

EMERGENCY FOOD PREPARATION

During wartime or a natural disaster, food shortages and lack of natural gas or electricity for cooking requires a great deal of improvisation and reliance upon back-to-basics cooking techniques used by our forefathers in order to survive. In an emergency it helps to know what to do with all the wheat, rice, cornmeal, sugar, molasses, vegetable oil and dried beans, milk, fruits and vegetables which you've wisely cached along with firewood or cooking fuel. Colonial, pioneer and nineteenth century military cooking methods and recipes are useful when preparing meals from simple cached staples. Many of the recipes included in this information paper don't need perishables like meat, eggs or yeast which you might not have. Recipes for the modern kitchen with a temperature controlled oven will naturally have to be adjusted by trial and error if you are baking in a clay oven in the field or cooking over a campfire. Improvisation is called for to substitute what is available. For example if a recipe calls for bacon drippings, you can use any cooking fat like lard, margarine, butter, vegetable oil or shortening. Butter Flavor Crisco can be used in most recipes, doesn't require refrigeration and is available in easy to measure sticks. The interaction between a sweetener, baking soda and buttermilk or sour milk (which you can make by adding a little vinegar to reconstituted dry milk; 1 tablespoon per cup of milk and let stand 5 minutes) can substitute for yeast if none is available. White hardwood ashes can replace baking powder as a leavening agent. Honey, molasses or syrups can be substituted for sugar in most recipes by using less water (1 cup honey = 1-1/4 cup sugar plus 1/4 cup liquid). Use whatever dried fruit is available regardless of what the recipe calls for. Experimentation is the order of the day. If you remember to add spices in stages (they can't be removed if you use too much) and if all of the ingredients you use are food, then the chances are the end result will be edible (especially if you are hungry enough).

Sources of Recipes. Living history reenactors of the American Revolution and the War of Northern Aggression take great delight in recreating authentic army meals around their campfires and hardcore reenactors actually eat the mess. Patricia B. Mitchell has published a series of cookbooks (available from Sims-Mitchell House Bed & Breakfast, 242 Whittle Street SW, P.O. Box 429, Chatham, VA 24531) to make this task easier and many excerpts from her books "Revolutionary Recipes," "Union Army Camp Cooking," "Confederate Camp Cooking," "Confederate Home Cooking" and "Cooking for the Cause" are included in this paper. Some recipes have been included from "Colonial Treasure Cookbook" (Hutcraft, High Point, NC 27262) and from "Colonial Fireplace Cooking & Early American Recipes" (Shoestring Press, 430 N. Harrison, East Lansing, MI 48823). Regional cookbooks, especially from the South, are a source of recipes for nutritional meals from simple foods. Recipes have been included from

various southern cookbooks including "Cookin' Yankees Ain't Et" (The Merry Mountaineers, Highlands, NC 28741), "Southern Recipes" and "Piggin' Out in Dixie" (Southern Cookbooks, P.O. Box 100905, Nashville, TN 37224). Recipes and field cooking techniques have also been excerpted from "The Green Beret Gourmet" (The Guttenberg Press Publications, P.O. Box 973, Rockledge, FL 32955). Some quick bread recipes which don't require yeast come from "Sunset Breads" (Sunset Publishing Corp., Menlo Park, CA 94025), a cookbook with recipes from all over the world. If you have active dry yeast or sourdough starter, this book is an excellent reference for other bread recipes not included in this paper. Vegetarian cookbooks should also be a good source of survival recipes, but being a confirmed carnivore, the writer of this paper has no personal knowledge of any such books. Backpacking books are also an excellent source of field cooking techniques and recipes. There is a chapter on field nutrition and camp cooking as well as an extensive appendix of recipes in "The National Outdoor Leadership School's Wilderness Guide" (Simon & Schuster, Inc., Simon & Schuster Building, Rockefeller Center, 1230 Avenue of the Americas, New York, NY 10020). "Roughing It Easy" by Dian Thomas (The Dian Thomas Company, P.O. Box 171107, Holladay, UT 84117; 1-800-846-6355) is a comprehensive collection of outdoor cooking recipes and techniques, including many variations on improvised tin can stoves and ovens, pit and open fire cooking, dutch oven cooking, building a solar reflector cooker or solar oven and a section on drying fruits, vegetables and jerky.

The Improvised Kitchen. You should have a camping stove for emergency cooking purposes. Two-burner stoves are useful in a fixed location or if you are vehicle mobile. Propane stoves are easy to use but fuel is expensive, the high pressure steel canisters are heavy and not likely to be widely available during a long-term emergency. A multifuel stove capable of using either white gas (lantern fuel or Coleman fuel) or ordinary gasoline is easier to resupply in an emergency. However, gasoline burns hotter than propane and is not as useful for low heat simmering of foods, so it might be wise to have both types of stove. If you are in a fixed location like a survival retreat or base camp, nothing beats a cast iron skillet, covered kettle and especially a dutch oven for open fire or hot coal cooking. An excellent configuration for a cooking fire is the keyhole type. Build a fire ring of rocks with a rectangular extension, build a fire in the circular part and coals can be raked or shoveled into the rectangular cooking area as needed. A grill or griddle can be supported over the rectangular cooking area (bricks can be used instead of rocks here for more stability) or the area can be used with a dutch oven. A metal tripod (or one fashioned from green branches) to hang a kettle can be used for boiling water or directly cooking over the flames in the circular part of the fire ring. The book "Roughing It Easy" shows how useful heavy duty aluminum foil is for outdoor cooking; stock up. Also, if you store food in large #10 cans (1 gallon) or in five gallon square cans, get this book and a pair of tin snips to convert the empty cans into many useful stove and oven variations. A cookie cooling rack can be used over a small pit of coals or an improvised #10 can barbecue. A grill and dutch oven can be arranged to allow simultaneous use as a baking oven and for frying. Dig a shallow hole 9 to 12 inches in diameter and 3 to 4 inches deep; place coals or charcoal briquets in the hole and place the grill across the hole; put the pan containing the item to be baked on the grill and cover with

an inverted dutch oven; place coals on the base of the dutch oven which is now the top; place the inverted dutch oven lid on the base tripod legs and it becomes a griddle for frying foods. Another useful accessory for either base camp cooking or for use in the field is a folding pack grill. Such a grill can be used for directly broiling meats, as a stand over the coals for a skillet, griddle or a stock pot (used for soups and stews, as a steamer or as an oven for baking or roasting), as a reflector oven (using disposable aluminum cooking pans for reflectors), as a stand for an inverted dutch oven lid allowing it to be used for frying, as a dirt free stand for placing a dutch oven lid when adding ingredients to or checking the progress of food in the oven and as a stand away from the fire for serving or for safely adding ingredients without burning yourself or spilling the food. The Coghlan's brand pack grill is cheap enough (about \$3 to \$4 in discount stores) that several can be purchased for use in a base camp. A single pack grill and a lightweight nesting cooking set or GI mess kit can be carried in your rucksack to simplify field cooking. You can also add a folding pocket stove or GI canteen cup stand and solid fuel tablets to your rucksack for reheating prepared foods or preparing hot beverages like instant soup, coffee, tea or cocoa.

