

# Cooking Basics

Most people appreciate good food and the comfort of a delicious home-cooked meal. Many Scouts know the fun of enjoying a tasty cookout after a rigorous day in the outdoors. Cooking is a skill you can learn now and enjoy for life.

With a little planning and practice, you can easily turn everyday ingredients into a healthy meal. Learning to cook gives you new respect for those who have prepared meals for you. Best of all, cooking is fun and rewarding, too—especially when the compliments pour in and you hear requests for second helpings.

The Cooking merit badge will introduce you to principles of cooking that can be used both at home or in the outdoors. You will learn about food safety, nutritional guidelines, meal planning, and methods of food preparation. This pamphlet includes recipes that can be used either at camp or at home. It also offers a look into the variety of culinary (or cooking) careers available. So, let's get cooking!

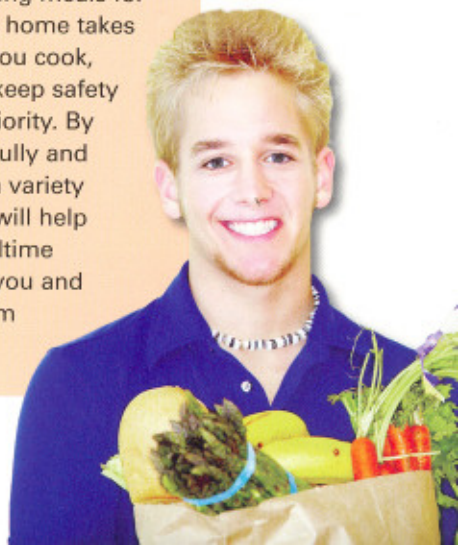
---

It is hard to beat the satisfaction of preparing great food for yourself and your family and friends.

---



From the grocery store to the plate, making meals for cookouts or at home takes planning. As you cook, remember to keep safety as your top priority. By planning carefully and cooking with a variety of foods, you will help make the mealtime enjoyable for you and those for whom you cook.



## Cook Safely

Safety is always a Scout's primary consideration. Along with considering the gear needed, the environment, and any necessary protection from the elements, the first consideration in preparing for this trip would be the safety of the patrol members. Cooking also requires planning and attention to detail to keep safety first.

A simple definition of cooking can be putting together three items—uncooked food, utensils, and heat—and creating edible nourishment. All three elements contain the potential for injury.

### Food

The first item involved in safe cooking is, of course, the food. Meats and dairy foods must be kept cold before use. Once removed from its protective wrapper, meat must be kept separate from other food items. Because bacteria can grow in meat, the meat must be cooked as soon as it is no longer cold. Likewise, any uneaten, cooked meat must be properly stored and kept cold to eliminate the risk of growing bacteria.

### Utensils

Cooks use many types of equipment to prepare food. Sharp knives must be used properly to prevent serious cuts and injuries. Pots on a stove or campfire get extremely hot and always must be handled with hot-pot tongs or hot pads to prevent burns.

Some pots are very thick and heavy by design, such as the Dutch oven. Cooks must always transport these heavy pots carefully. Dropping such a pot, even an empty pot, could cause serious injury if it landed on someone.

Never grab a pot handle without first protecting your hands.



## Heat

Whether cooking over a fire in camp or on a stove at home, there is always a risk to you, to others nearby, and to your environment. In camp, follow all safety guidelines described in building and using a campfire or camp stove.

Cook under adult supervision when you are using a stove or grilling outside. Both electric and gas stoves and grills present unique risks; understand the fuel your cooking appliance uses. Keep your stove and oven clean and neat. Do not place pot holders or dish towels on the stove, even for a moment.

Dress appropriately while cooking. Remove jewelry that can dangle or catch on a pot. Avoid wearing loose clothing and, for sanitary and safety reasons, tie back long hair.

### EXERCISING FIRE SAFETY AWARENESS

Residences are required by law to have a working fire alarm, or smoke detector. A fire alarm emits a very loud siren to alert occupants when smoke is present. These alarms typically are installed on the ceiling, where smoke can first be detected.

A fire extinguisher is a must in the well-equipped kitchen. Learn how to use yours before an accident occurs.



Understand how smoke detectors work. Make sure to change their batteries regularly, such as during a springtime holiday and again during a fall holiday.

Do not use an outdoor grill inside the house or garage, or near overhanging branches outside.



## First Aid and Prevention of Common Cooking Injuries

Following these safety guidelines won't eliminate your risk of a cooking injury but will help prepare you in case of an accident. Basic first-aid techniques can be used if someone gets injured while cooking.



A first-aid kit is useful for treating injuries, but rely first on safety and prevention.

### Common Cooking Injuries

Here are some common injuries that can take place while cooking.

**Burns and Scalds.** Burns are caused by contact with flame, hot objects, chemicals, electrical sources, radiated heat, frozen surfaces, friction, or radiation. Scalds are burns caused by contact with boiling fluids or steam. Treatment for minor burns and scalds is the same.

**Step 1—Stop the burn.** Put out flames or remove the victim from the source of the burn. The terrible thing about burns is that the skin continues to burn and more damage is created until you can cool down the affected area of the person's body.

**Step 2—Cool the burn.** Use large amounts of cool water to cool the burn. Never use ice except on small, superficial burns, because it causes body heat loss. If the area cannot be immersed, like the face, soak a clean cloth in cool water and apply it gently to the burn. Continue adding water to keep the cloth cool.

**Step 3—Cover the burn.** Use dry, sterile dressings or a clean cloth to help prevent infection. Bandage loosely so that air can flow around the wound; this will help the area heal more quickly. Apply an antibiotic ointment only to minor burns. Do not use home remedies, and do not break blisters.

For minor (first-degree, second-degree) burns that are not severe enough to require medical attention, wash the burned area with soap and water. Keep the wound clean, and apply an antibiotic ointment for the first few days. Some people may be allergic to topical ointments; if you have any doubts, call a doctor.

For severe (third-degree) burns, seek medical treatment as quickly as possible. Severe burns can be a life-threatening injury. Unless the victim is having trouble breathing, have the victim lie down. Try to raise the burned areas above the level of the victim's heart if possible, and protect the victim from drafts.

## Preventing Burn Injuries

These simple precautions will help any cook prevent burn injuries.

- Take time to prepare meals without rushing.
- Always use pot holders that are in good repair.
- Keep pot handles turned toward the back of the stove.
- Cook on rear burners whenever possible, but avoid reaching over an open flame or hot burner.
- Use caution when moving heavy pots of hot liquids from the stove.
- Keep all heated liquid and food out of children's reach, and never hold anything hot while carrying a child.
- While cooking, try to keep younger children out of the kitchen.
- Remove tablecloths when toddlers are present (they can pull the table's contents on top of themselves).
- Purchase and use small appliances with short electrical cords.



Because they can cause falls, avoid using area rugs in the kitchen, especially near the stove.



**Cuts.** Follow these steps to treat minor cuts.

**Step 1—Stop the bleeding.** Apply pressure with a clean, absorbent cloth or your fingers. (Wear latex gloves.)

**Step 2—If the blood soaks through, apply a second bandage on top.** Leave the first bandage on to preserve the clotting that has already taken place.

**Step 3—If the bleeding continues, raise the wound** above the patient's heart level.

**Step 4—Once bleeding stops, clean the wound gently with soap and water,** or just flush the wound with water to remove all debris and dirt.

**Step 5—Apply an antibiotic ointment.** Some people are allergic to these ointments; ask the patient or contact a doctor if you have any doubts. Cover the cut with a clean bandage.

## Preventing Cuts

Help prevent accidents by practicing these safety tips.

- Keep knives and scissors sharp and handle them carefully.
- Store sharp items separate from other utensils. Take them out of storage only when they are being used.
- Never put knives or scissors in a sink full of water. Wash, rinse, dry, and put them away as you go.
- When you use a knife to cut, dice, or chop, always place the item you are cutting on a flat surface such as a wooden cutting board. Cut away from yourself, making sure your fingers are not in the knife's path.



The first step in treating a minor cut is to apply pressure to the wound with a clean, absorbent cloth.

**Smoke Inhalation.** Inhaling smoke can seriously damage the lungs, and smoke sometimes contains noxious fumes. To treat a smoke inhalation victim, first remove the victim from the smoke-filled area. Then have the victim take long, deep breaths of fresh air to clear the lungs.

If coughing or choking continues, or if there is pain, irritation, or raspy breathing, see a doctor as soon as possible.

## Clean as You Go

Develop good habits in the kitchen. Clean pans, pots, utensils, and your working surfaces as you go. Dishes are easier to wash when you clean them soon after you use them. Keeping the home or camp kitchen clean as you cook has other advantages.

- It keeps the cooking area safer.
- It makes your cooking experience calmer and more organized.
- It makes cleanup a breeze when you are finished cooking and eating.

It is no fun when you have muffins ready to come out of the oven and you cannot find a pot holder because it was not put back where it belongs. If you use what is handy, such as a dish towel, you stand a good chance of getting burned. Cleaning and putting things back where they belong as you go will eliminate these hassles because everything will be in its place when you need it.

Make sure the work area is clean and uncluttered before you begin, and keep it clean as you go. Have all the ingredients, utensils, pots, and pans ready before you start to cook.



Never put knives in the dishwasher. It is easy to miss seeing the knives and get cut when unloading the dishwasher.





As you cook, you often need to reuse the same equipment. For example, you might use a mixer for the cake batter, so clean the mixer blades right away because you will need them as soon as the cake cools to make frosting.

*Always* use an antibacterial cleaner to wipe up spills from meat packaging or from raw meat. Do not cut meat on the same surface you use to cut up vegetables and other foods, even if the surface is clean.



Use an antibacterial cleaner to keep kitchen countertops clean.



Store food in tightly sealed containers.

To plan ahead and minimize cleanup as much as possible, keep a sink about half full of warm, soapy water while preparing meals. This makes it quick and easy to keep your hands clean as you work with various foods, such as raw meats.

Sweep up and dispose of broken glass carefully. Put the broken pieces inside a small paper bag or small empty box before putting it into the trash bag to help prevent injury to the person who handles the trash.



Avoid overstocking the refrigerator; an overstuffed fridge will not keep food cold enough.

### Safe Food Storage and Transportation

When storing and handling food, these simple rules will help keep the kitchen—and your cooking—safe.

- Keep cold foods cold and hot foods hot. For camp, keep cold food on ice in a cooler.
- When you buy food in jars, make sure the safety seal on the lid is intact.
- Freeze any fresh poultry or meat that will not be used within two days. Follow any label instructions for storage.
- Refrigerate any leftovers as soon as the meal is over. Use smaller containers to cool leftovers quickly; slow cooling encourages bacteria growth.
- Keep the refrigerator clean, and discard uneaten leftovers after three days.

**Proper food storage helps prevent bacteria from forming.**





## Stoves and Other Appliances

Most Scouts know about the risks involved in using fire in the outdoors. These risks carry over to any kind of cooking anywhere, no matter what the "fire" looks like. For example, even though you do not see fire when the microwave is operating correctly, the electricity used to run it is basically the same as a campfire. If you use a microwave oven to reheat leftovers for lunch, you probably know that having anything metal (like aluminum foil) in the microwave while it operates may cause an electrical fire.



**Never use aluminum foil to cover food in a microwave oven.**

Always cook under an adult's supervision. Ask an adult to explain the stove's operation; gas stoves and electric stoves operate very differently and have different risks.

### General Food-Related Illnesses and Prevention Guidelines

There are simple ways to reduce the risk of food-related illnesses.

- Always follow the food-storage guidelines described in this chapter.
- Wash your hands with soap and warm water before cooking, after cooking, as needed while you cook, and before eating.
- Keep your work area clean; wipe up spills quickly and thoroughly using soap and water or kitchen cleaner.
- Cook all meat and poultry products, including eggs, thoroughly before eating.
- Never eat raw cookie dough or cake batter.
- Never use foods from cans that bulge.

Before you cook, learn about any appliances you will be using. If you are cooking with a gas stove while camping, read the manufacturer's instructions and use only with adult supervision. Be sure all parts are in good working order.



Camp stove



**Wash your hands with soap and water before handling food.**

Failure to follow safe food-handling guidelines can cause serious illness. Here are a few illnesses worth mentioning.

**Salmonella Enteritis.** This bacteria is linked to raw, uncooked eggs and poultry, and unwashed, raw vegetables and fruits. Salmonella poisoning symptoms include nausea, vomiting, fever, abdominal pain, diarrhea, dehydration, weakness, and loss of appetite.

Help prevent salmonella poisoning by doing the following.

- Do not buy leaking packages; isolate meat packages in plastic bags to prevent contaminating other foods.
- Prepare foods using clean utensils and clean work surfaces.
- Quickly wipe up all raw meat or poultry juices from counters, and wash utensils, hands, cutting boards, and serving plates that are exposed to such juices.
- Thoroughly cook all foods derived from animals (including eggs).
- Do not eat raw eggs, cookie dough, or cake batter. Consume only pasteurized milk products.
- Thoroughly wash all fruits and vegetables.
- Refrigerate leftovers promptly.





**Staphylococcal Enteritis.** This bacteria multiplies in warm temperatures and thrives on protein. Symptoms of infection include nausea, vomiting, diarrhea, headache, fever, chills, weakness, and dizziness.

To prevent staphylococcal enteritis, wash hands and utensils before serving food. Thoroughly cook all meats, and refrigerate leftovers promptly in shallow, covered containers.



**Escherichia Coli Enteritis (E. Coli).** This is a bacteria that attacks the intestinal tract. It can be transmitted person to person and grows at temperatures of 44 degrees and above. In extreme cases, it can cause serious complications in children and elderly people. Symptoms include abdominal cramps, diarrhea, nausea, vomiting, and fever.

