

**TROOP 219**  
**GUIDE TO CAMP COOKING**

## **Forward**

Cooking is more than a means to fill your stomach. It teaches many personal skills; budgeting, art, manners, cleanliness, and responsibility. Our troop has made a commitment to instill the values taught by good cooking in the scouts. It just happens to be fun and extremely rewarding when it's done right.

This text is a collection of information from a variety of sources. It has been said that the strongest form of flattery in the Scouting Brotherhood is to use what others have done. Several parts of this text are copied from the efforts of other Scouters and the web pages of companies.

My thanks to the members of past Philmont Training groups for their many cook books, Dwayne Pritchett – the Old Geezer, Troop 928 of the Sam Houston Council, The Dutch Oven Cookbook by Mike Audleman and John Lyver of Troop 1577, Herndon, Va., the Texas Dutch Oven Society, and the authors of many books read and used in putting this together. Some of the books are referenced in the appendix for those wanting to find out more or just explore, as are several web sites for additional information.



**Ray Kahl**  
**Assistant Scoutmaster**  
**Troop 219**  
**Great Plains District**  
**Circle Ten Council**

## Introduction

Troop 219 has its own special application of the Patrol Method for outings and camp cooking. Each Troop in the BSA does. Our focus is on good, healthy food and the growth of the Scouts into well rounded men - men whose self confidence includes the knowledge and skills of caring for themselves and others in the kitchen and out.

This text is a collection of the lessons each Scout should learn and practice in the effort to become a well rounded cook.

- Nutrition
- Safety
- Planning and menus
- Budgeting and shopping
- Methods of food preparation

The text in Planning and Menus explains how the patrol method should work on an outing and the manner to use the Troop 219 Recipe Book.

Our Troop has a process for menu development, shopping and cooking complexity. Every Troop is different and should aim its process of teaching cooking and personal management skills toward the goals set by the Troop leadership.

**Troop 219** is chartered by Christ Episcopal Church in the Great Plains District of the Circle Ten Council, Boy Scouts of America. The troop meets Monday nights at 7:00.

4550 Legacy Drive – Plano, Texas 75024

*Calvin Joyner*  
Scoutmaster



## ***Philmont Grace***

*For food, for raiment  
For life, for opportunity  
For friendship and fellowship  
We thank thee, O Lord.*



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***"Cooks are not found wandering in the woods. Nor do Scouts fry an egg on the first try. Guide them, teach them, but don't do everything for them."***

Ed Bailey, Denver Area Council, Centennial District

# 1

## **General Commandments of trail cookery:**

*Go light, no fuss, no mess*

### **Food Cooked On The Trail Should Be:**

1. Nutritious
2. Meets BSA's food safety handling standards
3. Low in weight
4. Compact
5. Cooks fast with no fuss
6. Cheap – well – inexpensive stay in our budget!
7. Tastes Great

These commandments are simple rules but have a variety of means to carry them out. In this text several alternatives will be explored for all the commandments.

Nutrition and Food safety are not to be compromised. The standards therein are true laws to maintain health and safety.

The other five commandments are really dependent upon the type of outdoor cooking you wish to use, the duration of your outing, location, resources, skill level, personal taste, and many other influences.

This text has guidelines and standards each one of you can use to accomplish your goals for pack weight, volume, level of complexity, taste and budget.

***"Scoutmaster Rule #47 - No Boy Scout ever starved to death on a weekend outing"***

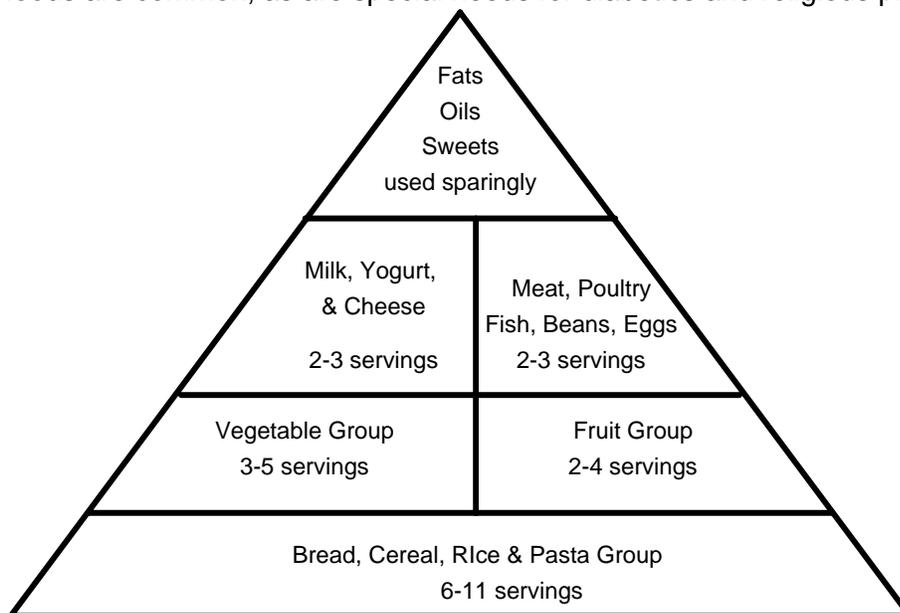
*Roger Morris, Scouter*



## 2 Good Nutrition

Eating well is not just part of the fun of camping. It is important to eat well to replace the energy used in the hiking and activities that busy Scouts are prone to do. High fluid intake and high caloric intake are needed. Seasonal changes may demand over 3,000 calories per day. The food pyramid is a guide for meal planning. The Pyramid can change with camping activities and weather conditions. The high calorie diet of campers uses more fats during colder weather. Hot weather requires more fluids and better protein and mineral intake. Try to take the bulk of the food from the carbohydrate group for really active outings.

Take special note of any dietary needs of the Scouts and adults when you are planning. Allergies to foods are common, as are special needs for diabetics and religious preferences. Be *courteous*.



The food triangle was presented by the US Department of Agriculture and the Department of Health in 1992 as a good place to start for menu planning. This triangle is based on several things. It is important to know what they are and how you should adapt them to your needs and circumstances.

The food triangle is based upon a caloric intake of about 2800 to 3200 calories. Active hiking and cold weather can use all those calories. Basic non strenuous activity and older scouts and scouters will need fewer calories. Reduce the calories by reducing the carbohydrates and fatty oils. To stay trim make your triangle more vertical and a smaller base. Cold weather and strenuous activity require more calories – don't scrimp when you need the energy. Remember this is usually only a few days to a few weeks it should not be your life style of cooking. Consult your physician or dietician for specific dietary needs. Hypothermia and exhaustion can be deadly.

Portion or serving size is referenced in the triangle and varies widely in quantity from food group to group. These ranges give you an overview of a total caloric range from 1,600 to over 3,000 calories a day. Servings are more arbitrary than you think.

**What is a serving?** It varies from food group to food group. A good thing to do is look at the package. It lists the nutritional value as a percentage of the standard daily requirements and tells

you what – for that food- is a portion size. In the absence of prepared nutritional values good guidelines for a 2,000 calorie menu are:

- Grains – eat 6 ounces a day at least half being whole grains. One slice of bread is about 1 ounce, 1 cup of breakfast cereal is one serving, ½ cup of cooked cereal like oatmeal is a serving.
- Vegetables – eat 2 ½ cups a day. Focus on green leafy vegetables and orange vegetables. Dried beans also have protein and can be carbohydrates as well.
- Fruits – eat 2 cups everyday. Limit the amount of fruit juice; it's usually mostly corn syrup. A banana or a medium apple is a cup.
- Milk and dairy – 3 cups a day. Go low fat. A yogurt, ice cream (one regular scoop), a slice of cheese (one ounce) is a serving or one cup equivalent.
- Meat and Beans – Protein – eat 5 ½ ounces every day. Fish like salmon have added oils that are good for you. Nuts, seeds, dried beans, peas, cheese are also sources of protein as well as beneficial oils, calcium and carbohydrates.
- Added sugars only contribute calories and few if any nutrients. Your body burns calories but needs nutrients and protein to replace tissue and help you grow. Watch your calories by watching what and how much you eat. Adjust your diet to your activity level.

The original Food Guide Pyramid, released in 1992, has been updated and revised. The overall purposes of the revision were 1) to improve its effectiveness in motivating consumers to make healthier food choices and 2) ensure that the U.S. Department of Agriculture's (USDA) food guidance system reflects the latest nutritional science. The revision has paralleled and been coordinated with the development of the *2005 Dietary Guidelines for Americans*, which USDA and the U.S. Department of Health and Human Services (HHS) released in January 2005.

Historically, USDA has provided consumers with dietary guidance dating back more than 100 years. Until the release of MyPyramid, the original Food Guide Pyramid was the most recent form of federal nutrition guidance for consumers.

### **Technical research – to update the science base**

MyPyramid's daily food intake patterns identify amounts to consume from each food group and subgroup at a variety of energy levels. To ensure that these patterns reflect the latest science, they were updated to meet all current nutrition standards through a technical research process.

Since the original Pyramid's publication, new nutrition standards have been published by the National Academy of Sciences' Institute of Medicine. These are now collectively titled Dietary Reference Intakes, and replace the former Recommended Dietary Allowances (RDAs). The *Dietary Guidelines for Americans*, the cornerstone of federal nutrition policy, also has been reviewed and updated. In addition, USDA's Agricultural Research Service has released new data on the nutritional content of foods and on food consumption patterns. These data were used to determine if various patterns of food intake meet the nutritional standards. All of these data were used in the technical research to update the food intake patterns.

The final updated food intake patterns were published in the *2005 Dietary Guidelines for Americans*. These food intake patterns form the technical basis for the new food guidance system, which replaces the original Pyramid.

Following is a chart for the recently published food guidelines MyPyramid food intake patterns. More about MyPyramid will follow that chart.

## MyPyramid Food Intake Patterns

The tables below include the suggested amounts of food to consume from the basic food groups, subgroups, and oils to meet recommended nutrient intakes at 12 different calorie levels. Nutrient and energy contributions from each group are calculated according to the nutrient-dense forms of foods in each group (e.g., lean meats and fat-free milk). The table also shows the discretionary calorie allowance that can be accommodated within each calorie level, in addition to the suggested amounts of nutrient-dense forms of foods in each group.

**1 Calorie Levels** are set across a wide range to accommodate the needs of different individuals. The attached table “Estimated Daily Calorie Needs” can be used to help assign individuals to the food intake pattern at a particular calorie level.

| Daily Amount of Food from Each Group         |         |          |          |          |          |           |         |           |           |          |          |          |
|--|---------|----------|----------|----------|----------|-----------|---------|-----------|-----------|----------|----------|----------|
| Calorie Level <sup>1</sup>                   | 1,000   | 1,200    | 1,400    | 1,600    | 1,800    | 2,000     | 2,200   | 2,400     | 2,600     | 2,800    | 3,000    | 3,200    |
| Fruits <sup>2</sup>                          | 1 cup   | 1 cup    | 1.5 cups | 1.5 cups | 1.5 cups | 2 cups    | 2 cups  | 2 cups    | 2 cups    | 2.5 cups | 2.5 cups | 2.5 cups |
| Vegetables <sup>3</sup>                      | 1 cup   | 1.5 cups | 1.5 cups | 2 cups   | 2.5 cups | 2.5 cups  | 3 cups  | 3 cups    | 3.5 cups  | 3.5 cups | 4 cups   | 4 cups   |
| Grains <sup>4</sup>                          | 3 oz-eq | 4 oz-eq  | 5 oz-eq  | 5 oz-eq  | 6 oz-eq  | 6 oz-eq   | 7 oz-eq | 8 oz-eq   | 9 oz-eq   | 10 oz-eq | 10 oz-eq | 10 oz-eq |
| Meat and Beans <sup>5</sup>                  | 2 oz-eq | 3 oz-eq  | 4 oz-eq  | 5 oz-eq  | 5 oz-eq  | 5.5 oz-eq | 6 oz-eq | 6.5 oz-eq | 6.5 oz-eq | 7 oz-eq  | 7 oz-eq  | 7 oz-eq  |
| Milk <sup>6</sup>                            | 2 cups  | 2 cups   | 2 cups   | 3 cups   | 3 cups   | 3 cups    | 3 cups  | 3 cups    | 3 cups    | 3 cups   | 3 cups   | 3 cups   |
| Oils <sup>7</sup>                            | 3 tsp   | 4 tsp    | 4 tsp    | 5 tsp    | 5 tsp    | 6 tsp     | 6 tsp   | 7 tsp     | 8 tsp     | 8 tsp    | 10 tsp   | 11 tsp   |
| Discretionary calorie allowance <sup>8</sup> | 165     | 171      | 171      | 132      | 195      | 267       | 290     | 362       | 410       | 426      | 512      | 648      |

**2 Fruit Group** includes all fresh, frozen, canned, and dried fruits and fruit juices. In general, 1 cup of fruit or 100% fruit juice, or 1/2 cup of dried fruit can be considered as 1 cup from the fruit group.

