Camper

1. Make a sawbuck and, with a saw, use it to cut some large diameter logs.
2. Use a file to sharpen some teeth of a saw.
3. Make a bow saw sheath.
4. Use an axe to cut a small diameter log into pieces.

Frontiersman

1. Use an axe to cut a large diameter log into pieces.
2. Use an axe and chopping block to split a saw cut log.
3. Use an axe and chopping block to split an axe cut log.
4. Use a file and dry sharpening stone to sharpen an axe.
5. Demonstrate good judgment in the understanding, use, care and safety of all of the camp tools. (Knife, Axe, Saw, Shovel)



CHAPTER 7—COOKING

For campers, and hikers, "what's to eat!" is the daylong question from everyone. The great outdoors provides an opportunity to use your imaginations and make some great meals.

Meals at camp should be interesting, never dull or routine. Anyone can cook hot dogs, and hamburgers. At home someone may prepare your meals for you, but when you're in camp, you have to rely on yourself and your partners. Learning to cook at home can help you become a good camp cook! Use the experience you have gained at home, and apply it to cooking in the great outdoors.

THE "FOOD GUIDE PYRAMID"

Good eating is an important part of each day. That doesn't mean just eating a lot, or eating constantly by snacking. It means eating well-balanced meals, which give you the energy, and vitality to really enjoy being in the outdoors. God has given us many foods to enjoy. But not all foods are equally good for us.

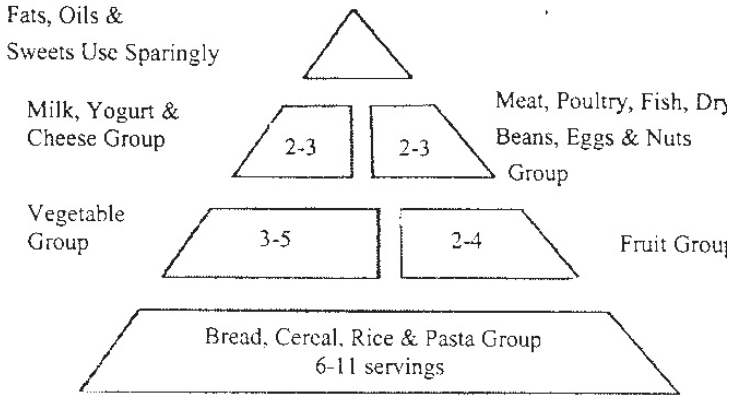


Figure 1

When planning daily menus for camp, or anytime, you should pick your foods from the "Food Guide Pyramid". The Pyramid is based on the USDA's

research of the foods we eat, what nutrients are in these foods, and how to make the best choices for you. Figure 1 shows the pieces of the pyramid.

The base of the Pyramid is food from grains like, breads, cereals, rice, and pasta. You need the most servings of these foods each day, 6 - 11 servings.

The second level of the Pyramid includes foods that come from plants, like vegetables and fruits. They supply vitamins, minerals, and important fiber. You should eat 3 - 5 servings of vegetables, and 2 - 4 servings of fruits per day.

The third level of the "Food Guide Pyramid" is two groups of foods that come mostly from animals. These include; milk, yogurt, and cheese, in one group. And meat, poultry, fish, dry beans, eggs, and nuts, in the other group. These foods provide important proteins, calcium, iron, and zinc.

You should eat 2 - 3 servings of the dairy group, and 2 - 3 servings of the meat group, each day.

The small tip of the Pyramid represents foods most people should use sparingly, like fats, oils, and sweets. These foods provide your body with calories, but very little nutritionally. Foods included in this group are; salad dressings and oils, cream, butter, margarine, sugars, soft drinks, candies, and sweet desserts.

COOKING TERMS

Most recipes use standard words or terms to describe different cooking methods. You should learn these terms, so you understand what is expected while following a recipe. For instance, you would not want to stew eggs for breakfast, or poach pancakes! There are many different ways to prepare your meals while camping or hiking. The method you use will depend upon your menu, equipment, and your taste! The following are some cooking terms;

BAKE: To cook with dry and even heat.

BASTE: To moisten the food while cooking.

BOIL: To cook in water or other liquid, hot enough for bubbles to raise and break on the surface.

BRAISE: To cook meat tender by browning in hot fat or grease, then cooking in a covered pan with added liquid.

BROIL: To cook meat directly over an open fire. Also called grilling.

DEEP FRY: To cook by immersing in boiling or very hot oil or fat.

FRY: To cook in a pan using a small amount of oil or fat.

MARINATE: To flavor and tenderize meat by covering with spices, vinegar, wine, oil, salad dressing, etc.

PAN-BROIL: To cook in a very hot pan, with little or no fat and oil, so food does not fry.

PAR-BOIL: To boil until food is partly cooked.

POACH: To cook in liquid, just below the boiling point.

ROAST: To cook in hot air. An uncovered pan in an oven, or over hot coals

SCALD: To heat to just below the boiling point, then remove from heat.

SEAR: To seal the surface of meat by cooking with intense heat.

SIMMER: To cook in liquids, at a temp. just below the boiling point, for some time.

SKEWER: To pierce and place on a pointed stick.

STEAM: Cook over boiling water in steam.

STEEP: To extract a taste or value by soaking a plant or food in hot but not boiling water.

STEW: To cook by searing, then simmering until tender.

TENDERIZE: To make meat easier to cook and/or chew, by pounding, or marinating until the tissues are softened.

READING RECIPES

Unfortunately there is no standard form recipes are written in. Some may be typed and others hand written. Some may list everything you must do, and others leave the cooking to your imagination. Some recipes may even be copied wrong! For this reason, you should always read the recipe at least twice. Make sure you fully understand what you must do to follow the recipe. As you gain experience, you will understand when the fire isn't hot enough, and you will know what size pot is needed. So pay close attention to details and practice, practice.

ORGANIZATION

Before you start mixing, cooking, and eating, make sure your hands are clean. Clean and clear the area you are using to prepare and cook your food. Gather all the utensils you will need, and keep them close by. A well-organized cooking area will prevent costly mistakes.