To ease the cleanup chore when reheating cooked food, immerse the food container (can, MRE pouch, vacuum seal bag or freezer bag) in boiling water in your cooking pot; pierce the food container above the water line so it doesn't explode. In the field this method of heating food reduces cooking odors and lessens the chance of giving away your unit's position to enemy scouts. A single-burner butane or multifuel backpacking stove can be shared between two or three people. Most butane cartridges nowadays are filled with iso-butane which can be used down to about 20 degrees but, like with two-burner camp stoves, a multifuel stove is easier to resupply. Get an extra GI canteen cover and you can carry your stove attached to the side of your GI rucksack. If you are on the move without a vehicle or pack animals to carry heavy cooking vessels like cast iron skillets and dutch ovens (or in case you get separated from your well stocked rucksack), here are some of the many other ways of cooking food using natural materials described in "The Green Beret Gourmet":

Clay Ovens: Construct an arched structure of green sticks (similar in shape to a beehive), insert a thick stick vertically through the top to form a flue opening and daub with wet clay until it is completely covered except for a front opening. Pile on successive layers of clay until a thick wall is made. Allow the layers to dry between applications by either placing hot coals inside or, if time is not a problem, by the sun. If each layer is not thoroughly dry, the oven will crack when you try to use it. A clay oven can also be made by hammering a thick sharpened stick down through a bank or slope about three feet back from the edge. Scoop out the size of the oven you want about a foot or so down the bank. Leave a thick ceiling. Leave a narrow front opening and dig back and hollow the bank as far as the stick which you hammered down. Pull the stick out to form the chimney opening. Wet your hands and smooth the interior surfaces, then harden the walls by building a small fire inside. After your oven is prepared, to use it build a fire inside. When the fire has burned down, scrape out the coals and ashes. Lay food inside on stones, leaves or hardwood slabs. Close off the front opening and flue. Leave food inside to cook. Cooking time depends upon the type of food being cooked.

Cooking in Natural Containers: A stone with a hollow in it makes an excellent container. If it is small enough you can build a fire around the stone. Bark can be used to fashion pots to boil water, cook soups, stews or any foods with liquids over a fire. Peel a square of bark and fold the corners inward and hold them in place with wooden pegs. Keep the flames from touching your bark pot above the liquid level and your meal will cook in this simple container. Large leaves make an instant "aluminum foil" when baking or steaming food, but be sure to use edible nonpoisonous leaves.

Baking in Clay. This method is excellent for small game or fish. Remove the entrails from the animal being prepared. This is easiest to do if the animal is already dead. Do not skin, pluck or scale. Cover with a layer of clay about an inch thick. Place it in hot ashes and build a fire above it. Cooking time varies with animal size and taste preference. A one pound animal will be cooked in approximately 30 to 40 minutes. The meat will be stripped clean of fur, feathers or scales when you break off the clay.

Baking on a Stick. Heat a peeled green stick by the fire while you prepare a bread dough. Mix a GI canteen cup of flour with a mound of baking powder the size of a quarter and a dash of salt. Add water gradually to make a soft dough. Work quickly so the bread will rise as it bakes. Wrap dough around heated stick and place upright next to the fire to let it bake.

Cooking in Ashes. Foodstuff is placed in warm ashes and then covered with embers. Self-contained foods such as vegetables do not need to be wrapped in anything; simply place them in the ashes and dust them off after cooking. Cooking time depends upon the type of food and personal preferences. You can test vegetables by feeling for softness and putting them back if they still feel firm.

Cooking on Wood Slabs. Select a green hardwood slab (evergreens season the food with a pine or turpentine taste) large enough to lash or peg the animal. Fish and very small game can be successfully cooked this way. Clean the animal and flatten down on the slab. Either pin the animal down with wooden pegs or lash to the slab with whatever is available. Lean the slab up in front of glowing coals. Turn a few times so the food will cook evenly. This recipe comes from Richmond, Virginia in the Confederate States of America when Yankee invaders were marauding and food was in short supply:

Roasted Rat The rat must be skinned, cleaned, his head cut off and his body laid upon a square board, the legs stretched to their full extent and secured upon it with small tacks, then baste with bacon fat and roast before a good fire quickly like canvasback ducks.

Broiling on a Stick. This is a good method for cooking a small amount of food. Fish, birds and small animals (large animals must be cut into smaller chunks) can be cleaned and then skewered on a peeled green wood stick. If the food tends to slide, a bark twine can be used to tie

it down by splitting the wood down to the game on both ends and twisting bark through the splits. Sear the meat in the flame to seal in the juices. The skewer can be laid over forked green sticks at both ends of an ember bed. As long as the fire does not flame up, the meat needs only occasional turning so it cooks evenly.

Steaming in a Hole. This method can be used to cook small or enormous amounts of food with great results. Build a fire and place some stones in it to heat. Don't select rocks from a stream bed, limestone or sandstone since they can contain trapped moisture and may explode when heated. While the stones are heating, dig a hole. Put the stones in the pit and place a thick layer of wet vegetation like grass or seaweed over them. Lay the food on top of the wet vegetation and place a stick near the edge of the pit. Fill with dirt. Pull the stick out and pour water down this opening onto the rocks to steam the food. Tamp down the top and leave the food to steam for at least two or three hours. If you are cooking something larger than fish or small game, the cooking time will need to be extended.

Grilling. Meat can be grilled over the coals if it is fat. Lean game will end up very dry. Build a bed of hardwood embers and place a grill matting of green sticks on it. Place the meat on the grill and turn immediately after the sides are seared to seal in the juices. Try not to pierce the meat with whatever you are turning it with so you don't lose any juices. Keep a small container of water nearby to douse any flames that surface from the fat drippings.

Fire Cake and Hoe Cakes. One of the easiest ways of making flour edible, even if not very appetizing, is to make a simple dough and fry or bake it over a fire. During the Revolutionary War it was common for soldiers to make a thick paste of flour and water (salt was added when available) and then bake it on hot rocks around a campfire. The result was an unpalatable, chewy, soggy glob which only the starving soldiers at Valley Forge probably appreciated. Hoe cakes were made from a corn meal dough carried to the fields by slaves and other farm workers. At lunch they cleaned their hoes, put the dough on them and cooked it over a fire.

Entrenching Tool Cake 4 GI canteen cups white cornmeal boiling water 1 GI mess kit spoon (1 tablespoon) bacon drippings 1 GI mess kit spoon salt Scald cornmeal with enough boiling water to make a stiff batter, then add bacon drippings and salt. Shape into pones, leaving the imprint of four fingers across top. Place batter on the cleaned, greased blade of an entrenching tool and set up next to fire to bake.

Corn Pone 2 cups cornmeal

3/4 tsp. salt (or less) boiling water 2 tbsp. butter or margarine, melted; or vegetable oil Combine all ingredients to make a semi-stiff mush. Spread 1/4-inch thick in a well-greased heavy pan and bake at 375 degrees 20 to 25 minutes. (Corn pones used to be baked on a greased shovel over glowing coals.)

