamin C was important to our health?

Back in the days of sailing ships, sailors often had a disease called scurvy. Doctors found that lemons, oranges, limes, or other fresh fruits cured the disease. Many years later, scientists found the substance in certain fruits and vegetables which cured scurvy. They named it — vitamin C.
QUICK BREADS

Quick breads are really quick — quick to make and quick to bake. They add that touch of variety to meals.

Cornbread, popovers, and biscuits are quick breads. So are pancakes, waffles, coffee cakes, nut or fruit breads, and muffins. The last five breads are alike in many ways.

They contain the same basic ingredients — but in different proportions.
— They can be plain — with little shortening and sugar; or quite rich and sweet.
— You can use the same method to make them — but they need different amounts of mixing.

Check your cookbook for interesting quick bread recipes. Here are some hints on making muffins. Find a good muffin recipe. Make some plain ones, but try corn or bran muffins; fruit muffins — blueberry, cranberry or date, too.

Making Plain Muffins

HOW TO MIX:
— Have all ingredients at room temperature.
— Sift dry ingredients together thoroughly.
— Add liquid ingredients all at once to dry ingredients.
— Stir until dry ingredients are barely moistened.
— Don’t overmix; 15 to 20 strokes should be enough.
Batter should be lumpy.

HOW TO BAKE:
— Grease muffin cups well.
— Push a spoonful of batter all at once into muffin tins.
— Use a rubber scraper. Fill two-thirds full.
— Bake at temperature indicated in recipe. A muffin baked at too low a temperature will be dry and tough.
Cake-type or richer muffins are usually baked at a lower temperature than plain muffins.

HOW TO JUDGE:
— Your muffins should have —
— lightly browned crust
— rough-rounded top
— creamy white interior
— tender, slightly moist texture
— fairly even grain (cells or airholes of similar size, no large tunnels)
— pleasing flavor

SCIENCE WHY’S

What is the difference between baking powder and soda?

Both combine with any liquid to form a gas called carbon dioxide. As you mix the ingredients for a quick bread, this gas forms within the batter. When the batter is baked, the gas expands. This stretches the strands of batter and tiny air cells form.

Soda is used in recipes which contain an acid ingredient such as fruit, molasses, sour milk, or vinegar. The acid does two things: (1) works with the soda to help form the carbon dioxide; (2) combines with the soda to get rid of the soda’s soapy, bitter taste.

Baking powder contains soda and an acid ingredient. Because of this, you do not need vinegar or sour milk when you use baking powder.

What is the difference between single-acting and double-acting baking powder?

The label on a can of baking powder tells you whether you are buying single or double acting powder.

Double-acting baking powder: Part of the chemicals act when liquid is added and some carbon dioxide gas is formed. The rest of the chemicals act when the batter is heated, releasing more carbon dioxide.

Single-acting baking powder: All of the action takes place when the liquid is added to the dry ingredients. You must be sure to get the batter into the oven quickly before the carbon dioxide is lost.

What does flour do for muffins?

It gives muffins their shape and structure. Flour contains protein which combines with liquid to form gluten — a stretchy substance. Gluten stretches itself around the gas cells. When baked, it becomes firm instead of stretchy and forms the structure of the muffin.
What happens if muffins are overmixed?

The more a batter is mixed, the stronger the gluten becomes. If the gluten is too strong, it stretches to form big tunnels instead of small, even holes. Too strong gluten also makes the muffins tough. There is less danger of overmixing a richer muffin. This is because fat and sugar prevent the gluten from becoming too strong. We say they “tenderize” the muffin. So sweet, rich muffins can be mixed longer without having tunnels or becoming tough.

BE A CEREAL FAN

On your grocers’ shelf, you will find 30 to 40 different cereal products. Some are ready-to-eat; some must be cooked. How many have you tasted? Try some new ones.

Cereals give you food energy—the power to do work. They also give you plant protein. When you buy cereal, choose one that is enriched or made from whole grain. The label on the package will tell you if the cereal is enriched. This means that three vitamins and iron have been added to the cereal to help meet the body’s needs. The three vitamins are thiamine, niacin, and riboflavin. These vitamins help your body make use of the carbohydrate and protein in your food. They are necessary for growth. The body uses iron to form hemoglobin for the blood.

Cereal Cooking Cues

Use the directions on the package. These have been thoroughly tested for you.

SERVE IN MANY WAYS

Serve as dessert, main dish, accompanying dish; example: apple crisp made with oatmeal, porcupine meatballs containing rice, creamed chicken over rice.

Try these “toppings” at breakfast time: granenuts sprinkled over cooked cereal; honey and milk or cream on ready-to-eat or cooked cereal; fresh or canned fruit on cereal; brown sugar and/or butter on cooked cereal; dried fruits, too. Sprinkle ice cream with frosted, ready-to-eat cereal.

SCIENCE WHY’S

Why do we need protein?

Protein is necessary to all life. It is a part of every cell in your body. In order to repair or build cells, your body must get protein from the food you eat.

Is there a difference between animal and plant proteins?

Animal protein comes from milk, eggs, meat, poultry and fish. It does a very good job in building or repairing body cells.

Plant protein comes from nuts, flour or cereals. When the protein from these foods work with each other or with animal protein, they, too, build and repair cells.

One of the active workers in protein is nitrogen. Every living thing must have nitrogen in order to live. Plants get nitrogen from the soil or air. Animals eat plants and use the nitrogen to make protein for their body cells. You get nitrogen when you eat plant or animal foods which contain protein.

Why do cereals swell up when they are cooked?

Water enters the starch granules in the cereal. This softens the cereal and causes it to swell. Heating the cereal makes this happen faster.

Why do cereals become sticky when they are stirred too much?

Stirring breaks the swollen starch granules. Some of the starch and water forms a sticky, glue-like mass.

How can we keep cereal from foaming as it cooks?

Add a little butter to the cereal as it cooks. It will bubble quietly.
EGGS, THE WAY EVERYONE LIKES THEM

Remember about the “prize winners”—the nutrients which come in foods? Eggs bring some very important “prize winners”—protein, iron, and some of the B vitamins. In fact, eggs are so important that you need to eat at least four a week.

Here’s how the nutrients in eggs help the body. The protein and iron contribute to the hemoglobin in the blood. Hemoglobin carries oxygen to every cell in your body. Protein builds and repairs body tissues, too. The B vitamins help your nerves get along efficiently; they also help your body cells obtain energy from foods.

Look in your cookbook and try several egg recipes you find there. No matter how you cook an egg, keep these rules in mind:

— Cook at low to moderate temperature.
— Don’t overcook.
— Serve eggs at once (exception: cold, hard-cooked eggs).

Here are three common ways to prepare eggs. You can vary each one by adding such foods as ham, bacon, minced onion, chopped green pepper, tomato juice, or cheese. Remember; treat eggs gently.

SCRAMBLED EGGS

Use 1 or 2 tablespoons milk or other liquid (tomato juice) for each egg. Beat slightly. Season. Pour into a skillet containing a little melted fat. Cook over low heat. Turn or stir eggs occasionally as mixture thickens. Do not stir constantly.

BUTTER POACHED EGGS

This is really a way to fry eggs. Melt ½ teaspoon butter per egg in skillet. Break eggs into a saucer; then slip into skillet. Add a little water (2-3 teaspoons). Cover with heavy lid and cook over low heat for 3 to 5 minutes, or until film of white covering yolk is cooked.

FRENCH OMELET

This is a variation of scrambled eggs. It can be served in many ways and is a good main dish for lunch or supper. Prepare egg mixture as for scrambled eggs but use 1 tablespoon liquid per egg. It is hard to make a big omelet, so try a small one of 2 eggs.

Melt 1 tablespoon butter in a heavy skillet (½ tablespoon per egg). When hot, add the egg mixture.
As bottom layer of eggs thickens, use a spatula to lift cooked layer so that the uncooked eggs can run underneath. Repeat until eggs are cooked but top is moist. Do not stir at all. Increase heat and brown bottom of omelet.

Fold the omelet and turn out onto a hot platter. Serve with creamed ham or chicken or with creamed vegetables. Cheese or jelly in the omelet fold are good, too.

**SCIENCE WHY'S**

What makes eggs change from a "runny" to firm texture?