**3 Vegetable Group** includes all fresh, frozen, canned, and dried vegetables and vegetable juices. In general, 1 cup of raw or cooked vegetables or vegetable juice, or 2 cups of raw leafy greens can be considered as 1 cup from the vegetable group.

| Vegetable Subgroup Amounts are Per Week |          |          |          |          |          |          |        |        |          |          |          |          |
|---|----------|----------|----------|----------|----------|----------|--------|--------|----------|----------|----------|----------|
| Calorie Level                           | 1,000    | 1,200    | 1,400    | 1,600    | 1,800    | 2,000    | 2,200  | 2,400  | 2,600    | 2,800    | 3,000    | 3,200    |
| Dark green veg.                         | 1 c/wk   | 1.5 c/wk | 1.5 c/wk | 2 c/wk   | 3 c/wk   | 3 c/wk   | 3 c/wk | 3 c/wk | 3 c/wk   | 3 c/wk   | 3 c/wk   | 3 c/wk   |
| Orange veg.                             | .5 c/wk  | 1 c/wk   | 1 c/wk   | 1.5 c/wk | 2 c/wk   | 2 c/wk   | 2 c/wk | 2 c/wk | 2.5 c/wk | 2.5 c/wk | 2.5 c/wk | 2.5 c/wk |
| Legumes                                 | .5 c/wk  | 1 c/wk   | 1 c/wk   | 2.5 c/wk | 3 c/wk   | 3 c/wk   | 3 c/wk | 3 c/wk | 3.5 c/wk | 3.5 c/wk | 3.5 c/wk | 3.5 c/wk |
| Starchy veg.                            | 1.5 c/wk | 2.5 c/wk | 2.5 c/wk | 2.5 c/wk | 3 c/wk   | 3 c/wk   | 6 c/wk | 6 c/wk | 7 c/wk   | 7 c/wk   | 9 c/wk   | 9 c/wk   |
| Other veg.                              | 3.5 c/wk | 4.5 c/wk | 4.5 c/wk | 5.5 c/wk | 6.5 c/wk | 6.5 c/wk | 7 c/wk | 7 c/wk | 8.5 c/wk | 8.5 c/wk | 10 c/wk  | 10 c/wk  |

**4 Grains Group** includes all foods made from wheat, rice, oats, cornmeal, barley, such as bread, pasta, oatmeal, breakfast cereals, tortillas, and grits. In general, 1 slice of bread, 1 cup of ready-to-eat cereal, or 1/2 cup of cooked rice, pasta, or cooked cereal can be considered as 1 ounce equivalent from the grains group. **At least half of all grains consumed should be whole grains.**

**5 Meat & Beans Group** in general, 1 ounce of lean meat, poultry, or fish, 1 egg, 1 Tbsp. peanut butter, 1/4 cup cooked dry beans, or 1/2 ounce of nuts or seeds can be considered as 1 ounce equivalent from the meat and beans group.

**6 Milk Group** includes all fluid milk products and foods made from milk that retain their calcium content, such as yogurt and cheese. Foods made from milk that have little to no calcium, such as cream cheese, cream, and butter, are not part of the group. Most milk group choices should be fat-free or low-fat. In general, 1 cup of milk or yogurt, 1 1/2 ounces of natural cheese, or 2 ounces of processed cheese can be considered as 1 cup from the milk group.

**7 Oils** include fats from many different plants and from fish that are liquid at room temperature, such as canola, corn, olive, soybean, and sunflower oil. Some foods are naturally high in oils, like nuts, olives, some fish, and avocados. Foods that are mainly oil include mayonnaise, certain salad dressings, and soft margarine.

**8 Discretionary Calorie Allowance** is the remaining amount of calories in a food intake pattern after accounting for the calories needed for all food groups—using forms of foods that are fat-free or low-fat and with no added sugars.

### Estimated Daily Calorie Needs

To determine which food intake pattern to use for an individual, the following chart gives an estimate of individual calorie needs. The calorie range for each age/sex group is based on physical activity level, from sedentary to active.

**Sedentary** means a lifestyle that includes only the light physical activity associated with typical day-to-day life.

**Active** means a lifestyle that includes physical activity equivalent to walking more than 3 miles per day at 3 to 4 miles per hour, in addition to the light physical activity associated with typical day-to-day life.

| Children       | Calorie Range |        |
|----------------|---------------|--------|
|                | Sedentary     | Active |
| 2-3 years      | 1,000         | 1,400  |
| <b>Females</b> |               |        |
| 4 -8 years     | 1,200         | 1,800  |
| 9 -13          | 1,600         | 2,200  |
| 14 – 18        | 1,800         | 2,400  |
| 19 – 30        | 2,000         | 2,400  |
| 31 – 50        | 1,800         | 2,200  |
| 51+            | 1,600         | 2,200  |
| <b>Males</b>   |               |        |
| 4 -8 years     | 1,400         | 2,000  |
| 9 -13          | 1,800         | 2,600  |
| 14 – 18        | 2,200         | 3,200  |
| 19 – 30        | 2,400         | 3,000  |
| 31 – 50        | 2,200         | 3,000  |
| 51+            | 2,000         | 2,800  |

U.S. Department of Agriculture  
Center for Nutrition Policy and Promotion  
April 2005

# 3

## Basic Food Safety Rules

When you are cooking you are dealing with several of the most dangerous situations you can come in contact with:

- Fire**
- Knives**
- Health Risks like poisons and bacteria.**

As a Scout and Tenderfoot you earned your Fireman's Chit and your Whittlin' Chip. The rules and safety issues are all involved in cooking. Remember them and practice them faithfully. There are a few more rules you should follow to ensure a safe working area and protect yourself and fellow scouts.

- **Always have the right kind and amount of fire available** before you start cooking. Remember cooking hotter is not cooking faster or better. It usually means burned food and harder cleanup.
- **NEVER** leave the stove on unattended.
- **NEVER** leave the cooking area while food is being prepared.
- **Always put knives away** when you have finished a task. Put them where they can be seen and will not be knocked away or bumped into.
- **Do not put knives in the wash bucket** with all the other dirty utensils. Wash them individually and separate from the dirty dishes. Reaching into a hot pot of sudsy water and finding a sharp knife with your fingers will result in a serious injury.
- **Follow the food safety rules.**
- **Wash your hands and work on a clean surface!**

## Fire Safety – Cooking Temperatures

If cooking on a wood fire, wait for the flames to burn down. The coals are where the heat comes from. Also the flames will blacken the bottom and sides of the pot making clean up more difficult.

When using a propane or gas stove you have a variety of heat settings, wide open is not the best way to cook. Use the knob on your shoulders and the one on the stove. Higher temperatures don't cook food faster. They only burn the food and make it taste bad.

Just because what you are cooking is black on the outside it does not mean that it is cooked all the way through. Check the insides before serving. If you continually have burnt your food on the outside and it is raw on the inside, lower the cooking temperature so the food will cook more evenly.

Do not spray non-stick coatings for pans on a hot skillet / pan or near coals or flames. The spray can ignite causing the can to explode.

To test the griddle temperature before cooking, let a drop of water fall onto the surface. If the water simply lies there and bubbles, the griddle is too cool. If the drop pops and jumps, it's time to cook. If it splatters and disappears, the griddle is too hot and should be raised a bit from the heat source or the stove turned to a lower temperature. You need even heat for griddle cooking, so use the griddle only over coals or on a stove. It won't work successfully over a flaming campfire.

The Hand Thermometer enables you to fry on your campfire, recipes which specify a cooking temperature. Of course, the secret of any campfire cooking is to try and maintain steadily glowing coals, but once you have your fire in this state, you can gauge its approximate temperature by using your hand.

- Hold your bare hand over the coals and count off second ("1 and 2 and 3..."). Your temperature guide is the number of second you can hold your hand over the fire.
  - -If you have to remove your hand between four and five seconds, you have a low heat (about 300 degrees F)
  - -If you have to remove your hand between three and four seconds, you have a medium heat (about 350 degrees F)
  - -If you have to remove your hand before you can count to three seconds, you have a high heat (about 400 degrees F)
- To find the temperature you want, raise or lower your hand and you will know where to set your cooking utensils. No matter what you are cooking, the results will be more consistent if you maintain an even or near-even heat. And, by using your hand thermometer, you will assure that your meal cooks at the rate which will produce the tastiest results every time.

## Knife Safety

Sharpen your blade. A dull knife is a dangerous tool. Obtain the steel from the Scoutmaster and true up your edge on the knives you are using. A steel does not sharpen; it straightens the edge to its true vertical. Tell the quartermaster if your knife set requires sharpening. He will assign that task to a patrol member as a post camp activity.

Use the right knife in a proper manner.

- Chef's knives are for dicing, chopping and mincing. Use a rocking motion to be safe.
- Paring knives are for peeling and smaller cutting duties.
- The utility knife is just that – the knife that does most or all of the slicing and basic work not done with the other two.
- Keep the knives in their scabbard until needed. Always put them back in the scabbard **CLEAN**
- A clean knife cuts clean and easy. Don't let the knife gunk up while using it wipe it off – carefully.

## Clean Sweep - Food Safety

The biggest party crasher at summer picnic and camp outs is food borne bacteria. You can't see them, you can't taste them - but you sure can feel them if illness occurs hours or days later.

Each year about one in every ten Americans has an illness caused by food. Most of these cases result in simple stomachaches or diarrhea. If you prepare and then store foods properly, they will never leave their calling card behind. It's up to you to select, store, prepare, and then serve safe

foods for you and your family. The most important steps to keep these uninvited guests away are very easy to do.

## The Golden Rules of Food Safety

Always follow safe food-storage guidelines described below.

- **WASH YOUR HANDS BEFORE AND AFTER HANDLING FOOD!**
- **WASH YOUR HANDS AFTER USING THE REST ROOM, etc.!**
- **WASH YOUR HANDS BETWEEN EACH TASK!**
- **Read the preparation directions twice before beginning.**
- **WASH YOUR HANDS!**
- **Keep cold food cold and hot food hot.**
  - 140 degrees F or above and 40 degrees F or below. Do not leave food at room temperature longer than 2 hours (1 hour when summer room temperatures are hot). Thaw foods in the refrigerator, not on the counter. Also make sure that meat juices can't drip onto other foods. To store hot foods, refrigerate immediately in shallow containers to cool them more quickly.
- **Cook all the Food.** Leftover raw meats spoil faster than cooked meat.
- **Thoroughly cook** all meat and meat products, such as eggs, until well done before eating.
- Never eat **raw cookie dough**.
- **Keep chicken and chicken products, and other meat juices away from other foods.**
  - Clean cutting boards between each use. When preparing food, keep surfaces and utensils clean. Use one cutting board for raw meats, another for fruits and vegetables that won't be cooked.
  - Keep the meats in a separate closed container or zip bag sealed in the cooler. If the water in the cooler is bloody, wash everything with hot soapy water before using, peel all the fruit before eating, cook all the other food that has come in contact with the water to an internal temperature of 165°F.
- **Be considerate of the cleaning crew while cooking**, you may be next on the duty roster.
  - Pick up trash as you create it.
  - Soak pots and pans after using, Saves on that stuck on food mess after the meal. A simple trick is to fill dishpans with hot, sudsy water. This serves two purposes for me. When preparing food, you can toss the dirty dishes into the hot water to soak while you cook. This makes for easier cleanup. As you cook, stick your hands in the water to clean.
  - Keeping a clean kitchen area saves on cleaning up after the meal and keeps food related illnesses at a minimum. A clean heavy plastic sheet can declare kitchen boundaries.