Hardtack. During the War for Southern Independence, hardtack was a staple food (when fresh bread was unavailable) for both the brutal soldiers of the oppressive Federal government and the brave Confederate patriots defending their homeland. Hardtack was a virtually indestructible 1/2-inch thick cracker about three inches by three inches, pierced with sixteen holes and made from flour and water. Tack was a contemptuous term for food and the soldiers "affectionately" referred to hardtack as worm castles, sheet iron crackers and tooth dullers. Some of the hardtack issued to soldiers in the 1860's was supposedly left over from the 1846-48 Mexican War. The daily ration was nine or ten crackers, but there was usually enough for those who wanted more since some men would not draw a full ration. They were eaten plain, soaked in coffee or crumbled and added to the stew pot. A dish known as Skillygalee was made by soaking hardtack in cold water and then browning it in pork fat and seasoning to taste. A favorite seasoning of the times was cayenne pepper. Confederate Cushman provided a dinner entree that consisted of bits of cooked beef, seasoned with garlic, fried in bacon grease and then stewed with crumbled hardtack or cornmeal mush. The crackers included in military C-rations and the current MREs are similar to hardtack, being much more dense, containing more flour and less air than commercial saltine crackers. When fresh, hardtack was not unappetizing, but when boxes of hardtack sat on railroad platforms or warehouses for months before being issued it hardened and often became insect infested. Because hardtack was packed in boxes marked "B.C." (probably for "Brigade Commissary"), soldiers said they were so hard because they were baked "Before Christ". The following account from a Yankee invader indicates how much hardtack was appreciated:

"While before Petersburg, doing siege work in the summer of 1864, our men had wormy hardtack, or ship's biscuit, served out to them for a time. It was a severe trial, and it tested the temper of the men. Breaking open the biscuit and finding live worms in them, they would throw the pieces in the trenches where they were doing duty day by day, although the orders were to keep the trenches clean for sanitary reasons. A brigade officer of the day, seeing some of the scraps along our front, called out sharply to our men 'Throw that hardtack out of the trenches.' Then, as the men promptly gathered it up as directed, he added, 'Don't you know that you've no business to throw hardtack in the trenches? Haven't you been told that often enough?' Out from the injured soldier heart there came the reasonable explanation 'We've thrown it out two or three times, sir, but it crawls back.'"

Hardtack (original 1860's recipe) Use one part water to six parts flour. Roll dough flat and score into cracker shapes. Bake 20-25 minutes and cool off until completely dry before storing in canisters. The crackers should be hard as bricks and indestructibly unappetizing. If not consumed by hungry soldiers, the crackers might last at least until the Lord returns!

The following recipes don't duplicate the indestructible nature of 19th century hardtack, but they are more appetizing since they are made from more than just flour and water:

Corntack 1-1/4 cups cornmeal 1 cup water (about) 1/2 tsp. salt 2 tbsp. vegetable oil Combine the above ingredients, using enough water to moisten. Bake in a greased 7x11-inch pan at 375 degrees for around 15 minutes, or until the edges begin to brown slightly. While still warm, cut into squares. A modern day cross between hardtack and cornbread, these thick crackers are actually pleasantly tasty served warm or reheated.

Swedish Hardtack 1 cup water 3 tbsp. vegetable oil 3 tbsp. honey 3 cups rye flour (or 1-1/2 cups rye & 1-1/2 cups whole wheat flour) 1-1/2 tbsp. brewer's yeast (optional) 1/4 tsp. salt Mix liquids together. In a separate bowl, mix dry ingredients. Combine the mixtures, stirring to moisten throughout. Form a ball. On a floured surface, flatten the dough, and roll out thinly. Cut into squares and prick each cracker with the tines of a fork a couple of times. Transfer to lightly greased baking sheets. Bake at 425 degrees around 8 minutes, checking to be sure not to over-brown. Best served warm.

Southern Soda Crackers 2 cups flour (preferably whole wheat) 1/4 tsp. salt 1/2 tsp. baking soda 2 tbsp. oil 2/3 cup sour milk (or buttermilk) Mix dry ingredients. Add oil and sour milk. With a fork, stir to thoroughly moisten. Form a ball. Flatten and roll out on a floured surface. Cut into squares and transfer to lightly greased baked sheets. Prick crackers with a fork. Bake at 350 degrees for about 8-10 minutes, watching vigilantly so as not to burn. Best served warm.

Cornbread. Red meats are complete proteins containing all of the essential amino acids needed by the body to build and maintain muscle and other tissues. Most vegetables don't contain all of the necessary amino acids (although soybeans contain most) and are referred to as incomplete proteins. The Confederate army marched and fought on a staple diet of cornbread and beans, combining incomplete proteins to provide good nutrition.

Southern Cornbread 2 cups cornmeal 1/2 tsp. salt 1/2 tsp. baking soda 2 tsp. baking powder 1-1/4 cups buttermilk (or sour milk) 1 egg, well beaten

1/4 cup melted grease (your choice) Preheat oven at 425 degrees. Mix cornmeal, salt, soda, baking powder and sugar. Add buttermilk and egg. Blend well. Heat grease (until it almost smokes) in an 8 or 9 inch iron skillet, then pour most of the grease into the batter and stir, mixing well. Pour batter into the very hot skillet. Bake for 20 to 25 minutes, or until nicely browned.

Molasses Cornbread or Muffins 1-1/2 cups bran 1 cup all-purpose flour 1/2 cup cornmeal 1 tbsp. baking powder 1/4 tsp. salt 1/4 cup sugar 1/3 cup vegetable oil 2 eggs, beaten 1 cup milk 1/3 cup molasses Combine dry ingredients. Add liquid and blend well. Pour into a greased 9x9x2-inch baking dish and bake at 375 degrees for 30 minutes; or pour into 18 greased muffin tins and bake at 375 degrees for 20 minutes.

Grandma Sarah's Cornbread 1-1/2 cups sour milk or buttermilk 2 eggs 1 tbsp. sugar 1/2 tsp. salt 1/2 tsp. baking soda 1-1/2 cups cornmeal 1/2 cup flour 1/4 cup melted butter Combine first five ingredients. Stir in cornmeal and flour. Add melted butter. Pour batter into greased 8-inch square pan. Bake at 425 degrees for 30 minutes.

A Lady's Touch Cornbread 1 cup cornmeal 1 cup whole wheat, unbleached or all-purpose flour 2 tbsp. sugar (optional)

1 tbsp. baking powder 1/4 to 1/2 tsp. salt 1 egg, beaten (optional)

3 tbsp. vegetable oil 1-1/4 cup milk Combine the dry ingredients. Stir in the liquids and spoon into a greased 8-inch square pyrex dish. Bake at 400 degrees for 20 minutes. The recipe can be easily doubled and baked in a 9x13-inch pyrex dish.

Country Sunshine Cornmeal Loaves 4 cups yellow cornmeal 2 cups all-purpose flour 2 tsp. baking powder 2 tsp. baking soda 3/4 tsp. salt 1/2 cup sugar 6 tbsp. butter or margarine, melted 4 cups buttermilk or sour milk Mix dry ingredients. Stir in butter and buttermilk. Blend well. Pour batter into two greased 9x5-inch loaf pans. Let stand 15 minutes. Bake at 350 degrees for one hour. (Note: no eggs required for this recipe)

Johnny Cake or Journey Cake 1 cup cornmeal 1 tbsp. salt 1 cup water 1/2 cup milk Stir cornmeal and salt into boiling water. Cook until thick. Remove from heat and add milk. Mix well. Drop from large spoon on greased hot griddle or skillet. Turn to brown both sides.