Timing is probably the most difficult part of cooking. When cooking over an open fire, with limited utensils, timing can be especially tough. Remember, the timing of the meal is up to you! You need to read the recipes and determine what the cooking time is for each food you are preparing. If you time it all right, everything should be done all at once, and you can sit down to a complete meal. You will also need a watch. Most recipes say things like " cook over medium

heat for 5 minutes", or "simmer for approximately 15 minutes".

Another part of cooking is measuring. It's best to stick to the recipe and use level measures when ever possible! Your food and your wagon's food could be ruined if you guess. Most cook kits have a cup with measuring marks on the side, make sure you have one! And for ingredients of less than a quarter cup you should have measuring spoons. The following is a table of measures to help you if you have problems;

A DASH	=	6 OR 7 DROPS
A PINCH	=	LESS THAN $_{1/8}$ TEASPOON
1/4 TEASPOON	=	15 DROPS
1 TEASPOON	=	1/3 TABLESPOON
1 TABLESPOON	=	3 TEASPOONS
1 FLUID-OUNCE	=	2 TABLESPOONS
1/4 CUP	=	4 TABLESPOONS
1/3 CUP	=	5 1/3 TABLESPOONS
3/8 CUP	=	6 TABLESPOONS
1/2 CUP	=	8 TABLESPOONS
1 CUP	=	16 TABLESPOONS
1 PINT	=	2 CUPS
1 QUART	=	4 CUPS
1 GALLON	=	4 QUARTS

Recipes may list serving sizes also. If the serving size is too small or too large, halve, double or triple the ingredients. Make the serving size right for your group.

WHERE OUR FOOD COMES FROM

It is important to remember that God has provided the food we eat. While in the wilderness God provided for the children of Israel. He gave them manna, and quail, their clothes never wore out, and water gushed out of rocks. There was always enough. And there will always be enough for you. God gives us your daily food, even if we fail to pray to Him and ask Him for our food. It is important for us to realize that our souls have to be nourished as regularly as our bodies! No one should forget their prayers at the beginning or at the end of your meals. A brief morning and evening devotion should be conducted, even on short campouts.



The scriptures also give us advice in several other areas connected with cooking. Wastefulness is one of these. Both the cook and his partners should remember that food is a gift from God. Careful planning helps avoid waste while preparing meals. Try to have sensible serving sizes to eliminate waste.

Cleanliness while preparing food and eating is another Godly concern. Whether you are at home, or in a camp trailer, in a tent, or out under the sky, clean hands and clothing are important. Clothing and hair that will not drop or swing into the food is important for the cook, servers, and the dinners.

Manners should not be forgotten in the woods either. Campers should remember not to eat noisily or sloppily. Food should never be thrown or disposed of improperly. Animals should never be fed food from the campsite!

Feeding wild animals will spoil them, and can be dangerous.

When out camping or hiking, think about the blessings God has given us; the great outdoors, your daily bread, good friends. Think of prayers to thank God for all His blessings. And take turns leading prayers within your wagon, and train.

PRAYER:

Dear Lord God, you have opened your hand and satisfied the need of every living thing. Open your hand to us unworthy and unthankful servants. Forgive our ungrateful and forgetful hearts. Teach us to pray with sincerity, "give us this day our daily bread". We ask in the name of Jesus, who taught us these words. Amen.

OUTDOOR COOKING PREPARATION

Earlier you read how timing is very important to outdoor cooking. When beginning to prepare your meal, you should think about all the tasks that will need to be preformed.

One of the biggest problems with timing your outdoor meal will be your fire. Start your fire early. The type of wood you use can make a difference. For wood to burn efficiently, it must be dry. Dry firewood ignites easily, burns hotter and smokes much less. Forget anything with green leaves or needles, it’s not dry, and will not burn well. Longer burning fire woods, and those which produce a sound bed of coals, come from the heavier, slower growing hard woods. Hardwoods are ideal because they burn slowly, while giving off the most heat. Hardwoods include: oak, hickory, maple, beech, ash, dogwood, and birch. Softwoods and evergreen, or coniferous trees, are great for starting your fire, but have too much sap and pitch in the large branches to use them for cooking. Poplar and aspen dry slowly, and give an offensive odor when burned. Meals will not cook if the fire dies down while you are doing some other task. Keep the fire going to ensure you will have the right amount of coals.

While you cook you should be in charge of the fire. Others should not play with the fire, add firewood, or paper, and poke at it. Things like paper, eggshells, and disposable food containers will make your food taste bad, if thrown into the fire while cooking. Never throw grease into the fire!

Grease could throw flames into your face, and burn you. Put nothing in the fire, except fuel, until the meal is cooked. And in this case "fuel" means firewood, not charcoal lighter, gasoline, or kerosene. These fuels are meant for cooking stoves, or in the case of charcoal lighter, lighting a charcoal fire. Never throw these "fuels" into a campfire! They can explode, and will cause injury to you and your wagon partners!

As you begin fixing your meal, set up a food preparation area. Lay out all the utensils, pots,

pans, and food you will need while cooking your meal. Organize the cooking area around the fire, make sure the cooking grate is level, and that you have places to set cooking equipment when not in use.

Before using those cooking utensils, pots, and pans, it's important to remember to start with clean equipment. Bacteria, which can make you sick, grow on equipment that is not kept clean. After cooking your meal, always heat a pot of water over the fire. Use the hot water to wash your cooking equipment with soap. This will prevent the bacteria from growing.

When cooking over an open fire, your pots and pans will turn black from the soot the fire produces. To solve this problem, wipe the entire outer surface of the pots and pans with a thin layer of liquid dish soap. This will not prevent the cooking equipment from getting black, but the black soot will wash off with soap and water. If you forgot the liquid dish soap, you can use bar soap. Just get the bar soap wet, and suds it up. Wipe the soap film on the pots and pans just as you would with the liquid soap. Make sure you don't get soap in the cooking equipment. It tastes awful, and it might make you sick.

COOKING UTENSILS



Now you're at camp, and ready for a big breakfast. You pour the pancakes in the pan, they brown on one side and are ready to turn. But wait a minute! Where is the spatula? You mean you forgot the spatula? How are we going to flip those cakes? This story happens all the time. The best time to think about your cooking utensils is before you go on your outing. You need to think about the types of meals you will be preparing. Then think about the pots, pans, potato peelers, knives, tongs, and all of the other utensils you may use during the preparation of each meal. Don't forget to include the water container and the washbasin.