- Clean the dishes with soap, sanitize, rinse **all** the soap off.
- Put utensils and pots back in the right places.
- **Keep dry items dry**; don't place wet towels in with the dry goods.
- **WASH YOUR HANDS**
- **Always serve food on clean platters.** Now, you are probably thinking - "I know that! Why are they saying that to me?" But think? Have you every taken raw meat to the barbecue on a plate and then put the cooked meat back on the same plate to serve? Don't do this unless you have washed the dish in between. Raw meat has bacteria that will spread to the cooked meat.
- **If in doubt, throw it out!** If you have any question in your mind about the freshness or safety of eating a food product, throw it out. It is better to be safe than sorry!
- **Never use foods from cans that bulge.**
- **Never used canned foods with a strange odor or appearance.**

### **Why is this more of a problem in camping?**

Did you pack the refrigerator? Temperatures are harder to control in the out-of-doors. Too Hot or Too Cold are what the campers say, but not your food. Camping temperatures usually range in the ideal temperatures for bacteria growth. Cleanliness is seldom forgotten. Also Bugs and Dirt are naturally at home at the campsite.

There are several bacteria borne illnesses that are caused by BAD food habits and preparation the culprits are:

- **Salmonella enteritis** –the most common and easiest to avoid. This is a bacteria linked to raw, uncooked eggs and poultry. Salmonella poisoning symptoms include fever, abdominal pain, nausea and vomiting, diarrhea, dehydration, weakness, and loss of appetite. Cook these foods thoroughly
- **Staphylococcal enteritis** – also common comes from dirty hands and airborne (sneezes) mists. This bacteria multiplies in warm temperatures and thrives on protein. Symptoms of infection include nausea, vomiting, diarrhea, headache, fever, chills, weakness, and dizziness. Higher temperatures kill this bacterium
- **Escherichia coli (E. coli) enteritis** – usually comes from the intestinal tract, feces and unclean work surfaces. This is a bacteria that attacks the intestinal tract. It can be transmitted person to person and grows at temperatures of 44 degrees F and above. In extreme cases, it can cause serious complications and death in children and elderly people. Symptoms include abdominal cramps, diarrhea, nausea, vomiting, and fever.
- **Botulism** This is a deadly food-borne disease caused by ingesting bacteria that can be found in many kinds of foods. Symptoms include dry mouth, double vision, nausea, diarrhea, vomiting, abdominal cramps, sore throat, dizziness, constipation, weakness, muscle paralysis, and difficulty swallowing or breathing. This is most commonly found in "spoiled" food. Do not use bulging cans or prepared food with at strong odor.
- **Trichinosis** Trichinosis is an infection caused by the parasite Trichinella spiralis. People contract trichinosis by eating undercooked or raw meat, especially pork that is infected with

the parasite. Its larvae can remain alive in human tissue for years. With today's health standards for purchased meat this is not very common. Wild game (rabbit, boar and deer) can carry this parasite

- **Hepatitis A** Hepatitis A is one of 5 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 (dark yellow urine, light-colored stools, and yellowish eyes and skin). Patients with anorexia often may have Hepatitis A. Most common food source is shellfish (oysters, clams, crawfish). This is also transmitted from person to person through contact, airborne mists and fluids. Keep your immunizations current. Wash your hands!

## **Salmonella and Food Safety**

Salmonella is the most common form of food poisoning and very debilitating. Chicken, turkey, pork, beef, and other meat and poultry products are important sources of protein and other nutrients. Unfortunately, these foods -- like eggs, raw milk, and all raw foods of animal origin -- may also carry salmonella and other bacteria. The good news is that these bacteria don't have to cause illness. Routine food safety can destroy salmonella and other bacteria.

***Hamburger and any ground meat has increased surface area and an increased risk for contamination.***

### **What is salmonella?**

The salmonella family includes about 2,000 different strains of bacteria, but only 10 strains cause most reported salmonella infections. Strains that may cause no symptoms in animals can make people sick, and vice versa. A salmonella bacterium is a one-celled organism that can't be seen, touched, or tasted. The bacteria are common in the intestinal tracts and waste of livestock, poultry, dogs, cats, rats, and other warm-blooded animals.

### **How can salmonella bacteria on raw meat, poultry make people sick?**

First, "food abuse" allows bacteria to survive and often to multiply. For example, if the meat knife is used to cut the salad lettuce without first being washed, the lettuce can be contaminated by any bacteria on the meat. The person who eats the salad then also eats the bacteria. Next, if the bacteria survive the stomach acid, they reproduce themselves in the small intestine. One cell becomes two, two become four, four become sixteen and so on. When there are "enough" bacteria, they cause a salmonella infection.

### **How many bacteria does it take to make people sick?**

There is no exact number, but the more bacteria consumed, the more likely a person is to get sick. Healthy adults have eaten food containing millions of bacteria without getting sick. Other people have gotten sick from as few as 10 bacteria in the food.

### **What are the symptoms of salmonellosis?**

According to the Centers for Disease Control, stomach pain occurs within 6 to 48 hours after the food was eaten. Most people get diarrhea, and many people have upset stomachs, chills, fever or headache. Most people feel better within 3 to 5 days. Many persons with salmonellosis may believe they have the flu and may never see a doctor.

### **How does the doctor know a person has salmonellosis?**

The only way to tell for sure is to conduct laboratory test on the stools of the person who got sick, a process that takes several days.

### **How many people die from salmonellosis?**

Salmonella infections can be life-threatening for the very young, the very old and for persons already weakened by other serious diseases, such as AIDS. Reports show about 2 deaths for every 1,000 known cases of salmonellosis, but experts believe that about 500 persons each year actually die from salmonella infections.

### **What foods are most likely to make people sick?**

Foods don't make people sick -- bacteria do. Any raw food of animal origin -- meat, poultry, raw milk, fish, and shellfish -- may carry salmonellae. The bacteria can survive to cause illness if these specific foods are not thoroughly cooked. The bacteria can also cause illness if they contaminate any other food that comes in contact with the raw food, either directly or by way of dirty hands or dirty equipment. Salmonellosis is a world- wide, food-chain problem that can't be "blamed" on any one food.

## **Anti-Salmonella Strategy**

Bacteria on raw foods of animal origin do not have to cause illness. Investigations of actual outbreaks reported to the Centers for Disease Control show that:

***bacteria + food safety mistakes can = illness.***

Errors during food shopping, transport, preparation, serving, or storage can enable bacteria to grow or even just survive. If foods are prepared a day or more ahead of time and food handlers make mistakes, the chance of illness can increase, because bacteria have more time to multiply. In outbreaks traced to bacteria or other organisms in meat or poultry, one or more of the following eight food handling mistakes enabled bacteria on raw products to survive and cause food-borne illness:

1. Improper cooling
2. Improper hot storage of cooked foods
3. Undercooked
4. Cross-contamination of cooked foods by raw foods
5. Inadequate cleaning of equipment
6. Infected person touching cooked food
7. Eating raw meat or poultry
8. Inadequate reheating of cooked and chilled foods

Therefore, the key to preventing illness -- at home, camping, in a restaurant, at a church picnic, anywhere -- is to destroy the bacteria. Below are some hints, based on information from actual outbreaks that can destroy or stop growth of salmonella bacteria and other bacteria that can cause illness.

### **Clean It.**

Salmonella bacteria can survive in water, soil, and on the kitchen counter, so sanitation can make a big difference -- especially in preventing bacteria that could be on raw products from contaminating other foods. (This is called cross-contamination.) ***USE HOT WATER, SOAP and DISINFECTANT***

**Wash your hands frequently with SOAP and water for at least 20 seconds** -- after you use the bathroom, before you start food preparation, before you start working with a new food or a new tool, when you finish food preparation, and before you serve food.

**Prevent cross-contamination.** Never let raw meat and poultry, or their juices, come into contact with cooked meat or any other food -- raw or cooked.

**If you use a dishcloth for cleaning kitchen surfaces, switch to a clean one after you work with raw meat or poultry.** Choose a type that will stand up to a laundering in hot water and bleach. Otherwise, use paper towels and throw away after use.

**Cut raw meat or poultry on a cutting board that is thoroughly cleaned after each use.**

**Wash cutting boards, knives, counter, and other implements with detergent and hot water immediately after you use them with raw meat and poultry.**

**After washing and rinsing equipment and counter, professional food service workers also sanitize and rinse them.** Consumers who want to sanitize implements after washing can use a solution of 2 to 3 teaspoons household bleach in 1 quart of water, followed by a cold water rinse. (Note: Sanitizing doesn't work on dirty surfaces, so clean them first.) The Troop supplies a dishwashing liquid that is antibacterial and has a sanitizer available for adding to the rinse water in specific quantities – See a Scout Master to have this added to your rinse water.

**Serve cooked meat and poultry on clean plates.** When you replenish the banquet, replenish the serving plates. Don't put grilled meat or poultry back on the plate with raw juices.

**Keep pets and other animals away from food,** and away from cooking and eating surfaces and equipment. Squirrels and mice contaminate, as do insects.

## **Cook It**

Salmonellae -- however many there are -- do not survive when beef or pork is cooked to an internal temperature of at least 160 degrees F, or when poultry is cooked to 185 degrees F. (Some experts believe that this country's passion for rare beef explains why beef -- which carries very low levels of salmonella bacteria -- is involved in more reported salmonellosis outbreaks than poultry.) Always cook meat and poultry thoroughly, and be just as careful when micro waving as when using traditional ovens.

**Using a meat thermometer to check "doneness."** If meat is too thin for a thermometer, follow the recipe and cook till the juices are clear.

**Use the hand method for meat doneness** as a quick check.

**Well Done** - Make a fist – clench it tightly. Push on the fleshy area between your thumb and forefinger. The hardness of the meat when cooked will match this for well done. If in doubt cut the item and see if the juices run clear. Cook all poultry and pork to well done.

**Medium** – Put your thumb and forefinger together – don't squeeze just hold your hand as if you are holding a piece of paper. Push on the fleshy area between your thumb and forefinger. The hardness of the meat will match this for medium.

**Rare** – Open your hand. Push on the fleshy area between your thumb and forefinger. The hardness of the meat will match this for rare. Only cook meat to a rare state when you know it has been prepared and stored properly. Remember improper storage can cause bacteria to grow. The worst feeling is to be alone in the woods and be sick.

**Never interrupt cooking** -- it's a "half-baked idea" that can make you sick. After thawing foods in the cooler, cook them immediately.

**If reheating leftovers, cover and reheat thoroughly to 165°F** just in case bacteria survived in the food during refrigeration or freezing. Let sauces and gravies reach a rolling boil.

**Don't store the latecomer's cooked meat and poultry dinner in an off or warm oven.** Hold the food above 140°F. (But, within 2 hours after cooking, refrigerate the food.)

## **Cool It.**

Refrigeration and even freezing do not kill all salmonella or other bacteria, but proper cooling can usually prevent salmonellae from multiplying.

**Refrigerate raw meat and poultry as soon as possible** after you take it out of the grocery meat case. Ice it down in the camp cooler

**Refrigerate food containing cooked meat or poultry within 2 hours after cooking.**

**Refrigerate or freeze cooked meat or poultry casseroles in covered shallow pans** rather than deep pots. leave space around the containers to let cold air circulate.

**Never thaw frozen meat and poultry on the kitchen counter.** Thaw it in the refrigerator or, if you are in a hurry, in a bag under cold running water. It will thaw in a cooler.

**Remember that refrigeration or freezing cannot be counted on to kill many salmonella bacteria.** It can't "fix" a mistake such as leaving cooked turkey at room temperature for more than 2 hours -- it can only postpone the risk of illness. If in doubt, throw food out.

# 4

## Planning and Menus

The Monday before any outing the patrols for the campout are formed and the process of planning begins during “patrol time” at our regular meeting. Each Patrol has both a menu and a duty roster to fill out and have reviewed by their Patrol Guide and/or Advisor.

The menu should include entrees from the selected group that the patrol chose at the first leadership PLC for the current leadership cycle. The recipes will be selected from the Troop 219 Recipe Book and reproduced on laminated cards for the patrol to use. Each menu will be reviewed for nutritional standards, complexity and appropriateness given the type of outing and location of the camp out. Care should be taken to assure that any food allergies and dietary restrictions are met in the planning. Likes and dislikes are important and the patrol should reach a consensus of what should be on the menu. This is good chance to hone our skills in dispute resolution. Every Patrol member must participate.