Heat thickens or coagulates the protein in eggs, changing the texture of the egg.

What happens when we cook eggs too long or at too high a temperature?

If you don't know what happens, try this experiment. Place an egg in a saucepan and cover with cold water. Heat water to simmering point; cover; and remove from heat. Let stand 20 to 25 minutes. Cool in cold water.

Place a second egg in a different saucepan and again cover with cold water. Bring to a boiling point. Boil rapidly for 30 minutes. Cool in cold water.

Now take the eggs out of the shell. Make sure you know which one is the 30-minute egg. You can tell anyhow. It will have a greenish coat on the yolk. Taste it. It is apt to taste like sulfur or an "old" egg. The white will be tougher than the white of the simmered egg.

Reason? There is iron in the yolks of eggs. The whites contain sulphur. If the egg is over-cooked at too high temperature, the sulphur combines with the iron to form a chemical compound called ferrous sulphide. This is the greenish coat you see. The egg is perfectly all right to eat—but you may not like its appearance or taste. The same thing happens when you use low-quality eggs.

Overcooking always makes eggs and other protein foods tough.

**Can Eggs Be Frozen?**

**Uncooked**—Eggs should be removed from the shell. The egg expands which causes the shell to crack. One tablespoon corn syrup or sugar, or one teaspoon salt should be added to 2 cups of liquid whole eggs or 2 cups of egg yolk. Mix well, breaking all yolks, but do not beat air into the mixture. Chemical changes occur in the egg yolk when these additions are not made. These changes produce a gummy yolk which will not blend in with other ingredients. Egg whites can be frozen without any additions.

"Freeze only the amount of whole eggs, egg yolk, or white that will be used at one time. Use moisture-vapor-proof containers. Small quantities of egg can be frozen in small paper cups supported by muffin pans, or in trays having removable individual sections. Package after freezing.**

Fresh eggs can be stored in the refrigerator for several months without spoilage. Therefore, it is not necessary to freeze large quantities of eggs.

Eggs should be used immediately after being thawed. One tablespoon of yolk is equivalent to 1 egg yolk; 2 tablespoons of white are equivalent to 1 egg white.

**Cooked**—If cooked eggs are frozen, the egg whites undergo change. The egg white loses its ability to hold liquid. As a result the egg white becomes a series of layers. Cooked egg yolks can be frozen successfully.

**EXPERIMENT:** Freeze cooked and uncooked eggs. Did the changes described above occur?

1 "Freezing Foods in Michigan Homes" Circular Bull. 216 (revised).

**Storage—Cool, Clean, Covered**

Store eggs in the refrigerator in a covered container. Uncovered eggs often pick up odor and lose moisture. Use within a reasonable length of time. Eggs lose their flavor very rapidly at room temperature. Even when stored in the refrigerator, eggs eventually taste "old."
ALL ABOARD FOR BREAKFAST

Surely by now you understand why breakfasts are important to you, to your health, to your good looks, and to your pep and energy. A good breakfast gives you nearly one-third of the food you need each day. When you make breakfast for yourself or your family, be a "marvelous manager." Do it this way:

"Marvelous-Manager" Methods

FIRST THINGS FIRST
1. Plan the menu. See pages 4, 5 for hints. Follow the food guide.
2. Check to see that you have everything you need.
3. Do some things the night before. Set table; measure dry ingredients, if necessary.

A PLEASING TABLE
1. Make your breakfast table pleasing with:
   - well-chosen color.
   - interesting centerpiece.
   - attractive place mats or cloth.
   - orderly arrangements.
2. Serve foods attractively.

EVERYTHING UNDER CONTROL
1. Decide which things must be done first. If you use a menu like the first one on page 5, you would prepare the orange juice and pour it and the milk before you cook the egg and make the toast.
2. Be sure everything is ready at the same time. This takes planning and practice.

DO'S FOR DOING DISHES
1. Get ready before you start the job itself. Use trays to carry dishes to the sink. Stack dishes in the order you will wash them.
2. Use rubber scraper to take off unused food; pre-rinse dishes. Note: Very important if you have a limited supply of water.
3. Soak pots and pans as soon as food is removed from them. Use hot water for soaking away fats or sugar; cold water for starchy foods; lukewarm water for proteins.
4. Arrange equipment so that clean dishes will be near storage when done. Saves time, steps.
5. Use hot water — hot as your hands can stand — and plenty of detergent. A dishmop lets you use hotter water. Change the water when it becomes dirty or cold, or the suds are gone.
6. Use clean dishcloth; clean towels.
7. Wash cleaner dishes first — glassware, silver, china; then pans.
8. Rinse everything with scalding water. Let dishes stand a few minutes in hot rinse water. If you drain dishes, dry only the silver and pans.
9. Wipe off work surfaces and the range. Clean the sink, dishpan, and dishclothes.

SCIENCE WHY'S

Does eating a good breakfast really make a difference in how we feel?

Scientists say "yes." They have studied the breakfasts girls eat. They know from research that girls who eat breakfasts are less apt to be tired in late morning than those who do not. Count the hours between the evening meal and the noon meal on the following day. This is the amount of time that the body is without food if no breakfast is eaten. Would you agree that the morning meal is well named "breakfast" or "break fast"?

Breakfasts are as important for the girl who is overweight as for the girl who is just the right weight. Sometimes girls who are overweight try to lose weight by not eating breakfasts. Often these girls become tired easily and reduce their activity, or they may snack in the middle of the morning. If a girl is gaining weight too rapidly, she should reduce the total amount of food which she eats — smaller portions at each meal — and omit rich desserts. She should give her body the nourishment it needs in the morning.
LET'S START WITH MEAT

Aren't you lucky to live in a country where there is plenty of meat for everyone? Meat gives you:

— protein to help build and repair body cells.
— iron (beef and liver) for good blood and healthy tissues.
— vitamin A (liver) to help your skin stay healthy and your eyes adjust to changes in light.
— riboflavin (all meats) and thiamine (pork) for good blood, healthy skin, eyes, and nerves.
— phosphorus, which works with calcium to make and keep bones and teeth healthy. This mineral is a part of every tissue in your body. It is necessary for your muscles to work and helps your body use carbohydrates and fat.

Hamburgers! Of course you can cook them. But you can cook more kinds of meat than that — Swiss steak, broiled chicken, ham slices. It's all in knowing how and why.

One of the first things you'll find out is that you can cook meat with dry or moist heat. Which to use depends on how tender the meat is. Generally, you cook tender meat with dry heat; less tender cuts with moist heat. You cook some cuts of pork with moist heat to develop its flavor, even though it may be tender.

The most tender cuts of beef come from the loin or rib.

Some pork and practically all lamb cuts are tender; so is fish.

Young poultry is tender; older birds may be tough.

Meat should be: well browned, tender, full of flavor, juicy, not dry.

Remember — you are a success with any method if your meat turns out
— well browned
— tender
— full of flavor
— juicy (not dry)
Dry Heat — Roasting

THESE MEATS ROAST WELL
- Thick cuts of pork (loin, shoulder, ham)
- Thick cuts of lamb (shoulder, rack, leg)
- Roasting chicken
- Beef rib and loin
- Top-quality beef rump
- Turkey

HOW TO ROAST
1. Insert meat thermometer in center of thickest muscle. Be sure it does not touch the bone.
2. Place on rack in baking pan large enough to catch the drippings.
3. Do not sear! Do not cover! Do not add water!
4. Use a low to moderate temperature (325 to 350 degrees).
5. Cook until done. The meat thermometer will tell you, or use the timetable in your cookbook. You may cook beef rare, medium or well done. Always cook pork until well done. (See Science Why's.)

Note: You can carve a roast more easily if you let it stand a few minutes at room temperature after cooking.

Dry Heat — Broiling

THESE MEATS BROIL WELL
- Ground beef or lamb
- Sirloin, T-bone, club, rib, or Porterhouse steaks
- Broiling or frying chicken
- Fish
- Lamb chops or steaks
- Cured ham slices

HOW TO BROIL
1. Use tender cuts that are ¾ to 2 inches thick.
2. Cut through the outer fat and connective tissue to prevent curling of steaks and ham.
3. Brush on fat to prevent drying (chicken, fish). Use lemon or melted butter, Italian salad dressing, or any barbecue sauce.
4. Place on broiler, 2 to 5 inches from heat. This will depend on thickness of meat, how long it takes to cook, and doneness desired. Place thicker pieces farther from heat.
5. Turn oven regulator to broil. If meat cooks too fast, move broiler pan away from heat.
6. Turn steaks, ground meat, and fish when top side is browned and meat is about half done. Turn chicken more often. Baste when you turn it. Continue to broil until done to your taste.
7. Season and serve immediately.