Take these precautions to prevent the spread of E. coli.

- Prepare and store food in a sanitary environment.
- Thoroughly cook all food.
- Refrigerate food at 40 degrees or below.

**Botulism.** This deadly disease is caused by ingesting bacteria that can be found in many kinds of food. Symptoms include dry mouth, double vision, nausea, diarrhea, vomiting, abdominal cramps, sore throat, dizziness, constipation, weakness, muscle paralysis, and difficulty swallowing or breathing.

Take these precautions to prevent the spread of botulism.

- Never use food from damaged or bulging containers or foods that have a strange odor or appearance.
- Cool leftovers quickly by storing them in shallow, small containers.
- Reheat all refrigerated foods.

**Trichinosis.** Trichinosis is caused by the parasite *Trichinella spiralis*. Its larvae can remain alive in human tissue for years. People contract trichinosis by eating undercooked or raw meat, especially pork infected with the parasite. Infection usually occurs without symptoms, which can include stomachache, nausea, vomiting, and diarrhea. When there are symptoms, they occur during the first week after swallowing the organism. To prevent trichinosis, thoroughly cook meats, especially pork.

**Hepatitis.** Hepatitis A is one of five viruses known to cause inflammation of the liver, the others being hepatitis B, C, D, and E. Hepatitis A is usually a mild illness characterized by sudden onset of fever, malaise, nausea, and abdominal discomfort, followed in several days by jaundice. Patients with anorexia often may have hepatitis A.

A vaccine can prevent hepatitis A in many cases. Children ages 1 to 18 years old should receive two initial doses of the vaccine and booster shots after six and 12 months. Adults should get an initial dose and then a booster six to 12 months later. It takes at least two weeks before protection can take effect. The illness also can be prevented by a shot of immune globulin within two weeks of exposure. To help prevent hepatitis A, do the following.

- Wash hands with soap and warm water before preparing and eating food. Make sure to use a nailbrush to scrub under your fingernails, where bacteria can hide.
- Cook shellfish thoroughly before eating.
- Drink water from approved sources only.
- Keep bathrooms clean and disinfected.



---

Knowing the basic tools of cooking and practicing safe food-handling and preparation techniques gives the beginner cook a solid foundation. Staying safe while handling food and equipment should be a Scout's top priority.

---





# Planning and Preparing Meals at Home

Good planning and preparation before you start cooking will help you successfully prepare healthy and delicious meals at home.

1. Determine when you will be cooking and the types of meals you will be preparing.
2. Find out whom you will be cooking for and whether anyone has any special dietary needs.
3. Select recipes using the food pyramid (discussed later on) as a guideline.
4. Make a list of foods required for the meals, then create a shopping list based on the ingredients you will need.
5. Create and follow a timetable for the preparation of each meal.

---

Practicing and developing your cooking style will help you gain the confidence you need to prepare a variety of tasty meals.

---

## Understanding the Equipment

Before you cook at home, understand your cooking equipment, including appliances, utensils, pots, and pans. Appliances include the stove and oven, microwave, refrigerator, and garbage disposal, plus any small appliances such as a food processor, blender, and electric mixer. All these appliances serve a function in the food preparation process, and care must be taken in operating these appliances correctly.

For instance, food processors and blenders have very powerful and sharp blades that can chop, puree, and liquefy foods. Use them only for foods recommended by the manufacturer. Always make sure the top is firmly locked in place before operating a food processor or blender. Most food processors have safety features that prevent the appliance from operating unless the top is secure.





## Cooking With a Microwave Oven

A microwave oven is a great time-saver, especially with simple meals. Baked potatoes, which take at least 45 minutes in a conventional oven or over a campfire, cook in just a few minutes in the microwave. Covering bacon slices thickly with paper towels and cooking them on a plate in the microwave is much easier than pan-frying bacon. Reheating tortillas takes only about 30 seconds in the microwave; in a conventional oven, it might take 10 to 15 minutes.

Take special precautions when using a microwave oven. Wear oven mitts and handle microwave dishes with extreme care.



**Be careful when eating foods with filling—the filling may be very hot, even though the outer portion feels lukewarm.**

Often, it is better to heat something up in a pan on the stove. For example, the microwave does not work as well for browning foods. Heat permeates food rather than being concentrated on the surface next to the heating element, as in conventional cooking. As a result, food does not brown from close contact with the heat source.

Some foods change in texture when cooked in a microwave. For example, potatoes baked in an oven or on the coals have a crisp shell and dry, fluffy interiors that some people prefer to the softer, steamier microwaved potato.

- Read and follow the user's manual, and follow the instructions when preparing packaged foods.
- Avoid using glass containers, which can get very hot.
- Puncture plastic wrap before heating foods, and stir foods during cooking to distribute the heat.
- To avoid steam burns, protect your hands and forearms when removing the cover from a hot dish.
- Never heat baby formula or baby food in a microwave.

## Planning Meals

When shopping for your family meals, always consider your family's budget. An adult at home can help you determine how much to spend and how to stay within budget.

**Frozen fruits and vegetables are the next best thing to fresh during the winter months when some fruits and vegetables are not in season or are more expensive.**



Buying in bulk and freezing portions of ingredients (such as fresh meats and poultry) often cuts per-unit costs, saving money in the long run. When freezing fresh meats, remove them from their original packaging and wrap recipe-sized portions tightly in freezer wrap or resealable plastic freezer bags.

If you plan wisely, you should not have many leftovers—unless you want leftovers. For example, if you make a big pot of chowder, you may want to serve it for dinner, refrigerate it, and have some the next day. You also might freeze a portion to enjoy later on.

Always look at the servings or yield any recipe promises, for example, “serves four.” From there, the recipe can be increased for a larger crowd or decreased for only a couple of people. Just double the amount of ingredients listed to cook for twice the number of people the recipe serves, or halve the ingredients for just two people.

One of the many freedoms of cooking at home is the availability of refrigeration. Many frozen foods are available that make cooking easier or, in some cases, make recipes possible at all.

**This chart will help you adjust the yield of your recipe.**



Measurements	Equivalent
¼ teaspoon	15 drops
1 teaspoon	½ tablespoon
1 tablespoon	3 teaspoons
2 tablespoons	1 fluid ounce
4 tablespoons	¼ cup or 2 fluid ounces
8 tablespoons	½ cup or 4 fluid ounces
16 tablespoons	1 cup
1 cup	8 fluid ounces
2 cups	1 pint
1 pint	16 fluid ounces
4 cups	1 quart
1 quart	32 fluid ounces
4 quarts	1 gallon (in the United States)

Some recipes do not “double” well, but the recipe will often make a note of this.



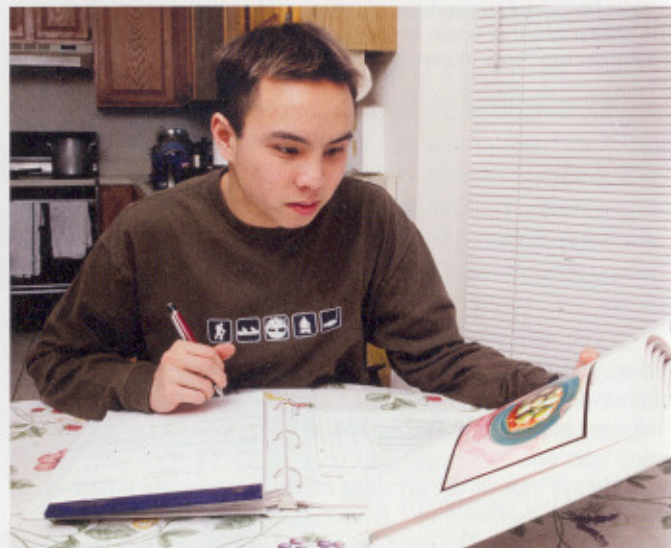


## Coordinating a Timetable

Meals at camp or on the trail should be simple. One-pot meals, foil meals, or meals that require adding only hot water often are an easy choice.

Save more complicated and time-consuming dishes for at home.

Coordinating some meals seems to be easier than others. For example, most casserole dishes are easy to keep warm. But there is no reason to be mashing potatoes while the grilled chicken on the table is getting cold.



A timetable is a great aid in meal planning and preparation.

The best way to plan a meal is to follow a schedule. Create a timetable, based on how long it takes to prepare each course or recipe. This eliminates much of the anxiety that can come from preparing a meal for others.

Here are some simple rules of thumb. Write down which course, or food, takes the longest to prepare, then the next-to-longest, and so on. From there, break it down into smaller steps. Making a roast, for example, involves trimming the fat, rinsing the meat, preheating the oven, seasoning the meat, putting it on a drip rack in a pan in the oven, and then cooking it for the remainder of the time. While the roast cooks, you have enough time to prepare other side dishes and the dessert. Bread, rolls, and the like are usually the last thing to be popped in the oven before a meal is served.

Here is an example. For Sunday dinner, John decides to make roast beef, mashed potatoes with gravy, green bean casserole, cucumber soup, crescent rolls, and rice pudding for dessert. He and his family are eating at 5 P.M.

John consults his recipes and discovers that, including time to make the gravy, the roast will take  $3\frac{1}{2}$  hours to complete. He puts the roast in first. He then sees that, with all the time allowed for various steps, the cucumber soup takes about 45 minutes to prepare, plus a few hours to chill afterward, since the soup should be served cold.

Remember, you usually will work on more than one recipe at a time. Although it may take a couple of hours for the cucumber soup to chill, once it is made, you can work on something else for the meal while the soup chills.

Notice that items on John's timetable sometimes overlap. The items shown between 3:30 and 4:30 seem to take longer than the hour he is allowed. However, a great deal of that time the vegetables are cooking so he has time to prepare the next course. Also, he does not always include measurements. Perhaps it may be an item in which he uses exactly what he bought, or perhaps he is familiar with the recipe and knows how much to add. The main thing is that John's timetable is simply a tool for his use, so he can jot down as much or as little detail as he wants.

ROAST WITH  
CARROTS AND ONIONS,  
CUCUMBER SOUP,  
GREEN BEAN CASSEROLE,  
MASHED POTATOES,  
ROLLS, GRAVY,  
RICE PUDDING

After studying his recipes, John's initial list looks like this.

1:20 Crush four garlic cloves. Remove roast from refrigerator. Trim, wash, and rub both sides with garlic. Place in pan with 1 cup water and quartered onion. Cover and put in 350-degree oven. Set timer for 2 hours, 40 minutes.

1:35 Peel and chop cucumbers. Cook till tender. Drain. Add salt and white pepper to taste. Puree in food processor; return to saucepan with two cans vegetable broth, and cook 10 minutes. Add sour cream and heat through. Pour in serving bowl, cover, and refrigerate.

2:30 Cook 1 cup rice in 2 cups water. When done, add sugar, cornstarch, and milk and reduce heat to low. Cook, uncovered, until pudding thickens slightly. Remove from heat, pour in serving dishes, and put in fridge.

3:15 Set table. Put out dishes for hot stuff. Put out empty serving dishes.

3:30 Peel and chop potatoes, add salt in pan with water. Cook till just tender. Remove pot to a cool burner, set aside.

3:45 Cook green beans. While they cook, mix milk, soup, half of french-fried onions, mushrooms.

4:00 Scrub carrots, put in large pieces, and put in pan with roast. Set timer for 15 minutes.

4:15 Mix green beans in milk mixture. Pour in baking dish, sprinkle with remaining french-fried onions. Put green bean casserole in oven. Remove roast from oven. Put roast on platter along with carrots and onions. Put on table.

4:30 Drain and mash potatoes and put in dish on table. Put crescent rolls in oven. Make gravy. Put gravy in gravy dish with table. Put on table. Tell everybody dinner's almost ready.

4:55 Remove green bean casserole from oven. Put on table. Remove crescent rolls from oven, put in basket.

5:00 EAT!

When he has broken down and prioritized all the steps for each recipe, John's timetable looks something like this.



## Finding Recipes

There are many great places to find recipes. See the recipes and resources section in this pamphlet, and thumb through your own cookbooks. The Internet (with your parent's permission) and local library have hordes of recipes.

Don't forget the many cooking shows on TV; you're sure to find a few that interest you.



## Cooking Healthy

Always try to choose foods that promote good health over those that do not. There are many low-fat products on the market that can be substituted for high-fat choices. Extend those healthy choices to the cooking method used, too.

Vegetables are especially nutritious when they are briefly steamed, instead of being boiled for long periods of time—and certainly better than when fried. Steam, poach, or sauté vegetables in some broth or a bit of olive oil. Some larger and firmer vegetables, such as bell peppers and zucchini, can be grilled to make them even more flavorful. The same applies to meats and poultry. Skinless grilled chicken, prepared properly, has all the delicious, juicy flavor of fried chicken but only a fraction of the fat and calories.

Healthy cooking  
methods  
complement  
and often  
enhance the  
flavor of foods.



Sage



Marjoram



Rosemary



Thyme



Oregano

## Using Spices and Herbs

Experimenting with spices and herbs is another healthy way to enhance the flavor of foods. Most comprehensive cookbooks have a chart that will show you which herbs and spices go best with various meats and vegetables.





# Planning and Preparing for Camp Cooking

Planning and preparation are key in camp cooking and important in making your cookout a rewarding experience.

## Choosing Cooking Equipment

There are times when campfires are still the center of Scout life and may be appropriate. However, Scouts today are wiser about the environment and understand that fires can leave scars upon the land. Lighting campfires in heavily used campsites can mar surrounding forests as people gather up every stick of dead wood and break off tree branches for fuel. Instead, most Scout campers now use stoves for cooking.