Johnny Cakes 1 cup cornmeal 1/2 tsp. salt 1 tsp. sugar 1-1/2 cups boiling water 1/2 cup milk In a bowl combine the cornmeal, salt and sugar. Stir in water, beating out lumps. Slowly add milk. Drop by tablespoons full into greased skillet. Cook slowly for 5 minutes. Turn over and cook 5 minutes more. Makes 10 cakes.

Dixie Corn Dodgers 2 cups cornmeal 1/2 tsp. salt 2 tsp. baking powder 2 tbsp. vegetable oil, melted butter, or bacon drippings 2/3 cup milk (approximately) Combine the dry ingredients. Stir in liquids. Form eight "bullet-shaped" dodgers. Drop in a greased and heated heavy skillet. Brown on one side, turn to brown bottom.

Campfire Cornbread 1 cup cornmeal 1 cup flour 2 tsp. baking powder 3/4 tsp. salt 1 cup milk 1/4 cup vegetable oil Mix dry ingredients. Stir in liquids. Spoon into a well-greased, heated 10 or 12 inch skillet. Cover tightly. Cover over a low flame for 20 to 30 minutes, or until firm in the center. When pan baking over hot coals place the pan on a low grill, on a three rock stand in the coals or directly on coals. Place coals on top of the lid (like a dutch oven) to distribute heat more evenly. Baked foods are more likely to burn on the bottom than the top. To prevent burning, check the temperature of your coals before placing a pan on them. Hold your hand about six inches above the coals; it should be hot, but you should be able to keep your hand in place for eight seconds.

No-Flour Camp Cornbread

1-1/2 cups cornmeal

1 tsp. salt

1 tsp. baking soda

1 tbsp. sugar, molasses, sorghum, or honey

2 cups buttermilk or sour milk (To sour milk, put 2 tbsp. lemon juice or vinegar in a pint measuring cup. Add milk to make 2 cups. Stir and let sit a few minutes until clabbered.)

2 eggs, beaten 1 tbsp butter or margarine, melted (or other fat) Mix dry ingredients. Stir in liquids. Spoon into a well-greased hot 10 or 12 inch iron skillet. Cover and cook over a low flame for about 30 minutes or until firm in the center (or bake in the oven at 425 degrees for approximately 30 minutes).

Hush Puppies 2 cups yellow cornmeal 1 tbsp. flour 1 tbsp. sugar 1 tsp. baking powder 3/4 tsp. baking soda 1/4 cup finely chopped onion 1-1/4 cups buttermilk 1 egg, well beaten lard or cooking oil for deep frying, heated to 375 degrees Mix dry ingredients together and make a well in the center. In a separate bowl mix buttermilk and beaten egg. Pour in the well all at one time and mix until well blended. Using a heaping tablespoon for each, form into small cakes. Deep fry only as many as will float uncrowded one layer deep. Turn several times as they rise to the surface during cooking (do not pierce). Fry 3 to 4 minutes or until well browned. Drain a few seconds before transferring to paper towels. Serve hot. (Note: At fish fries the dogs would start howling from the aroma of the cooking fish and hush puppies were thrown to shut them up.)

Cornmeal Pancakes 2 tsp. sugar 1 tsp. salt 1 tbsp. baking powder 1-1/4 cups sifted flour 3/4 cup cornmeal 2 eggs, well beaten 1-1/4 cups milk 3 tbsp. melted shortening Sift together sugar, salt, baking powder and flour. Stir in cornmeal. Combine eggs and milk and add to flour mixture. Add shortening and mix until smooth. Drop by tablespoons full on a greased hot griddle. Cook until edges are brown and bubbles are in the middle. Turn and cook on other side. Serve with butter and sorghum, molasses or other syrup.

Beans. There is an old saying, "Beans, beans, good for the heart, the more you eat beans the more your health will improve." All varieties of dried beans except split peas and lentils need to be soaked before cooking. Beans tend to retain their shape better with a long soak.

Cooking Dried Beans. To prepare dried beans (1 pound of dried beans = about 2 cups raw or 5 to 6 cups cooked), place washed beans in a pot with 2 to 3 times their volume of water (1 pound of beans needs 4 to 6 cups). Let stand 8 to 12 hours. To quick soak, bring water and beans to a boil and allow to boil 2 minutes. Cover pot and let stand 1 hour. The time required for cooking beans is generally 1-1/2 to 2 hours, but this depends upon the variety of bean and the length of

time they have been stored. Check beans often as they begin to get tender so they don't get mushy. Cook at a gentle simmer with the lid tilted to retain shape. If beans foam up during cooking, add a tablespoon of oil or fat to the water or cook with a small amount of fat pork or bacon. If a recipe calls for tomatoes, lemon juice or vinegar, add when beans are almost tender or acid will slow the softening process. Beans can also be prepared for quick-cooking in camp like minute rice. Cook them normally until tender, drain and dry them in a food dryer or spread them on a flat pan and dry in a warm oven or in the sun. Store in airtight canisters. They can then be reconstituted in water by boiling about 20 minutes.

Trench Beans 1 lb. dry pinto beans, cooked 1 tbsp. seasoned salt 1 tbsp. worcestershire sauce 1 tbsp. A-1 Steak Sauce 1/8 tsp. Tabasco 1 tsp. lemon pepper 1 tsp. onion powder Soak and cook beans. When tender, add seasonings and simmer an additional 30 minutes.

Battalion Baked Beans 1 large can pork and beans 1/2 cup tomato catsup 6 small onions (or 1 jar small onions) 1/2 cup brown sugar 1 tsp. vinegar 2 tbsp. molasses 1 tsp. dry prepared mustard bacon strips Combine all ingredients except bacon and spoon into a casserole dish. Cover with strips of bacon. Bake at 300 degrees to 350 degrees for 1 hour or until the bacon is done and the beans are bubbly.

Secession Baked Beans 2 cans pork and beans (or 3 cups cooked dry beans) 1/4 cup molasses 1/2 cup tomato sauce (3/4 cup if more liquid is needed) 1 medium onion, sliced into rings 1/2 tsp. dry prepared mustard 1/4 tsp. salt (or more to taste) dash of pepper 3 strips of bacon, cut in half (optional) Combine everything except bacon. Pour into 1-1/2 quart casserole dish. If you use bacon, arrange on top of the bean mixture. Bake at 325 degrees for 2 hours or 375 degrees for 1 hour.

Baked Beans 6 cups cooked dry beans (2 cups raw) 1 small chopped onion 1/2 cup brown sugar 2 tbsp. molasses 1 tbsp. salt 1/2 tsp. dry prepared mustard 2 slices fat pork or bacon Place half the cooked beans in a bean pot place chopped onion on top. Add remaining beans. Mix brown sugar, molasses, salt and mustard and pour on top of beans. Lay fat pork or bacon on top and cover beans with hot water. Cover bean pot and bake in a slow oven (250 degrees) for 6 hours. Uncover last hour to brown.

Rice and Beans. Like the cornbread and beans diet of the Confederacy or the fish and rice staple diet of the Orient, rice and beans combine incomplete proteins from two different foods to form complete proteins. The combination of rice and beans is a staple diet for much of the world's

population. You can top the Carolina Red Rice recipe with cooked dried beans (seasoned to taste). Use the recipes for Hopping John (a colonial dish served on New Year's Day to insure good luck) as guidelines and substitute whatever type of beans you have available. Try adding canned chili and tomato sauce or salsa to cooked rice (or make your own chili with meat, tomato sauce and chili seasonings) and add it to any rice and bean mix (seasoned to taste with hot sauce).