A good item to bring camping is a nest of kettles or cook kit. The nest of kettles is made of aluminum and fit neatly inside one another for storage. They usually include saucepans, a frying pan, coffee pot, a large pot, plates, cups, and silver-ware. These cook kits are great because they take up very little space, and if they are taken care of, they will last for a very long time.

If weight is not a problem, cast metal cooking items can come in handy. These items are made of cast iron, or cast aluminum, and include Dutch ovens, frying pans, and griddles. Cast metal pots, pans and griddles, need to be "seasoned" before use, or the food will stick while cooking and burn. To season these cooking utensils, warm the pot, pan, or griddle, and wipe the cooking surface with cooking oil or grease. The oil or grease will soak into the cooking surface, and will reduce sticking while you cook.

And don't forget to include some way to handle those hot pots, and pans. Hot pads, and cooking mitts work well, so do thick cotton gloves. The gloves also work well while managing the fire or coals. Campfire cooking is hot business, and you can get burnt very easily, so be careful!

UTENSILS YOU CAN MAKE

But what do you do if you forget some of the cooking utensils. Your still hungry, and you still need to cook that meal! Well that's when you look to some of the things God has provided for

us in nature, or use other materials you may have brought with you.

Green sticks, with the bark peeled off, can be used for a number of homemade cooking utensils. A good example is tongs. To make tongs, cut a straight, finger sized green branch, and peel its bark. Bend the branch in the middle to form a "V". Most green hardwoods will not break apart. These tongs should be strong enough to use for food, or for arranging wood or coals. Utensil's can also be made from wire coat hangers. You can make tongs, long handled forks, pothooks, and pot supports.



The V-tool

What if you forgot the frying pan? If you have aluminum foil and some wire coat hangers, you can make a very useful frying pan. Just take a coat hanger, and pull it open, into a square. Wrap a double layer of foil around the wire square, bend the hook down for a handle, and you are all set to cook your meal. You can also make a fry pan with a green forked stick and aluminum foil!

A buddy burner, or tin can stove, can be very useful when the firewood is wet, or when you want a quick meal without having to start a fire. The buddy burner is easy to make and easy to carry! The stove part of the buddy burner is made of a juice size tin can. Use a can opener to remove the lid with the holes in it. Then use a triangle shaped can opener to cut several small vents in the side of the can, below the remaining lid. To make the burner part, of the buddy burner, use an empty tuna fish can. Cut strips of cardboard to fit into the tuna fish can, and just below the surface of the can. Now put a cardboard wick in the middle of the can, standing straight up. Pour melted wax into the tuna fish can, and over the cardboard. To use the buddy burner, light the burner part, and then put the stove part over the burner. You cook on the top lid of the stove can. This stove gets very hot, and you can easily burn yourself, and your food, so here are a few tips;

☛Always use hot pads or gloves when handling the hot buddy burner!

☛To regulate the heat better, cut a rectangle vent in the side of the can. If the stove gets too hot you can adjust the temperature by bending this vent up or down.

☛Use aluminum foil on the top cooking surface, this keeps the surface clean and your food will not burn as easily.

COOKING WITH ALUMINUM FOIL

Cooking with aluminum foil has several advantages, you can prepare your meals before you leave for your camp trip, and there is very little clean up. As we talked about earlier, you can make all kinds of utensils with aluminum foil. But you can also cook inside a folded up package of foil, which can be thrown right into hot coals, or placed on a fire grate. This hot dinner package is a complete meal in a single serving size. Wrapped in a tightly sealed foil packet, the food is basted in a steam from it own juices. Since very little steam escapes from the foil packet, the food retains many essential vitamins and minerals. Aluminum foil is found in two types; all purpose, which requires a double thickness for cooking, and heavy duty, which can be used in a single thickness. When it's mealtime, and the fire has burned down to coals, lay the foil package

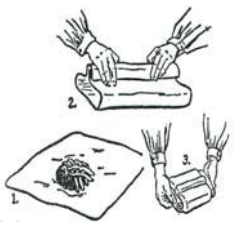
on the coals. Then rake a few coals over the top of the package, or as the meal inside the package cooks, flip the package over to make sure both sides are cooked thoroughly. In ten minutes or so, depending on the package size, the type of food inside the package, and the heat of the coals, your meal will be ready to eat.

Use a set of tongs to bring your foil packet out of the coals. Unwrap the package, and use the foil as a plate. Just think, no dishes or greasy pans to clean! Remember that aluminum foil does not burn, and must be disposed of with the tin cans and other un-burnable trash. Do not leave aluminum foil in your fire ring!

The following is an easy recipe for foil cooking. Give it a try!

HOBO TIN FOIL DINNER

Serves 1.



1 - hamburger patty
1 - small potato, sliced thin
1/4 cup - mixed vegetables
1 teaspoon - dry onion soup mix
1 teaspoon - butter or margarine
2 - large squares of aluminum foil

Lay one square of foil on top of the other, and place both squares on a flat surface. Crumble the hamburger patty into small pieces, and place in the middle of the foil. Place the potatoes, and the vegetables on top of the hamburger. Sprinkle the onion soup mix over the food. Now mix all the materials, in the center of the foil, up. (This will help everything in the meal to cook evenly and thoroughly!) Place the teaspoon of butter in the middle of the mixture. (The butter or margarine is optional, but if used, the butter will help prevent your foil meal from burning.) Fold the package as shown in the picture. Place the foil packet into the coals and cook for approximately 10 minutes.

PLANNING

Planning is the most important part of any function. A well-planned campout will be a successful campout! When planning what food, and cooking equipment to take, we must first consider the type of campout we are going on. Then you must determine the types of food, you would like. When planning, you should consider tastes, nutrition, individual diet requirements, costs of foods, and methods of cooking. You should also consider the number of people to cook for, and their ages, the method of transportation, and the number of meals to prepare. (A Junior Leader can almost always eat much more than a Recruit!) The time of year, and the seasons, also need to be considered when determining the type of food, and the cooking equipment you will need!