**Camp stoves allow you to prepare meals in nearly every sort of weather, on almost any terrain, and without relying on available firewood. Best of all, camp stoves leave no marks on the land.**

---

Always fill a camp stove with fuel outdoors. Never loosen the cap or fill the tank near an open flame or pilot light, or while the stove is hot.

---



## Selecting a Stove

The stove you choose depends on the kind of cooking you will do, type of fuel you want to use, and weight you are willing to carry. Always read and follow the manufacturer's instructions for carrying, fueling, using, maintaining, and storing camp stoves.



**White gas stoves equipped with pumps that pressurize their fuel tanks can be an advantage in cold weather.**

**White Gas.** White gas is a highly distilled fuel. Some white gas stoves must be preheated, often by squeezing a dab of flammable paste into a depression at the base of the burner stem. Preheating increases the pressure inside the fuel tank, forcing vaporized fuel up a stem and into a burner where it can be ignited with a match. Once the burner is roaring, it will keep the fuel tank hot enough to maintain a steady supply of vaporized fuel.

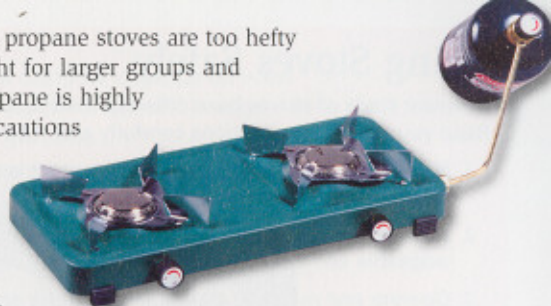
**Cartridge Stoves.** If you want simplicity, safety, and convenience, butane and propane cartridge stoves are your best choice. These stoves need no pumping or preheating; simply attach a fuel canister, turn the control knob, and light the burner.

Cartridge stoves work well in warm weather and at high altitudes, but they lose efficiency as the temperature drops.



**Propane Tank Stoves.** Two-burner propane stoves are too hefty for backpacking but can be just right for larger groups and when weight is not a big issue. Propane is highly flammable, so take appropriate precautions when using propane stoves.

**Kerosene.** This is a hot burning, nonexplosive fuel available almost anywhere. Kerosene camp stoves are unusual in North America but are frequently seen on international expeditions. A kerosene stove must be preheated before it can be lit.



**Propane tank stoves are great for bigger groups and when transporting is not a big deal.**

## Grills

Many campgrounds have grills already set up. A simple portable grill with legs placed over your campfire also makes a good cooking area. The pots or pans can be placed on the grill, or foods can cook directly on the grill over coals.

**Charcoal.** Charcoal makes outdoor cooking and grilling easy, as long as there are no regulations against its use where you camp. Dutch oven cooking, stick cooking, and cooking with foil packs are a snap with charcoal. Using self-lighting charcoal vastly decreases the amount of time it takes to get the coals perfect for grilling (when they are covered with gray ash throughout).



Portable charcoal grill



Cartridge caution:  
Never place a  
windscreen  
around a  
cartridge stove—  
the cartridge  
might explode.



## Using Stoves Safely

Different kinds of stoves burn different fuels and operate in different ways. Read your stove's instructions carefully and follow them exactly.

1. Never fuel, light, or operate a gas stove or lantern inside a tent, snow cave, or igloo; always do this outdoors.
2. Use, refuel, and store stoves and lanterns only with the supervision of a knowledgeable adult and in Scout facilities only where allowed.
3. Operate and maintain stoves and lanterns according to the manufacturer's instructions included with the product.
4. Store fuel in well-marked, approved containers (never in a glass container) and in a ventilated, locked box at least 20 feet from buildings and tents, and below 100°F. Keep containers well away from campfires, burning stoves, and all sources of heat.
4. Allow hot stoves and lanterns to cool completely before changing compressed-gas cartridges or cylinders, or refilling from containers of liquid fuel.
6. Refill stoves and lanterns outdoors, a safe distance from flames, including other stoves, campfires, and personal smoking substances. Use cartridges or fuel expressly recommended for your stoves by the manufacturer. Use a funnel to pour liquid fuel into a stove or lantern. Recap the fuel container and stove or lantern. Before lighting the device, wait until any spilled fuel has evaporated.
7. Place the stove on a level, secure surface before operating. On snow, place the stove on an 8-inch-square piece of plywood or other flat surface to insulate it from the cold and make it more stable.
8. Have stoves and lanterns checked periodically by knowledgeable adults to make sure they are in top working condition.
9. To avoid possible fires, locate gas tanks, stoves, etc., below any tents since heavy leakage of gas will flow downhill the same as water.
10. Follow the manufacturer's instructions for lighting a stove. Keep fuel containers and extra canisters well away. Do not hover over the stove when lighting it. Open the stove valve quickly for two full turns and light carefully, with head, fingers, and hands to the side of the burner; then adjust down. Keep your head and body to one side in case the stove flares up.
11. Never leave a lighted stove or lantern unattended.
12. Do not overload a stove with a heavy pot or large frying pan. When cooking requires a pot capacity of more than 2 quarts, set up a separate grill with legs to hold the pot, then place the stove under the grill.
13. Carry empty fuel containers home for proper disposal. Do not place them in or near fires, or in trash that will be burned; empty fuel containers will explode if heated and should never be put in fireplaces or with burnable trash.

## Cook Kits and Utensils

Deciding which utensils to take on a campout depends on what you plan to cook. Plan meals based on the length of the trip, your destination, and how you will get there.



When buying new gear, get the best you can afford.

Planning meals for a campout includes making a list of utensils. Pay close attention to recipes to ensure your list is complete. A standard chef's cook kit, which offers a great variety of tools and utensils, probably has what you need, but make sure.

In addition to the cooking utensils and pots and pans you will need to cook for a group, do not forget your own personal eating utensils. Also bring resealable plastic bags with herbs, pinches of spices, salt and pepper packets, and other seasonings or condiments to make your dishes even more



## Dutch Oven Cooking

Some of the tastiest meals you will make and eat as a Scout will be cooked in a Dutch oven. This sturdy iron pot with a thick, heavy lid not only can cook one-pot meals but can also act as a small oven for making biscuits, breakfast casseroles, and fantastic fruit cobblers. Its thick build produces an even heat, ideal for slow simmering. Despite its weight, the Dutch oven's versatility makes it a valuable tool in any camp kitchen.



If carrying or moving heavy equipment is not a problem, the Dutch oven is excellent for cooking many dishes.

## Cooking With Foil

One of the camp cook's best friends is double-layered, heavy-weight aluminum foil. It is great for cooking food in coals—and for creating simple, disposable pots and pans. Lighter-weight foils will not provide enough protection against punctures and extreme heat and the possibility of burnt food.

Coals can be placed on the heavy lid of a Dutch oven to increase the temperature inside the pot.



Foil wrapped as an airtight package around food and sealed with a drugstore or sandwich fold becomes a miniature pressure cooker. On a bed of hot coals with some heat on top, a foil packet of diced vegetables and meat will cook in 10 to 15 minutes, whole potatoes in 40 to 50 minutes.

Be sure to allow some space in your packages for expansion by not wrapping the uncooked food too tightly. If you want to allow food to brown or broil as in a skillet, leave the package open at the top (or fashion like a folded drinking cup with a flat bottom). The steam can escape and you can watch the cooking progress of your meal.

Dab butter or margarine on an ear of corn before wrapping it in foil. Roast on the coals for 10 minutes.



Using foil, you can cook almost anything directly in the charcoal. Dutch ovens are also useful for cooking and baking this way. Place the Dutch oven on top of the coals, put coals on top of the Dutch oven's lid, then place your foil packet over the coals. You also can use foil to line the Dutch oven when baking. This makes for easy removal of items such as cakes. As a bonus, your cleanup is easy. Just remember that used foil must be packed out at camp.

## How to Fold Foil

There are three variations used in foil cooking.

**Handle Wrap.** Double-thickness, heavy-duty aluminum foil can substitute for simple pots at times. Just tear off a long enough section of foil so that you can double it, and then crimp and fold the foil into the shape you need.

**Bundle Wrap.** Place food in the center of the foil. Bring the corners of the foil up into a pyramid shape, twisting the four corners together to seal. Leave room for expansion.

**Drugstore Wrap.** Place foil on a flat surface and place food in center of the foil. Fold the sides up. Tightly crimp and fold down several times, leaving space inside for expansion. Bring the open ends together, folding several times, and crimp to seal.



Two-handed wrap



Bundle wrap



Drugstore wrap

## What You Need to Know

The first step in planning for camp cooking is to find out the destination, the length of the trip, and the time of departure. Find out how many people are going and if anyone has any known allergies or dietary restrictions. Also get an idea of the group's daily activities while camping. If plans call for fishing one afternoon, for example, consider having the day's catch for dinner that evening. Have a backup plan, though, in case the fish do not bite.





Consider the season of the year. In summertime, people generally prefer lighter foods. In the winter, hot and hearty meals help keep the body warmer and replenish the storehouse of energy it burns keeping warm.



A hearty one-pot camp stew makes a delicious winter meal.

Make your own marinades using a little vinegar or fresh lemon juice or lime juice and some spices. In a pinch, just about any prepared salad dressing will do. Marinating meat in this mixture will add even more flavor and tenderness. Always properly discard the marinade juices after you remove meat from a marinade.

Using this knowledge, along with the guidelines described in the MyPyramid (see the chapter called "Get to Know Your Food Groups"), will help you create flavorful meals for your campout. Consult the recipes in this pamphlet as you prepare your menus. The Cooking merit badge requirements include providing camp dinners with soup, meat, fish, poultry, or an appropriate meatless substitute for protein; two fresh vegetables; a drink; and dessert. Remember, at least one meal must be a one-pot dinner prepared without the use of canned foods.

## Treating Water

You will need water for drinking, cooking, and cleanup—several gallons a day per Scout. Public supplies (drinking faucets and fountains) are safest and often can be found in frontcountry campsites. Camping in dry regions requires careful planning for how you will transport water to camp.

## Open Water

Water taken from streams, rivers, lakes, and springs may contain bacteria and parasites too small to see and must be properly treated before use. Use one of the following methods to treat any water that does not come from a tested water source.

**Boiling.** Bringing water to a rolling boil for a full minute or more is the most effective way to kill any organisms that water might contain.

**Treatment Tablets.** Sold in small bottles, these tablets make a lightweight option. However, they are not always effective against all harmful organisms. The label usually tells you to drop one or two tablets into a quart of water and then wait 30 minutes before drinking. The treatment may leave a chemical taste in the water. After the tablets have had a full 30 minutes to take effect, you can improve the flavor by adding some drink mix. If you will be using treatment tablets, be sure to add these to your shopping list.

Water treatment tablets quickly lose their potency once the container is opened; be sure to check the expiration date before you go camping.



## Iodine Caution

Anyone who is allergic to iodine or shellfish cannot use water treated with tablets. Iodine can also be harmful to small children, people with thyroid problems or who take lithium, women over 50, pregnant women, and people with liver or kidney disease.

**Filters.** Water treatment filters are effective and easy to use. Some operate by pumping water through pores small enough to strain out bacteria. Others contain chemicals or carbon.

Follow the manufacturer's instructions for the water filter you plan to use.





## Making a Shopping List

Plan your meals and your shopping trips carefully, taking into consideration as precisely as possible how much of an ingredient you will need. List everything you will need to buy. Your counselor can help you determine the quantity of each item for the number of people you will be feeding.

Include on your shopping list resealable plastic bags, foil, and other nonfood items that will be needed. Read each recipe carefully and jot down how many resealable bags you will need and the sizes required to repack ingredients.

Take your shopping list to the store and jot down prices for each item. Back home, total the price for the items, adding sales tax, if it applies. Divide the amount by the number of people who will be eating. This is the amount you should collect from each Scout for his part of the food bill.

## Shopping Smart

Price is important when shopping, but equally important is value—getting the most for your money.



Most stores have shelf labels that tell not only the price of an item, but also the unit price. The store has done the math for you to show the cost per unit of an item rather than per package. For a jar of jam, the unit price might be what 1 ounce of jam costs. This means the store has divided the total price by the number of ounces in the jar, so you can compare the price of different sizes and brands of the jam. The jar with the smallest unit price is the least expensive, but it may not always be the best value or the most practical for camping purposes.

You will often—but not always—find that buying in larger quantities is more economical. The larger item may cost more than a smaller size, but you get a great deal more of the item. However, always consider how much you plan to use. It is not wise to buy a gallon of jam for a weekend campout. If the economy size is much more than you will need, buy a smaller size.

Another money-saving tip is to use plain-label (also known as generic) or store brands. They are of comparable quality but often cost much less than name-brand goods.

## Equipment, Utensils, and Other Necessities

Take your notebook and review your recipes again. This time, make a list of the equipment and utensils necessary to prepare each recipe. This will make packing easier and less stressful.

Do not forget herbs, spices, cooking oils, and nonfood items. Here are some other “unforgettables.”

**Water Containers.** It may be convenient to have a few collapsible plastic water containers for use in camp cooking. Common container sizes are 1 gallon and 2½ gallons.

**Cleanup Materials.** Soapless scouring pads, a rinse agent, and a little biodegradable soap will take care of most of your dishwashing needs in camp. As soon as they are washed, stow cooking and personal eating gear in a small fishnet hammock strung between two trees, or in a mesh bag tied to a branch.

**Trash Bags.** Large plastic trash bags work well as storage sacks, emergency ponchos, or pack covers, for suspending food on bear lines, and to pack out trash at the end of a trip.