Cooking Rice. Instant or minute rice, while good for cooking in the field, won't store for long periods (without vacuum or nitrogen packing) since it has already been cooked and then dried. To prepare regular long grain white rice (1 cup uncooked rice = about 3 cups cooked rice), rinse lightly and drain the water. Add one cup of water and 1/2 to 1 tsp. salt (or meat stock or bouillon) for each cup of rice. Optionally, add one teaspoon of butter or oil for each cup of uncooked rice. Bring to a boil over high heat and allow to boil one minute. Cover pot, reduce heat and simmer for 20 minutes. Remove from heat and let stand for 10 minutes more. Don't open lid while cooking.

Bean-Rice Casserole 3 cups water 1 cup uncooked rice 1/2 cup quick-cooking black beans (see previous section for instructions on preparing quick-cooking beans or substitute cooked dried beans or a can of cooked beans) 1 tbsp. instant beef bouillon 3 tbsp. margarine 1/2 cup chopped dried apricots 1/2 cup chopped dried pineapple Put all ingredients in a frying pan and mix. Cover and cook over medium heat for about 20 minutes. Don't stir while it's cooking because that will make the rice gummy. When the water has been absorbed, test rice for doneness. If it's still a little chewy, add a little more water and cook a few minutes more.

Carolina Red Rice 1/4 lb. bacon 3/4 cup chopped onions 2 cups cooked rice 2 cups canned tomatoes (or reconstituted dried tomatoes) 1/2 tsp. salt 1/2 tsp. pepper 1/4 tsp. Tabasco sauce Cook bacon, remove from pan and crumble. Cook onions in bacon fat until tender. Add rice, tomatoes, seasonings and crumbled bacon. Cook on low heat about 35 minutes, stirring well. Stir with fork several times while cooking. Check after 15 minutes and add water if needed.

Hopping John 2 cups cooked black-eyed peas 2 cups cooked rice 1 chopped onion (optional) 2 tbsp. butter dash salt, pepper and hot sauce Blend and heat slowly about 30 minutes.

Hopping John Soup 1 cup dry black-eyed peas ("southern caviar") 8 cups water 6 slices bacon 3/4 cup chopped onion 1 clove garlic, minced 1 cup regular rice 2 tsp. salt 1/4 tsp. pepper Rinse black-eyed peas. In a large saucepan add the peas and water, bring to a boil 2 minutes. Remove from heat and let stand 1 hour. Drain, setting aside 6 cups of the cooking liquid. In heavy

saucepan, cook the bacon, onion and garlic until the bacon is crisp and the onion is tender but not brown. Remove the bacon, drain on paper towels: crumble and set aside. Stir the black-eyed peas, raw rice, salt, pepper and reserved cooking liquid into mixture in saucepan. Bring to a boil, cover and reduce heat. Simmer 1 hour, stirring occasionally. Stir in crumbled bacon and it's ready to serve eight regular folks or two good ol' boys.

Bread and Biscuits. In case of a power outage, bread bakes just as well in a dutch oven with hot coals or charcoal briquets (cooking time should be roughly the same as in your home oven). If you don't do a lot of baking, you might want to invest in a set of no-stick air-bake insulated baking pans and cookie sheets, which will lessen the chance of burning your baked goods. Bread can be prepared from stockpiled staples and can be served with any meal. However, note that due to their oil content, items like wheat germ and whole wheat flour or other unprocessed flours will turn rancid without refrigeration (or freezing). It's best to store whole grains, get a hand cranked mill and grind your own flour. In the face of an expected long-term power outage, you will want to preserve or use up the perishables in your refrigerator. Baking bread is a good way to use your milk, eggs and butter (substitute melted butter in recipes that call for vegetable oil) before they spoil and will give you something to put your peanut butter and jelly on or sop up some gravy. To ease this task, you may want to keep a stock of Jiffy Muffin Mix on hand (rotate periodically by using and replacing). These mixes are easy to use and are very versatile. For example, the corn muffin mix package has instructions for preparing as muffins, cornbread, corn sticks and corn pancakes or waffles. Any Jiffy Muffin Mix can be extended using the following recipe:

Jiffy Muffin Mix Mini-Loaves 1 package Jiffy Muffin Mix (corn muffin, blueberry, apple-cinnamon, etc.) In addition to the ingredients listed in package recipe (e.g. corn muffins call for 1 egg and 1/3 cup milk), also use: 1/3 cup wheat germ, bran or uncooked multigrain cereal 1 tbsp. brown sugar or molasses 1/4 tsp. salt 1/3 cup raisins or chopped dried fruit (or 1/4 cup each dried fruit & chopped nuts) 1/2 tsp. baking powder 1 tbsp. melted butter or vegetable oil 1 tbsp. milk For corn muffin mix, preheat oven to 400 degrees (or temperature called for by other type muffin mix). Mix dry ingredients together. Beat remaining ingredients together in a separate bowl, then blend with dry mix. For maximum rise, let batter rest 3 or 4 minutes and then pour into two greased 3x5-1/2 inch mini-loaf pans (which will fit in a 10-inch dutch oven, by the way; set the pans on top of home-canning jar rings or pebbles placed in the bottom of the oven to let hot air circulate under the pans). Bake 15 to 20 minutes or until brown.

The following quick breads (no active dry yeast required) can also be prepared to use up your milk, eggs and butter before they spoil:

Logan Bread 6 eggs 3 cups flour (any mixture of whole wheat and rye) 3/4 cup wheat germ 1/4 cup brown sugar 1/2 cup powdered milk 1 cup oil 1/2 cup honey 1/4 cup molasses 1/4 cup sorghum syrup or maple syrup (any combination of these four sweeteners totaling one cup works fine) 1/2 cup shelled walnuts or pecans 1 cup dried fruit (raisins, dates, apricots, peaches, etc.) Beat all the ingredients together in a large bowl. Pat down into two greased 9x5-inch loaf pans. Bake at 275 degrees for two hours, or until a tester comes out clean. The bread will be very heavy, dense and chewy; each loaf weighs 24 ounces. Logan bread tastes good on the trail, is high in calories and is almost impervious to spoilage.

Pioneer Bread 1/2 cup butter or margarine 1/2 cup honey 3 eggs 1 cup buttermilk (or sour milk: 1 tbsp. vinegar, 1/3 cup powdered milk, water to make 1 cup, let set 5 minutes) 2 cups whole wheat flour 2 cups unbleached white flour 1 tsp. baking soda 1 tsp. salt 1 cup raisins 2 tbsp. caraway seeds Combine butter, honey, and eggs in a bowl and add buttermilk. Separately, combine flours and baking soda and add salt, raisins, and caraway seeds. Combine both bowls. Place in a greased 9x5-inch loaf pan. Bake at 375 degrees for 50 to 60 minutes or until a tester comes out clean.

Molasses Graham Bread 1/4 cup sugar 2 cups flour 2 tsp. baking soda 2 tsp. salt 1 tsp. baking powder 1-3/4 cups graham flour (or whole wheat flour) 1/3 cup butter 2 eggs, beaten 1-3/4 cups sour milk or buttermilk 3/4 cup molasses Mix together dry ingredients, then cut in the butter. Work with fingertips until mixture resembles coarse cornmeal. Blend eggs, milk and molasses. Pour into dry mixture and stir just enough to blend. Pour into two greased and floured loaf pans. Bake at 350 degrees for about 40 minutes.