In addition to basic foods you will bring, you should also consider other things which are necessary in cooking: fats, butter, margarine, salad dressing, sugar, flour, ketchup, mustard, salt, pepper, jelly, and any other type of flavorings, or spices.

You also need to plan the size of the meals! Appetites are always larger than normal when camping. Breakfast should be a hearty meal. Combinations of bacon and eggs, pancakes or hot cereal along with dried, or fresh fruit, dry cereal and milk, will make a good breakfast. The fire must be started early so that there is a good bed of coals to cook upon. Remember to put a pot of water on the fire as soon as possible for dish washing!

A nourishing light lunch should be planned which will require little or no dishwashing. This will allow more time for other day-camp activities. Sandwiches, served with fruit drinks, raisins or a candy bar are good when the weather is warm and dry. If the weather is cold or rainy, serve some hot foods with the sandwiches, like soup, or hot cocoa.

Supper should be your feast! This is a meal that offers the opportunity to try all those camp recipes. And gives you the opportunity to practice your newly acquired camp cooking skills. **Begin preparations early.** Late suppers are no fun, and doing dishes in the dark is a real chore! Again, remember to put a pot of water on the fire as soon as possible for dish washing.

PLANNING BY THE TYPE OF CAMPING

OVER-NIGHT CAMPING - Most over night camping is done at established campsites, and you arrive by automobile. Planning meals for this type of camping is easy! Most of the food you bring will be raw or pre-cooked. Packaging the food is not hard, and refrigeration is minimal. When you are over-night camping, nutrition is not as important as the well-balanced meals you will need for other types of camping. Normally you need to plan just two meals, supper and breakfast.

WEEKEND OR WEEK LONG CAR CAMPING - With this type of camping, you normally arrive at pre-established campsites by automobile. Generally you eat fresh, and canned foods. Many perishable foods are brought, and these are the biggest problem! You must make sure these food items stay frozen or cold until needed. To make this easier, buy and freeze your meat in the portions you'll need for preparing individual dishes. Keep all frozen foods together in a cooler; this will help keep them frozen longer. As you pack the cooler, put the foods you will use first, near the sides, bottom and top of the cooler. Put the foods you will use last in the center of the cooler. (This will keep these foods frozen longer.) If frozen solid, a chicken or ground beef will defrost in about a day. Beef will stay good longer than chicken once it has thawed, if keep cold! Vegetables and fruits must also stay cold in a cooler, until used.

BACKPACK OR CANOE CAMPING - Planning, preparation, and packing are very important when doing this type of camping! When backpacking or canoeing, you must carry, on your back and in your canoe, all your food and cooking equipment. Packing all items as compact as possible is a must. Because you have to carry everything, bulky coolers are not practical. Fresh meats should be frozen before your trip, and packed in cardboard, inside your food pack. These frozen foods will not stay frozen long, and should be eaten first! Prepackaged, dehydrated, and freeze dried foods are most practical. But these foods are very expensive, and they never actually serve as many as the packages list! Many dried and dehydrated foods can be bought in bulk, in your local grocery store at a much lower price. These foods include; pancake mix, dry soup, dry stew mix, muffin mix, quick breads, powdered milk, and eggs, freeze dried hash browns and potato slices, fruit drinks, and many other items. Just walk the isles of the grocery, and use your imagination! Cooking utensils must also be lightweight and compact. Leave the cast iron frying pan at home! When backpacking or canoeing, you will need foods that are high in protein and carbohydrates to keep your energy level high.

MENU MAKING

Ok, so your wagon has been put in charge of the menu for the next campout. Where should you start? Start by determining **how many meals, of what type, you will be planning for.** Will there be one breakfast, one dinner, two lunches? And what about a quick energy snack?

Once you have determined how many meals you will be planning for, **decide what you would like to eat!** Remember variety is the spice of life, don't have the same things over and over, try new ideas. And remember that you must also have well balanced meals, not just something to fill your stomach! Use the "Food Guide Pyramid" to help you plan! Sit together as a wagon, and just start listing ideas on a piece of paper. List every idea, and then read over the list. Take off the ideas that just won't work on this trip.

Now that you have decided what foods you want, you need to make a food list! **List everything you will need to make each dish.** Don't forget things like seasonings, cooking oil, etc.

Next you need to **determine the amount of food to bring for each meal!** The following chart lists serving sizes. Take the serving size for each item and multiply it by the number of people you are feeding. This will be the quantity you will need to purchase for each item!

SERVING SIZES... PER PERSON

BREAD, CEREAL, RICE, & PASTA GROUP- AMOUNT	
Bread	4 slices
Cookies	2 oz.
Cakes	2 oz.
Cereals – oatmeal	2 oz.
Cereals – cold	2 oz.
Pancake Mix	1 1/2 oz. mix
Rice, precooked	1 1/2 oz.
Spaghetti	3 oz.
Macaroni	3 oz.
Pudding Mix	1/2 package

FRUIT, AND VEGETABLE GROUP	**AMOUNT**
Orange, Apple, Banana	1
Fruit, Canned	5-6 oz.
Fruit, Dried	2 oz.
Grapefruit	1/2
Tomatoes	1
Fruit Juice	6 oz.
Cabbage	1/6 head
Carrots	1
Vegetables, Canned	4 oz.
Vegetables, Dehydrated	1/2 oz.
Potatoes, Raw	2 medium
Potatoes, Instant	2 oz.

Sweet Corn, In The Husk	2 ears
Onions, Raw	1 medium
Soup, Canned	5 oz.
Soup, Dry	1 ind. pkg.

MILK AND CHEESE	AMOUNT
Milk, Fresh	1 pt.
Milk, Powdered	1/2-2 oz.
Cocoa, Instant	2 packets
Cheese	2 oz.
Ice Cream	1/2 pt.

MEAT,POULTRY, FISH, EGGS, AND NUT GROUP

Steak	6-8 oz.
Pork Chops	6-8 oz.
Stew Meat	4 oz.
Hamburger	4 oz.
Hot Dogs	2
Chicken, With Bones	12 oz.
Ham	5-6 oz.
Lunch Meat	3-4 oz.
Meat, Canned	3 oz.
Fish, Fresh	6-8 oz.
Fish, Canned	3 oz.
Eggs, Fresh	2
Eggs, Powdered	1/4 oz.