Shelf labels allow you to compare the unit prices of items to find the best value.



## Preparing for Camp Cooking

You know how long you will be gone, how many people you will be serving, and what and how you will be cooking. You have shopped for the food and even figured out each Scout's share. The only thing left is to cook, right? Well, almost.

### Before Leaving Home

Getting food to the campsite takes a little planning.

**Measuring Food.** Measuring is important in cooking. Take only what you need for the trip. For this part of the planning, gather the recipes, resealable plastic bags in different sizes, and the food you will be taking. Pack one recipe at a time and precisely measure each required ingredient. Be organized so that in camp, you need only minimal preparation.



Use a permanent marker and masking tape to label the bags of food.

Some food preparation, such as slicing and chopping, can be done in advance, saving time in camp. Be sure to keep the instructions for food preparation. You may want to tape them to the outside of the plastic bags.

**Packing Food.** Repackage multiple-packaged foods into sealable plastic bags to reduce the amount of litter you will generate. Where necessary, put ingredients in separate bags. If a recipe calls for several similar ingredients to be mixed (flour, salt, and pepper, for instance), put these all in one bag.

Keep all perishable foods refrigerated until you leave, then store them in a cooler. Keep all refrigerated foods for the campout in a separate section of your refrigerator, if possible. Putting them in a separate bag will make it easier to gather everything when it is time to pack.

As you put an ingredient in a resealable plastic bag, carefully remove the air from the bag as you close it. A bag with excess air inside takes up more space and might split if squashed. Also, perishable food such as vegetables will stay fresher without oxygen inside.

When you finish packing all the ingredients for a meal, recheck each recipe to make sure everything is there. Label the packages, then put all these ingredients in one larger bag. Separate each bag by meal and day, so that when you are ready to prepare lunch on Saturday, you only need to look for the bundle labeled "Saturday lunch."

Pack the food so that each meal is easily accessible as it is needed. As you pack the box, consider the order of the items, and pack in reverse. First, put in those packages needed for the last meal, then the next to last, and so on—so that the ones needed first are closer to the top or the front. By the end of the trip, everything will have been easily located as it was needed and the organization will have paid off.

**Packing the Cooking Gear.** Pack cooking equipment as carefully. Forgetting a single item could be disastrous. Pack similar items together: Group utensils together, all pots together, and so on. Pack knives and other sharp utensils safely. Make a simple knife sheath using a flattened paper towel roll.





## Setting Up the Camp Kitchen

With your counselor, select a safe place to cook—at least 10 feet away from anything combustible, since you will be working with fire. Keep supplies put away except when it is time to cook. If using a stove, set it up now, following the manufacturer's instructions. Once the stove is set up and working and you have a pot of water ready for washing dishes and clean water to use for cooking, the camp kitchen is ready.



**Always select a level spot for your cook site that is at least 10 feet away from anything that might catch fire.**

## Campfire Cooking

Whether using a stove, grill, or campfire as your source of heat for cooking, manage fire responsibly and make safety a primary concern. Unmanaged fires can cause serious and widespread damage to the land and can injure humans and animals. Never leave a stove in use unattended. Keep anything flammable, from fuel to matches to paper towels, away from the fire source.

Place pots or pans directly on the campfire and cook using firewood as fuel. One good way to do this is to build the campfire within a circle of rocks, then place a grate or grill on top of the rocks. Upon arrival at the campsite, use an established fire ring. Build your own only if there is no existing fire ring.

## Putting Out the Fire

When the cooking is done, thoroughly and properly extinguish your campfire. Carelessness can cause uncontrollable fires in the wilderness. Be responsible for putting the fire cold out—beyond a doubt.

The best way to put out a campfire is with water (do not use dishwater, which may have small food particles and an odor that will attract wildlife). Sprinkle—do not pour—water directly on the fire to prevent the water from rushing into the ground with fire still burning where the water did not hit. Use a stick to stir the wet embers with the water. Continue sprinkling and stirring until the fire is completely cold out.

**Charcoal Cooking.** Charcoal can be used in place of small sticks or split wood. Build the fire within a circle of rocks to get it going quickly. Regular coals must burn about 40 minutes, until a coat of light gray ash appears, before the fire is ready to use. Quick-start coals are usually ready in 10 minutes.

**Cooking on a Grill.** First use a wire grill brush to clean the grill, especially if food will go directly on the grill. Starting a fire under the grill will help burn away anything remaining on its surface. Pots and pans can be placed directly on the grill. Food can go either directly on the grill or in foil bags. Cooking directly on the grill gives food a unique, delicious flavor.



## Getting It All Done on Time

With thoughtful menu selections and a little organization and planning, getting dishes on the table at the same time should be easy. If charcoal cooking, allow time to heat the coals. Then start with the food that takes the longest to cook. For example, baked potatoes will take at least 45 minutes to cook. If grilled fish, a salad, and baked potato are on the menu, get the potatoes cooking first, then prepare the rest of the meal.

Another heating device, canned flammable jelly, is easy to light and can be closed up after cooling and reused again later. Perfect for warming up single servings, it does not efficiently produce enough heat to cook a group meal.

Find a source of treated water, or begin the water treatment process now. Set aside a bucket or large pot of water for washing dishes.



## Cleaning Up

Clean and put away the cooking gear as quickly as possible after the meal, even if you are not yet leaving camp. Not only will you be able to enjoy the next activity, but the longer pots and pans sit, the tougher they are to clean. Put on a pot of water before you serve a meal. That way you will have hot dishwater by the time you finish eating.



Begin cleanup by setting out three pots.

**Hot-water wash pot**—hot water with a few drops of biodegradable soap.

**Hot-water rinse pot**—clear, hot rinse water.

**Cold-water rinse pot**—cold water with a sanitizing tablet or a few drops of bleach to kill bacteria.

Scrape excess food into a garbage bag that you will pack out. Then, scrub dishes in the hot-water wash pot. Use hot-pot tongs to dip items in the hot rinse water. Follow with a dip in the cold-water rinse pot. Lay clean dishes and cookware on a plastic ground sheet and let them air dry.

**Dishwater Disposal.** For campouts lasting no more than a couple days, use a small kitchen strainer to remove food bits from your wash water and put them in your trash. Carry the wash and rinse water away from camp and at least 200 feet (about 80 adult steps) from any water source. Give it a good fling, spreading it over a wide area.

For longer stays at one site, dig a sump hole away from camp and at least 200 feet from water sources. Make a hole about 1 foot across and 2 feet deep. Pour dishwater into the hole over a piece of screen to catch the food particles. Shake the food particles into a trash bag. Fill the sump hole when you break camp, and replace any ground cover.

Pack out all food scraps. Do not bury or scatter leftovers in the woods; animals will almost always find it. Food scraps are unhealthy for animals and can attract them to campsites where they may lose their fear of humans. This can be dangerous for them and for you.

**Disposing of Garbage.** When camping, set a goal to leave no trace that humans were ever there. Always pack out everything that was packed in, including all food packaging, foil, food scraps, and recyclables. Leave the campsite exactly as it looked when you arrived, if not in better shape.

**Storing Food.** At camp, store food where it will be safe from animals, insects, dust, debris, and bad weather. Frontcountry campers can use vehicles, coolers, or plastic buckets with tightly fitted lids as storage units. In the backcountry and wherever bears may be present, a bear bag is the best answer. Not only will your food be secured, hanging anything with an aroma will give bears no reason to linger in your camp.

Land managers of camping areas frequented by bears can give you further information about the best ways to store your food.



Rinse cans and carry them home for recycling.

Save space by flattening the cans.

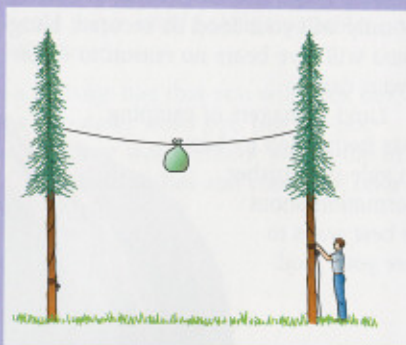
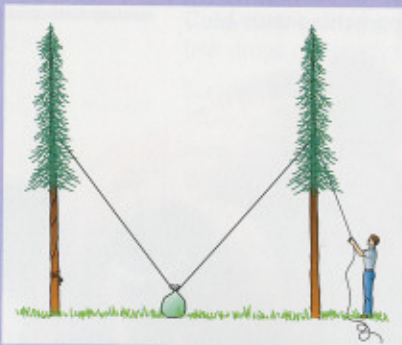
All Scouts are responsible for cleanup and washing their own eating gear. If everyone cleans one pot, pan, or utensil, the work will be done in no time.



## Protect Your Smellables

Here are three ways to suspend food and other "smellables" to keep them safe from wildlife.

1. Find a tree with a sturdy branch about 20 feet above the ground. Tie one end of a strong cord around a rock and toss it over the branch. Then untie the cord around the rock. Stash your provisions in a plastic trash bag or a burlap bear bag lined with a trash bag, and tie it to one end of the cord. Raise the bag until it is well out of reach of standing bears, and tie the free end to a tree trunk.
2. If there is not a good branch nearby, find two trees about 20 to 30 feet apart. Toss a line over a branch close to the trunk of one tree, then toss the other end of the line over a branch of the second tree. Tie your bear bag to the center of this line, and hoist it high between the two trees.
3. Outsmart those bears that are clever enough to claw loose the tied end of a cord. Divide your provisions equally between two bear bags. Raise one up to a high branch, as you would in the first method. Tie the free end of the cord to the second bag, lift it overhead, and use a stick or hiking staff to shove it out of reach of animals. The bags will counter-balance one another, keeping them safe. To retrieve the bags, use a stick to push one bag even higher, causing the other to come down within your grasp.



Remember to follow MyPyramid as a guide (see the chapter called "Get to Know Your Food Groups").

**You will need to pack lightly for trail cooking.**

## Trail Cooking

Trail cooking is like cooking at home in that you will try your best to make nutritious meals that taste great.

Portability is so important to trail cooking that one requirement for this merit badge is to figure the weight of the food. Everything needed for meals must be carried, so all excess weight must be eliminated. This calls for planning simpler, lighter meals that require no refrigeration, heavy equipment, or utensils. Sometimes you may choose not to cook at all, opting instead for sandwiches and other foods that are easy to carry.



## Figuring Weight

To calculate the weight of the food, you need an accurate food scale. Weigh each food item, jot down the weight beside the item, then add the weights for a total.

**Use a food scale to calculate the weight of different foods.**

To plan the menus for trail cooking, use the same principles described in the sections about menu planning and shopping for camp cooking. See the recipes section of this pamphlet for nutritional meals to prepare along the trail. Choose sandwiches that contain hearty, nourishing ingredients, fresh fruits and vegetables, and vitamin-packed nutrition or granola bars for dessert. These healthy foods will provide a good source of energy, too.

Using the menus and recipes you choose, compile a food list. Calculate the cost for each Scout, and purchase the food. Review each recipe and list the utensils you will need.

Prepare the food and other cooking supplies for packing. When you are ready to assemble and repackage the foods for the hike, you can figure the weight of the food.

**Dry, prepackaged foods are convenient, tasty, lightweight, and require no refrigeration.**





# Get to Know Your Food Groups

Just being aware of what your body needs is half the battle to staying fit for life. The other half is eating healthy and exercising. Remember, the old adage rings true: You are what you eat. When you learn about the nutritional benefits of the different food groups, you can begin to prepare healthy and well-balanced meals.

## MyPyramid: A Blueprint for Healthy Eating

To help people make better dietary choices, the U.S. Department of Agriculture has created a guide called MyPyramid. This plan focuses on the types of foods people should eat as well as the quantity, which depends on a person's age, sex, and exercise habits. The guidelines emphasize fruits, vegetables, whole grains, and fat-free or low-fat milk and dairy products. Also included are lean meats, poultry, fish, beans, eggs, and nuts, and a very low intake of saturated fats, trans fats, cholesterol, salt (sodium), and added sugars.

According to MyPyramid, the average 12-year-old Scout who exercises 30 to 60 minutes per day should consume about 2,200 calories a day. His daily diet should include 7 ounces of grains, 3 cups of vegetables, 2 cups of fruit, 3 cups of milk, and 6 ounces from the meat, fish, nuts, and beans group.

Whole grains are complex carbohydrates. They provide the body with energy and stamina. While it takes longer to burn complex carbohydrates, you should try to make sure at least half (or 3.5 ounces) of your grain intake comes from whole grains. This food group includes whole wheat bread, oatmeal, and brown rice.



---

Scouts can learn more about the USDA's new food pyramid by visiting (with your parent's permission) <http://www.mypyramid.gov>. Go to "My Pyramid Plan," plug in your age, sex, and exercise habits, and get a customized blueprint for healthy living.

---



A young Scout should try to limit his intake of fats and sugars to 290 calories a day. He should not eat more than 6 teaspoons of oil, butter, and fats per day. This would include the "hidden" fats found in cheese or dairy products.



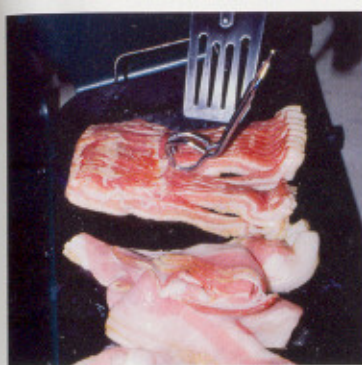
You should consume more fruits and vegetables than any other category. These foods provide important vitamins and minerals that your body needs to function properly. They also provide roughage or fiber, which is good for your digestive system.