Note: Do outdoor broiling just as you do indoor broiling. Use the same kinds of meat cuts. Be sure to broil over coals rather than flames.

Dry Heat — Pan-Frying

Use tender meat. You may use very lean cuts. You may pan-fry chicken and liver but you should not pan-broil it.

HOW TO PAN-FRY
1. Put fat in skillet. The amount you use depends on what you are frying. You can fry liver in a well-greased skillet. You will need more fat for frying chicken (perhaps ½ inch melted fat in bottom of skillet).
2. You may or may not flour the meat or use other coating. If you coat the meat, you'll need to use more fat or the meat will stick to the pan.
3. Season to your taste.
4. Cook with moderate heat. Do not cover meat unless you are braising it.
5. Serve as soon as meat is browned on both sides and is done to your taste.
Dry Heat – Pan-Broiling

Use the same cuts as for broiling. Meat can be thinner and must have enough fat to prevent sticking.

HOW TO PAN-BROIL

1. Place meat in heavy, heated skillet. Do not flour. Do not add fat.
2. Cook with moderate heat until meat is well-browned and about half done. Drain any fat that cooks out. Turn.
3. Cook to your taste. Season and serve as soon as second side is browned and cooked to your taste.

Moist Heat – Braising

In general, use this method for less tender meat. You might braise cuts as thick as a chuck roast or as thin as ¼-inch round steak. You may use:
- chuck (pot) roasts or steaks
- round (pot) roasts or steaks
- liver
- chicken (fryer or roaster)
- pork chops
- heart

HOW TO BRAISE

1. You may flour meat — use a crumb covering or other coating. Brown meat in small amount of fat in a heavy pan or skillet with a tight-fitting lid.
2. After browning, you may place a low rack under meat to prevent sticking or overbrowning.
3. You will probably need to add a little liquid (water, tomato juice, or bouillon) as the meat cooks.
4. Cover tightly. Simmer until tender, either in oven or on top of range.

Moist Heat – Stewing

Cuts for stewing:
- ham hocks
- beef brisket
- tongue
- stewing beef
- stewing chicken

HOW TO STEW

1. Brown the meat, if desired.
2. Cover with water or other liquid (tomato juice, broth). Add seasonings such as herbs or spices if you like them.
3. Simmer until tender. Add water as needed.
4. You may add vegetables, noodles, or rice during the last half hour or hour of cooking.

SCIENCE WHY’S

What happens when meat broils?

Direct rays of heat passing through air cook the meat. They cause many things to happen. The fat melts. The meat turns brown, for the heat changes the coloring from red to brown. The meat becomes firmer and squeezes out juices. Gases are released to give meat its good aroma. The flavor of the meat changes.

How is roasting different from broiling?

A roast is cooked mostly by hot air circulating around the oven. It does not receive any direct rays of heat. Roasting is slower than broiling and is used for thicker, larger cuts of tender meat.

Why are tender cuts of meat used for broiling, roasting, and pan-broiling?

Dry heat does not tenderize meat. In fact, it makes the muscle fibers firmer and less tender. Broiled or roasted meat is no more tender after it is cooked than when it was raw.

How does meat cook when pan-broiled? Pan-fried?

The hot metal of the skillet conducts heat to the meat. When you pan-fry, hot fat as well as hot metal cooks the meat.

How does braising or stewing tenderize meat?

Moist heat provided by steam and hot liquid changes the collagen (a kind of connective tissue) to gelatin which is a tender protein.
**Why pound round steak?**

Round steak has a lot of connective tissue. Pounding helps break up the connective tissue. This makes the steak more tender.

**Why always cook fresh pork until well done?**

This is a safety measure. Fresh pork that is cooked well-done is perfectly safe to eat. This is because heat kills the tiny organisms which cause the disease trichinosis. These organisms are sometimes found in fresh pork. The National Live Stock and Meat Board recommends that fresh pork be cooked to an internal temperature of 170°F. This is well above the temperature of 137°F which kills the parasite, trichinae, which causes trichinosis. Well-done pork also has a better flavor. You do not have to cook cured pork such as ham and bacon quite as long. See meat timetable in your recipe book.

**Defrosting Meat and Poultry**

Even though you may not have a freezer at home, you may have occasion to purchase frozen meat and poultry. To maintain the quality of the frozen product, it is important to take care when defrosting them.

The following methods may be used for thawing frozen meat and poultry.

1. **In the refrigerator.** Highly recommended but takes the longest time. Need to plan in advance.

2. **At room temperature.** Caution — As soon as the product is thawed place it in the refrigerator, or cook it.

   If this method is to be used for defrosting turkey, the following procedure is recommended:

   - Leave turkey in original wrap.
   - Place frozen turkey in brown paper bag or wrap in two or three layers of newspaper.
   - **Thawing Time**
     - Under 12 pounds 10-18 hours
     - Over 12 pounds 18-30 hours
   - Check turkey often during the last hours of thawing. Refrigerate immediately if completely thawed.

   Do not defrost pre-stuffed turkeys.

3. **During cooking.** Extra cooking time is required. For meats, add about 20 minutes per pound. Increase the cooking time for poultry by at least one-third.

4. **In water.** "Most authorities recommend thawing in water only for meat in which the muscles have not been cut or meat that is sealed in a watertight package."¹

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MEAT COUNTER QUIZ

What Shall I Buy?
This depends on the meal you have in mind. Company dinner? Breakfast? Snacks or picnic? Decide on your menu and the kind of meat ahead of time. (Note: Give yourself a second choice just in case the meat you have in mind may not be your best buy on the day you shop.)

How Much Shall I Buy?
If the meat is boneless, buy ¼ pound per serving (flank steak, ground lamb). If meat has some bone, buy ½ to ¾ pound per serving (chuck roast, ham). For very bony meat, buy ¾ to 1 pound per serving (chicken, spare ribs).

How Will I Cook It?
See pages 12-14 for ways to cook various cuts of meat.

How Can I Be Sure It Is Good Meat and Safe To Eat?
The best way to be sure is to buy from a store that (1) carries federally inspected (USDA) meats or (2) buys its meat from a meat plant that has its own very sanitary and clean inspection system. The USDA inspects all meat that moves from one state to another.

What Will It Cost?
This depends on your local store. But watch differences in the price of meat at various seasons of the year. For example, because there is more pork on the market in December-February it is usually cheaper then.

What Quality Is It?
Sometimes you will be able to see the purple stamp of the grade of meat on the cuts of meat at the counter. Grades tell you about the quality of meat. The meat packers can ask the United States Department of Agriculture to grade the beef, lamb, and veal before it goes to our grocery stores. If you look, you will see the USDA stamp. Pork is not graded by the USDA. Brand names on cured pork sometimes indicate quality.

US Prime is the top quality; it usually is sold to big hotels and restaurants. US Choice and US Good are the most common grades sold in grocery stores. The lowest grade you will find at the meat counter is US Standard.

Top grades of meat are the juiciest and may be more tender. They have more fat. More fat also means more waste.

Lower grades of beef are excellent for stewing or pot roasting.

SCIENCE WHY’S

Why store meat in the refrigerator or freezer?
Cold temperatures slow down the changes in meat which make it spoil or taste “old.” These changes are caused by bacteria and other microorganisms. The tiny microorganisms cannot grow as fast in the refrigerator as at room temperature. But when you freeze meat, the very low temperature stops the growth of microorganisms almost completely. If meat is kept at room temperature, you should use it right away. Refrigerated meat can be stored a few days (see the chart). Frozen meat will not spoil or change flavor for several months.

Why remove the store wrapping from meat when it is put in the refrigerator?
Air dries the surface of the meat slightly. The dry surface helps prevent bacteria from causing spoilage as quickly.
**FRUITS AND VEGETABLES EVERY DAY**

You want to look and feel and be your very best self. Plenty of sleep, exercise, and good food will help. Good food includes four servings of fruit and vegetables every day.