Well, now you know what types of food you want, now which meals should you plan for which days? The best way to do this is to get a list of the activities, and the times which they are planed for. Light, quick meals are normally planed for the middle of the day, when it is impractical to stop all your activities and spend two hours making a meal. If you have a big activity planned for an evening, make that dinner less elaborate, and easy to clean up.

A planning chart will help you stay organized and will prevent you from forgetting items.

DAY	MENU	FOOD INGREDIENTS	QUANTITIES	EQUIPMENT

THE SHOPPING LIST

Before you go to the store to price your food list, look to see if you have any leftover staples from your last trip. These would include things like seasonings, cocoa, soap, matches, napkins, toilet paper, and aluminum foil. Think of all the things you don't have, and the things you will need. Combine this list of items with the list of food items from your planning chart. Now you should have a complete shopping list!

PRICING THE FOOD LIST

Now that you have a complete food list, it's time to find out how much the food will cost! It’s

DAY	MENU	FOOD INGREDIENTS	QUANTITIES	EQUIPMENT
FRIDAY	Dinner Beef Stew Rolls Butter Pie Kool-aid	Stew Meat Carrots/Potatoes Flour Salt and Pepper Dinner Rolls Graham Crackers Pudding Butter Kool-aid	2 lbs. 1 lb. Of each 1/4 cup 1 dozen 16 oz. (2) 5 oz. Pkg. 1/4 lb. (1) 2 qt. Pkg.	Frying Pan Slotted Spoon Sharp Knife Wisk Dutch Oven (2) Pie Tins Beverage Container

important to try to keep the cost as low as you can, while still providing good tasting, nourishing food. Remember, the cost of this food will be split between everyone in you wagon, or train! You will have to watch quantity, weight, volume, and servings per package very closely. Most Grocery stores have many different brands, of the same item, in different packages. Sometimes one brand name, and one package size can be a better buy than the others. Quantity, and quality can affect prices. And don't forget to look for "discount sales" on the items you need! Meats, and convenience items will be the most expensive. For the type of cooking you will be doing, it pays to have "good" or "choice" grade meats. Lower grade meats will not be as tender when cooking over an open campfire!

Make sure you read the labels on all packages. What is in the package, how much, how many will it feed? Do you have to add anything to the packages ingredients...milk, eggs, sugar? Keep in mind the type of storage you will have for perishable items. And don't forget that when packages say they have 3-4 servings, they may actually serve only 2-3 hungry Pioneers at camp!

You may want to take your list to the local grocery store and show it to the owner or store manager. Sometimes the owner or store manager will be willing to help you with the pricing, and they may offer you a discount! Get all the advice you can from your parents, trainmaster, and the grocery store.

DETERMINE THE COST PER PERSON

Once you have determined the food list, the quantities, and the prices, you can determine the cost per person. Add the cost of all food, and other staples together for a total cost. Now take this total cost and divide it by the number of people going to camp. This will be the cost per person. If the cost is too high you may have to change your menu slightly.

BUYING THE FOOD

After the all the planning is done, it's time to buy the food. Make sure to take your wagon partners along to help you out; this should never be a one-man job!

SHARING THE WORK & TAKING TURNS

The best way to have great meals at camp, and have fun cooking, is to share the work. There are all kinds of jobs to be done if you want a successful, tasty meal. There is wood to be gathered, fires to start, food preparation, and dishes to wash. All of these are important jobs, and one person cannot do them all. It's important that we take turns and share the work. Everybody at camp should have a job to do, and nobody should be stuck with the same job, meal after meal, and day after day! The best way for everybody to learn is to rotate the jobs and take turns. When you’re at camp, everyone, including you, will benefit from camp chores which are done correctly. When camp chores are done efficiently, and quickly, there is more time for other activities.

THE PARTNER SYSTEM

It's nice to have someone you can share your work with. Partners who can help you carry wood or help keep the fire going. Its great to show someone what you have learned, and to learn things from your partner. To handle most camp jobs, two people are best. You will probably find that two cooks are not too many, but any more than two, and you are tripping over each other. Assigning partners to different duties each day, or each meal, will help share all the duties fairly.

SCHEDULING THE DUTY ROSTER

What are the most important things you need to do when cooking at camp? Gather firewood, and water; prepare and cook the food; and clean up after your done. No meal can be eaten, without successfully carrying out these chores. Duty rosters can be flexible, schedule by the meal or by the day.

Fuel and Water Partners keep a good supply of clean water, tinder, kindling and firewood in camp. They should make sure the firewood stays dry, and is split to size for cooking. These partners should also start the cook fire in plenty of time to have a good bed of coals for the cooks.

Cooking Partners prepare and mix food items. They follow the menu planning charts, and recipes. Cooking partners warm a pot of water on the fire for dishes, serve meals, and put food away.

Clean-up Partners set up a dishwashing area with warm wash water, and rinse water. They clear and clean off the table, properly dispose of any trash and put out the fire. Clean-up partners also maintain a wash area for their fellow Pioneers.

Once you have determined what partners will have what jobs, put this list on a duty roster chart:

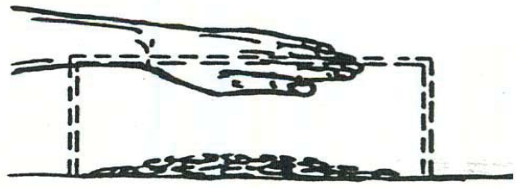
Make the chart big enough for everybody to see, and hang it near the kitchen area. Make sure everyone knows what his job is.