The 12-year-old Scout who exercises 30 to 60 minutes each day should eat a variety of vegetables. Every week, he should consume 3 cups of dark green vegetables, 2 cups of orange vegetables, 3 cups of dried beans or peas, 6 cups of starchy vegetables, and 7 cups of other vegetables.

A 15-year-old Scout who exercises 30 minutes a day should follow the same diet regiment as the 12-year-old who exercises more. If you have any medical conditions or food allergies, consult a nutritionist or your primary care physician regarding what your calorie intake should be and what you should eat.

### Meat and Beans Group

All foods made from meat, poultry, fish, dry beans or peas, eggs, nuts, and seeds are considered part of this group. Dry beans and peas are part of this group as well as the vegetable group, because they provide protein. Protein helps keep your bones and muscular structure strong and provides energy.



**Most Americans eat too much red meat and high-fat meats like bacon, which should be eaten sparingly.**

**Meat alternatives:** black-eyed peas, chickpeas (garbanzo beans), falafel, lentils, lima beans, navy beans, split peas, tofu (bean curd made from soybeans), soybeans, veggie burgers

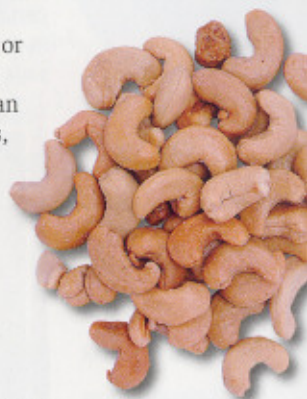
### Grain Group

Foods made from wheat, rice, oats, cornmeal, barley, or another cereal grain are all grain products. These include bread, pasta, oatmeal, breakfast cereals, tortillas, and grits.

Grains are divided into two subgroups: whole grains and refined grains. Whole grains contain the entire husk or bran, germ, and endosperm. Whole wheat flour, bulgur (cracked wheat), oatmeal, whole cornmeal, and brown rice are examples of whole grains, which provide dietary fiber, iron, and many B vitamins such as thiamin, riboflavin, niacin, and folic acid.

If you have ever eaten a hearty bowl of oatmeal and then hiked several miles, you might have noticed that you did not feel hungry again until your patrol broke for lunch. This is because complex carbohydrates from whole grain foods provide energy and stamina and take longer for your body to process.

Most meats and poultry choices should be lean or low fat. Fish, nuts, and seeds contain healthy oils, so choose these foods more often than meat or poultry. If you are not allergic to nuts, you can eat hazelnuts, peanuts, peanut butter, and pecans as meat alternatives.





Refined grains have been milled, which removes not only the bran and germ but also many nutrients and vitamins. Refined grain products include white flour, degermed cornmeal, white bread, and white rice. Most refined grains are enriched so certain B vitamins are added back in after processing, but fiber is not. Refined grains include grits, noodles, pasta (unless it says whole grain), macaroni, and pita bread.



Fresh is best,  
then frozen,  
then canned.

To help build stronger, better bodies, choose whole grain products whenever possible.

### Vegetable Group

Any vegetable or 100 percent vegetable juice counts as a member of the vegetable group. Vegetables can be raw or cooked, frozen, canned, dried, or dehydrated. They can be eaten whole, cut up, or mashed.

Vegetables are organized in the food pyramid under five subgroups, based on their nutrient content.

**Dark green vegetables:** broccoli, greens (collard, turnip, mustard), dark green leafy lettuce, kale, watercress, bok choy

**Orange vegetables:** acorn squash, butternut squash, pumpkin

**Dried beans and peas:** black-eyed peas, garbanzo beans (chickpeas), lentils, lima beans, navy beans, soybeans, split peas, tofu, white beans

**Starchy vegetables:** sweet corn, green peas, lima beans (green), potatoes

**Other vegetables:** artichokes, asparagus, beets, brussels sprouts, cabbage, cauliflower, celery, cucumbers, eggplant, green beans, green or red peppers, okra, radish, turnips



### Fruit Group

Either 100 percent fruit juice or any type of fruit counts as part of the fruit group. Fruits can be fresh, canned, frozen or dried. They can be eaten whole, cut up, or pureed. Fruits are a good substitute for sweets.

**Berries:** blueberries, raspberries, strawberries

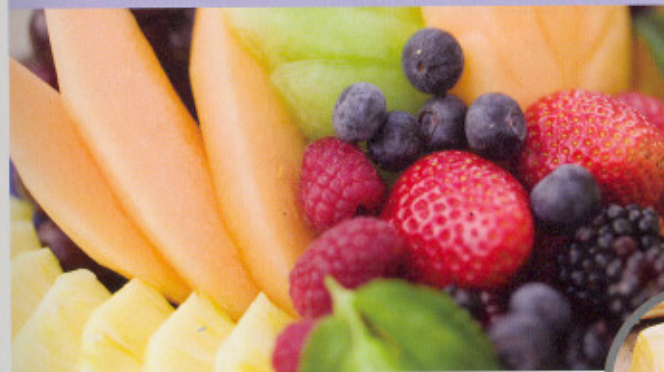
**Citrus fruits:** clementines, grapefruit, lemons, limes, oranges, tangerines, pineapple

**Melons:** cantaloupe, honeydew

**Pitted fruits:** apricots, avocados, cherries, mangoes, nectarines

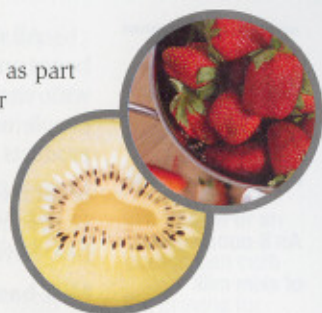
**Other fruits:** apples, bananas, grapes, kiwi fruit, pears, watermelon

In place of favorite standbys like apples and bananas, try something different next time: clementines or tangerines instead of oranges; mango instead of peaches or nectarines; kiwi fruit instead of watermelon.



### Milk, Yogurt, and Cheese Group

The foods in this group are all made from milk. Examples include milk, yogurt, cheese, cottage cheese, puddings, ice cream, and creamed soups. When eating foods from this group, choose low-fat or fat-free versions. If you choose milk or yogurt that is not fat free, or cheese that is not low fat, the fat in this food counts as part of your discretionary calorie allowance.



Did you know:

One medium-size kiwi fruit has more vitamin C but fewer calories than a medium-size orange.





All dairy products provide calcium to help build strong bones and teeth. Dairy products like milk are often fortified with vitamin D, which helps your body to absorb calcium. For people who are lactose intolerant, lactose-free and lower-lactose products are available, including hard cheeses and yogurt.

**Milk:** fat-free (skim), low-fat (1 percent milkfat), reduced fat (2 percent milkfat), whole milk, lactose-reduced and lactose-free, flavored milks such as chocolate, strawberry, and vanilla

**Milk-based desserts:** ice milk, ice cream

**Other milk-based products:** flavored yogurts and yogurt-based drinks

If you choose sweetened milk products (flavored milk, yogurt, drinkable or frozen yogurt), the added sugars count as part of your discretionary calorie allowance.

**Hard natural cheeses:**

Cheddar, mozzarella, Parmesan

**Soft cheeses:**

cottage cheese, ricotta

**Processed cheeses:**

American

**Oils, Fats, and Sweets Group**

Oils are fats that become liquid at room temperature, such as the vegetable oils used in cooking. Oils come from various plants and from fish.

**Common oils:** canola, sunflower, corn, cottonseed, grapeseed, olive, peanut, safflower, soybean

Many foods (nuts, some fish, olives, avocados) are naturally high in oils. Mayonnaise, some salad dressings, and soft tub or squeeze margarine are mainly made from oils. Check the nutrition label to find margarines with zero grams of trans fat.



Most oils are high in monounsaturated or polyunsaturated fats and low in saturated fats. Oils from plant sources, such as vegetable and nut oils, contain no cholesterol. A few plant oils, such as coconut oil, are high in saturated fats and for nutritional purposes should be considered solid fats.

Solid fats such as butter, margarine, and shortening stay solid even at room temperature. Solid fats come from animals and can be made from vegetable oils. Other solid fats include beef fat (tallow, suet), chicken fat, and pork fat (lard).

Sweets are included in this group because they are often high in fats and oils. If you are eating something sweet, you are probably eating fats and oils, too. Limiting sweets is good for you and helps your teeth to stay healthier, too.

Consuming too many sweets and fried foods can cause your weight to skyrocket while your energy and overall health may decline. Eating poorly can cause serious health problems, too, such as heart disease, obesity, and diabetes. It is hard to think ahead when you are young. However, if you develop good eating habits now, it will be easier for you to lead a healthier life and help prevent many of the health problems that are linked to poor eating habits.

## Fat in Food Preparation

Staying aware of how food is prepared is important in preparing nutritious meals and eating healthy. For example, a baked potato stuffed with fresh, steamed vegetables has little or no fat and few calories. The same baked potato with butter, sour cream, cheese, and crumbled bacon becomes full of fat and calories. And fast-food fries are loaded with fat and salt, low in nutritional value, and barely recognizable as a relative to the baked potato first mentioned.



A good substitute for sweets is fruit. The sweet taste of an apple or an orange can curb the craving for sugar, without adding fat.

An 8-ounce glass of skim milk contains more calcium than an equal amount of low-fat or whole milk.



## General Food Preparation

Knowing about cooking methods and about the different food groups will provide you with the knowledge you need to prepare excellent meals.



The nutrients in some vegetables, such as in the potato, often are located in or near the skin. Removing the skin will remove many of the nutrients. Next time, consider scrubbing the skins and leaving them on when you prepare them. Scrubbed potatoes usually can be substituted in recipes calling for peeled ones, without sacrificing flavor.

People who are allergic to peanuts must also avoid foods cooked with peanut oil. Consuming any kind of peanut product can cause severe breathing difficulties and other serious health problems.

### Allergies

Even minor exposure to some foods can cause severe complications in people who have allergies. Be aware of any allergies of those for whom you are cooking. Whenever possible, provide alternatives from the same food group. For example, soy milk could be offered to someone who is allergic to dairy products. Meatless spaghetti sauce served with whole wheat pasta could be offered as an alternative for someone who is a vegetarian.



### Vegetarianism

Consider the needs of vegetarians when creating menus. People who do not eat meat, fish, or poultry are considered vegetarians. They must be careful to get the proper amounts of nutrients, particularly protein and iron. Vegetarians do, however, eat eggs, cheese, and other dairy products. To stay healthy, they get protein from beans, peas, and nuts.

Vegans ("vee-guns") are vegetarians who do not eat any kind of animal products, including dairy products and meat-based broths. These vegetarians must pay special attention to their protein and iron intake. They often rely on meat substitutes such as tofu to provide their needed protein.

Substitute nonmeat items for meats from the same food group. For example, a bean burrito would make a good substitute for a chicken burrito. Tasty substitutes are available for burgers, hot dogs, chicken nuggets, bacon, sausage, and all varieties of cold cuts. Some of these foods are made from tofu, which is a soybean product, or from seitan, a seasoned wheat gluten that is said to resemble meat in both taste and texture.

### Religion

People of different faiths may restrict what they eat, or what they eat on a particular day or during a certain time of the year. It is helpful to know if you need to plan ahead to accommodate anyone's diet for this consideration.

It is easy to think of certain foods in certain contexts, such as bacon and eggs for breakfast. But if you have ever had pizza for breakfast, you know that variety can make meals fun and interesting.





# Food Service as a Career

If you enjoy cooking, the food service industry is wide open with a variety of careers. You could be a chef or, if pastry is your thing, you could specialize and be a pastry chef. Restaurants often have a head chef on staff; top restaurants have several.

You could become a chef anywhere in the world or on a cruise ship, traveling to exotic places while being in charge of the food served to thousands of vacationers every day. Here is how to find out more about the food service industry.

For information about the food service industry, check out the library, the Internet (with your parent's permission), and school counselors. Ask your school counselor about ProStart, a program developed by the Hospitality Business Alliance. ProStart is available in many states to high school juniors and seniors. It combines classroom learning with hands-on industry experience.

## Learning About the Food Service Industry

A dietician or nutritionist in your school district can give you information on careers, the type of training and education required, and some of the methods used in professional food preparation. The dietician should know the local health regulations and licensing requirements that must be followed.

---

Ask your guidance counselor where to get specific information on coursework and the type of degree needed for the career that interests you.

---





## Exploring Education

Depending on the area of the food industry that piques your interest, check out two- and four-year colleges that offer programs in food service and the culinary arts. There are highly specialized culinary schools in the United States and around the world. Many people become cooks and chefs after learning the trade in the military services.

The Foodservice Management Professional Certification program gives food service professionals hands-on opportunity to apply their education and supervisory experience as certified food service professionals. Such certification programs distinguish top achievers and afford them greater employment opportunities and earning potential.



## Career Options

Some other options for a food service career include cafeteria manager, produce manager, caterer or personal chef, food critic or food writer, instructor, dietary manager, and food stylist or photographer.

People qualified in these types of careers are needed by restaurants, hotels, schools and universities, cruise lines, resorts, theme parks, sports venues, convention centers, magazines, grocery stores, hospitals, and food manufacturers, to name a few.



Your family will enjoy your new cooking skills.

## Cooking for Life

Best of all, earning the Cooking merit badge will serve you throughout your life. You may discover that you enjoy cooking enough to pursue it as a career, or you may become the designated troop chef. Even if cooking remains just a hobby or a campout duty, cooking is a valuable life skill for anyone.



# Menus and Recipes

As you plan your menus, take into consideration the distance you must transport your food. Use lightweight alternatives like pouch or boxed juices instead of canned. Flavored milks (chocolate, strawberry, vanilla) also are available boxed.