Choose one that is rich in vitamin C. (See page 4 for fruits and vegetables containing vitamin C.) This vitamin helps your body heal wounds and broken bones and keeps blood vessels healthy. It also helps you resist infection and be less tired.

Some fruits and vegetables are important to you because they contain vitamin A value (See “Science Why’s, page 19). Vitamin A is important for healthy skin and membranes. It also helps your eyes adjust to changes in light intensity. You can store vitamin A in your body but it doesn’t last forever. A serving of vitamin A-rich foods (certain fruits and vegetables or liver) every other day should be enough.

All fruits and vegetables, even those not rich in vitamin A or C, are important to your health. They contribute bulk to your diet and contain small amounts of many vitamins and minerals.

**Vegetables – All Ways**

Fresh, frozen, dried, canned — all vegetables are good but each has its own special taste. They must be cooked in different ways, too.

**FROZEN** — These vegetables are more tender than fresh vegetables. They need less cooking. Use less water than for fresh vegetables. Panning is a good way to cook frozen vegetables such as broccoli, corn or spinach.

**CANNED** — There are dozens of different canned vegetables on the grocery shelf. So go adventuring. All you have to do is heat and season these vegetables. Boil down the liquid from the can before adding the vegetables. For a special flavor, add minced onion, bits of bacon, a cheese sauce, or a dash of herbs.

Add *rosemary* to the liquid when you cook potatoes, green beans, peas or spinach.

Use *summer savory* with cauliflower, sauerkraut, Zucchini squash, string beans, or peas.

*Thyme* tastes good with onions, carrots, or beets.

**DRIED** — You will need to replace the water lost in the drying process, so use plenty of water when you cook these vegetables. To shorten the cooking time, soak dried vegetables before cooking. If you have a pressure cooker, try it. It cooks dried vegetables much faster than an ordinary saucepan does.

**RAW** — See “Salads” on page 18.
Cooking Cues

There are not many rules for cooking vegetables, but each rule is important. Vegetables cooked “just right” are tender but firm; have a bright fresh color and a good flavor. Look in cookbooks and magazines for recipe ideas.

HOW TO COOK VEGETABLES IN WATER

1. Cook in as little water as possible. Too much water dissolves nutrients and gives a “washed out” flavor.

2. Have water boiling before you add vegetables to it. The vegetables will not have to soak in water before they start cooking. Soaking causes a loss of some of the vitamins and minerals as well as loss of flavor.

3. Cook green vegetables and strong flavored vegetables with the lid off — at least for the first few minutes — to let mild acids and strong flavors escape. Cook other vegetables in a covered utensil. They will cook faster if steam is kept in the pan.

4. Reduce heat when water boils again. Rapid boiling causes some vegetables to lose shape. Also the vegetables won’t burn so easily if you reduce the heat.

5. Cook just until tender. Vegetables will taste better and will contain more vitamins and minerals.

6. Save cooking liquid for gravies, sauces, or stews. Some of the nutrients do dissolve in the cooking water. If you use this water, you’ll get the nutrients.

7. Serve vegetables as soon as they are cooked. Vegetables become unattractive and lose flavor when they stand. They also lose some nutrients.

HOW TO BAKE VEGETABLES

Bake some vegetables in their skins. Scrub potatoes, tomatoes, or squash. Bake at 350 to 400 degrees until done. (Tomatoes will bake in a short length of time.) When potatoes are done, squeeze or gently crush them to make them mealy.) Open at top and add butter and seasoning.

Try different casserole recipes. Use sliced or grated vegetables such as carrots, potatoes, beets. Prepare the vegetables. Slice thinly or grate. Place in buttered casserole. Dot with butter. Season. Add a very little boiling water. Cover and bake at 350 to 400 degrees until done.

Serve scalloped dishes. Cover sliced vegetables in a casserole with a white sauce or a condensed cream soup. Top with buttered crumbs or crushed potato chips. Bake uncovered at 350 to 400 degrees until done.

HOW TO PAN VEGETABLES

Panned vegetables are often called “Chinese style”. Peel vegetables and slice thinly or grate. Add a small amount of fat to heavy skillet. Add vegetables and cover skillet. Turn the heat low and cook until tender, but still slightly crisp. Stir or shake once or twice during cooking to prevent sticking. You may need to add a little liquid near the end of cooking.

TRY OUTDOOR COOKERY

Baked Potatoes a la Charcoal – Wrap each potato separately in aluminum foil. Place on charcoal or wood coals for 45 to 60 minutes. Turn frequently with tongs. When potatoes feel soft, they are ready to eat.

Frozen Vegetables a la Charcoal – Since frozen vegetables need less cooking than fresh vegetables, they are ideal for cooking outdoors. Separate block of frozen vegetables into smaller pieces. Dot generously with butter. Season as desired. Wrap tightly in double aluminum foil or in extra-heavy aluminum foil. Place directly on coals or on grate over fire. Turn often. Cook for 20 to 30 minutes.

SCIENCE WHY’S

Why do we cook sweet corn soon after picking?

Sweet corn contains sugar. If it gets too old, or if it stands too long after picking, enzymes (little chemical “action-pushers”) change some of the sugar to starch. When you cook corn, you stop the enzyme action. This is why corn tastes sweeter if you cook it soon after it is picked.

What does hard water do to vegetables?

Hard water contains minerals which affect the color and texture of some vegetables. Green vegetables look greener. White vegetables such as cauliflower, cabbage or onions may turn yellow or gray in color if cooked too long in hard water. To avoid this, add just a little cream of tartar to the water. This makes the water more acid; prevents the color change.

Hard water turns the red color of beets or cabbage to a bluish color. Vinegar or lemon juice (which are acid) added to the vegetables when almost tender will bring the red color back.

Hard water also can make vegetables less tender. Vegetables cooked in hard water often need a longer cooking time.

17
**Fruits for Snacks, Salads, and Desserts**

The world is full of wonderful fruits. Some grow close by; some come long distances to give your meals variety. Let’s look at some fruits from near and far-away places.

Strawberries from Michigan’s gardens and berry patches everywhere . . . blueberries and raspberries from Michigan, Oregon, and Washington . . . cherries from Michigan, Wisconsin, and Oregon . . . peaches from Colorado, Georgia, South Carolina, and Michigan . . . apples from everywhere . . . pineapple from Hawaii, Cuba, Mexico . . . bananas from Central and South America . . . dates from California, Asia, or Oregon . . . cranberries from the bogs of Massachusetts, Wisconsin, and New Jersey . . . grapefruit and oranges from Texas, California, and Florida . . . and many others from across the world.

If you look in your favorite cookbook, you will see dozens of ways to use these fruits.

**FRESH FRUIT**

Combine sweetened peaches and raspberries. Top with commercially-made sour cream.

Fill cantaloupe halves with vanilla ice cream.

Arrange a tray of fresh fruits, cheese, and crackers.

Make ambrosia (combine orange segments, banana slices and coconut flakes).

**DRIED FRUIT**

Follow cooking directions on the package. Then try dried peaches, apricots, pears, prunes, or dates in:

— a compote (several fruits together). Flavor with lemon or orange juice.

— refrigerator desserts

— pies or cobblers

— fillings for coffee cakes or fancy yeast rolls, cookies, cakes, or cooked cereals.

**COOKED FRUIT**

Of course you can make rhubarb sauce, but have you tried —

— cinnamon apples

— baked pears

— fruit whips

— fruit cobblers or pies

— thickened cherry sauce over rice mixed with sweetened whipped cream.

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**Salad Highlights – Vegetables and Fruits**

It’s time for an art class — making beautiful and tasty salads. Consult your cookbook and experiment. These are the main types of salads:

**Main dish** — Serve these for the main course of the meal. Combine a protein food (egg, cheese, or meat) with fruits or vegetables.

**Dinner** — Serve these with the main course. Practically any fruit, vegetable, or gelatin salad may be a dinner salad. Don’t make it too rich or too sweet.