DAY	DUTY	BREAKFAST	LUNCH	DINNER
Fri.	FUEL AND WATER	MATT JASON	JAKE JESSE	LARRY JEFF
DAY	**DUTY**	**BREAKFAST**	**LUNCH**	**DINNER**
Fri.	COOKS	LARRY JEFF	MATT JASON	JAKE JESSE
DAY	**DUTY**	**BREAKFAST**	**LUNCH**	**DINNER**
Fri.	CLEANUP	JAKE JESSE	LARRY JEFF	MATT JASON

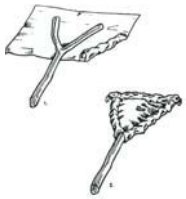
GAUGING THE TEMPERATURE OF A COOKING AREA

Knowing the temperature of your cooking surface is important! When the recipe says, "preheat to 350F", how do you do it? The palm count method is best used when trying to determine what the temperature is. Place hand, palm facing the heat, at the cooking location. Now start counting seconds: "one-one thousand, two-one thousand, three-one thousand, and so on. Note the time it takes before you need to pull your hand away. This is not an endurance test; so when your hand gets hot, pull it away! Use the following chart to determine the approximate temperature:

Time Before Withdrawing Hand	Coals/Fire are:	Approximate Temperature
2 seconds	hot	400 degrees
3 seconds	Medium—hot	375 degrees
4 seconds	medium	350 degrees
5 seconds	Medium—low	325 degrees
6 seconds	low	300 degrees



STICK COOKING



Earlier, you read how green sticks, with the bark peeled off can be used to make a set of tongs. In this section, you will read about ways to cook with sticks. Stick cooking can be fun, because you involve each camper in the preparation of his own meal.

COOKING UTENSILS MADE FROM STICKS

Green sticks work best for creating utensils. The moisture inside green sticks prevents the wood from burning as fast as dry sticks will. Don't use soft wood such as pine, spruce fir, or cedar. These woods will make your food taste like the resin contained within them. The following are some examples of stick utensils:

Forked Stick Frying Pan - Find a stick with forks with prongs wide enough to contain the food, and a handle that is at least 12 inches long. Center 2 sheets (for strength), of aluminum foil over the crotch of the fork. Roll the foil diagonally, starting at the bottom corners. Crimp the foil securely around each fork, and roll the top edge down. Turn the stick over. Depress the center slightly to form a well to hold the food and liquids from running off. This frying pan can be used for just about any simple fried food.

Skewers - A wooden skewer is just a stick that is about a 1/2 inch thick, and between 1 to 4 feet long. The bark should be peeled off the stick in the section where the food is to be placed. Skewers can be used for cooking many different types of food, all of which are roasted over or near the fire. Examples; hot dogs, marshmallows, bread, whole fish, shish-kebab, etc.

Stirring, Poking - A green stick, with the bark peeled, can be used in the preparation of your food to stir or mix. You can also use green sticks to arrange wood, and coals in your cooking fire. The great thing about using green sticks, is you don't have to wash them. After you get done using them, and after you are done cooking, just throw them in the fire to dispose of them!

Tongs - Refer to an earlier section of the manual.

TWIST BREAD STICKS

1 - 7 oz Tube Of Soft Bread Stick Dough
Butter

Let your campfire coals reach a medium-low temperature. Cut a finger thickness green stick to about 1 to 1 1/2 feet long. Peel the bark from the stick, and preheat over the coals to make bread cook more evenly through out. Unroll the tube of bread sticks and separate the individual pieces. For each green stick, roll one piece of bread stick dough between your hands until the dough is long, and narrow. Now wrap the dough around the bread stick, starting at the top of the stick and angling down. The edges of the dough should touch each other but not overlap. Bake the bread over the coals, turning frequently to prevent burning. Remove the stick from the heat when the bread is golden brown. Brush the bread with butter, and eat!

Alternatives: Roll the buttered stick in cinnamon & sugar, or garlic powder. You can also use instant mixes, instead of the tube dough.

SHISH-KABOB

Chunks Of Beef, Chicken, potatoes,
onions, green peppers,
Pineapple, or any other meat and
vegetable you like.

Let your campfire coals reach a medium temperature. Cut a 1/2 inch thick green stick to about 2 1/2 feet long. Peel off the bark and sharpen one end. Alternately slip small chucks of the above ingredients onto the green stick. Roast over the coals until cooked throughout.

The Bible has many stories that tell of the challenges people faced packing, carrying, preparing, and eating their food. You have read, and learned about many different types of food, and different ways to prepare them. Now that you have learned the differences between camping types, we will talk about the most challenging types of camp cooking. In this section we will talk about backpack cooking, cooking over a one-burner stove, and baking at the campsite.

BACKPACK COOKING

Earlier you learned how planning, preparation and packing are very important when doing this type of camping! When backpacking, you must carry everything on your back! Sometimes for long distances. Backpacks are also the best way to contain your food and cooking equipment,

when packing in to remote areas with your canoe. Packing all items as compact as possible is a must. Cooking equipment should be light and compact.

PACKING YOUR FOOD IN THE MOST USEFUL FORM

When backpacking, it is important to develop a packaging and packing system. All of the items that go in the backpack should be organized, and prepared before you leave your own kitchen. When going on a car camping trip you may take a bag of flour, a box of salt, fresh vegetables, and anything else you thought you needed to cook with. If you forgot an ingredient, you discovered it when you started to prepare the meal. At the end of your trip you may have two pounds of flour, a pound of bacon, and a half-pound of salt left over. If you were backpacking, you would have been carrying 4 pounds of extra weight.

When backpacking, all of your food should be prepackaged. Prepackaging means you mix and measure all ingredients at home for each meal, and pack them together in a bag marked breakfast, lunch, or dinner. You can even specify which day the meal is for.

To develop a prepackaging plan you must first determine how many times each, you will be eating breakfast, lunch, and dinner; (refer back to the planning chart section for additional information). While at the grocery store, buy a couple of different sized clear plastic bags; one style large enough to hold all the food for each meal, and other styles large enough to hold individual ingredients or portions of the meal.

Commercially available dried, and freeze-dried foods can make your packing, convenient and easy. But these types of foods can be very expensive, and they never feed as many hungry campers as they say they do on the package! It's best to try a few at home first before taking them on you're backpacking, or canoeing trip. Taking rice along, which is lightweight, can make them feed more hungry campers. Just add the rice to the dinners.

The average grocery store has many different types of dried and freeze dried foods. These are much less expensive than the prepackaged commercially available dried, and freeze-dried foods. Large grocery stores seem to have the largest selection of these types of foods.

If you can get individual portions or some foods in portions packaged for the exact size of your group, great! But if you can't, just buy the correct overall quantity, and repack the food into your own portions. Make sure you label each bag, and include cooking instructions in the bags. When you have all of the portions for each meal, put those portions into one of the larger bags. Label the bag with the type of meal it is, and the day you wish to eat that meal.