Irish Soda Bread 3 cups all-purpose flour 1/2 cup sugar 1 tbsp. baking powder 1 tsp. baking soda 1-1/2 cups dried currants or raisins 1-3/4 cups buttermilk 2 large eggs 3 tbsp. melted butter or margarine 1/2 tsp. vanilla Mix flour, sugar, baking powder, baking soda and currants in a large bowl. In a small bowl, beat buttermilk, eggs, 2 tablespoons of the butter and vanilla until blended. Add egg mixture to flour mixture and stir until evenly moistened. Spread batter in a greased 10-inch oven-proof frying pan. Drizzle with remaining 1 tablespoon butter. Bake at 350 degrees until bread is browned and pulls away from sides of pan (about 45 minutes). Let cool in pan on a rack for 10 minutes.

Nut Bread 3 tbsp. butter 1 cup sugar 2 eggs 2-1/2 cups flour 3 tsp. baking powder

1 tsp. salt 1 cup milk 1 cup chopped nuts 1 tsp. vanilla Cream together butter and sugar. Add eggs and beat real good. Sift together dry ingredients and add to butter mixture alternately with the milk. Mix in nuts and vanilla. Pour batter into greased loaf pan and let rise for 30 minutes. Bake at 350 degrees for 30 minutes.

Date Nut Bread 1 cup chopped dates 1 cup sugar 2 tbsp. shortening 1 cup boiling water 2-1/4 cups all-purpose flour 1 tsp. baking soda 1 tsp. salt 1 tsp. baking powder 1 cup chopped nuts 1 egg Preheat oven to 375 degrees. Put dates, sugar and shortening into a bowl. Pour boiling water over mixture and cool. Sift flour with soda, salt and baking powder. Mix with dates. Add nuts and mix real good. Add egg last, mix thoroughly and pour into a greased loaf pan. Bake 1 hour.

Whole Wheat Beer Biscuits 2 cups all-purpose flour 1 cup whole wheat flour 2 tbsp. sugar 4-1/2 tsp. baking powder 1 tsp. salt 3/4 tsp. cream of tartar 3/4 cup (1/4 lb. plus 1/4 cup) cold butter or margarine, cut into pieces 1 large egg, lightly beaten 1 cup beer Mix all-purpose flour, whole wheat flour, sugar, baking powder, salt and cream of tartar in a large bowl. With a pastry blender or 2 knives, cut in butter until mixture resembles coarse crumbs. Add egg and beer. Stir with a fork just until dough holds together. Turn dough out onto a well floured board and knead briefly until smooth (2 or 3 turns). Pat dough 1-inch thick. Using a floured 2-1/2 to 2-3/4 inch round cookie cutter, cut out biscuits. Gently pat scraps together and cut out remaining biscuits. Arrange biscuits slightly apart on a large greased baking sheet. Bake at 425 degrees until browned (18 to 20 minutes). Transfer biscuits to a rack. Makes 8 or 9 biscuits.

Carolina Choice Rice (or Grits) Loaf (or Muffins) 2 cups cooked brown rice (or 2 cups cooked hominy grits) 1-1/4 cup sour milk 1/4 cup vegetable oil 1 egg, beaten 1 tsp. baking soda, dissolved in 1 tbsp. of water 2 cups whole wheat, unbleached or all-purpose flour 1/2 tsp. salt 1 to 2 tbsp. sugar Combine the rice or grits, sour milk, oil, egg and soda in water. In a separate bowl, mix the remaining 3 ingredients. Stir together the two mixtures. Spoon into a greased 9x5-inch loaf pan or into greased muffin tins. Bake at 375 degrees. For the loaf bread, bake 50-60 minutes. For muffins, bake 15 to 20 minutes. Test with a toothpick or broom straw. Insert near the center; if it comes out unsticky, the bread is baked.

Charleston Rice Muffins 2 cups flour 2 tsp. baking powder 1/2 tsp. salt 1/4 tsp. freshly ground pepper 1 cup cold cooked rice 2 eggs, beaten 1 cup milk 1/4 cup butter, melted Combine dry ingredients. Add rice and liquid ingredients. Mix. Spoon into greased muffin tins. Bake at 400 degrees for around 20 minutes. Makes 12 muffins.

In case of a long-term survival situation, the following bread and biscuit recipes don't require eggs or yeast and can be prepared with foodstuffs which will keep on a pantry shelf without refrigeration (except whole wheat flour which you should grind as needed):

South Boston Brown Bread 1 cup rye flour 1 cup yellow cornmeal 1 cup whole wheat flour 2 tbsp. plain white flour 2 tsp. baking soda 3/4 tsp. salt 3/4 cup raisins 2 cups buttermilk or sour milk (to sour milk, put 2 tbsp. lemon juice or vinegar in a pint container, add milk to make 2 cups, stir and let sit a few minutes until clabbered) 3/4 cup molasses Sift dry ingredients together. Add raisins. Stir. Mix buttermilk with molasses and pour into dry mixture. Blend well and pour into greased 9x5-inch loaf pan (do not use 8x4-inch pan unless you enjoy cleaning your oven). Bake at 350 degrees for about 45 minutes. (Note: This bread is named after South Boston in Halifax County, Virginia, CSA.)

Old-Fashioned Brown Bread 2 cups graham or whole wheat flour 1 cup all-purpose flour 1 tsp. baking soda 1/2 tsp. salt 1 cup dark molasses 1 cup buttermilk 1/2 cup low-fat milk Mix graham flour, all-purpose flour, baking soda and salt in a medium size bowl. In a large bowl, combine molasses, buttermilk and low-fat milk; stir until blended. Add flour mixture to milk mixture; stir until well blended. Pour batter into a greased 9x5-inch loaf pan. Bake at 325 degrees until bread begins to pull away from sides of pan and a skewer inserted in center comes out clean (1 to 1-1/4 hours). Let cool in pan on a rack for 10 minutes, then turn out onto rack and let cool completely.

Master Biscuit Mix 4 cups whole wheat flour 4 cups unbleached or all-purpose flour 1/3 cup baking powder 1 tbsp. salt Mix all ingredients (store in refrigerator or freezer for later use, if desired). To prepare, take 1-1/2 cups of master biscuit mix and add 3/4 cup milk and 2 tablespoons vegetable oil. Mix. With a large spoon, drop mounds of batter on baking sheet or cast iron skillet. Bake at 425 degrees for about 15 minutes or until the tops are brown.

Cabin Buttermilk Biscuits 2 cups flour 2 tsp. baking powder 1/4 tsp. baking soda 1 tsp. salt 1 cup buttermilk (about) 2 tbsp. lard or shortening Sift dry ingredients together and blend with lard or shortening. Add buttermilk, about one cup to make soft dough. Roll on a floured board until 1/4 to 1/2 inch thick and cut with drinking glass or biscuit cutter. Place on baking sheet and bake in 350 degrees oven about 10 minutes or until brown.