### Duty Roster

Fill in the tent assignments and the rest of the duty roster. Remember a duty roster is a plan of leadership not a list of sole responsibility. The entire patrol must participate in clean up and preparation. Leaders of the task are named as responsible for leading the patrol in achieving the tasks listed. Having dirty equipment at the end of an outing is not acceptable. A patrol doesn't say “So and so had KP so he was responsible.” The so and so's responsible are the patrol and the patrol leadership.

Everybody has a duty and everybody participates. The work does not get left undone.

### Choosing a Menu

**Work together.** Everyone has likes and dislikes. Some people have food allergies and dietary restrictions for religious or medical reasons. Honor those and resolve any conflicts. There are over 200 recipes in the Troop cookbook and a variety of meals that are explained later on.

Every six months that Troop elects a new leadership team. The Patrols also have new leadership and duties. As a part of refreshing the troop, each patrol can select a new group of recipes to work form for outings. Troop 219 attends between 10 and 11 outing a year where we can prepare meals. Every six months the patrols should select 10 entrees, 10 breakfasts and up to 10 other alternative methods of cooking (one pot meals, foil packs) and desserts.

**Choose these from the Troop 219 Cookbook** and ask the advisor to print recipe cards. These cards are to be used in planning meals. The patrol leadership is responsible for bringing these to the planning meeting before each outing.

**Following the outing** – at the Patrol Leaders Council – turn in the recipe cards to the advisor along with a recipe evaluation sheet or any comments. The only way to improve the recipe book is to have creative and constructive criticism.



# 5

## Budgeting and Shopping

**Each duty roster has a shopping guide** printed on the back to help you define quantities and a checklist to help you remember everything. Each patrol will have two shoppers to purchase and prepare the food for transport to the outing.

**Food safety begins here**, at the selection and preparation phase.

- Package items in clean, water tight bags.
- Keep dry stores separate from wet.
- Refrigerate all produce, meats and dairy products. Keep most fruits at room temperature.

**Review your recipes** before you go to the store.

**Make a list.**

**Check the spice box and dry stores** for items left from the previous campout. Are they fresh? Is there enough?

**Make an estimate** of the quantities needed.

**Think about your budget.** You are responsible for assuring that everybody has enough to eat. But you only have so much money, typically \$12.00 per scout for four meals. Use coupons and look at specials to adjust the menu (slightly) to accommodate your budget and the items available.

Following the Troop 219 Standard Shopping Guide may be enough will help you with simple menus.

Following the copy of the guide are several more tools you can use to estimate quantities and substitutions for ingredients not available.

***Do your homework and review the recipes and the shopping list.***

It is a long way to the grocery when you are camping.

# Standard Troop 219 Shopping Guide

## GROCERY LIST

- Bread \_\_\_\_\_
- Milk \_\_\_\_\_
- Juice \_\_\_\_\_
- Eggs \_\_\_\_\_
- Cheese \_\_\_\_\_
- Fruit \_\_\_\_\_
- Vegetables \_\_\_\_\_
- Meat \_\_\_\_\_
- Bacon \_\_\_\_\_
- Sausage \_\_\_\_\_
- Deli - meats \_\_\_\_\_
- Cereal \_\_\_\_\_
- Pasta \_\_\_\_\_
- Canned Goods \_\_\_\_\_
- Frozen foods \_\_\_\_\_
- Snacks \_\_\_\_\_
- Desserts \_\_\_\_\_
- Paper goods \_\_\_\_\_
- Foil \_\_\_\_\_
- Snacks \_\_\_\_\_
- Spices \_\_\_\_\_
- Flour \_\_\_\_\_
- Sugar \_\_\_\_\_

## Grocery List Planner

**Sandwiches** requires 2 times # eating divided by 22 = number of loaves

**Deli meat** - 1 1/2 to 2 ounces each Sandwich

**Salad** - 1 bag serves 5-6 big salads

**French toast** requires 1 1/2 eggs per person and three slices of bread

**Pancakes and biscuits** look at box for serving count and cooking directions

**Raw meat** - 6 to 8 ounces each person more if bone in.

Chicken - 1 breast or 2 thighs or drumsticks per person

**Milk** 8 oz a day per person - divided by 128 = number of gallons

**Juice & Drinks** - 16 ounces minimum each - each day

### **Vegetables:**

Corn & Green Beans - one can serves 4-5

Baked Beans - one large can serves 6

Potatoes - 1 medium for each person

### **Cobbler for 8 -**

2 cans of fruit filling, 2 cake mixes, 2 eggs, 3/4 cup milk, 1 stick butter

option 3 cans of fruit - no milk use juice for mixing

**Estimate your quantities and buy appropriately**

Don't forget seasonings!

Once you have composed a menu of the meals you plan to make, **you need to make a shopping list**. Start by listing the food items and the amount based on 1 Scout or group of Scouts. Then multiply by the number of campers. Keep items to the smallest appropriate size to reduce waste.

Here is an example of a shopping list.

|                            |                             | number to buy | \$\$  |
|----------------------------|-----------------------------|---------------|-------|
| Hot Chocolate              | 4x number of Scouts         | _____         | _____ |
| Cookies                    | 4x number of Scouts         | _____         | _____ |
| White Bread                | 4x (slices) 20-22/loaf      | _____         | _____ |
| Jam                        | 1 small jar per 8 Scouts    | _____         | _____ |
| Eggs                       | 4x number of Scouts         | _____         | _____ |
| Cinnamon                   | 1 small can per group       | _____         | _____ |
| Sugar                      | 1 pound per group           | _____         | _____ |
| Oil                        | 2 quart per group           | _____         | _____ |
| Powdered sugar             | 1 pound per group           | _____         | _____ |
| Applesauce                 | 1 small can per 4 Scouts    | _____         | _____ |
| Cinnamon red hots          | 1 small package 4 oz.       | _____         | _____ |
| Macaroni and Cheese        | 1 box per 2 Scouts          | _____         | _____ |
| Chunky Ham                 | 1 can per 4 Scouts          | _____         | _____ |
| Milk                       | 1 quart (group) powdered OK | _____         | _____ |
| Lettuce                    | 1 small head per 4 Scouts   | _____         | _____ |
| French dressing            | 1 small bottle per 8 Scouts | _____         | _____ |
| Kool ade                   | 3-4 quarts per Scout        | _____         | _____ |
| Hamburger                  | 1 pound per 3 Scouts        | _____         | _____ |
| Pork and Beans             | 1 medium can per 3 Scouts   | _____         | _____ |
| Brown Sugar                | 1 pound (group)             | _____         | _____ |
| Onions                     | 3-4 medium (group)          | _____         | _____ |
| Pita Bread                 | 2x number of Scouts         | _____         | _____ |
| Watermelon                 | 1 large (group)             | _____         | _____ |
| Canned Biscuits            | 1/2 (5) can per Scout       | _____         | _____ |
| Spiced Apple Cider packets | 2x number of Scouts         | _____         | _____ |
| Instant Oatmeal            | 1 1/2 serving per Scout     | _____         | _____ |
| Syrup                      | 1 small bottle (group)      | _____         | _____ |
| Tomato Juice               | 8 oz per Scout              | _____         | _____ |

## Plan Your Budget

Use Coupons and leftover stock from last camp out. No one likes to dig deep out of their own money at the checkout line.

Some times you can't find the specific things listed in a recipe. Or you don't need a whole package of volume of just that one thing. There are a lot of ways to supply the same item in a recipe. Below is a list of substitutions for specific ingredients. While not exactly the same, these substitutions provide an acceptable alternative to buying too much or not having it at all.

## Substitutions for Ingredients

|                                    |   |  |
|------------------------------------|---|--|
| 1 lb. butter / shortening          | = | 2 cup  |
| 4 oz. cheddar cheese               | = | 1 cup grated   |
| 1/2 pt. whipping cream             | = | 1 cup (2 c. whipped)   |
| 8 oz. sour cream                   | = | 1 cup  |
| 1 lb. flour                        | = | app. 3 1/2 cup   |
| 1 cup marshmallows                 | = | 11 large or 110 miniature  |
| 1 lb. brown sugar                  | = | 2 1/4 cup (packed)   |
| 1 lb. granulated sugar             | = | 2 1/4 cup  |
| 1 cup milk                         | = | 1/2 cup evaporated milk + 1/2 cup water -or-                                     |
|                                    | = | 1 cup reconstituted dry milk + 2 tbs. butter                                     |
| 1 cup buttermilk                   | = | 1 cup milk + 1 tbs. vinegar -or-   |
|                                    | = | 3/4 cup milk + 1/4 cup butter + 1 1/2 tsp. corn starch                           |
| 1 cup sour milk                    | = | 1 cup sweet milk + 1 Tbs. vinegar / lemon juice                                  |
| 1 stick butter                     | = | 1/4 lb. or 1/2 cup or 8 tbs.   |
| 1 lb. loaf bread                   | = | about 17 slices  |
| 1 1/2 tsp. cornstarch              | = | 1 tbs. all purpose flour   |
| 1 cup Honey                        | = | 1 1/4c sugar + 1/4c water or other liquid  |
| 1 cup of fine crumbs               | = | 22 vanilla wafers, 4 slices of bread, 26 saltine crackers,<br>14 graham crackers |
| 1 Tbs. instant minced onion        | = | 1 small fresh onion  |
| 1 Tbs. prepared mustard            | = | 1 tsp. dry mustard   |
| 1 cup sugar                        | = | 2/3 to 3/4 cup honey   |
| 1 cup honey                        | = | 1 cup molasses   |
| 1 whole egg                        | = | 2 egg whites   |
|                                    | = | 1/4 cup egg substitute   |
|                                    | = | 1 egg white + 1 tsp. oil   |
| 1 cup sour cream                   | = | 1 cup plain low-fat yogurt – 1/2 tsp vinegar                                     |
| 1 oz baking chocolate              | = | 3 Tbs. cocoa powder + 1 Tbs. oil   |
| 1 Tbs. cornstarch (for thickening) | = | 2 Tbs. flour   |

Quantities and servings is always a challenge when scaling a recipe or trying to estimate how much a crew will eat. The shopping guide below has some basic standards for estimating several food items. Use it in planning your shopping list to insure you will have enough food for everybody.

Most of the recipes in the Troop Cookbook are scaled to feed 6 – 8 scouts. Some are only for one or two scouts and can be easily scaled. If you have a problem scaling your recipe see your advisor they can use the recipe software to scale it up to the right quantities and print a new recipe card.