The advantages of prepackaging are that you save time in the field, you carry only the exact amount you will actually need, and you insure your food supply against loss of any one vital ingredient. Daily food packages can be carried in a separate backpack (food pack), or put a one day supply of meals into each campers backpack. When packing a food pack, pack the meals you will use first at the top of the backpack. This will prevent you from digging through the whole pack to find the right meal. If every camper is carrying meals, make a master list of who's got what meals! Here are some additional tips to follow when packing food for a backpacking or canoe trip:

- Special dishes for fussy eaters are impractical, everyone eats the same thing! To make everyone happy, choose meals everyone likes.

- Either buy perishable foods as late as possible before the trip, or freeze them to prevent spoilage.

- Prevent food from being contaminated from water, dirt, soap, and cooking oils. Seal cleaning agents, and other things that could contaminate food in separate plastic bags.

- Don't pack glass or breakable containers. There are many useful, unbreakable, watertight containers available today.

- Label everything you pack.

- Avoid leftovers! Pack the correct amounts of food; God tells us we should not be wasteful. Eat what you cook.

- Cooking pots, and containers have empty spaces within them. Stack pots, pans, and containers within themselves. Fragile items, like an egg, can be packed inside a pot of oatmeal or cocoa mix.

- Salt, pepper and other spices can be bought in bulk containers, or brought from home to eliminate some of the expense. 35 mm film canisters or a similar sized containers work great for storing these spices. Tape the lids, and place in a plastic bag to prevent spillage.

COOKING WITH A CAMP STOVE



There are several different types of camp stoves today. These stoves come in many different configurations and are fueled by gasoline, propane, solid and gel chemicals, alcohol, kerosene, and even wood kindling. (The buddy burner is an example of this type of wood burning stove.) One burner camp stoves are ideal for backpacking, and canoeing. They are lightweight portable sources of fire, which can be much more convenient to use than a campfire. Most one burner camp stoves are fairly inexpensive, simple to use, and have a large amount of heat output for their size.

There are times when a camp stove is more efficient, and environmentally safe than a cooking fire. Here are a few examples:

- The area you are camping in is dry and the potential for a forest fire is high.
- Lack of wood to fuel a cooking fire, such as in the desert.
- Weather! If it is raining, snowing, extremely cold, or windy, cooking fires can be hard to light and maintain.
- Camp stoves do not produce the soot and smoke that a campfire does. Not only is this safer for the environment, but there are no black pots to clean, and no smoke in your eyes when trying to cook!

HOW TO COOK ON A ONE BURNER CAMP STOVE

One-pot meals are great cooked on a one burner camp stove. Some examples of one-pot meals are: chop suey, chili con carne, savory beans, chowders, soups, skillet meals, etc. Some one-pot meals can be cooked entirely in one pot on the one burner camp stove. Meat is generally browned or re-hydrated and warmed first. Any grease that may have been produced while the meat was cooking is drained off. Water, vegetables, seasoning packets or sauces are added, and the whole mixture is allowed to simmer until cooked thoroughly.

Freeze dried foods, whether from the grocery store or a camping store work well with the one burner camp stove. There are many different accessories available for one burner camp stoves. There are many fixtures that make cooking on these stoves more efficient, like baking enclosures, different sized fuel canisters, and windshields. Whether homemade or store bought, windshields are generally necessary, since even a slight breeze will draw heat away from the bottom of your kettles and pots.

ONE POT RECIPES

QUICKIE ONE POT STEW

1 1/2 LBS. GROUND BEEF
2 MEDIUM-SIZED CANS MIXED PEAS AND CARROTS
4 MEDIUM ONIONS, SLICED
2 MEDIUM-SIZED CANS TOMATOES
6 MEDIUM POTATOES SLICED THIN

Brown the meat and onions thoroughly. Drain any grease, and add the tomatoes, peas, carrots, and potatoes. Season to taste. Add enough water so that liquid covers the bottom of the pot. Cover and cook about 10 minutes or until the potatoes are done. Serves six to eight.

ONE SKILLET BREAKFAST

2 LARGE POTATOES SLICED THIN
1/2 LB. OF BACON, SAUSAGE, OR HAM
8 EGGS
1 MEDIUM SIZED ONION
SALT, PEPPER OR OTHER SEASONINGS

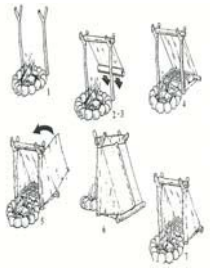
Fry the bacon until crisp or the sausage and ham until browned. Remove from the skillet, and crumble the bacon, cut the sausage and ham into small pieces. Leave the bottom of the skillet just covered with grease, pour off all excess. Add the potatoes and fry until lightly browned. Beat the eggs lightly and pour over the potatoes. Add the meat. Cook, stirring until the eggs are cooked to your liking. Season to taste. Serves 3-4 people.

PAN FRIED COOKIES

1 CUP BROWN SUGAR
1 CUP CHOPPED DATES
2 EGGS, BEATEN
2 CUPS KRISPED RICE
SHREDDED COCONUT - ALUMINUM FOIL

Mix together the brown sugar, eggs, and dates. Cook in the frying pan for 10 minutes, stirring constantly. Remove the mixture from the heat and add the crisped rice. Drop by spoonful onto the aluminum foil and roll in shredded coconut. Let cool and eat. Makes one dozen.

BAKING AT CAMP



One of the most challenging types of outdoor cooking is baking! The reasons for this - baking generally takes longer than other types of cooking. The definition for baking in the Recruit chapter is; To cook with dry and continued heat. There are several different ways you can bake at camp, but continued, constant heat is needed for all types of baking. This means you must manage the fire, and coals closely.

THE REFLECTOR OVEN

A reflector oven can be used for baking biscuits, bread, cakes, and pies. It can also be used for roasting many types of meat. Reflector ovens are lightweight, and most fold to a compact size. You don't need hot coals to use this oven. Reflector ovens work by reflecting the heat and brightness of an open fire to the center shelf of the oven.