Mammy's Baking Powder Biscuits 2 cups flour 4 tsp. baking powder 1/4 tsp. salt 2 tbsp. shortening 1/2 cup milk Sift dry ingredients together. Work in shortening with fingertips. Add

milk slowly, stirring the batter until smooth. Roll on a floured board until 1/2-inch thick and cut. Place on a baking sheet and bake in a hot (450 degrees) oven for 15 minutes.

Rebel Yell Whole Wheat Biscuits 2 cups whole wheat flour 2 cups unbleached or plain white flour 1-1/2 tsp. salt 8 tsp. baking powder 1/2 cup vegetable oil 1-1/2 cups milk (or more) Mix dry ingredients. Combine oil and milk. Stir the liquid into the dry mixture quickly. On greased baking sheets, make mounds of dough using a large spoon, leaving enough space to allow for expansion. Bake at 425 degrees for about 12 minutes.

Casseroles, Soups, Stews and Dumplings. Much colonial cooking consisted of meals that simmered for hours in cast iron kettles over the fireplace. One-pot meals in a dutch oven or iron kettle over a fire are still a practical method for preparing a lot of food with minimum effort. For casseroles the ingredients are mixed together in the cooking vessel and then baked. For soups and stews on the stove top or over the fire, the meat goes in first and vegetables are added towards the end of the cooking time. If unexpected guests show up, an extra potato can be quartered and dropped in the stew pot. If meat is in short supply for your stew, you can substitute bouillon cubes and a little butter or vegetable oil and add potatoes or dumplings. Dumplings can be quickly p

repared to stretch a meal by adding biscuit dough in small lumps or strips and steaming in the covered pot for 10 to 15 minutes (either use a biscuit recipe from the previous section or try one of the dumpling recipes below).

Whole Wheat Biscuit Mix for Dumplings 1 cup white flour 1 cup whole wheat flour 2 tsp. baking powder 1 tsp. salt 2 tbsp. shortening or oil 1/4 cup powdered milk Combine at home and store in a zip-lock bag or Nalgene bottle. In camp, add 3 tablespoons water per 1/2 cup biscuit mix and mix well. Spoon into boiling stew or soup. Simmer 10 minutes uncovered and 10 minutes covered.

Cornmeal Dumplings 1 cup cornmeal 1/4 tsp. black pepper ham stock Mix cornmeal and pepper. While ham stock is boiling, pour some over meal mixture and stir into dough. Make stiff enough to form balls the size of an egg and drop in briskly boiling stock. Reduce heat and simmer 20 minutes.

Dumplings 4 cups flour 1/3 cup lard or other shortening 1-1/2 to 2 cups water Mix together flour and lard. Add water and mix thoroughly. Toss dough on a floured surface until coated with flour.

Divide into 4 balls and roll dough out 1 ball at a time to about 1/4-inch or thinner. Cut in strips and cut strips into 2-inch pieces. Add a few pieces at a time to boiling broth. Cook uncovered, making sure that each dumpling is under the liquid part of the time. cook about 5 to 10 minutes. Makes 4 to 5 large servings. (Note: If using self rising flour, make sure to use hot water so dough will rise before cooking.)

Beef Stew with Dumplings 1-1/2 pounds rump roast 1/4 cup flour 1-1/2 tsp. salt 1/4 tsp. pepper 1 small onion 1/3 cup cubed carrots 1/3 cup cubed turnips 4 cups potatoes, quartered Wipe meat off, remove from the bone, cut in 1-1/2 inch cubes. Mix flour with salt and pepper and cover meat with mixture. Heat some fat from meat in a frying pan. Add meat and brown. Put meat with browned fat in stew kettle, add boiling water to cover. Simmer until tender, about 3 hours. Add carrots and turnips for last hour of cooking. Add potatoes 20 minutes and dumplings 15 minutes before serving. Use one of the dumpling recipes above.

Chicken and Dumplings 1 stewing hen 3 cups flour 1 egg 1 heaping tablespoon shortening 1 tsp. salt 1/2 cup cold water Cut chicken for stewing. Barely cover with water and cook until tender for about 2 to 3 hours. Remove chicken from stock and remove bones. Put flour in mixing bowl. In center of flour put egg, shortening and salt. Gradually add cold water. Work plenty of flour into dough. Roll thin and cut in 2x3-inch strips. When dumplings are added to broth, lower heat and simmer about 12 to 15 minutes. Place the chicken back in the stew. A little butter may be added if chicken is lacking in fat.

Chicken Pot Pie 3 to 4 cups cooked chopped chicken 1 16-ounce can mixed vegetables, drained

1 can cream of chicken soup 1 cup chicken broth 1 cup self-rising flour (if using ordinary flour, add 1 tsp. baking powder and 1/2 tsp. salt) 1 tsp. baking powder 1 cup milk 1/2 stick (1/4 cup) margarine, melted Place chicken in a large casserole dish and add vegetables, soup and broth. Mix together, in a separate bowl, the next 4 ingredients for the topping. Pour the topping mixture over the chicken. Bake at 425 degrees for about 45 minutes or until the crust is golden brown.

Meat Loaf with Cornbread Topping meat loaf ingredients: 1-1/2 pounds ground chuck 1 pound ground pork breakfast sausage 1-1/2 cups cooked rice 1 tsp. salt 1/2 tsp. pepper topping ingredients: 1 cup flour 1 tsp. baking powder 1/2 tsp. salt 1/4 tsp. sage 1 tsp. shortening 3/4 cup milk 1/2 cup cornmeal 2 tsp. sugar 1/8 tsp. pepper 1/4 tsp. thyme 3 eggs, beaten Preheat oven to 350 degrees. Mix meat loaf ingredients together and lightly press into a 9x5-inch loaf pan. The top of the meat loaf should be flat to make an even surface for the topping. In a mixing bowl,

combine the dry topping ingredients and cut in shortening. Add eggs and milk and blend well. Spread topping evenly on top of meat loaf. Bake at 350 degrees for 60 minutes.

Beef Stew and Lima Beans 3/4 cup dried lima beans 1 pound boneless chuck stew beef, cut in pieces 1 bunch carrots salt, pepper and celery salt Soak beans overnight, drain. Add meat and cook 1-1/2 hours in boiling water. Add carrots and cook until tender. Season with salt, pepper and celery salt. Serve with tomato sauce.

Beef Stew 1-1/2 pounds boneless stew beef 3 tbsp. bacon fat or shortening 1-3/4 tsp. salt a few dashes of pepper 1 onion the size of a large egg, peeled 1/3 cup water, and more as needed 5 carrots (6 inch long) 5 potatoes (medium size) Wipe meat with a damp cloth and cut into 1-1/2 inch cubes. Heat fat until sizzling in a heavy 3 quart saucepan or dutch oven. Add meat, turning it often until a fine rich brown. Add thickly sliced onion to meat the last five minutes of browning. When brown, sprinkle with 1 teaspoon salt and pepper. Add water, cover, heat to boiling, reduce heat and simmer until meat is almost done, from 1-1/2 to 2 hours. After simmering 1 hour, if more water is needed, stir in 1/4 cup at a time. A half-hour before serving time, add scraped and washed carrots cut into 2-inch lengths and pared halved potatoes. Sprinkle with remaining 3/4 teaspoon salt. Cover and cook until vegetables are just done. There should be enough liquid in pot to almost cover meat and vegetables. To make gravy, mix 1/3 cup water and 1 tablespoon flour. Blend until smooth. Push meat and vegetables to one side and pour flour mixture, while stirring, in a stream into broth. Cook and stir 2 to 3 minutes longer until thickened and smooth.