# Shopping Guides

| Food                  | Weights/Approximate Measurement                       | Approximate Servings  |
|-----------------------|---|---|
| <b>Beverage</b>       |   |   |
| Coffee singles        | 3.5 ounces  | 19 coffee bags  |
| Hot chocolate         | 12 ounces   | 1 serving   |
| Kool-Aid              | 1 package   | 8 servings  |
| Soft drink            | 12 ounces   | 1 serving   |
| Tea                   | 3.5 ounces  | 16 tea bags   |
| <b>Bread</b>          |   |   |
| 1 loaf                | 1 pound   | 20 to 22 slices   |
| corn muffin mix       | 7 oz.   | 6 muffins   |
| <b>Cereal</b>         |   |   |
| Ready to eat          |   |   |
| Flaked                | 18 ounces / 18 to 20 cups                             | 18 to 20 1 -cup servings  |
| Puffed                | 18 ounces/ 32 to 36 cups                              | 26 1 1/2-cup servings   |
| Cooked:               |   |   |
| Oatmeal               | 18 ounces / 6 cups<br>(1 cup uncooked = 1 2/3 cooked) | 12 to 14 3/4-cup servings   |
| Rice                  | 2 oz. / 1 cup   | 2 servings  |
| Minute                | 4.5 oz. / 1 cup                                       | 2 servings  |
| <b>Crackers</b>       |   |   |
| Graham                | 1 pound / 65 crackers                                 | 32 to 35 2-cracker servings   |
| Saltine               | 1 pound / 130 squares                                 | 32 4-cracker servings   |
| <b>Dairy Products</b> |   |   |
| Cheddar Cheese        | 1 pound / 12 to 16 slices                             | 4 cups grated      6 to 8 sandwiches (2 slices each)                  |
| Cottage cheese        | 1 pound / 2 cups                                      | 6 to 8 1/2-cup servings   |
| <b>Milk:</b>          |   |   |
| Evaporated            | 14 1/2 ounces / 1 2/3 cups                            | 1 can milk+ 1 can water = whole milk<br>Equivalent to 3 1/3 cups milk |
| Whole                 | 1 quart / 4 cups                                      | 4 servings  |
| Nonfat dry            | 1 pound / 5 quarts                                    | 20 servings   |
| <b>Fats</b>           |   |   |
| Butter or margarine   | 1 pound / 2 cups                                      | 48 pats   |
| Shortening            | 1 pound / 2 1/2 cups                                  |   |
|                       | 3 pounds / 7 1/2 cups                                 |   |
| Salad oil             | 1 pint / 2 cups                                       |   |
| <b>Flour</b>          |   |   |
| All-purpose           | 1 pound / 4 cups                                      |   |
| Whole wheat           | 1 pound / 3 1/2 cups                                  |   |
| <b>Fruit Juices</b>   |   |   |
| Frozen concentrated   | 6 ounces / 3 cups                                     | 6 1/2-cup servings  |
| Canned                | 46 ounces / 5 3/4 cups                                | 11 to 12 1/2-cup servings   |
| <b>Fruits Fresh</b>   |   |   |

|            |                    |                              |
|------------|--------------------|------------------------------|
| Apples     | 1 pound / 3 medium | 3                            |
| Bananas    | 1 pound / 3 medium | 3                            |
| Grapefruit | 1 pound / 2 medium | 2                            |
| Oranges    | 1 pound / 2 medium | 2 (1 orange = 1/3 cup juice) |
| Pineapple  | 2 pound / 1 medium | 6 to 8                       |

### Meats

|                  |                           |                           |
|------------------|---------------------------|---------------------------|
| Bacon            | 1 pound / 20 to 24 slices | 10 to 12 2-slice servings |
| Hamburger        | 1 pound / 2 cups          | 4 to 5                    |
| General guide:   | 1/4 pound per serving     |                           |
| Boneless meat    | 1 pound                   | 4                         |
| Small-boned meat | 1 pound                   | 3                         |
| Large-boned meat | 1 pound                   | 2                         |
| Chicken, whole   | 2 1/2 to 3 1/2 pounds     | 4                         |
| Ham              | 1 pound                   | 4 to 6                    |
| Fish             | 1 pound                   | 2                         |

### Pasta

|           |  |                           |
|-----------|--|---------------------------|
| Macaroni  | 1 pound / 4 cups uncooked<br>8 cups cooked | 14 to 16 1/2-cup servings |
| Noodles   | 1 pound / 6 cups uncooked<br>8 cups cooked | 14 to 16 1/2-cup servings |
| Spaghetti | 1 pound / 4 cups uncooked<br>8 cups cooked | 14 to 16 1/2-cup servings |

### Sugar

|               |                             |
|---------------|-----------------------------|
| Brown         | 1 pound / 2 1/4 cups packed |
| Granulated    | 1 pound / 2 1/4 cups        |
| Confectioners | 1 pound / 4 cups            |

### Syrup

|            |                      |                          |
|------------|----------------------|--------------------------|
| Corn syrup | 1 pint / 2 cups      |                          |
| Honey      | 1 pound / 1 1/4 cups | 20 1-tablespoon servings |
| Molasses   | 1 pint / 2 cups      | 16 2-tablespoon servings |
| Pancake    | 1 pint / 2 cups      | 16 2-tablespoon servings |

### Legumes Dried

|           |  |                  |
|-----------|--|------------------|
| All kinds | 1 pound / 2 cups uncooked<br>6 cups cooked | 6 1-cup servings |
|-----------|--|------------------|

### Vegetables Fresh

|                |  |                         |
|----------------|--|-------------------------|
| Beans          | 1 pound / 3 cups                         | 5 to 6 1/2-cup servings |
| Broccoli       | 1 pound                                  | 3 to 4 1/2-cup servings |
| Cabbage Raw    | 2-pound head / 18 to 24 leaves           | 14 1/2-cup servings     |
| Cooked         | 2 pounds                                 | 8 1/2-cup servings      |
| Carrots        | 3 mature / 2 1/2 cups                    | 5 1/2-cup servings      |
| Cauliflower    | 1 pound / 1 1/2 cups                     | 3 1/2-cup servings      |
| Lettuce        | 1 pound / 1 large head                   | 8 to 10                 |
| Onions         | 3 large; 4 to 5 medium / 2 1/2 to 3 cups |                         |
| Potatoes       | 1 pound / 3 medium                       | 3                       |
| instant "buds" | 13.75 oz / 7 2/3 cups                    | 17 servings             |
| Tomatoes       | 1 pound / 3 to 4                         | 5 to 8                  |

### Miscellaneous

|              |              |
|--------------|--------------|
| Marshmallows | 1 pound / 64 |
|--------------|--------------|

|               |                           |                               |
|---------------|---------------------------|-------------------------------|
| Peanut butter | 18 ounces / 2 cups        | 8 to 10 2-tablespoon servings |
| Potato chips  | 1 pound                   | 16                            |
| Walnuts       | 1 pound / 4 to 4 1/2 cups | 8 1/2-cup servings            |

## Dried Beans and Peas Yield Values

| <u>When you start with:</u> | <u>You will get at least:</u> |
|-----------------------------|-------------------------------|
| 1 cup black beans           | 2 cups cooked beans           |
| 1 cup black-eyed beans      | 2 1/2 cups cooked beans       |
| 1 cup Great Northern beans  | 2 1/2 cups cooked beans       |
| 1 cup kidney beans          | 2 3/4 cups cooked beans       |
| 1 cup lentils               | 2 1/2 cups cooked lentils     |
| 2 cup large lima beans      | 2 1/2 cups cooked beans       |
| 1 cup small lima beans      | 2 cups cooked beans           |
| 1 cup pea (or navy) beans   | 2 1/2 cups cooked beans       |
| 1 cup split peas            | 2 1/2 cups cooked peas        |
| 1 cup pinto beans           | 2 1/2 cups cooked beans       |

*Source: Utah State Extension*

“Remember: not all beans are the same.” *Ralph's Beanery*

## Can Sizes

| <u>Can Size</u> | <u>Net Weight</u>            | <u>Cups</u> | <u>Servings/Can</u> |
|-----------------|------------------------------|-------------|---------------------|
| #1              | 10 1/2 - 12 oz.              | 1 1/4       | 1 or 2              |
| #300            | 14 - 16 oz.                  | 1 3/4       | 2 or 3              |
| #303            | 16 - 17 oz.                  | 2           | 4 or 5              |
| #2 1/2          | 1 lbs 13 oz.                 | 2 or 3      | 4 or 6              |
| #3 cylinder     | 3 lbs 3 oz. or<br>1 qt 14 oz | 5 3/4       | 12                  |
| #10             | 6.5 lbs to 7 lbs 5 oz.       | 2 - 13      | 25                  |
| #5              | 48 oz                        | 6           |                     |

*SOURCE: Purchasing Food for 50 Servings, Cornell Ext. Bulletin 803*

## Fluid Standard Measures

|                  |   |              |   |              |   |                   |
|------------------|---|--------------|---|--------------|---|-------------------|
| 3 Teaspoons      | = | 1 Tablespoon | = | 1/2 oz       | = | 29.57 milliliters |
| 16 Tablespoons   | = | 1 Cup        | = | 8 oz         | = | 0.236 liters      |
| 2 Cups           | = | 1 Pint       | = | 16 oz        | = | 0.473 liters      |
| 2 Pints          | = | 1 Quart      | = | 32 oz        | = | 0.946 liters      |
| 4 Quarts         | = | 1 Gallon     | = | 128 oz       | = | 3.785 liters      |
| 1 Gallon water   | = | 8 pounds     | = | 3.785 liters |   |                   |
| 1.056803 Gallons | = | 4 liters     |   |              |   |                   |

## Camper's measurements without utensils

|                               |   |              |
|-------------------------------|---|--------------|
| 1 Open Fistful                | = | 1/2 cup      |
| Five-Finger Pinch             | = | 1 Tablespoon |
| Four-Finger Pinch             | = | 1 Teaspoon   |
| One-Finger Pinch (with thumb) | = | 1/8 Teaspoon |
| One-Finger Gob of shortening  | = | 1 Tablespoon |
| Palm of hand (center)         | = | 1 Tablespoon |

# 6

## Methods of Cooking and Types of Meals

Each outing will have its own character and theme. Menu planning and meal type will vary from outing to outing. Besides the pre-selected recipes there are several other types of meals that can be selected and should be used for various forms of camping and outings.

- **Trail meals:** for hiking, orienteering and extended backpacking trips.
- **Car Camping:** for full menu development having a base camp with stoves, coolers and the trailer hauled chuck boxes
- **One Pot Meals:** for use in base camp for quick meals or short trips with a single stove a few utensils and pots.

### Trail Meals:

Trail foods should be quick or no-cook foods for a fast sit and eat or eat while walking meal. Here are a couple of tables for pick and mix meals. Pick and bag for each meal or keep in a large bag for the trail. Remember that what you don't eat the first couple of days will be left for the last. If you plan for 7 days, don't eat it all the first three.

The grocery is a good place to buy for the trail. You just have to imagine the food without the package. Get curious and browse through your nearby supermarket. That TRAIL PACK of pancake mix is still only pancake mix – add water only style. Instant oatmeal is just oatmeal pulsed in a food processor for a count of three. There are a lot of prepackaged prepared foods that can be Trail ready. The new prepared meats and fish in foil pouches are great for adding to basic mixes for a good - tasty dinner.

Backpacking or dehydrated prepared meals are expensive and often leave a lot to be desired in the taste department. Carry some seasonings with you – Chili, white pepper, garlic and onion powders, salt and black pepper, sugar and cocoa for the desserts. Try out those backpacking meals before you are 20 miles from a store. Of course when you are really hungry even an old boot tastes good.

### Trail Breakfast

**Mix and Match: Pick one from each category.**

| <b>Dairy</b>  | <b>Meat</b>                                      | <b>Grain</b>   | <b>Fruit</b>  | <b>Fun</b>   |
|---|--|--|---|--|
| hard cheese<br>cheese spread<br>string cheese         | Jerky<br>bacon bar<br>hard salami<br>meat sticks | Bagel<br>Crackers<br>melba toast<br>graham cracker<br>oatmeal, instant         | dried apples<br>banana chips<br>fruit bits<br>fruit leathers<br>Raisins | trail mix<br>choc. granola<br>Nuts<br>Sunflower seeds<br>pumpkin seeds |
| <b>Drinks</b>   |  | grits, instant<br>cream of wheat<br>pilot bread<br>cereal mixes<br>granola bar | Orange<br>cranraisins   |  |
| water<br>Tang<br>tea<br>powder mixes<br>hot chocolate | peanut butter<br>powder eggs<br>Eggbeaters       |  |   |  |

## Trail Lunches

Pick one from each category.

| Dairy  | Meat   | Grain  | Fruit   | fun  |
|--|--|--|---|--|
| hard cheese<br>cheese spread<br>string cheese    | Jerky<br>can tuna<br>canned spread<br>hard salami<br>meat sticks | Bagel<br>Crackers<br>melba toast<br>graham cracker<br>corn chips         | dried apples<br>banana chips<br>fruit bits<br>fruit leathers<br>raisins | hard candies<br>GORP<br>trail mix<br>candy bar<br>choc granola |
| Drinks   | peanut butter<br>Jelly   | flour tortillas<br>wheat bread<br>pilot bread<br>Pretzels<br>granola bar | walking apple<br>orange   | nuts<br>sunflower seeds<br>pumpkin seeds<br>cereal mixes       |
| water<br>kool aid<br>gator types<br>powder mixes |  |  |   |  |

## Pick a Trail Mix

Pick 1/2 cup from each column, pack in bag.

| Cereal         | Nuts              | Fruit        | Candy               |
|----------------|-------------------|--------------|---------------------|
| Cheerio's      | Peanuts           | Raisins      | M&M's               |
| Chex 's        | Mixed Nuts        | Fruit Bits   | Chocolate chips     |
| Grape Nuts     | Macadamia         | Apple chips  | Reese's Pieces      |
| Granola        | Sunflower kernels | Banana chips | Peanut Butter Chips |
| Wheat Thins    | Almond slices     | Pineapple    | Butterscotch chips  |
| Snack crackers | Corn Nuts         | coconut      | Carob chips         |
| Pretzels       |                   |              |                     |
| Fish crackers  |                   |              |                     |
|                |                   |              |                     |

### Suggested Breakfast items

Breakfast Bars, Granola Bars  
Pop Tarts  
Canned juice / Dry juice mixes  
Pancake Mix  
Granola Mix (see recipe)  
Powdered Milk  
Melba Toast  
Bakery Goods  
English Muffins w/ butter & Jam  
Fresh fruit - oranges - grapefruit  
Hard boiled eggs (done in advance)  
Milk gravy on pancakes  
Hot Chocolate  
Instant Oatmeal (add raisins, brown sugar)  
Instant Grits  
Sausage and bacon - precooked

### Suggested Lunch Items

Dried fruit  
Fresh fruit  
Triscuit – Wheat thins - pilot biscuits  
Cheese  
Squeeze Cheese  
Hard Boiled eggs (done in advance)  
Raw Carrots / Broccoli / Cauliflower  
Peanut Butter  
Salami or Sausage  
Meat sticks or Beef Jerky  
Canned chicken / SPAM / Tuna  
Spreadables / Vienna Sausages  
Canned turkey / Ham spreads  
Chocolate bars  
Chewy brownies or cookies  
Drink Mix

## Car Camping Suggestions

Car camping allows greater use of fresh foods. You can have elaborate kitchens and expanded menus. But it is a great time to try variety of cooking styles and techniques. Propane, open fire pit, or charcoal, it is still cooking. Try out those recipes before you leave home.