Adjusting the heat at the surface of the reflector oven can be tricky. You must either move the reflector oven towards the fire, or away from the fire to adjust the temperature. Set the oven next to the fire ring, and then use the palm count method to determine the temperature. Slowly count to eight, if the count is less than eight the surface will be too hot. If the count is more than eight, the surface will be too cool. You can also vary the size of the flame to make the cooking surface hotter, or cooler. Soft woods will throw sparks, and may litter your food with bits of ashes. Finely split hard woods work the best. A good general rule is to have the flames rising as high as the reflector oven. Remember that reflector ovens must be kept clean and bright to work well.

A reflector oven can be made of aluminum foil, some sticks, a few stones, and a baking rack.

DUTCH OVEN BAKING

Dutch ovens offer great possibilities to the camp cook. They are more versatile than the reflector oven, and can produce some fantastic meals and baked goods. Dutch ovens are made of cast iron or aluminum. The cast iron ovens are extremely heavy, but heat gradually, distribute the heat more evenly, and stay hot longer than the aluminum ovens. Most have three short legs, a snugly fitted, flat, rimmed cover and a handle. The legs hold the oven up off the bed of hardwood coals. The cover's flat surface, and raised rim retain glowing coals heaped upon it. Because of the weight and snug fit of the cover, moisture and flavor are slow to escape the Dutch oven. This makes it ideal for tough cuts of meat such as flanks, briskets, and chuck roasts.

PRINCIPLES OF OPERATION

Baking is accomplished by raking out a 10 to 18 inch pad of glowing hardwood coals. The longer burning the better. Softwood coals will generally last only a few minutes. If the Dutch oven has legs, these legs will prevent the bottom from sitting too heavily on the coals. If the oven does not have these legs, three or four, small, evenly sized, dry rocks can serve as legs. The oven is placed in the center of the bed of coals, with the cover placed on top. Coals are heaped upon the cover with a small shovel, tongs. The Dutch oven quickly distributes the heat of the coals throughout its surface. The secret to Dutch oven cooking is to sufficiently preheat the oven before added the food.

Biscuits may be baked directly on the bottom of the slightly greased oven. Pies, cakes, muffins, and other pastries should be baked in tins. Elevate the tins slightly by setting them on top of three small rocks.

In addition to baking, the Dutch oven can be used for frying, boiling, roasting, and simmering. These ovens allow you to make an unlimited variety of camp dishes. Everything from cakes, pies and cobblers, to stews, roasted meats, and chili!

BAKING RECIPES

BAKING POWDER BISCUITS

2 CUPS FLOUR
1 TEASPOON SALT
4 TEASPOONS BAKING POWDER
1 CUP MILK
4 TABLESPOONS SHORTENING
BUTTER

Mix the flour, baking powder, milk, and salt; add shortening, blending in well until easily handled dough is attained. Roll out on a floured pastry board (or canoe paddle) and cut into 1/2 inch thick by 3 inch square pieces. Bake 15 to 20 minutes in a reflector oven before a brisk hardwood fire. Remove from heat, split open and butter while hot. For an added treat, top with canned or fresh fruit.

DUTCH OVEN COBBLER

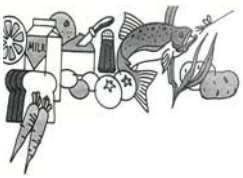
2 CANS OF FRUIT PIE FILLING
2 BOXES OF JIFFY YELLOW OR WHITE CAKE MIXES
ALUMINUM FOIL

Line your Dutch oven with foil to the top edge of the kettle. This will keep your Dutch oven clean, and is a good way to remove the cobbler from the oven for serving.

After preheating the Dutch oven, pour in the cans of fruit filling. Any combination of fruit filling can be used. When the filling starts to bubble, remove 1/2 of the coals under the Dutch oven. Prepare the cake batter as instructed on the box. Pour the batter on top of the filling, and cover the Dutch oven.

Place hot coals on top of the oven lid and bake the cobbler until golden brown. The cobbler will cook from the top down. There should be just enough heat on the bottom to keep the filling hot without burning it.

THE IMPORTANCE AND SYMBOLISM OF FOOD IN THE BIBLE



In an earlier section of this cooking manual you learned how important it is to remember that God provides us with the food we eat. When you eat, it is important to eat with your family and friends. Mealtime is an important time for fellowship. It is a time to enjoy each other's company and talk about the day's activities. Meals should not be eaten in front of the television, were conversation of the days events will be minimal.

There are dozens of references in the bible to food. Both Physical and spiritual food. Food was an important part of everyday life in biblical times. The Israelites had many feasts in which they burnt animal sacrifices to God. They could only eat certain foods, which were prepared a certain way. God ordered his people to do these things as symbols of the people's love, and to remind them of the salvation that was to be theirs.

Jesus used food in several parables. Christ also gave us the Lord's Prayer, in which we ask for our daily bread. And he gave us communion, which is the true body and blood of our Lord Jesus Christ, together with the bread and the wine. The blessing we receive through this eating and drinking is, forgiveness of our sins. But Martin Luther, in the "Catechism", explained that it is not merely the eating of bread and the drinking of wine that gives us forgiveness of sins. But it is the eating of the bread and the drinking of the wine together with these words, "Given and poured out for you for the forgiveness of sins". Whoever believes these words has what they plainly say, forgiveness of sins!

Jesus also tells us; "do not worry about your life, what you will eat or drink; or about your body, what you will wear. Is not life more important than food, and the body more important than clothes? Look at the birds of the air; they do not sow or reap or store away in barns, and yet your heavenly father feeds them. Are you not much more valuable than they?"

We should not place physical food in front of spiritual food. We need to realize that Jesus is "the bread of life". And that spiritually, if we believe in him, we will never go hungry, and we will never be thirsty!

Matthew 6:25-26.

OBJECTIVES
CHAPTER 7—COOKING

Recruit

1. Draw a "Food Guide Pyramid". Include examples of different foods, and Serving size.
2. Put together a trail food/mix for your wagon.
3. List five different types of cooking and give definitions of each.
4. Write a prayer for use at mealtime during camp.
5. Create 2 different types of cooking utensils using aluminum foil.
6. Prepare and cook a dinner using aluminum foil.