## Camp Breakfasts

**Option 1:** oatmeal with chopped apple or raisins/nuts, French toast, milk or orange juice

**Option 2:** pick-a-breakfast sandwich, apple, milk



## Trail Breakfasts

**Option 1:** peanut butter and jelly on crackers, banana, hot cocoa

**Option 2:** instant dried cereal, mixed dried fruits, hot cocoa

Take a small notebook to track the planning done for camp cooking. Use your notes and records of supplies and meals to plan the next camping trip.

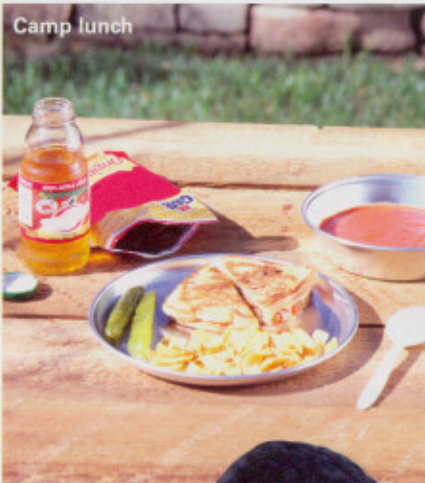


## Camp Lunches

**Option 1:** tomato soup, grilled ham-and-cheese sandwich with pickles on the side, corn chips, apple juice

**Option 2:** hot dogs with pickle relish, mustard, ketchup, pork and beans, sliced pears, chocolate milk

Camp lunch



Trail lunch



## Trail Lunches

**Option 1:** peanut butter and jelly sandwich, carrot sticks, chocolate pudding or applesauce, juice

**Option 2:** canned meat or tuna fish with assorted crackers, energy bars or hard-boiled eggs, canned peaches, chocolate milk

## Camp Dinners

**Option 1:** black bean soup, Texas hash, fruit salad or lettuce-and-tomato salad, stuffed bananas, milk

**Option 2:** camp kabobs, camp-style potatoes, biscuits, peach cobbler, chocolate milk

Camp dinner



One-pot dinner



## One-Pot Dinners

**Option 1:** one-pot chicken and rice, sourdough rolls, peach cobbler, milk

**Option 2:** summer pasta, Italian loaf bread, fresh sliced melon, instant lemon pudding, pineapple-orange juice

## Trail Dinners

**Option 1:** instant vegetable-barley soup, canned chicken or tuna with sliced cheese on sourdough rolls, oatmeal raisin cookies, milk

**Option 2:** instant chicken and rice soup, heated sliced beef on wheat rolls, carrot sticks, milk





## Breakfast Dishes

### Instant Pancakes

Pancake mix ("complete" variety that needs only water)  
Large resealable plastic bag

Before leaving for camp, measure the necessary amount of pancake mix into the plastic bag. On the bag, write how much water to add. At camp, add water to the mix, seal the bag, knead to combine, and squeeze small dollops from the bag onto the hot greased griddle. Watch pancakes closely. When the small bubbles in the center of the pancake begin to burst, turn the pancakes. Continue until you have as many pancakes as needed. Serve with butter and syrup or fruit and whipped topping. Save leftover pancake batter by carefully resealing the bag for later use (and put it in a cooler).



**At home:** Mix the batter in a bowl and cook the pancakes on a hot greased griddle or a medium-hot greased skillet.

### Pick-a-Breakfast Sandwich

Use this tool to create a variety of simple, portable, and filling breakfast sandwiches made with easily transportable ingredients. The amount shown below is per serving.

Start with one egg scrambled with a little milk. Add one or two items from column one. Add one or two items (in whatever amount you like) from column two. Serve in one of the breads shown in column three. You can start with fresh, uncooked eggs and meats and cook them together in a skillet, or cook the eggs and add cooked, leftover meat. Top with ketchup, salsa, or any other tasty topping you have on hand.

Adjust the amounts and combine anything you like from the first two columns—it is all easy and delicious. You may discover new combinations to enjoy.



1

2 slices Canadian bacon, cooked  
1 slice deli ham or ¼ cup ham steak, chopped  
¼ cup cooked turkey sausage, crumbled  
¼ cup any leftover meat, chopped  
¼ cup potato, cut into small cubes and cooked



2

Salsa  
Tomato, chopped or sliced  
Shredded or sliced cheese or cottage cheese  
Apple, chopped or sliced, cooked or uncooked  
Pineapple tidbits



3

Pita  
Bagel  
Flour tortillas  
Biscuit, split open  
Small whole wheat hamburger bun





### Quick Sausage and Eggs

- 1 pound (16 ounces) sausage or turkey sausage
- 12 eggs
- 1 cup milk
- 1/2 cup shredded cheese, any variety

Brown and crumble the sausage over medium-high heat, then drain and cool it completely. Scramble the eggs with the milk and cook in a greased pan over medium heat; allow the eggs to cool. Store the sausage and the eggs separately in resealable plastic bags. At camp, reheat the sausage and eggs in a greased, disposable foil pan (for easy cleanup) over the fire, grill, or propane stove. Top with shredded cheese.

### Biscuits

Biscuit mix ("complete" variety that needs only water)

Resealable plastic bag

Before leaving for camp, measure into a resealable plastic bag the amount of biscuit mix you will need to make the number of biscuits you want. Write on the outside of the bag the amount of water you will need to add.

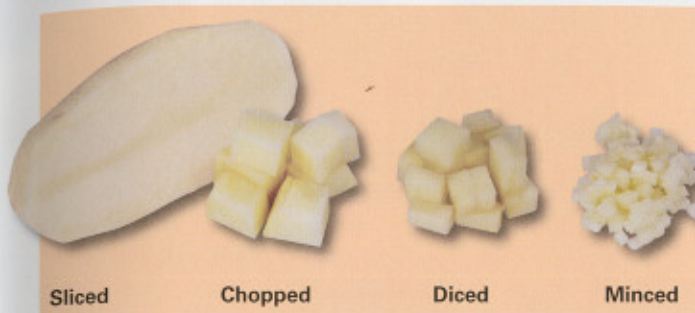
At camp, preheat a Dutch oven and lid over hot coals. Mix together the water and the biscuit mix until blended. Knead dough on a lightly floured board for about 15 seconds. Roll to 1/2 inch thick. Use a clean, empty can or cup to cut the dough into rounded biscuits.

Heat some vegetable oil in the oven. Put each biscuit into the oil and turn it over so oil is on both sides. Put a layer of biscuits on the bottom of the oven. Put the lid on and place the oven on the coals. Stack coals all along the sides of the oven. Look at the biscuits in about 10 minutes. If they are light golden brown, they are done.

**At home:** Follow the instructions on the biscuit box and bake in the oven.



To conserve dough, cut the biscuits from the edge of the dough toward the inside. Reshape the leftover scraps into biscuits.



### Main Dishes for Lunch or Dinner

These main dishes will give your camp menu some flexibility and variety.

#### Texas Hash

- 1 tablespoon cooking oil
- 1 pound (16 ounces) ground beef
- 1 large onion, chopped
- 1 medium green pepper, chopped
- garlic powder to taste
- 8-ounce can stewed tomatoes (with liquid)
- 1 teaspoon chili powder
- 1 cup cooked long grain or brown rice
- salt, pepper to taste
- grated Monterey Jack or cheddar cheese, optional

In a Dutch oven, heat oil over the campfire or stove and brown the meat, stirring to break up the chunks. Set meat aside on a plate. Add onion, bell pepper, and garlic powder to pan. Cook just until tender. Add the meat, tomatoes, and chili powder; mix well. Add cooked rice and season to taste. Bake until hot, 20 to 25 minutes. Sprinkle grated cheese on top during the last five minutes of baking. Serves four to six.

**At home:** Follow the recipe, using your kitchen stove in place of the campfire and a covered casserole dish instead of the Dutch oven. Add an 8-ounce can of whole kernel corn, if desired. Bake covered at 350 degrees for 20 to 25 minutes; add grated cheese during the last five minutes.



Unless noted otherwise, the recipes in this section serve four.





### Fish With Buttered Onions

See the *Fly-Fishing* merit badge pamphlet for information on how to clean a fish.

Try this simple and delicious way to cook trout or other whole fish.

Fresh fish, any kind, 3 to 4 ounces per serving  
1 small onion per fish, sliced thin  
salt and pepper  
2 tablespoons butter per fish

Clean the fish thoroughly. Leaving the fish whole, season the inside with salt and pepper. Fill it with the butter and as many of the onion slices as desired. Place the stuffed fish on buttered foil and wrap it up, leaving some space for expansion. Place the fish packet over the grill or hot coals for 7 to 10 minutes on each side.

**At home:** Follow the recipe but place pouches on a baking sheet. Bake at 350 degrees for 20 to 25 minutes.



### Johnny Marzetti

1 pound (16 ounces) ground beef  
1 cup onion, chopped  
1 ½ cups meatless spaghetti sauce  
12-ounce package of egg noodles, cooked and well-drained  
4 ounces cream cheese, cubed  
salt and pepper, to taste

Thoroughly cook the ground beef in a skillet until it is crumbly. Dice the onion and add to the crumbled ground beef; cook until the onions are translucent (kind of see-through). Drain off all fat. Add the spaghetti sauce and simmer. Meanwhile, cook the noodles until tender in a pot of boiling water; drain well. Transfer the hot noodles and meat mixture to a 5-quart saucepan. Add the cubed cream cheese; toss lightly until cream cheese is melted. Add salt and pepper, to taste. Serve with hot bread and a salad.

### Chicken With Brown Rice

Vegetable cooking spray  
3 cups cooked brown rice  
10-ounce package frozen green peas  
2 cups cooked chicken breasts, chopped into small pieces  
½ cup cholesterol-free, reduced-calorie mayonnaise  
½ cup slivered almonds, toasted (optional)  
2 teaspoons soy sauce  
¼ teaspoon ground black pepper  
¼ teaspoon garlic powder  
¼ teaspoon dried tarragon leaves

Spray 3-quart baking casserole dish with cooking spray. In a large bowl, combine rice, peas, chicken, mayonnaise, almonds, soy sauce, and seasonings. Mix well. Spoon into a casserole dish and cover. Bake at 350 degrees for 15 to 20 minutes or until heated through. Serves six.

**At camp:** Make this dish in a Dutch oven. Cook the brown rice at home, before leaving for camp.





### Chicken Divan

- 6 to 8 chicken breast halves, cooked and cooled
- 2 10-ounce boxes frozen chopped broccoli
- 2 cans (10¾ oz. each) condensed cream of chicken soup
- 4 to 5 tablespoons mayonnaise-style salad dressing
- Juice from one slice of lemon
- 8 ounces (about 2 cups) cheddar cheese, shredded
- 1 3-ounce can onion rings or 1 cup cracker crumbs or dry bread crumbs

Remove the cooked chicken meat from bones and cut into bite-size pieces. Cook the broccoli according to the package instructions. In a large bowl, combine the soup, salad dressing, and juice from the lemon slice. Layer the broccoli, chicken, and cheese alternately in a 13-by-9-by-2-inch baking pan. Pour the soup mixture over the top and bake, uncovered, at 350 degrees for 15 minutes. Sprinkle the onion rings or cracker crumbs on top; continue baking 15 minutes longer or until heated through. Serves eight to 10.



### Vegetable Beef Soup

- 2 to 3 pounds stew meat or top sirloin, cut in bite-size pieces, trimmed of fat
- 2 teaspoons salt
- celery salt and onion salt, to taste
- 4 11.5-ounce cans of vegetable juice
- 4 carrots, chopped
- 4 celery ribs, chopped
- ½ sweet white onion, chopped
- 5 medium-size potatoes, chopped
- 1 8-ounce can corn, drained, or a small (10 ounces) bag of frozen corn
- 1 box (10 ounces) frozen lima beans
- 1 8-ounce can stewed tomato bits

To save time, use a large bag (32 ounces) of frozen corn, carrots, and green beans.



Fill a 5-quart pot or stockpot ⅔ full with water. Put on back burner of stove on high heat. Add the beef, salt, celery salt, and onion salt; bring to a boil. Reduce the heat to medium low; simmer for one hour. Skim the froth off the top of the stock frequently.

Pour in the vegetable juice. Add carrots, celery, and onions to stock. Add more celery salt and onion salt, to taste. Simmer 10 to 15 minutes, then add the potatoes. Add the corn, lima beans, and/or frozen mixed vegetables, and stewed tomato bits. Simmer until vegetables are tender. Add more salt, celery salt, and onion salt to the soup if needed. Serve with crackers or a grilled cheese sandwich. Serves eight.







### Camp Kabobs

Cut up steak or chicken and fresh vegetables at home. Place meat and vegetables in separate resealable plastic bags. At camp, add 3 ounces of Italian salad dressing to the bag of chicken or a teaspoon of garlic powder and 3 ounces of soy sauce to the bag of steak; marinate for 20 to 30 minutes.

When ready to cook at camp, use metal or wood kabob sticks and load them up with the same item: All mushrooms should go on their own sticks, all onions on their own, all meat, etc. The cooking time for the different vegetables will vary, as will the cooking time for the meat or chicken. This way, you can judge when each item is properly cooked. Position the skewers of meat first, then hard veggies, then softer ones like mushrooms, over the fire for a few minutes; turn regularly. Add foil-baked potatoes and whole grain bread or rolls for a complete meal.