## One Pot Dinners

The first restaurants, as we know them today, were French soup kitchens. Workers and aristocrats would come into a shop and sit – rest – for a bowl of nutritious broth, instead of wine or tea. Broth began to have vegetables as soups. Soups became stews with braised meats – basically one pot meals. One pot meals are classics.

The idea is to create a stew or casserole in one pot. A mixture of starches, proteins, vegetables, and spices or a delectable sauce can become a grommet feast. The following combinations are examples. Use the Chart to help create your own specialties.

One pot dinners can be easy to prepare with a little thought before hand.

- Which foods need to cook longer? - Start them first.
- How much water is needed? Generally just cover the meat and vegetables. Vegetables release water when cooked, unless you want a soup, don't add too much water. Remember concentrated flavors taste better. Reducing the fluids by boiling will over cook the vegetables.
- Is the pot big enough? – a 4 1/2 quart pot will feed 8 people without over filling the pot.
- Try to maintain texture in the food. Mush is mush and no amount of spices will dress it up. Time what you add and when, harder vegetables (potatoes and carrots) and pasta take 20-25 minutes. Softer vegetables (fresh beans squash, onions, peppers) only need 10 -15 minutes.
- Plastic freezer bags can serve for carrying and mixing items such as instant potatoes. Reduce the cleanup; add the boiling water to the bag and mix. This works with quick rice as well.

## Directions:

1. Select and assemble your ingredients from the grocery store, camping outlet or food co-op. Amounts of each ingredient can be adjusted to suit individual preferences and appetites.
2. Determine the order of preparation based on the cooking times of each ingredient. Items with similar cooking times and methods may be dumped together in a plastic bag. Put the bulkiest or main items in a large bag, and put the other items in smaller bags and seal them. Place these smaller bags inside the large bag and seal it.
3. Check the instructions for each component to be sure you include any extra items such as butter, dry milk, etc. that are needed.
4. Decide how much water you need to start with based on what is needed for each ingredient.
5. Write instructions for each package in the meal down, based on the items determined above. Include order of preparation, cooking times, ingredients not included in the bags, etc.
6. Include the instructions for each package with the package. Include the instructions for the whole meal with the large bag, in addition to the instructions for that bag.
7. Label each bag. (i.e. Large bag can be labeled "dinner Day 3" with list of contents) Orange drink, chicken soup, Mac & cheese, chocolate pudding. You might include separate bags for

drink, soup, and pudding. Instructions can be written on bags with a marker that will not wash off or cut labels and directions from boxes and place in the bag.

## One Pot Dinners

Take one from each column

| BASE                   | VEGETABLE                         | MEAT                                | SAUCE                   | SPICE                | TOPPING          |
|------------------------|-----------------------------------|-------------------------------------|-------------------------|----------------------|------------------|
| Spaghetti              | <b>Fresh</b>                      | ground beef                         | cheese                  | oregano              | Nuts             |
| Thin Spaghetti         | Carrots                           | can beef                            | sour-cream              | herbs                | Bread<br>Crumbs  |
| Vermicelli             | Potatoes                          | can chicken                         | stroganoff              | sage                 | Sunflower seed   |
| Capellini              | summer squash                     | can turkey                          | spaghetti               | basil                | Pumpkin seeds    |
| Fettuccini             | Onions                            | dried chipped<br>beef               | dry soup mix            | salt, pepper         | Coconut          |
| Macaroni Ribbons       | Cauliflower – Broccoli            | can meat<br>spread                  | miso powder             | poultry<br>seasoning | Sesame seeds     |
| Egg Noodles            | <b>Frozen</b>                     | stew meat                           | gravy mixes             | garlic powder        | Margarine        |
| Linguine               | for short trips &<br>cold weather | hard salami                         | curry                   | onion powder         | Cheese           |
| Elbow Macaroni         | <b>freeze dried</b>               | Vienna sausage                      | sweet & sour            | chili powder         | Catsup packets   |
| Rotini                 | Peas                              | SPAM                                | au jus                  | butter buds          | Bacon bits       |
| Small Shells           | Green Beans                       | Jerky                               | teriyaki                | soy sauce            | Croutons         |
| Juniorettes            | Corn                              | Pepperoni                           |                         | <b>Bouillon</b>      | Dumplings        |
| Pasta Nuggets          | Carrots                           | <b>canned fish</b>                  | <b>thickeners</b>       | Chicken              | Butter           |
| Kluski noodles         | <b>home dried</b>                 | Clams                               | cornstarch              | Beef                 | Wheat germ       |
| Rigatoni               | Onions                            | Tuna                                | flour                   | Vegetable            | Dried fruit bits |
| Mostaccioli            | Mushrooms                         | Salmon                              | cornmeal                | <b>mixes</b>         | Raisins          |
| Ziti                   | Mixed vegetable<br>Flakes         | Sardines                            | <b>Soups</b>            | Chili                |                  |
| Ready-cut<br>Spaghetti | Soup blends                       | Crab                                | Cream of<br>Mushroom    | Taco                 |                  |
| Rotelle                | Pepper flakes                     | Shrimp                              | Tomato                  | Sloppy Joe           |                  |
| Rainbow Rotini         |                                   | <b>Vacuum pack<br/>foil wrapped</b> | Creamed Corn            |                      |                  |
| Medium Shells          | Celery flakes                     | Tuna                                | Tomato juice            |                      |                  |
| Cous Cous              | Canned onion rings                | Beef                                | Cream of<br>Celery soup |                      |                  |
| Acini di Pepe          |                                   | Chicken or<br>Turkey                | Cheddar<br>Cheese soup  |                      |                  |
| Rosmarina              |                                   | <b>freeze dried</b>                 |                         |                      |                  |
| A-B-C- noodles         |                                   | Ham                                 |                         |                      |                  |
| Rings                  | <b>box mixes</b>                  | Beef                                |                         |                      |                  |
| Ramen noodles          | ### Helper's                      | Chicken                             |                         |                      |                  |
| Quick Rice             | rice & ###                        | Shrimp                              |                         |                      |                  |
| Rice-A-Roni            | noodles & ###                     | dried fish                          |                         |                      |                  |
| Instant potatoes       |                                   | smoked fish                         |                         |                      |                  |
| Chow mein noodles      |                                   | bacon bar                           |                         |                      |                  |
| Stuffing               |                                   | <b>TVP</b>                          |                         |                      |                  |
| Mac & cheese           |                                   |                                     |                         |                      |                  |

## Mac and....

Kraft Foods Recipes

1 box macaroni and cheese, 1 can of tuna, chicken, or turkey, 1 small can vegetable. Cook the macaroni and add some onion flakes, drain and add the cheese mix, add the can meat and vegetable, add pepper. Heat and eat. ~ **4 servings**

| <b>MAC and .....</b>     | <b>1 cup Meat</b>     | <b>1 cup Vegetables</b> | <b>some EXTRAS</b>       |
|--------------------------|-----------------------|-------------------------|--------------------------|
| 1 box of<br>Mac & Cheese | ground beef           | Stewed tomatoes         | 1 t. chili powder        |
|                          | chicken               | broccoli                | 2 t. mustard             |
|                          | ham or SPAM           | red pepper              | 1/4 cup Miracle Whip     |
|                          | tuna                  | Peas                    | 1/4 t. Italian seasoning |
|                          | ground beef or turkey | peas & carrots          | 1/8 t. pepper            |

## Just a Minute....

*Minute Rice General Foods*

A cup of Minute Rice or other quick cooking rice can be made in a freezer bag. But add a equally quick instant soup mix and you can create a meal.

| <b>Rice</b>         | <b>Soup Mix</b>         | <b>Protein</b> |
|---------------------|-------------------------|----------------|
|                     | vegetable soup mix      | can tuna       |
| 1/2 cup Minute Rice | onion soup mix          | can ham        |
| = 1 serving         | chicken bouillon        | can chicken    |
|                     | gravy mix               | TVP            |
|                     | vegetable beef soup mix | can turkey     |

## Cooking at Altitude

The boiling point of water decreases with increasing elevation due to decreasing air pressure. The boiling point of water decreases 1 degree Centigrade for each 1,000 feet of elevation. Cooking times increase with increasing elevation at 6,000 feet to about 125% of the time needed to cook at sea level. Time is dependent on the type of food and the method of cooking.

## Water Boiling Temperature

| <b>Altitude</b> | <b>Fahrenheit</b> | <b>Celsius</b> |
|-----------------|-------------------|----------------|
| Sea Level       | 212               | 100            |
| 2,000 ft        | 208               | 98             |
| 5,000 ft        | 203               | 95             |
| 7,500 ft        | 198               | 92             |
| 10,000 ft       | 194               | 90             |
| 15,000 ft       | 185               | 85             |

Very high altitudes may increase boiling times to 30% more than at sea level. Therefore quick cooking foods such as minute or quick rice and instant noodle soups are easier to use than raw foods.

## Cooking with coals.

Coals are produced in two ways. Charcoal comes in bags not suited for backpacking but great for car camping. Place the Bag in a 5 gal. bucket to keep dry. The other method is producing coals from a wood fire. Hardwoods make better coals than softwoods such as pine. Twigs do not produce coals very well, if at all. 1 1/2 - 2 inch thick limbs make better coals. They are small enough to burn down, and large enough to make coals. The cooking can be done directly on the coals using foil wrapped food or Dutch Oven, or use a grate over the coals. The temperature can be determined by holding the back of your hand over the coals. Allow 30-40 minutes to get the coals ready before cooking

All Dutch oven cooking is done by hot coals, never in a flaming fire. The coals may be from hardwoods like oak and hickory or from charcoal. Hardwoods yield long-burning coals which are necessary for the lengthy cooking process in most Dutch oven recipes. Soft woods like pine are unsatisfactory.

Charcoal is more convenient to use and is necessary in areas where there is no downed hardwood. Use a fire pan under the coals to prevent killing ground cover. The pan can be metal or plywood with a thick layer of mineral soil (sand). Three or four stones can be used to prop up the pan above the ground.