**Dessert** — Of course you like fruit itself as a dessert salad. Why not try it with ices or gelatin sometimes?

**GELATIN**

1. Follow directions on package.

2. Use frozen fruit or substitute ice cubes for part of the liquid to make salad set quicker.

3. Substitute fruit juices for all or part of the water.

4. Cool gelatin until slightly thickened before you add bananas so they won’t float or turn brown.

5. Don’t use fresh pineapple. (See “Science Why’s.”)

**PLACED**

1. Use greens for base — shredded cabbage, lettuce leaf, endive, escarole, spinach.

2. Plan for variety of color and flavor.

3. Serve very cold.

**TOSSED**

1. Mix citrus juice with bananas, apples, or other fruits that darken. The juice keeps the fruit color bright.

2. Have all ingredients very crisp, very cold, and well-drained.

3. Mix lightly.

4. Use just enough salad dressing to moisten the salad ingredients.

5. Cut into large enough pieces so that the fruits and vegetables can be recognized.

6. Combine vegetables with fruits sometimes; for example — cabbage and apples, bananas and lettuce, carrots and oranges.
**Salad Dressings**

1. Select a dressing that blends with or brings out the flavor of your salad.

2. French dressings are good with raw vegetables, fruits, or fish salads.

3. Mayonnaise-type or cooked dressings are good on main-dish salads.

4. Fruit juice dressings, sweet French, or mayonnaise combined with cream or fruit juice may be used for fruit salads.

5. If you wish, pass salad dressing at the table. Your guests can then take as much or little dressing as they like.

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**SCIENCE WHY'S**

**What makes a gelatin salad set when it is chilled?**

Gelatin is a protein and has the ability to absorb a lot of liquid. But you must make sure to have the right amount of water (or juice) for the gelatin you use. When the mixture cools, the water and gelatin form a jelly-like combination.

**Why can't we use fresh pineapple in gelatin salads?**

Fresh pineapple contains an enzyme which keeps the gelatin from holding water. So, the salad will not set.

**What is the difference between vitamin A VALUE in fruits and vegetables and Vitamin A in milk or liver?**

Fruits and vegetables actually do not contain vitamin A as such. They contain carotene. When you eat fruits and vegetables, your body changes their carotene to vitamin A. Cows change the carotene from the plants they eat to vitamin A and store some of it in the fat of their milk. This means that milk products such as cream, butter, cheese, and ice cream are good sources of vitamin A. (Skimmilk or skimmilk products contain very little vitamin A.) Liver is also a rich source of vitamin A.

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**At the Fruit and Vegetable Counter**

When you shop for fresh fruits and vegetables, look for these points:

**FRUITS**

- Firm, no spots, blemishes, or soft spots
- Heavy for size (especially citrus fruit)
- Size to fit your use
- Color sometimes indicates quality (not in citrus fruits, however)

**VEGETABLES**

- Fresh and crisp
- Firm, no blemishes or spots
- Heavy for size (especially heads of cabbage, lettuce)

When you shop for frozen or canned fruits or vegetables, read the label. It should tell you what kind, what quality, and how many servings. Your experience with brands will help you decide which to buy.
Keep Them Fresh,
Store Them Right

You’ve spent good money for the fruits and vegetables you bought. Now you want to keep them fresh and good by storing them right.

Refrigerate — ripe fruits such as apples, pears, pineapple, plums, berries, peaches, tomatoes, grapes; green vegetables, radishes, carrots, celery (Store in plastic bag or tight vegetable crisper to prevent loss of moisture.)

Store in a dry, cool place — onions, white potatoes, squash, sweet potatoes.

Store in a moist, cold place — beets, turnips, cabbage, apples in large amounts.

Store at room temperature — bananas, unripened fruits, citrus fruit. (If there is danger of spoilage, refrigerate them.)

Out-of-Season Use

You may have an abundant supply of fresh fruits and vegetables. They are good when fresh. But only a certain amount can be eaten within a given time period. Also there is a point at which fresh fruits and vegetables spoil and must be discarded.

What can be done? If your family has a freezer, try freezing some of them. The U.S.D.A. Home and Garden bulletin, “Home Freezing of Fruits and Vegetables,” provides information pertaining to selection and freezing procedures. Or maybe you prefer to can the extra fruits and vegetables. An excellent reference bulletin is “Home Canning of Fruits and Vegetables,” a U.S.D.A. Home and Garden bulletin. Both of these bulletins are available at the county extension office.

CONTAINERS FOR FREEZING:
The freezing container or wrapping material must be moisture-vapor-proof. The materials should be:
— Odorless and tasteless
— Easy to handle, seal and label
— Strong and lasting

CONTAINERS FOR CANNING:
Both the jars and lids must be in perfect condition. Any imperfections prevent an airtight seal.
1. Use standard mason jars which are designed for home preservation.
2. The jars should be washed, rinsed and heated in clean water before being filled with hot foods or liquids.
3. Wash and rinse the lids except those with the sealing compound, in which case follow the manufacturer’s directions.

SCIENCE WHY’S

How does fruit ripen?

Many things happen when fruits ripen. For one thing, enzymes change the starch to sugar and make the fruit taste sweeter and less tart. When you can fruit or heat it, you stop this action. When you put fruit in the refrigerator, you slow down the enzyme action. If this action goes too far, the fruit spoils.

Why is it important to use recommended food preservation techniques?
The presence of micro-organisms and/or active enzymes lower the quality of preserved food. The micro-organisms (molds, yeasts and bacteria) cause food spoilage. They are destroyed by heat during the canning process. However, an improper seal will allow more organisms to enter, causing spoilage. Blanching vegetables before freezing reduces the number of micro-organisms.

Enzymes (chemical substances found in plants and animals) cause undesirable color, flavor, and texture changes. In canning, the heating (or pressure processing) destroys the enzymes. Blanching vegetables before freezing stops the enzyme action in frozen fruits. If the recommended procedures are not followed, the micro-organisms and enzymes may not be destroyed, causing an inferior product.

MILK OR CHEESE,
MEALTIME OR ANYTIME

You can count on milk to work hard for your good health and good looks.

It gives you calcium which works with phosphorus to give your bones and teeth their “hardness” or strength. Calcium helps your muscles work smoothly. It also helps your blood to clot.

There is phosphorus in milk, too. It helps calcium in the bone- and teeth-building business, but it does more than this. It helps your body obtain energy from food; it helps your muscles to contract.

The protein in milk, like protein in other foods, builds and repairs body cells. There are some B vitamins in milk, especially riboflavin. These vitamins do many things to help you stay healthy.

Kinds of Milk

You know how good a glass of cold milk tastes. But have you ever thought about all the ways you can eat milk? In custards or puddings . . . in ice cream
or soups . . . in creamed foods. Even a bite of cheese is a form of concentrated milk. There are many kinds of milk in the grocery store.

**FRESH WHOLE MILK** is pasteurized to make it safe to drink. It is heated just enough to kill organisms which might cause disease.

**HOMOGENIZED MILK** is pasteurized whole milk, too. But the fat has been broken up into very tiny particles so that it is distributed evenly all through the milk. The cream does not come to the top.

**FRESH SKIM MILK** is whole milk with the cream removed. It must be pasteurized, too. You can use skim milk just as you would whole milk. Of course, it is not as rich.

**DRIED SKIM MILK** is whole milk with the cream and water removed. You must add water to make fluid milk from it. It has many interesting uses: Add it to meat loaves or creamed foods for extra nutrition; use it to make cocoa or biscuit mixes; whip it for fluffy topping.

**EVAPORATED MILK** is whole milk with half the water removed. Then it is canned. Sometimes you can use this in recipes instead of cream. If you chill it until very cold, it will whip.

**CONDENSED MILK** is whole milk with part of the water taken out and sugar added. Use it for desserts such as quick and easy pies or puddings. It also comes in cans.

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**Cooking With Milk**

You will often add egg, flour, or cornstarch to milk. When you heat a milk mixture containing any of these ingredients, it will thicken. Remember to follow the recipes so you will have the right proportions of ingredients. Usually you stir these mixtures to keep the starch and milk evenly distributed. If the starch particles settle to the bottom, they may stick and become lumpy.

**IN WHITE SAUCE**

You use flour to thicken white sauces. You will use white sauces to cream vegetables, make cream soups, or sauces for casseroles.

Cook flour and melted fat together over low heat.