### Camper's Pizza

- 4 ounces (1/4 pound) lean ground beef
- 1 half medium-size sweet onion, chopped
- 1 box pizza crust mix
- 8 ounces pizza sauce or prepared spaghetti sauce
- 1/2 cup green bell pepper, coarsely chopped
- 1 cup mozzarella cheese, shredded
- 1 teaspoon dried oregano

Brown ground beef and onion in 12-inch cast iron skillet over medium coals. Place browned beef on a plate covered with paper towel to drain. Pour off drippings from pan. Make pizza dough from boxed mix. With your hands, flatten dough and push out to sides of skillet to form a circle. Press the edges about an inch up the side of the pan. Spread sauce over top just to cover the dough. Spoon ground beef mixture evenly over sauce. Sprinkle with green pepper, then cheese and oregano. Place the pan in the center of the grid over medium coals. Cover and cook 20 to 30 minutes or until crust is lightly browned. If cooking over an open grill or coals, cover the pan securely with foil.

**At home:** Follow the same instructions, using the stovetop in place of coals. Cook the beef and onion over medium heat on the stovetop. Preheat the oven to 350 degrees. Follow the rest of the recipe the same until the step for placing the pan over the coals. Instead, bake at 350 degrees for 20 to 30 minutes, or until the crust is lightly browned. At home, you will be able to widen the variety of toppings—pepperoni, Canadian bacon, mushrooms, olives, or whatever you prefer.





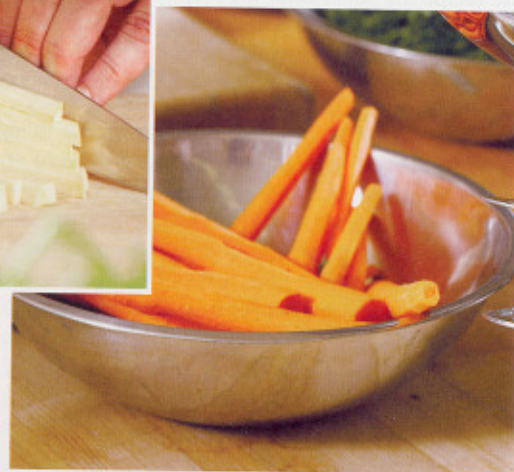
## Coffee Can Dinner

For each serving you will need:

- 1 carrot
- 2 celery ribs
- 2 strips bacon
- 8 ounces (½ pound) lean ground beef
- 1 medium potato, sliced
- 1 medium onion, sliced
- 1 medium tomato, sliced
- salt and pepper, to taste
- Coffee can with metal lid

Cut carrot in half lengthwise. Cut celery and carrot into 2-inch lengths. Cut bacon strips in half. Mold two meat patties. Place two pieces of bacon on bottom of can. Place half of each ingredient in layers, in order listed here. Season with salt and pepper, to taste. Repeat with second half of ingredients, again seasoning with salt and pepper. Cover the can with the lid of another pot (or use a double layer of foil). Place the closed coffee can on top of glowing coals for 25 minutes. Open the lid and check after 10 minutes. If it is browning too rapidly, pour 2 tablespoons of water into the can.

**At home:** This recipe can be done only when cooking with a campfire.



## One-Pot Chicken and Rice

- 16 ounces (1 pound) boneless chicken breasts, cut in bite-size pieces
- 1 medium onion, chopped
- ½ teaspoon garlic powder
- 2 tablespoons butter or margarine
- 1 tablespoon cornstarch
- 2 chicken bouillon cubes, dissolved in 1½ cups water
- 1 large carrot, sliced
- ½ teaspoon salt
- 1 teaspoon parsley, chopped
- 1½ cups quick-cooking rice

Sauté chicken, onion, and garlic powder in butter until chicken is lightly browned, about 5 minutes. Stir in cornstarch and cook one minute. Add broth, carrot, and salt. Bring to a full boil. Stir in parsley and rice. Cover; remove from heat. Let stand five minutes. Fluff with a fork before serving.

**At home:** Follow the same instructions at home, using your kitchen stovetop. Use a can of chicken broth instead of the bouillon and water.

## Campfire Grilled Cheese

For each serving you will need:

- Two slices of whole wheat bread
- Butter or margarine, softened
- Slice of ham
- Slice of cheddar or other variety of cheese

Butter one side of each slice of bread. Add the ham and cheese, keeping the buttered sides out. Place the sandwich in a campfire pie maker and place in coals for two to three minutes on each side until the cheese has melted.

**At home:** Heat a griddle or heavy skillet over medium heat. Butter the bread. Add the ham and cheese, keeping the buttered side out. Place the bread in the skillet and cook on each side until lightly browned and cheese is melted.



The term *sauté* means to fry in a small amount of fat or oil.



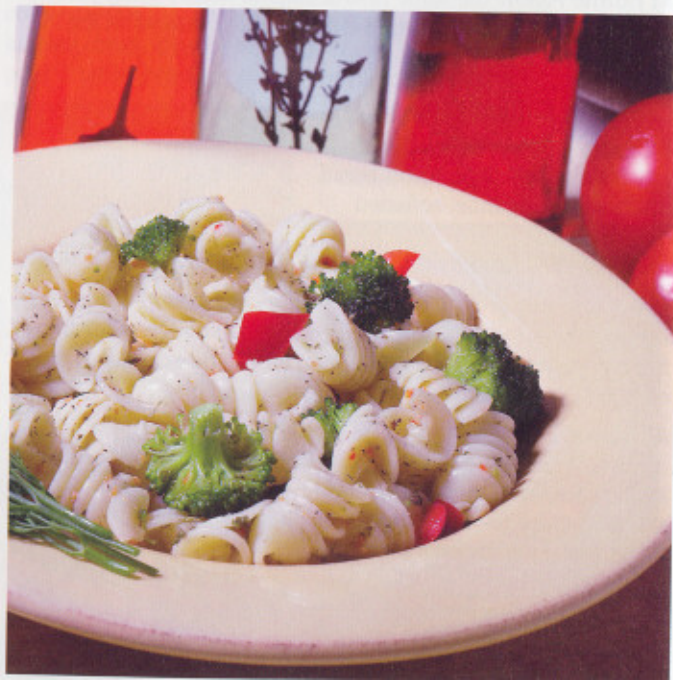


## Summer Pasta

- 16 ounces semi-soft cheese, such as Muenster (check the deli section of your grocery store), grated
- 2 teaspoons dried basil
- 1½ teaspoons garlic powder
- ¼ cup olive oil
- 4 large tomatoes, chopped
- salt and pepper, to taste
- 16 ounces spiral pasta, uncooked

Mix everything but the pasta in a large bowl or plastic resealable container with a lid. Cover tightly and keep cool. Do this early in the day to allow the flavors to blend. When ready to eat, boil the pasta according to the package instructions. Mix the pasta immediately with the cheese and tomato mixture, and serve immediately.

**At home:** Follow the same instructions, substituting six cloves of minced garlic for garlic powder and fresh basil instead of dried. Also add your favorite veggies, such as broccoli.



## Cheesy Turkey Hot Dogs

- 8 jumbo-size turkey hot dogs
- 4 ounces (½ cup) shredded cheese, any variety
- 8 sourdough rolls or whole wheat hot dog buns
- 4 tablespoons butter or margarine
- 1 tomato, chopped
- 1 small onion, diced
- mustard, ketchup, pickle relish

Split hot dogs and brown them on the grill, split-side down. Remove from heat. Spread cheese on split; return to heat, split-side up, to melt cheese. Butter rolls or hot dog buns, brown them, and serve with hot dogs. Add tomato and other extras, as desired.

**At home:** Follow the same steps, using a skillet and a kitchen stovetop instead of a grill.



Pita pocket bread works great for meals on-the-go. Just stuff the bread with sausage and eggs, tuna salad, chicken salad, or lunch meats and add vegetables such as tomato, lettuce, or celery for extra flavor and texture—not to mention a lot of great nutrients for breakfast, lunch, or dinner.





### Chicken Burritos

- 1 small package flour tortillas
- 2 packages quick-cooking Spanish rice
- 2 6-ounce cans of cooked chicken (white meat)
- 1 tomato, chopped
- Grated cheese, such as cheddar or Monterey Jack

Cook rice according to package instructions; add chicken and stir. Lay tortilla flat. Spoon chicken mixture onto center of the tortilla. Add tomato and cheese. Starting at one end, roll up the tortilla. Experiment with other flavors of rice for different combinations.



### Fiesta Roast Beef Sandwiches

- 2 cups cooked roast beef, shredded
- 1 cup canned red beans, optional
- 1 cup chunky salsa
- buns or flour tortillas
- 1/2 cup lettuce, chopped
- 1 tomato, chopped

Mix and heat beef, beans, and salsa. Place in buns or tortillas and top with lettuce and tomatoes. Serve with a baked potato as a side dish. Serves two to three.

**At home:** Follow the same instructions.

### Roasted Corn on the Cob

- Corn on the cob, not shucked
- Large bucket of water

Cut off the "hair" end of the corn. Soak in water for 20 minutes. Peel back but do not tear off the corn husks. Remove the silks from the ears and reposition the husks by tying them shut with a strip of husk that has been removed. Place the corn directly on the coals, turning frequently, and grill 10 to 20 minutes. Peel back husks before eating.

**At home:** You can roast corn on the grill at home the same way.

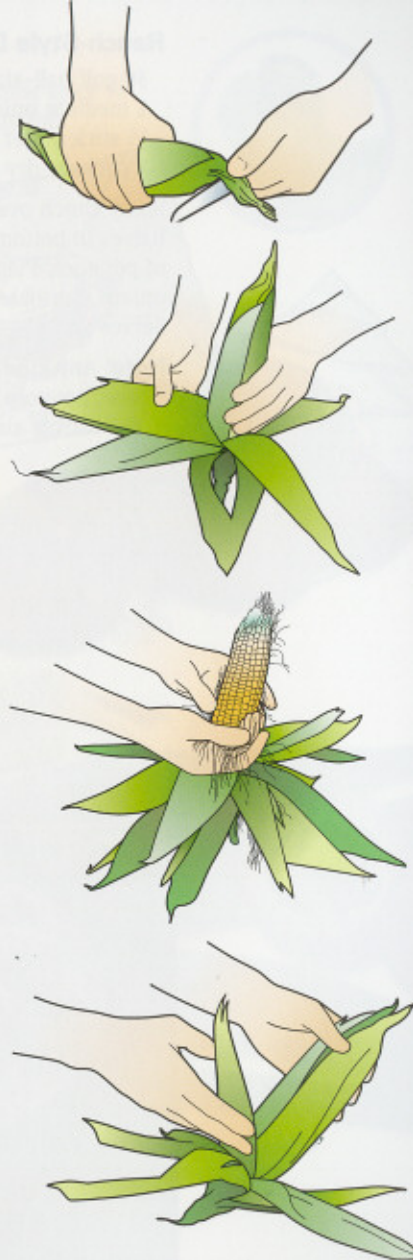
### Dirty Rice

Turn this side dish into a one-pot main course by adding cooked beef, chicken, or sausage—a variation of jambalaya. Add Cajun seasoning to suit your taste—remember that it contains a lot of pepper, so be careful. You can always add more.

- 8 slices bacon
- 2 onions, chopped
- 1 green bell pepper, chopped
- 1 red bell pepper, chopped
- 4 ribs of celery, chopped
- 6 cubes of beef bouillon, dissolved in
- 7 cups hot water
- 3 1/2 cups quick-cooking rice (uncooked)
- 8-ounce can mushrooms
- Cajun seasoning to taste

Cook bacon in bottom of Dutch oven until crisp; remove and set aside. Add chopped onions, bell peppers, and celery; sauté. Stir in broth, rice, mushrooms, and seasoning. Cook 40 minutes or until rice is done. Before serving, crumble reserved bacon and sprinkle on top. Serves eight.

**At home:** Follow the same instructions, using the Dutch oven on your stove at home.



Preparing corn for roasting



## Ranch-Style Dutch Oven Potatoes

- 30 golf ball-sized new red potatoes, halved
- 1 medium onion, chopped
- ½ stick butter or margarine, cut into chunks
- 1 package dry ranch dip mix

Spray Dutch oven with nonstick cooking spray. Place potato halves in bottom of Dutch oven. Place chopped onion on top of potatoes. Place chunks of butter on top of potatoes and onions. Sprinkle ranch dip mix over all. Bake 30 to 45 minutes. Serves six.

**Note:** Any kind of potatoes can be used. If using Idaho or russet potatoes, cut them into medium-size chunks. Baby carrots also can be added if desired.

**At home:** Follow the same instructions and bake 30 to 45 minutes at 375 degrees.



## Meals Cooked in Foil

Here are a few foil dinner meals that will add some spice to your campouts. Be sure to always use heavy-duty foil.



### Tex-Mex Foil Dinner

- 1 8-ounce can corn
- 1 cup rice, cooked
- 4 boneless chicken breasts, cooked and cut into strips
- 1 can black beans, drained
- 1 16-ounce jar tomato salsa
- 1 small can chopped green chiles
- 8 ounces (2 cups) cheddar cheese, shredded



At home, mix together all ingredients. Spoon mixture into aluminum foil packets. Seal well and put into resealable plastic bags to keep water out while stored in your cooler. At camp, just place foil packets over the grill or fire to heat. Grill for about 10 minutes or until heated through. Serves four.

### Campfire Hobo Stew Foil Dinner

- 16 ounces (1 pound) ground beef or stew meat (cut into small pieces)
- chopped vegetables of your choice (green beans, carrots, onions, zucchini, bell peppers)
- 1 clove garlic, minced
- salt and pepper, to taste
- 4 tablespoons butter

Cut off four pieces of aluminum foil for individual pockets. Spray the foil with cooking spray. Add meat first, then vegetables. Top with seasonings and then butter. Close foil on all sides, leaving some room for expansion. Be sure to mark your packet so it does not get mixed up with someone else's. Put the packets into the coals. Check for doneness in about 10 minutes. Serves four.