The amount of charcoal needed will vary with the weather (wind and temperature). If it is windy or colder than 60 degrees increase the amount of coals by 1/3 with the same distribution (approximately 30 degrees per coal). Have more lighted for longer cooking times.

| Approximate Temperature | Type of Fire | 8" cast iron 12" |             |             |             | Hand Thermometer  |
|-------------------------|--------------|------------------|-------------|-------------|-------------|-------------------|
|                         |              | coals            |             | coals       |             | Seconds over fire |
|                         |              | Under / Top      | Under / Top | Under / Top | Under / Top |                   |
| 250-325 degrees         | Slow         | 2                | 4           | 3           | 5           | 6-8               |
| 325-400                 | Medium       | 3                | 5           | 4           | 6           | 4-5               |
| 400-500                 | Hot          | 4                | 6           | 5           | 7           | 2-3               |
| > 500                   | Very Hot     | 5                | 7           | 6           | 8           | 1                 |

As with any cook worth their "beans", each has their own methods of cooking and preparing items to be cooked. Almost all "Dutch Oven" cooks agree that coals should be placed both on top, and on the bottom of Dutch Ovens, but the real controversy is HOW MANY coals to put on. Some say that 8 coals on the bottom and 12 coals on the top will cook a cake to perfection in about 20 - 30 minutes, others of us believe in the 9 on bottom - 12 on top rule. In any case, experimentation with different numbers of coals, types of food, and whether or not it's on the Dutch oven directly, lined, or wrapped in aluminum foil will be the true test.

Basically anything a recipe calls for as baked, that will fit inside a Dutch oven, can be "baked" in a Dutch Oven. Use the chart as a basis for determining temperatures. Preheat the oven if the items are placed in inserts or pans inside the Dutch oven. Always rotate the Oven over the coals and the lid over the oven to insure even heating. Don't be afraid to look inside but keep it to a minimum the heat will escape.

To use the Dutch Oven to cook a batter mixed Cake in a pan - first placing three small rocks in the bottom of the Dutch Oven – preheat the oven. Then make up the cake mix according to the directions on the box, placed the contents in a small round cake pan, and placed the cake pan on top of the rocks in the Dutch oven. (This allows the heat to flow around the cake pan and cook the batter evenly) It takes approximately 30 minutes to cook. Almost any type of cake, biscuits, bread, cookies,

or brownies can be made in this way. The troop has inserts which will do the same thing. Dump cakes and cobblers can be cooked directly in the Dutch oven or (to reduce clean up) in a foil lining.

## How do I clean my Dutch oven?

I've heard you just scrape it out and turn it upside down in the fire. **Wrong!** That is how the early pioneers and mountain men cleaned their ovens. A Dutch oven can be cleaned like that, but it burns out all of the seasoning. And since we don't use them everyday they will rust.

Scrape the oven out, and boil an inch or two of water in the oven to steam it out. This also gives you time to eat with your guests. After the oven has steamed a while, scrub it with a green scrubby pad or a soft wire kitchen brush and pour out the water. Then wipe it dry and coat it lightly with a high temperature vegetable oil while the oven is still hot. Place a wadded up newspaper or a couple of paper towels inside the oven so they hang out a little. Then place the lid on the oven and put it away. The paper helps keep the lid slightly ajar for air movement. It also collects moisture to keep the oven dry.

## Look Mom no Pots!

### Dinner Items: Foil Meals

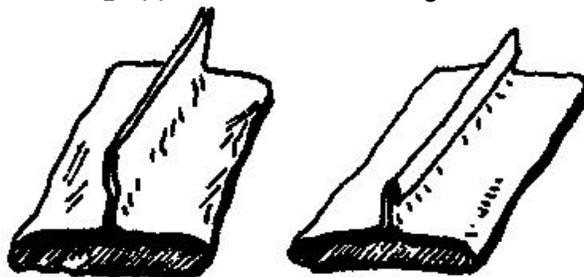
Hot meals are great but who wants to wash dishes. Try these **Foil meal ideas** or try a seal-a-meal or freezer zip bag in boiling water .

#### Drugstore wrap: *Not a Drug Rap..*

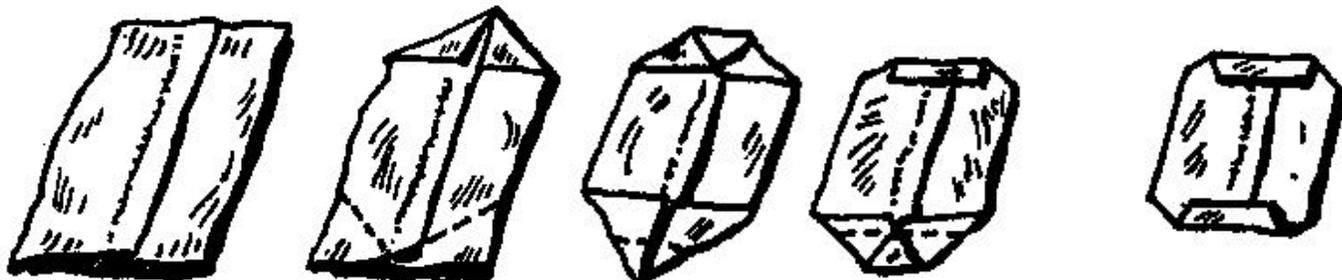
1. Cut 2 pieces of lightweight foil or 1 piece of heavy-duty foil, twice the circumference of the item to be wrapped.
2. Place food in middle of foil, shiny side in. Food must be moist or add 4 T. of fluid.



3. Bring opposite sides of foil together, and fold 1/2 inch, repeat turning down to item.



4. Flatten top of package, Fold corners of open ends in and roll ends in small folds into center. The edges must seal to keep steam in.



5. Use a permanent marker or nail polish to mark the pack. What's inside or who the dinner belongs to, are important coals and ash obscure regular pencil or felt marker.

For recipes suggestions and more on the technique visit the Reynolds Aluminum website: <http://www.reynoldskitchens.com/reynoldskitchens/kitchenconnection/search/results3.asp>

## Foil Box Ovens

Foil lined box ovens can be used to cook larger batches of biscuits, cookies and cakes than you can in Dutch Oven – at one time. Use this box oven only if the weather does not pose a risk of the oven blowing away. They are light and present a large area that can be tipped over or scattered in a moderate breeze. Weight the box oven down.

### Box Size

A fruit box or a paper supply box (10 reams size), the type where the top fits over the bottom is a practical, sturdy choice.

### Construction

Take a box, with the top on, and lay on one of the long sides. Cut around three sides of the box, leaving it attached on the long side on the bottom. This will be the oven "door"

Cover the interior and the "door" with heavy-duty foil, shiny side out. Tape in place on the outside of the box. Two layers of foil make a safer oven.

Find a rack that fits inside the box and support the rack on four **empty** cans. Empty fruit or soup cans are excellent – wash out the insides and remove the labels or your cookies will taste like burned paper or worse – soup. There must be sufficient space between the cans for a pie plate or multiple layered foil pan, which will hold the burning charcoal.

Devise a fastener for the door. A wire hoop on the door can be caught on a wire hook on the top of the box. An alternate method is to have the door open up, rather than down. In this case, the door would have to be held closed with a rock placed against the base of the door.

### To Use the Oven

Start charcoal on the pie plate or 4 or more sheets of foil folded with a rim – shiny side up, outside the oven, using as a rule of thumb one briquette for every 40°F wanted. When the briquettes are white, place pie plate and coals in the box oven. Care must be taken when handling hot coals and plate.

Use the hand thermometer technique to approximate the internal temperature.

After the oven has been preheated, add items to be baked. Timing is dependent on the amount of heat produced by the charcoal.

This oven is useful for cakes, biscuits, cookies and other baked goods with shorter time frames for cooking. Cook for amount of time called for in recipe. If cooking for much more than 30 minutes replenish charcoal. It may be necessary to add more charcoal (already started) to the oven tray.

Note: Be sure and lift box straight up or you will "dump" the heat. No peeking allowed! Anything you can cook in an oven at home can be done in a box though I prefer things that can be done in 30 min or so."

## **Box oven without the box**

When you don't have a box or empty cans but a good amount of foil, try this.

1. Pound four one inch + diameter by about 1.5 ft length sticks into the ground in the shape of a square about 1.5 – 2 feet per side and wrap them with heavy duty foil.
2. Wrap aluminum foil around stakes to make a box. Line the floor with foil. Make the leeward side have a slot to slide in the charcoal tray.
3. Drive three or four stakes into the ground through the foil floor to hold up the baking dish or biscuit pan.
4. Put the charcoal (already started) and tray inside.
5. Cover lightly to build up some heat.
6. Quickly place the baking dish and food inside the oven.
7. Drape 2 layers of foil over the top of the foil box and crimp to hold in place.

It looks kind of ugly but works pretty well for baking the biscuits and cookies or warming prepared foods. If you make it this way, you don't have to take up room with a bulky box.

# 7

## Cooking Hints

### Pre-Camp Advice

Get copies of your selected recipes. Read them twice at home and before shopping.

Do as much preparation as possible at home.

- Dice your onions, green peppers, etc. at home and store them in plastic bags. Place in the cooler before leaving.
- Pre-mix dry ingredients for cakes and breads.

Some yeast breads can be made 24 to 48 hours in advance if kept dry and cold before their second rise.

### Basic Cooking Tips

Follow the recipe and box directions to prepare food.

By using lids whenever possible, you will greatly reduce the cooking time required for many foods,

To cut down on grease in camp food, fry meats in a fine dusting of salt in the skillet instead of fat or shortening.

Vegetables such as celery carrots, radishes, cabbage, and lettuce will keep fresh longer if wrapped in foil and several layers of brown paper bag or paper toweling.

Pancakes are less likely to stick if you add a tablespoon of melted fat to each 1.5 cups of batter. They tend to be less tender and more like a waffle in texture, but the clean up is easier and won't tear or break as easy.

Bullion cubes can be substituted for meat stocks when making camp soup, stews, and gravies.

Stir pancake batter instead of beating it, and don't worry about the lumps. They will disappear. The same is true with muffin mix.

On a cold day, butter may be too hard to spread easily. Invert a heated bowl or pan over the butter dish for a few minutes. This will soften the butter but not melt it.

A piece of apple or orange inside a covered container of brown sugar will keep it soft. Do not leave this in the sugar for the next camp out. It will mold.

To keep salt shaker from spilling while traveling, Screw a piece of plastic wrap under the lid. Add a few grains of rice to keep it from clumping in moist weather.

Place bread in a shoe box to keep it from being smashed.

Lightly grease a cast-iron griddle before making first pancakes. Then rub a raw peeled potato to the warm griddle between batches. The starch and oil will add to the seasoning coating on the cast iron. This will produce golden brown flapjacks that will not stick.

Cheese cut in small strips or narrow slices will keep well in a covered glass jar.

A can or bottle can be used as a rolling pin.

Use fingernail polish to mark foil dinners. It won't burn off in the coals.

Vegetables can be warmed directly in their own can, but you must first open the lid part way to vent off steam. Otherwise, the can might explode.

A small soft drink bottle can be used as a potato masher.

A pinch of flour sprinkled on fat while frying will stop the spattering.

Removing a single strip of bacon from a package is difficult. Roll the packaged tightly. The slices will come off easily.

Slab bacon will keep without molding for long periods if first washed in water and a small amount of baking soda, then dried over a smoky fire.

Biscuits, breads and corn cakes which are dried out can be freshened by placing in a brown paper bag after sprinkling lightly with water. Place the bag near the heat or in a reflector oven for a few minutes.

If vegetables or cereal scorch, plunge the pan and all into cold water for a few minutes. Much of the burned taste will be dissipated.

If your stew or gravy is too salty, cut pieces of raw potato and add to the mix. Remove after a few minutes - before they cook entirely. The potato will absorb the salt.

Use plastic bags for mixing foods. You can cook dehydrated foods in freezer weight zip bags.

A maple syrup substitute can be made by heating brown sugar and a little water while stirring constantly.

Keep water boiled over a wood fire free of that smoky taste by throwing a clean sliver of wood into the water while you're boiling it.

The day is hot and breezy and you want to keep your drinking water cold. Wrap the water container in a wet cloth and hang it in the open from a branch of a tree. It's good as putting it in a regular refrigerator

When you've finished cooking, set your cook pot off to one side. Perhaps if you give them their own plate, the bees, wasps, flies and other pests will stay away from yours.

Avoid "burnt offerings from a Dutch oven by placing the baking pan 4 to 5 cm above the bottom of the oven.

To refresh a pack of marshmallows place them in a brown paper bag and place in a warm oven for a few minutes.

To keep marshmallows from burning dip them in water before holding them over the flame.

Cover the ice in a picnic cooler with foil to help it last longer. Keep the water in your canteen cooler by wrapping the canteen in foil.