Add milk slowly after saucepan is removed from heat; stir constantly so that milk and flour are evenly blended.

Cook until thickened. Stir constantly. White sauce scorches or lumps very easily.

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**IN CUSTARDS**

— Egg is the thickening agent.
— Don’t overmix eggs and sugar.
— Bake in custard cups surrounded by water.
— Bake at low temperature. (Check custards carefully until just done.) Test for doneness by inserting a table knife in center of custard. If knife comes out clean, custard is done.

**IN CORNSTARCH OR CREAM PUDDINGS**

You use eggs and cornstarch to thicken cream puddings. Cornstarch alone is used for cornstarch puddings.

When you use eggs, be careful not to overcook your pudding or it may curdle. Cook cornstarch mixture long enough to remove any starchy flavor.

**IN FROZEN DESSERTS**

The recipes you choose will depend upon the way you plan to freeze a dessert. Your cookbook will help you decide. The constant turning of the ice cream freezer helps prevent large crystals forming. This means that recipes for ice cream freezers need less ingredients such as cream, gelatin or eggs, whereas recipes for refrigerator ice creams need more.

Follow directions for freezing. This is just as important as using the right amount of ingredients.

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**SCIENCE WHY’S**

**Why do we bake custard in cups surrounded by water?**

The water keeps the custard from getting too hot. If the custard becomes too hot the protein loses its ability to hold onto water. The custard becomes spongy and has bubbles in it. The same thing happens when stirred custard curdles.

**What makes ice cream freeze firm?**

The ice or refrigerator takes heat away from the ice cream mixture. As its temperature lowers, it changes from a liquid to a solid just as water changes to ice. Cream, gelatin, and eggs keep the mixture from forming large crystals. Small crystals give ice cream its creamy smooth texture.

**Why do we add salt to ice when we freeze ice cream?**

Salt lowers the freezing temperature of the ice and water mixture. The ice can then remove more heat from the ice cream and it freezes faster.
Cooking With Cheese

Ever since Bible times, cheese has been a favorite food for people around the world. There are more than 400 different kinds of cheese. Many of them now are made in the United States. But they first were made in far off places — Swiss cheese from Switzerland, Gouda in Holland, Roquefort and Port du Salut in France, Gorgonzola in Italy. Cheddar, or “American” cheese is a favorite in this country.

Look at all the kinds and types of cheese in your grocery store. Some are “natural” — Edam, Swiss, cheddar. Some are called “processed” cheeses. These are natural cheeses which have been reheated and mixed with an emulsifying agent (helps the cheese melt smoothly and easily). Some are called “cheese food.” These contain milk solids, liquids, and emulsifying agent as well as cheese. They are not 100 percent cheese, so they have a mild cheese flavor.

Serve cheese many ways. Serve it plain with fruit and crackers. Use it in casseroles. Make all kinds of sandwiches with it. Make cheese cake, cheese sauce, cheese dip, cheese sticks. Your cookbook will suggest many recipes. Try them.

YEAST BREADS

You know how much you like to eat homemade rolls. Well, it's fun to make them, too, and you'll be surprised how easy it is.

Carry Out An Experiment

What makes yeast grow? Try this. Put 1/2 teaspoon dry yeast in each of four custard cups.
— To the first cup, add 1 tablespoon warm water.
— To the second cup, add 1 tablespoon boiling water.
— To the third cup, add 1 tablespoon ice water.
— To the fourth cup, add 1 tablespoon water and 1/4 teaspoon sugar.

Then stir 1 1/2 tablespoons all-purpose flour into each yeast mixture. Let set in a warm place (about 85 degrees) for 1 to 2 hours.

Results? The dough made with plain water and sugared warm water became larger than the others.

Reason? Yeast is a delicate, living plant. It must be treated very carefully if it is to live and grow and produce more yeast.

Yeast grows best in warm temperatures. Boiling water is too hot. It kills some of the yeast cells. Ice water makes the yeast sluggish; it grows slowly.

Of course, yeast, like any other living thing, must have food. It lives on sugar. There are sugars in flour which the yeast can use for food. If a little extra sugar is added to the dough, it is more immediately available to the yeast. Too much sugar overdoes a good thing. It delays the action of the yeast.

A dough which contains the right amount of sugar will rise more rapidly than one which contains very little or too much sugar.

Remember what you know about the yeast when you make rolls.

Standard Yeast Roll Recipe

1 1/2 cups scalded milk
1/2 cup sugar
2 teaspoons salt
1/4 cup shortening
2 packages yeast in 1/2 cup lukewarm water
2 beaten eggs
7 cups all-purpose flour, approximately

A GOOD YEAST ROLL

Tastes like this — well-blended, with no off-flavor.

Looks like this — evenly shaped, lightly browned, thin crust, fine-grained.

Feels like this — light in weight, tender, elastic.
## Thirteen Steps for "Yummy" Rolls

### WHAT TO DO:

1. Collect all ingredients and equipment. Read the recipe and directions thoroughly.

2. Scald milk. Soften yeast in lukewarm or warm water, depending on type of yeast used.

3. Add sugar, salt, and shortening to scalded milk. Cool to lukewarm temperature. Combine yeast and cooled milk mixture.

4. Blend in beaten eggs and add one-half the flour. Beat mixture until smooth.

5. Mix in enough of remaining flour so that dough forms an irregular ball and comes away from sides of bowl.

6. Turn dough out on floured board or pastry cloth and let rest for 10 minutes. Invert bowl over dough.

7. Knead on pastry cloth or slightly floured board until dough is smooth and elastic.

8. Place in greased bowl. Turn dough so that it is lightly greased on all sides. Cover with a clean towel.

9. Let rise in slightly warm place, free from draft, until doubled in bulk (1 to 1½ hours).

10. Punch down dough. Let dough rest 5 to 10 minutes. Shape dough into rolls and place in lightly greased pan.

11. Cover rolls with clean cloth. Put pans in slightly warm place away from draft, and let dough rise until doubled in bulk.

12. Preheat oven to 400 degrees. Place rolls in oven and bake them from 15 to 20 minutes, depending on size.

13. Remove rolls from oven. Butter the crusts, if you like. Serve while hot. Be sure you have plenty.

### WHY YOU DO IT:

1. Save time. Fewer mistakes.

2. Scalding stops bacterial and enzyme action in the milk. Bread made with unscalded milk may have an off-flavor and may not rise as well because the enzymes and bacteria interfere with the growth of the yeast.

3. Yeast is delicate. It is killed by too high temperatures.

4. It is easier to beat the batter if only about half the flour is added in the beginning. Beating helps develop the gluten.

5. The amount of flour needed varies from time to time because of differences in the kind of flour and humidity of the day. Too much flour makes tough, dry rolls.

6. Resting allows the flour to absorb liquid and "tightens" the dough, making it easier to handle.

7. Kneading develops the gluten which gives bread its characteristic strong structure.

8. Greasing the dough keeps a crust from forming on the outside of the dough. This dry crust might cause streaking in your rolls.

9. Dough that rises in too warm a place develops a yeasty flavor and the rolls have a coarse grain. The dough will rise very slowly in a cool place.

10. Resting the dough helps relax it, making it easier to handle.

11. The second rising makes the rolls light and airy. Letting the dough rise twice develops a stronger gluten and distributes the carbon dioxide gas better. The air cells are smaller and more even.

12. Since rolls are small and cook fairly quickly, they can be baked in a hot oven. Loaves of bread are generally baked at a lower temperature.

13. Because they're so good.
**SCIENCE WHY'S**

*What causes bread to rise?*

Remember the experiment with yeast? Carbon dioxide helps make bread rise just as it makes muffins rise. But it is the yeast, not the baking powder, that makes the carbon dioxide in bread. Steam and air also help the bread rise after it is in the oven.

*What is the difference between dry and compressed yeast?*

More water has been removed from dry yeast, making the yeast inactive. A package of dry yeast can be interchanged in recipes for one cake of compressed yeast. You can use slightly warm water (110 to 115 degrees) to soften dry yeast. Use lukewarm water (85 degrees) for compressed yeast.