### Pineapple Chicken Foil Dinner

- 4 skinless chicken breasts
- 1/4 cup ketchup
- 2 tablespoons cider vinegar
- 2 tablespoons brown sugar
- 1 8-ounce can of pineapple chunks, drained
- 1 green bell pepper, chopped
- 1 small sweet onion, chopped
- salt and pepper



Mix all the ingredients together (except the chicken) in a sauce pan and bring to a slow simmer, stirring occasionally. Cool and then store in a resealable plastic bag. Make this sauce at home and bring it to camp. Keep it cold in a cooler.

At camp, tear off four pieces of foil big enough to wrap each chicken breast. Spoon some sauce onto each piece of foil, place a chicken breast on top, and cover with more sauce. Sprinkle with salt and pepper. Wrap foil tightly (leaving room for expansion); cook over coals or grill for 30 to 40 minutes, turning occasionally. Serves four.

### Teriyaki Pork Tenderloin Foil Dinner

- 1 pound (16 ounces) pork tenderloin
- 1 package dry onion soup mix
- 2 tablespoons olive oil
- 2 apples, peeled and sliced
- 1/2 cup water
- Prepared teriyaki sauce

Mix all ingredients together (except the pork). Put the mixture into an aluminum foil packet; add the pork; seal packet well but allow room for expansion.

Cook on grill, top rack, for

90 minutes or on a hibachi for 60 minutes.

Turn the packet over about every 15 minutes. If liquid boils out, add more water to prevent drying out. Serves four.



### Camp-Style Potatoes in Foil

- 6 medium potatoes, cut into four crosswise slices
- 6 medium onions, sliced into rounds
- 1/4 cup butter or margarine
- salt and pepper

Spread butter on each side of potato slices. Place onion slices between potato slices; sprinkle with salt and pepper. Secure slices with skewers and wrap each one tightly in foil. Bake in coals 30 to 40 minutes. Serves six.

**At home:** Follow the same instructions, baking in a regular oven at 350 degrees for 30 minutes or until tender.



### Foil Pick-a-Meal

Here is a way to quickly multiply the variety in your meals. Pick one item from each column and follow the instructions below. Pick whatever sounds good to you.

1 pound ground beef	4 potatoes, chopped	4 carrots, sliced in sticks	1 medium onion, diced
4 boneless chicken breasts	3 cups cooked rice	1 cup chopped broccoli	1 7-ounce can mushrooms, drained
4 ham steaks	4 sweet potatoes, sliced	1 cup chopped zucchini	4 pineapple rings
8 hot dogs	4 slices bacon, cut in 1-inch pieces	1 cup baked beans	1 large apple, chopped
2 to 3 cups chili	2 cups corn chips	1 cup shredded cheese, any variety	1 cup salsa or 1 medium tomato, chopped
1 12-ounce can tuna mixed into a 10 3/4-ounce can cream of mushroom soup, undiluted	12 ounces pasta (any kind), cooked	1 8-ounce can peas	1 cup diced celery

Adding the meat first, place the ingredients on a large double-thickness of heavy-duty aluminum foil. (You can also make four smaller, individual-sized packets.) Season with salt and pepper. Fold and crimp foil in a drugstore wrap. Bury each packet in the coals. Cook until done, about 20 to 25 minutes. Carefully open the packets and check to make sure uncooked meats are thoroughly cooked before serving.

**At home:** Follow the same instructions, but bake foil packets in the oven 20 to 25 minutes at 350 degrees.



## Trail Recipes

Make these recipes at home and pack them for trail camping. They require little or no cooking on the trail and supply quick energy.

### Honey Granola Bars

- 1 ¼ cups quick-cooking oats
- ¼ cup whole wheat flour
- ¼ cup toasted wheat germ
- 2 teaspoons cinnamon
- ¼ cup honey
- ⅓ cup raisins or chopped dried apricots

Combine the oats, flour, wheat germ, and cinnamon. Stir to mix well. Add the honey and stir until mixture is moist and crumbly. Fold in raisins or apricots. Coat an 8-inch square pan with nonstick cooking spray. Press the mixture into the pan; bake at 300 degrees for 18 to 20 minutes or until lightly browned. Cool, then cut into bars and pack or serve.



### Northwoods Bread

- 1 cup sugar
- ¼ cup light corn syrup
- ½ cup shredded coconut
- 1 cup margarine
- 4 ½ cups rolled oats
- cup candy-coated chocolate pieces

Preheat the oven to 350 degrees. Cream the margarine and sugar together in a large bowl. Add the other ingredients and mix until well blended. Spread on a greased baking sheet to a thickness of ½ inch or less. Bake 15 to 20 minutes or until light brown. Cool. This makes a great trailside snack. Halve the bread so each hiker can have a ready supply.



For variety, add nuts, raisins, or dates in place of or in addition to the coconut in your Northwoods Bread..

### Chicken Onion Meal

- 1 small can chicken (about 5 oz.)
- 1 cup dry instant rice
- 1 packet dry onion soup mix

Put the rice and soup mix together in a resealable plastic bag. In camp, add 1 ½ cups boiling water to a pot and the rice mixture. Stir in the chicken and warm the mixture over the stove burner.

**For variety:** Try Chicken Diablo. Instead of the onion soup mix, use a packet of dry tomato soup mix and ½ teaspoon chili powder.





## Desserts

### Stuffed Bananas

- 1 banana (unpeeled) per person
- 1 teaspoon of peanut butter chips or plain chocolate chips per banana
- aluminum foil

Cut a slit deep down the side of each banana. Stuff a teaspoon of chips into each banana and wrap in a double layer of aluminum foil. Cover in coals and bake for 10 minutes. Eat with a spoon. For additional stuffing, add nuts and marshmallows.



### Campfire Apple S'mores

- 2 apples, thinly sliced
- peanut butter
- toasted marshmallows

Cut apples in half crosswise, and then cut into round slices the width of your apple. Poke out the center where the seeds are. Spread a small amount of peanut butter on one apple slice. Spear marshmallows on a skewer. Toast over campfire or grill over low heat. Place toasted marshmallows between the two apple slices. Serves four.



**For variety:** Try Peanut Butter S'mores using two packages of chocolate-covered peanut butter cups (1.6 ounces each), eight graham cracker squares, and four large marshmallows. Place one peanut butter cup on each of four crackers. Spear marshmallows on a skewer and toast over campfire or grill over low heat. Top each peanut butter cup with a toasted marshmallow, then place a graham cracker over each one. Press together and hold for a few seconds to melt chocolate. Makes four s'mores.



## Peach Cobbler



- 1½ cups plus ⅔ cup sugar
- ¼ teaspoon cinnamon
- ¼ teaspoon ginger
- 4 tablespoons cornstarch
- 2 cups biscuit mix
- 2 cups plus ¾ cups water
- 2 plastic quart-size resealable bags
- 6 peaches or 2 to 3 16-ounce cans sliced peaches

Before leaving for camp, combine 1½ cups sugar, the cinnamon, ginger, and cornstarch. Label this bag No. 1. In bag No. 2, combine biscuit mix and ⅔ cup sugar.

At camp, peel peaches, slice, and discard core, or open canned peaches. Mix contents of bag No. 1 with 2 cups water in Dutch oven. Bring to a boil, stir to dissolve the sugar and thicken the syrup. Place peaches into the mixture (including the syrup, if using canned peaches) and bring to a boil again.

Mix bag No. 2 with enough water (about ¾ cup) to form a sticky dough. Squeeze dough onto the hot peaches in Dutch oven. Cover with lid. Place Dutch oven on five or six hot charcoal briquettes and cover the lid with about 15 briquettes. Bake (without peeking) for 20 minutes. Carefully fan the ashes off the lid before checking for doneness. Cobbler is done when crust is light golden brown. Serves four to six.



**At home:** Follow the recipe as at camp, but use small bowls instead of plastic bags. Heat bag No. 1 with peaches in an ovenproof casserole dish. Mix dough from bag No. 2 and drop by spoonfuls onto hot peach mixture. Bake in oven at 350 degrees for 20 to 25 minutes until top is lightly browned.

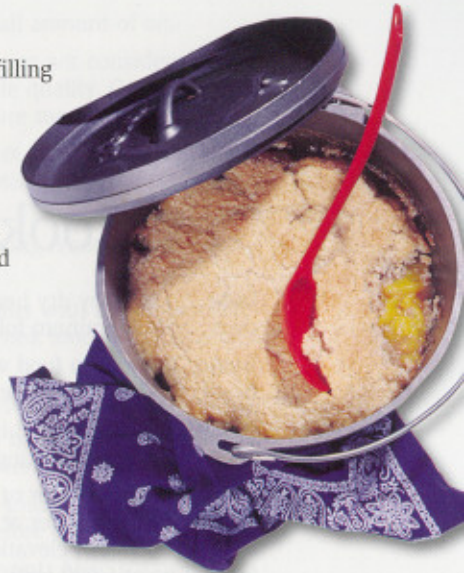
## Easy Fruit Cobbler

- 2 21-ounce cans cinnamon apple pie filling
- 1 box white or yellow cake mix
- 2 cups water
- 1 stick butter, melted

Line Dutch oven with foil. Empty pie filling into Dutch oven. Evenly sprinkle cake mix over pie filling. Add water and melted butter. **Do not mix.** Secure the Dutch oven lid. Place oven on 10 hot coals. With tongs, place eight hot coals on lid of Dutch oven. Cook about 1 hour. Serves up to 12.

**For variety:** Experiment with different flavors of cake mix and pie filling. Cherry filling with chocolate cake and blueberry filling with lemon cake make excellent combinations.

**At home:** Lightly grease a 13-by-9-by-2-inch baking pan. Preheat oven to 350 degrees. Pour pie filling into pan. Sprinkle dry cake mix evenly over pie mix. Carefully pour water and melted butter over dry cake mix. Do not stir. Bake in oven 35 to 40 minutes.



## Quick Gingerbread Dessert

Follow the instructions on a box of gingerbread mix, but use applesauce instead of water. Mix the ingredients together and pour into a large can. Put foil on tightly for a lid and cook in coals for about 20 minutes, until the top is dry.



# The Cook's Glossary

**bake.** To cook by dry heat as in a conventional oven, Dutch oven, or in aluminum foil.

**baste.** To moisten food while cooking with a liquid such as broth, meat drippings, or special sauces.

**blanch.** To plunge food into boiling water briefly, then into cold water to stop the cooking process.

**boil.** To cook in water or other liquid hot enough to bubble (212 degrees for water at sea level; subtract 2 degrees for each 1,000 feet of elevation; double the given cooking time for boiling at 5,000 feet).

**braise.** To cook meat tender by browning hot oil or other liquid, then cooking in a covered pan, usually with added liquid.

**broil.** To cook meat directly over or in front of an open fire.

**calorie.** In nonscientific terms, a calorie is a unit of heat used to calculate the energy your body burns up. For instance, it takes more energy for your body to use up or burn off a teaspoon of olive oil than it would a teaspoon of yogurt. This is why a teaspoon of olive oil has more calories than does a teaspoon of yogurt.

**cold out.** A test to ensure that a campfire is completely out. A fire is cold out when there are no hot coals and the ashes are cool to the touch.

**cut in.** To blend cooking fat, usually butter or shortening, with flour to make a dough by pressing in with a fork or cutting into fine chunks using a knife.

**deep-fry.** To cook by immersion in very hot oil.

**dredge.** To coat meat with flour, often seasoned, before browning or frying.

**Dutch oven.** A thick, heavy covered pot that is ideal for cooking foods that need to simmer slowly for a long time or for cooking one-pot meals.

**food pyramid.** See MyPyramid.

**fry.** To cook in an open pan with a small amount of oil.

**generic-brand foods.** Grocery store items not considered brand-name foods that have comparable quality. Generic (also called "plain label") foods often are more economical.

**marinate.** To tenderize or flavor meat or vegetables by covering with spiced vinegar and oil, salad dressing, or commercial marinade sauce.

**MyPyramid.** Guidelines for healthy eating recommended by the U.S. Department of Agriculture.

**pan-fry.** To cook meat in a very hot skillet with a minimum of oil. This method makes it possible to cook food by broiling over a gas or electric stove.

**poach.** To cook just below the boiling point of (usually) water.

**roast.** To cook meat and vegetables in hot air, as in a covered pan in an oven or in aluminum foil covered by hot coals.

**sauté.** To brown food quickly using a small amount of oil in a pan. The oil and pan must be hot before cooking begins.

**scald.** To heat just below the boiling point. Also, scalds are burns caused by contact with boiling fluids or steam.

**sear.** To seal surfaces of meat by exposing to intense heat so that juices are contained.

**simmer.** To cook in liquid just barely at the boiling point.

**staple.** An item—usually dry—commonly found in a cook's pantry, such as salt, pepper, flour, rice, dried pasta, and dried beans.

**steam.** To place food on a rack or special device over boiling or simmering water in a covered pan.

**steep.** Using a liquid (usually hot water) to extract the flavor from something dry (such as tea or dried herbs) by soaking.

**tenderize.** To render meat easier to cook or chew by softening the tissues by pounding, with a commercial tenderizing powder, or by marinating.

**tinder.** The small twigs, dry leaves, or paper used to start a campfire or cooking fire.

**vegan.** A person who restricts his or her diet so as not to consume any meat or any kind of animal products, including dairy products and eggs.

**vegetarian.** A person who restricts his or her diet so as not to consume meat.