Toast sandwiches by wrapping them in a foil envelope and placing them on the embers or a hot plate for a few seconds.

Because foil-wrapped foods tend to scorch where they are in direct contact with the coals, use a double wrapping of heavy duty foil and turn food frequently during cooking.

To make a sprinkler top for vinegar or oil bottle, shape a piece of foil over the bottle opening, secure with a rubber band, and punch small holes in the foil.

## **Tips about eggs**

Use foil ring dividers for frying eggs. Put rings in the greased pan and drop eggs into each ring.

Eggs can be removed from the shell, whole, and stored in an oiled jar with lid. They won't break and can still be poured out one at a time – as long as they are cold.

You say that some of the eggs you carried along acquired a crack en route? You can still boil them successfully if you first wrap them in tissue, Use string to tie the tissue closed like a purse around the egg.

Adding a pinch or two of salt to water when boiling a cracked egg will prevent the whites from running out, or wrap the eggs tightly in aluminum foil.

If you carry along eggs, avoid cracks (and worse) by packing them in your flour or sugar.

Eggs dipped in boiling water for 10 seconds will last for weeks in a camp ice chest.

To check if an egg is fresh place it in water, if it sinks it is fresh. If it floats it is bad.

Boiled eggs spin like tops fresh eggs won't.

Store eggs with large end up, they will stay fresh longer.

## **Clean Up**

Soap the bottom and side of your pots and pans before putting on the fire. This will reduce the amount of scouring you will need to do when cleaning up. Liquid soap is easier to use than bar soap.

Wipe dishes and pans with a paper towel, to get the grease off before cleaning.

Save clean-up time by lining casserole, baking and frying pan with heavy duty foil before cooking in them.

When it is time for washing up, a crumpled ball of foil makes an excellent scouring pad for pots and pans.

If you burn the inside of a cook pot, shake cream of tarter into the pot, fill with water and bring to a boil. Boil for a few minutes, pour out water, and wipe clean.

If you're having a problem cleaning a pan, rub the area with salt.

Take the backache out of washing messy pans by always filling used pans with cold water straight away.

A little vinegar or lemon juice will remove onion and fish odor from a skillet.

To remove fishy odor from your hands, rub a little vinegar or lemon juice on them and rinse with cold water.

A little dab of butter in oatmeal while it's cooking will make pot easier to clean.

Enjoy scrambled eggs but don't get stuck with a hard-to-clean pan. Rinse it out with cold water first and leave a very thin layer of water at the bottom before adding egg.

### **Camper's measurements without utensils** (It's worth repeating)

|                              |   |              |
|------------------------------|---|--------------|
| 1 Open Fistful               | = | 1/2 cup      |
| Five-Finger Pinch            | = | 1 Tablespoon |
| Four-Finger Pinch            | = | 1 Teaspoon   |
| One-Finger Pinch(with thumb) | = | 1/8 Teaspoon |
| One-Finger Gob of shortening | = | 1 Tablespoon |
| Palm of hand (center)        | = | 1 Tablespoon |

# APPENDIX

## ADDITIONAL READING

*\* Available at a reasonable price at the Scout Shop*

\* Camp Cookery for Small Groups, Arthur J. Walrath, ed., 1967, BSA

\* Dutch Oven Cooking, John G. Ragsdale

\* Camper's Guide to Outdoor Cooking, John G. Ragsdale,

\* Merit Badge books: Cooking, Camping, Backpacking

\* Outdoor Skills Instruction manuals Cooking, Camping, Backpacking

\* Venture manuals: Winter Camping, Backpacking, Canoe Camping

\* Woods Wisdom

\* Boy Scout Roundtable Planning Guide

\* Fieldbook - Boy Scouts of America

Axcell, Claudia; Simple Foods for the Pack; Sierra Club; 1986

Baker, Harriett; Supermarket Backpacker; Contemporary Books, Inc.; 1977

Baker, Harriett; The One Burner Gourmet, Contemporary Books, Inc.; 1981

Dutch Oven Outdoor Cooking, *Y2K Edition* \$12.95 plus \$2.00 S&H for the first book. Add \$1.50 S&H for each additional cookbook.; WH Publishing; P.O. 824; American Fork, UT 84003

Fleming, June, 1986, The Well Fed Backpacker, Vintage Books

Miller, Dorcas S.: BACKPACKER – More Backcountry Cooking; The Mountaineers, 1001 SW Klickitat Way, Suite 201, Seattle, WA 98134; \$16.95

Ririe, Robert L.; Let's Cook Dutch, A Complete Guide for the Dutch Oven Chef; Horizon Publishers and Distributors, Inc., 1979

Thomas, Dian; Roughing It Easy; 2nd edition; 1994,

Ubaldi, Jack; Meat Book, A Butcher's Guide to Buying, Cutting and Cooking Meat; Macmillan Publishing Co., New York; 1987

Viehman, John; Trailside's Trail Food , Rodale Press; 1993

Zayac, Roger and Annette; Texas Campground Guide and Cookbook; TGI Printed, Inc., PO Box 370 Bacliff, TX. 78006

## WEB SITES

## **Dutch Oven Cooking**

MacScouter -- Scouting Resources Online <http://www.macscouter.com/Cooking/DutchOven.html>  
Mike Audleman's Dutch Oven Cookbook v 2.3.

Happy Camper - <http://www.ahappycamper.com> Source for Dutch ovens, cook books and other supplies.

International Dutch Oven Society - <http://www.idos.com/> Non-profit organization based in Logan, Utah whose mission is to promote Dutch oven cooking.

Just Crockpot Recipes - <http://www.justcrockpotrecipes.com/> Features archive with large chicken, beef, soup, chili, chowder and turkey recipes indexes that adapt well to cooking in a Dutch oven.

Camp Chef Dutch Ovens - <http://www.campchef.com> The Ultimate Dutch Oven is the hottest, fastest cooking accessory on the market. Combining old-style outdoor flavor and modern cooking technology, this advanced cast iron black pot is quickly becoming known as "the outdoor microwave." Recipes at <http://www.iliveoutdoors.com/recipes/index.php>

Dutch Oven Cooking Information and Recipes - <http://www.isu.edu/outdoor/dutch.html>  
Dutch Oven Cooking is Back! Dutch Oven information and tasty recipes.

Lone Star Dutch Oven Society - <http://www.lsdos.com/> Home of Lone Star Dutch Oven Society. Dedicated to promoting Dutch Oven Cooking in Texas.

Cookoff Locations - <http://www.idos.com/Locations/locate.html> Calendar of Dutch oven cook-offs. Maintained by the International Dutch Oven Society.

Outdoor Cooking with the Dutch Oven - <http://www.outdoorcampus.org/kidscan.htm> Outdoor Cooking recipes for Dutch ovens, camping, wild game recipes and easy camping recipes for kids.

Cee Dub Dutch Oven and Camp Cooking - <http://www.ceedubs.com/> Recipes, Dutch ovens and equipment, videos, books, classes. \$18.95

Just Dutch Oven Recipes - <http://www.justdutchovenrecipes.com/index.shtml> Dutch oven recipes in over 20 categories.

Lodge Cast Iron - <http://www.lodgemfg.com/> Manufacturer of camp cookware offers Dutch oven recipes.

## **General Recipes**

Better Homes and Gardens <http://www.bhg.com/bhg/recipe/>

Just Recipes

<http://www.melborponsti.com> – [www.kitchenmixes.com](http://www.kitchenmixes.com) – <http://www.kitchenmixes.com>

Recipe Goldmine - <http://www.recipegoldmine.com>

RecipeSource - <http://www.recipesource.com/>

Recipe zaar - <http://www.recipezaar.com>

Camping Recipes from the Camping Source

[http://www.thecampingsource.com/Delicious\\_recipes.htm](http://www.thecampingsource.com/Delicious_recipes.htm) Feel free to search our online recipes.

They are sorted by category such as main dish, beverage, dessert and such. Submit your favorite recipes and you may win a free Camping Source tee-shirt.

## **FREQUENTLY ASKED QUESTIONS ABOUT the NEW FOOD GUIDANCE SYSTEM - 2005**

### **What is the relationship between the Dietary Guidelines and MyPyramid?**

- The *Dietary Guidelines for Americans* represent federal nutrition policy.
- MyPyramid is the educational tool designed to help consumers make healthier food and physical activity choices for a healthy lifestyle that are consistent with the guidelines.
- The U.S. Departments of Agriculture (USDA) and Health and Human Services (HHS) publish the Dietary Guidelines for Americans, first released in 1980 and revised in 1985, 1990, 1995, 2000 and most recently in January 2005, jointly.
- MyPyramid translates the principles of the *2005 Dietary Guidelines for Americans* and other nutritional standards to assist consumers in making healthier food and physical activity choices.
- MyPyramid was developed and issued by USDA.

### **The MyPyramid symbol in its simplest form has no foods pictured in it. How will consumers know what to eat?**

- One symbol can't carry all the nutrition guidance. The new symbol was designed to be simple. It reminds consumers to make healthy food and physical activity choices and be physically active every day. Each person has a Pyramid that is right for them based on their age, sex and physical activity level. Consumers are encouraged to find out what they need to eat each day and their physical activity level at [MyPyramid.gov](http://MyPyramid.gov).

### **Why revise the original Pyramid?**

- USDA has been providing nutrition guidance for over 100 years. USDA released the original Food Guide Pyramid in 1992. MyPyramid reflects the most current science; and the updated tools are designed for ease of use by consumers.

### **What's different about MyPyramid?**

- The MyPyramid symbol is one part of the food guidance system, an update to the Food Guide Pyramid. The new MyPyramid offers consumers a more personalized approach to healthy eating and physical activity.

### **What is the food guidance system?**

- The food guidance system is MyPyramid. The name food guidance system was used as a working title before the name MyPyramid was selected. MyPyramid is made up of motivational and educational tools designed to help consumers make healthier food choices. The motivational tools are the new MyPyramid symbol and slogan, "Steps to a Healthier You." The educational tools are the educational framework, consumer messages found on the new poster and the interactive activities that will help consumers find the Pyramid that is right for them. These tools provide personalization and information on demand.

### **What are discretionary calories?**

- Individuals need a certain number of calories to keep their bodies functioning and to provide energy for physical activities – this is the total energy requirement. The energy requirement depends upon a person's age, gender, body size and physical activity level. If

an individual chose to eat all foods in their lowest fat form and with no added sugars, they could meet their nutrient needs using fewer calories than the calories in their total energy requirement. This would leave a remaining balance of calories needed to meet energy needs, but not needed to meet specific nutrient needs. This balance is the discretionary calorie allowance. In other words, the discretionary calorie allowance is the balance of calories remaining in a person's total energy requirement after accounting for the calories needed to meet nutrient needs by eating foods in low-fat or no added sugar forms.

- Each person has an allowance for some discretionary calories, but most discretionary calorie allowances are very small, between 100 and 300 calories, especially for those who are not physically active. The discretionary calorie allowance can be used to increase the amount of nutrient-dense foods or to select foods that are not in their most nutrient-dense form, sweetened beverages, additional foods, or additions to foods (e.g., salad dressing, sugar, butter). For many people, the discretionary calorie allowance is totally used by the foods they choose in each food group.

#### **What are the shortfalls of the American diet?**

- The American diet is not in balance. On average, Americans don't eat enough dark greens, orange vegetables and legumes, fruits, whole grains and low-fat milk products. They eat more fats and added sugars. To bring the diet into balance, MyPyramid recommends eating more of the under-consumed foods and less solid fats, added sugars, and caloric sweeteners and foods rich in these.

#### **How do you use the Food Guidance System?**

- There are many ways to use the Food Guidance System. One way is to follow the food group recommendations found on the [MyPyramid.gov](http://MyPyramid.gov) Web site or on the poster. Also, consumers can find out what and how much they need to eat each day by going to the Web site and plugging in their height, weight and age to get more personal recommendations. For consumers who want to evaluate their current diet and physical activity pattern, they can go to the Web site and click on the MyPyramid Tracker.

#### **Does MyPyramid address the obesity epidemic?**

- USDA is committed to combating obesity. MyPyramid helps consumers find the right amount of food needed to balance with their daily physical activity.
- MyPyramid encourages consumers to shift their focus on more nutrient-dense foods that are now under-consumed. This should help them meet their nutrient needs within their calorie level.