**At the Bread Counter**

When you buy a loaf of bread, you buy many things. You pay the farmer who grew and harvested the wheat . . . the miller who made the wheat into flour . . . the trucker who took the flour to the bakery . . . the baker who made that loaf of bread . . . the trucker who took it to the grocer . . . and the grocer who sold you the bread. Isn’t it amazing how much you get for your money?

You do not need to squeeze the bread. It’s soft because the baker adds “softeners” to the dough. He also adds substances which slow down mold growth.

In the label on the package of bread, look for the word “enriched.” This means bread (flour) is enriched with B vitamins and iron as breakfast cereals are.

Have you tried these? — English muffins? Rye bread? Pumpernickel? Raisin bread? What you buy depends on what is most important to you. Is it flavor? Then which of these breads tastes best to you? Is it time? Then which kind can be prepared in the least time? Is it texture and appearance? Then which feels and looks best? Is it money? Then which is least expensive? Is it reliability? Then which of these will be good every time?

**Keep It Fresh, Store It Right**

*In the bread box* — Keeps well for short time. May mold. Will eventually stale.

*In the refrigerator* — Prevents bread from molding. Bread stales more quickly than in bread box.

*In the freezer* — Keeps bread for longer period of time as fresh as when placed in freezer. Bread in freezers neither molds nor stales.

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**CAKES FOR COMPANY AND EVERYDAY TOO**

Company is coming so you will bake a cake! Or maybe you’re the one to bake the cake for Mom’s or Dad’s birthday. There are dozens of good cake recipes in well-known cookbooks. They have been tested and retested by home economists. They are there for you to try.

Read the recipes. Study them. Notice how many cakes are mixed the same way. You will find most cakes are made by the quick-mix, conventional, or sponge method. Make sure you understand the directions. Then follow the recipe exactly. *Remember, if you change one ingredient, you don’t have the same recipe.*

**BUTTER CAKE**

Make a plain butter cake from a box mix. Then try one using a quick-mix method from your cookbook. For this, you simply add all or part of the liquid to the dry ingredients and mix.

Make a cake from a conventional recipe. In this method, you cream the sugar and shortening together, add eggs, and then add liquid and dry ingredients alternately.

Always use the method given for the recipe you are making. A recipe designed for a conventional cake will not work as well for a quick-mix cake. Taste and feel and look at each cake separately. Decide which cake you like the best.

**SPONGE CAKE**

Don’t forget to try sponge and angel food cakes. Use a box mix, or look in your cookbook for a good recipe. Sponge cakes may be yellow sponge or angel food. You whip air into the egg whites to make the cakes very light and airy. No baking powder or soda is used. There is no butter or other shortening in sponge cakes.
**Baking Cakes**

Your oven may not be like the one used in the test kitchen so don’t expect your cake to be done at the exact minute given in the recipe. Look at your cake 5 or 10 minutes before it’s supposed to be done. Then test it frequently until it is done. Insert a toothpick in the middle of the cake. If it comes out clean, the cake is done. You can also touch the center of the cake lightly with your finger. If the cake springs back, it is done.

**YOU BE THE JUDGE**

Sometimes cakes do “strange things” even if you have carefully followed the recipe and set the oven temperature just right. So judge your cake. If it has a “problem,” you’ll want to find out why. Then the next time, you can correct your mistakes and make a better cake. Check to see whether you prefer a homemade cake or a cake from a mix. Make a cake from a mix one day. Note the following things:

- MINUTES to prepare
- COST of mix
- TASTE: excellent, fair, poor
- APPEARANCE: excellent, fair, poor

Another day, make a cake from basic ingredients.

- MINUTES to prepare
- COST of ingredients
- TASTE: excellent, fair, poor
- APPEARANCE: excellent, fair, poor

Which cake is more convenient?
Which cake is more reliable?

Then decide which of these things are most important to you:
- cost
- reliability
- convenience
- time
- quality
- personal satisfaction
- keeping quality

Finally decide which of the cakes is best for you and your family.

You might make this test on many kinds of box mix and homemade recipes just to see which are your favorites.

**How to Serve**

- Frost cake if you like, but it is not necessary.
- Serve cake warm with butter.
- Dip strips of cake in butter, roll in coconut, and toast in the oven or under the broiler.
- Serve cake with a fruit or cream sauce.
- Try ice cream and a sauce over cake.

**SCIENCE WHY’S**

**What makes cakes rise?**

You learned when you made muffins that baking powder and soda work with water to make carbon dioxide. The same thing happens in cakes. The steam and air in cakes also makes them light and airy. When you use egg whites in sponge cakes, air is trapped within the bubbles of egg white. You must be careful when you fold other ingredients into the whipped egg whites. You don’t want to lose the air in them.

**Why is it important to use the right size pan?**

Your recipe tells you what size pan to use. This is important because too large a pan makes a thin, dry cake. The top of the cake may not brown because the sides of the pan protect it from the heat. Too small a pan makes a very thick cake. It may run over the sides of the pan or may not bake properly in the center.

**How does the pan affect the quality of the cake?**

A glass pan absorbs and relays more of the heat to the cake than a metal pan does. The cake in a glass pan will tend to brown quicker and have a thicker crust. For this reason, lower the oven temperature 25 degrees when you bake in glass.

Darkened or black metal pans absorb more heat than shiny pans. Cakes baked in them have a thicker, darker crust. The bottom is apt to burn before the top browns. Shiny metal pans reflect heat. Cakes baked in them are delicately browned with a thin crust.

**Why do recipes for quick-mix cakes call for hydrogenated shortening?**

Make sure the shortening is hydrogenated and contains an emulsifier. The label will tell you. Be sure to read it. This is important because the emulsifier helps the shortening blend with other ingredients more easily.
**How to Store**

Butter or sponge cakes can be stored a few days in a tight cake tin or cake box.

Cakes containing fruit (applesauce cakes or fruit cakes), honey, or molasses generally taste fresher and stay more moist over a longer period of time.

For future use bake cakes and store them in your home freezer. Remember the packaging materials must be moisture-vapor-proof, odorless and tasteless. Be sure to label the package. Use within two months.

Thaw in original wrapping at room temperature.

Frosted cakes are handled more easily if they are frozen before wrapping, and if they are unwrapped before thawing.

Frostings which freeze successfully include the uncooked type made from confectioner’s sugar and candy type containing corn syrup. Boiled icings, 7-minute icings, and custard fillings do not freeze satisfactorily.

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**PIES WITH PERFECT CRUSTS**

Which is your favorite pie? Cherry, apple, chocolate, lemon, pumpkin? Perhaps it’s rhubarb or butter-scotch? Whichever it is, you like it better if it has a perfect crust.

For quick breads, you used the muffin method. You made cakes with the conventional, sponge, and quick-mix methods. Now you will make pie crust with the pastry method. This method is also used for baking powder biscuits.

You may not have a perfect pie crust the first time. But follow directions, practice often, keep on trying and, before you know it, you will be able to make pie crust that is nicely-browned, tender but crisp, flaky and well-shaped, and good to eat.

If your mother has a favorite pie crust recipe, try it. This is a standard recipe you will want to learn!

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**Pie Crust Recipe**

\[
\begin{align*}
&\frac{3}{4} \text{ cup shortening} \\
&2 \text{ cups sifted flour} \\
&1 \text{ teaspoon salt} \\
&4 \text{ to } 6 \text{ tablespoons cold water}
\end{align*}
\]

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**SCIENCE WHY’S**

*Why do we use all-purpose flour rather than cake flour for pastry?*

Cake flour makes a mealy, very tender crust — so tender it falls apart. The gluten developed from cake flour is not strong enough to hold the pie crust together.

*May salad oil or butter be used for making pastry?*

Yes. You can make pie crust from any fat if you use a recipe designed for that fat. It takes more butter to make a pie crust as tender as one made from lard. This is because butter is not all fat. It contains water and some milk protein. Salad oil gives a more mealy but less flaky crust. You will probably use a different method for pastry containing salad oil.
### How to Make a Perfect Pie

<table>
<thead>
<tr>
<th>WHAT TO DO</th>
<th>WHY YOU DO IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sift flour and salt together.</td>
<td>1. Sifting salt with flour distributes the salt evenly.</td>
</tr>
<tr>
<td>2. Cut shortening into flour until mixture has the consistency of cornmeal and small peas.</td>
<td>2. The finer the fat is cut into the pastry, the more tender the crust will be. The larger pieces of fat give a flaky pastry. Since you want a pastry that is both tender and flaky, the pieces of fat in flour can be different sizes.</td>
</tr>
<tr>
<td>3. Sprinkle water over shortening-flour mixture. Toss lightly with a fork until mixture sticks together. Do not add any more water than necessary.</td>
<td>3. Overmixing develops the gluten, which makes a tough crust. Too much water does the same thing.</td>
</tr>
<tr>
<td>4. Form pastry into ball. Divide ball into two parts, one slightly larger than the other. Place the larger ball on lightly floured pastry cloth or board. Flatten the ball with your hand. Do not add any more flour than necessary.</td>
<td>4. You will need more dough for the bottom crust than for the top one. Extra flour makes pastry tough. Flattening the dough ball makes it easier to roll an evenly shaped crust.</td>
</tr>
<tr>
<td>5. Use a lightly floured rolling pin. Roll from center of dough with a light touch and apply less pressure on the edges. Lift dough now and then.</td>
<td>5. Use a light touch and lift the dough to prevent sticking.</td>
</tr>
<tr>
<td>6. Roll dough about ( \frac{1}{8} ) inch thick until it makes a crust about ( 1\frac{1}{2} )-inches larger around than the pan.</td>
<td>6. Thin pastry is apt to be flakier and crisper.</td>
</tr>
<tr>
<td>7. Transfer dough to pie plate by folding over rolling pin or by carefully folding the pastry in half.</td>
<td>7. This is an easy way to get crust from board to pie plate.</td>
</tr>
<tr>
<td>8. Fit pastry into pan loosely. Do not stretch it.</td>
<td>8. A bit of slack prevents undue shrinking away from the pan.</td>
</tr>
<tr>
<td>9. Use remaining dough for top crust. Roll out about ( \frac{1}{2} ) inch larger than the pan top.</td>
<td>9. This will give you the right size crust.</td>
</tr>
<tr>
<td>10. Cut slashes in the top crust.</td>
<td>10. Slashes in the top crust let steam escape. This helps prevent the top crust from bulging and breaking. The filling is not as apt to bubble over the edges.</td>
</tr>
<tr>
<td>11. Fill bottom crust with filling. Moisten rim of bottom edge.</td>
<td>11. If you moisten rim of bottom crust, the seal between the two crusts will be tighter.</td>
</tr>
<tr>
<td>12. Put the top crust in place and trim the crusts to about ( \frac{1}{2} ) inch. Fold the crusts under and flute or crimp the folded edges. Bake according to directions for filling.</td>
<td>12. Trim so you can make a pretty edge on the pie.</td>
</tr>
</tbody>
</table>

### FOR A ONE-CRUST PIE:

Use one-half of pastry recipe. Follow the first eight steps listed above. Then trim crust so that it is about \( \frac{1}{2} \) to \( \frac{3}{4} \) inch larger than the pie pan. Turn under edge of pastry. Crimp the folded edge against the rim of the pan.

### FOR A BAKED PIE SHELL:

Follow directions for a one-crust pie. To prevent puffing, prick the bottom and sides of the crust before you bake it. You can also bake a pie shell on the outside of an inverted pie pan. Bake at 450 degrees for about 10 to 12 minutes or until pale golden brown.
Making the Most of
What You Know

You have been learning the steps of meal management as you have used this bulletin. Now let’s put them all together. You know how to:
- plan menus (See pages 4, 5)
- buy and store food (See pages 14, 15, 20)
- manage your time (See pages 10, 28)
- cook food
- set the table (See pages 28, 29)
- serve food attractively (See pages 28, 29)
- clean up efficiently (See pages 10, 29)

**PLANNING NOTES**

Plan meals around the four basic food groups discussed in “Helpers for Health.” The groups tell what kind of foods to include every day.

Check cookbooks, magazines, and newspapers for recipes. Food needs to be good-looking and good-tasting. Some foods are easier to cook than others. Family likes and dislikes must be considered when selecting recipes.

Watch the time. Can everything be ready within the allotted time? About how long will the initial food preparation take? How much time should be set aside for the actual cooking or baking? What preparation can be done while some foods are cooking? Are canned or frozen foods on hand?

Watch the food costs. How much money is available to purchase food?

Perfect planning is a good meal that’s easy to make, everyone likes, good for us, doesn’t cost too much. Try a surprise recipe, too. Makes it more fun.

Make a shopping list. Check to see which foods are on hand. What needs to be purchased? How much? Choose foods with the most nutrition for the money (ground beef is as nourishing as steak).

Read and compare labels of similar food products. Compare costs of fresh, frozen, canned, and dried foods. Give everything a close look – fresh fruits, vegetables, and meat, especially.

Store foods in the proper places.

**TABLE NOTES**

The table should be set attractively. It should look orderly, clean, and neat. The colors of linen and china should not clash with the food. The meal can be served family style, plate service, or buffet style.

**Styles of Serving**

**FAMILY STYLE**

Set the table as illustrated below. Don’t forget the extras: salt, pepper, cream, and sugar. Arrange serving dishes attractively on table. Pass all serving dishes one way around the table — either to the right or left. Mother or Dad usually starts the main meat dish.
When everyone has finished eating, clear the table removing the serving dishes first. Then remove the plates and used silver. Maybe your mother or sister would help clear the table. Sometimes the dessert is placed on the table ahead of time. Sometimes it is served from the kitchen as a separate course.

**PLATE**

The food is placed on plates in the kitchen and set on the table immediately before the family sits down. The salad is also placed on the table ahead of time. The beverages are served with the right hand from the right-hand side. The plate of bread or rolls is usually passed. Serve the dessert from the kitchen as a separate course. Serve it with the left hand from the left-hand side.

**BUFFET**

Arrange the buffet as illustrated below. Select table linen, serving dishes (including plates and glasses or cups) and centerpiece so the buffet makes a pretty background for the food.

Note that the hostess serves the main dish and guests take plates from her; then help themselves to other foods. Card tables and TV trays are helpful if you do not use serving trays.

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**When It's All Over**

The best way to get dishes done is to do them yourself, right away. It's so much easier if the dishes and cooking utensils are rinsed and stacked as soon as they have been used.
YOU — AS A HOSTESS

1. Decide on the type of party you want to give. Example: friends over after the ball game.

2. Make a guest list.

3. Either write the invitations or call far enough in advance (at least a week) so your guests can make definite plans. You might want the guests to reply to the invitation.

4. Plan the food, preparation, arrangement of the table, and how you will serve. This will depend on the type of party. Will it be a buffet or an informal “gather around and help yourself?”

5. Be a well-groomed hostess.

6. Greet the guests as they arrive or ask another friend to greet the guests, especially if you must complete a few last minute food preparations.

7. As the hostess, you set the pattern for a party. Invite the group to be seated or to help themselves. If you are serving a meal with everyone seated at a table, sit and rise from the left of the chair. You are the one to make the first move to rise from the table when the meal is finished.

8. As your friends leave, see them to the door.

Mealtime Manners –
WHAT TO DO

- In many homes and at banquets, a “blessing” is offered before the meal. Wait to see what your host or hostess does before you start to eat.

- Use a napkin (paper or linen) as a common practice at home. If you do not learn this custom at home you will forget sometime when the occasion is very important to you.

- Hold your fork, knife, and spoon correctly. When cutting food at the table, hold the knife in the right hand and the fork in the left. Turn the tines of the fork downward to hold the food, and place the index finger firmly on the back of the fork handle. When eating, however, hold the fork in the right hand with the tines up.

- When fork and knife are not in use, lay the knife across the upper part of the plate. The cutting edge should be turned toward the center of the plate. Put your fork, with the tines up, beside your knife. Never lay them on the table or tablecloth. People notice this and judge accordingly.

- Eat slowly, quietly, neatly. Cut small portions of food.

- Ask to have food passed to you. Be courteous. Say “please” and “thank you”.

WHAT NOT TO DO

- Start to eat before others do at home or away from home.

- Slouch or lean over the table.

- Talk about unpleasant things at the table.

- Criticize the food or someone else’s manners.

- Reach in front of someone else to obtain food.

- Talk or drink with your mouth full of food.
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