Carolina Beef Stew 1 pound boneless beef cubes 2 tbsp. fat 1 onion, chopped 2 tbsp. catsup 3 cups beef bouillon

1 cup diced tomatoes 1 tsp. salt and pepper 2 cups diced raw potatoes 2 cups sliced carrots 6 small onions (whole) Brown beef in fat. Add chopped onion, catsup, bouillon, tomatoes, salt and pepper. Cover and simmer about 1-1/2 hours until meat is tender. Add potatoes, carrots and whole onions, barely cover with water. Cover and simmer until vegetables are cooked (about a half hour).

Brunswick Stew 1 large chicken 1 rabbit 2 bay leaves, crumbled 5 peppercorns 3 sprigs parsley 1 stalk celery, cut up

3 potatoes, cut up 2 large onions, sliced piece of salt pork 2 cups fresh corn, cut from cob 2 cups large lima beans 6 tomatoes, quartered salt and pepper 1 tbsp. sugar 1/2 tsp. oregano 1/2 tsp. thyme 1/2 tsp. savory Cut salt pork in small pieces and brown slowly in large skillet. Remove salt pork and save. Cut rabbit into serving pieces, dredge in seasoned flour and brown in salt pork fat. Place chicken in large pot, place rabbit on top of chicken. Add salt pork, beans, onions and celery. Cover with boiling water, cover tightly and simmer 2 hours. Add other ingredients except tomatoes. Cook until vegetables are just tender. Mix a little flour and water and add to stew. Add tomatoes and cook 5 minutes. Correct seasoning and serve.

Brunswick Stew 2 pounds beef or veal cubes 1 large chicken 2 cups diced raw potatoes 4 cups cut corn 1 cup chopped onions 3 cups fresh lima beans (or cooked dry lima beans) 4 cups canned tomatoes 1 tbsp. salt (to taste) 2 tbsp. hot sauce 2 tsp. red pepper Place beef or veal and chicken in large pot, cover with water, bring to boil, reduce heat and simmer over medium-low heat until tender. Remove meat from bones. Skim fat from liquid. Return meat to broth. Add other ingredients. Simmer slowly for several hours to blend flavors and thicken. Serve hot.

Company Brunswick Stew 2 fat hens, cut up 6 28-ounce cans of tomatoes 5 pounds of onions, chopped 10 pounds of potatoes, cubed 4 10-ounce packages frozen lima beans 4 17-ounce cans cream style corn 3 10-ounce packages frozen cut okra 4 red pepper pods 2 20-ounce cans tomato puree 1 5-ounce bottle worcestershire sauce 1 pound butter (no substitute) Cook hens in plenty of water over medium-low heat until they are tender enough to fall from bones. Remove chicken and let cool. Add tomatoes and onions to broth and cook 1 to 1-1/2 hours. Meanwhile, remove meat from bones and return to broth. Add potatoes, lima beans, corn, okra and pepper pods. Reduce heat and cook 1 hour longer, stirring occasionally. Add tomato puree, worcestershire sauce and butter. Simmer about another half hour. Serves 35 to 40.

Pea Soup 1/2 tsp. salt 1/8 tsp. pepper 2 tbsp. butter celery salt parsley 3 cups chicken stock 2 cups cooked green peas 1 cup cold water 1/2 onion 1 cup milk Set aside one third of peas. Add remainder to water, chicken stock and seasoning and let simmer for 30 minutes. Press through sieve. Add butter. Let boil for a few minutes then add milk and remaining peas which have been heated.

Split Pea Soup 1-1/2 cups dried split peas 1/2 cup onion, chopped 1/8 tsp. pepper 5 cups water Simmer peas, onion, salt and pepper in water 20 to 30 minutes until peas are tender.

Corn Chowder 2 slices diced salt pork (or 2 tbsp. butter) 1/2 cup diced onion 3 cups diced raw potatoes 2 cups water 2 cups fresh (or canned) corn 4 cups hot milk 1 tsp. salt 1 tsp. pepper Saute onion in butter (or pork grease) and mix all ingredients (except milk) in large pot. Cook until potatoes are tender. Add milk last and serve hot.

Confederate Corn Chowder 3 cups water 1 medium onion, diced 1 cup potato flakes 1 cup whole kernel corn 1/2 cup dry milk powder salt and pepper Combine ingredients in a large pot. Bring to a boil and simmer until onion is tender. Season to taste. Makes 6 servings.

Forager's Potato Soup 3 cups potatoes, peeled and diced 2 cups water 3/4 tsp. salt 1 cup onion, chopped 2 tbsp. vegetable oil or butter 2 tbsp. flour 2 cups milk 1 tsp. dried parsley 1/2 to 1 tsp. garlic powder 1/4 tsp. pepper Bring potatoes, water and salt to a boil in a saucepan. Reduce heat and simmer, covered, for 15 minutes or until the potatoes are tender. Without draining the potatoes, mash them up. Meanwhile, in a large saucepan, heat oil and add onion. Cook until onion is soft. Sprinkle in flour and stir for 1 minute. Gradually add milk, stirring frequently for 5 or 10 minutes until thickened. Add cooked potato mixture and seasonings blended together.

Old Timey Potato Soup 1 medium onion, minced 1/4 cup butter 4 cups diced raw potatoes 2 cups water 1 tsp. salt 4 cups milk a few dashes celery seed salt and pepper to taste 4 slices bacon, cooked and crumbled Saute onion in butter until translucent. Add potatoes, water and salt and cook until tender. Add milk and season to taste. Simmer a few minutes before serving.

Bacon and Bean Soup 2 cups dried beans (or 2 cans cooked beans) 4 slices bacon 4 cups water 1 cup diced onions 1 cup diced celery 1 tsp. dried parsley 1 tsp. savory 1 clove garlic 2 tbsp. bacon fat 1 tsp. red pepper 1 tsp. salt Soak dried beans overnight and cook until tender (or use canned beans). Fry bacon until crisp and drain. In a large pot, mix cooked beans with remaining ingredients. Simmer for 1 hour. Add water as desired during cooking process. Crumble crisp bacon on top and serve.

Desserts. The complex carbohydrates in bread and pasta can take four hours for the body to break down and make use of. This is fine to provide energy for a long hike or to allow you to sleep warmly. The carbohydrates in simple sugars are more easily assimilated by the body (about fifteen minutes). Cookies or breads containing fruit and a high sugar content make good snacks for a quick pick-me-up on the trail. For example, most of recipes in the cornbread section can be prepared using a little extra brown sugar, molasses and some raisins. Cooking the sugar rich cornbread batter in a cast iron corn stick pan makes an excellent trail snack or something to

munch on in a sniper hide. To satisfy your sweet tooth and to provide quick energy, here are some recipes that use sugar (brown sugar is easier to carry and use in the field), molasses and dried or fresh fruits (there is a possibility that you might just happen to run across a couple of apples in Washington State):

Yankee Cake 2 cups brown sugar

2 tbsp. shortening 2 cups hot water 1 package seedless raisins 3 cups flour 1 tsp. salt 1 tsp. baking soda 1 tsp. cinnamon 1 tsp. cloves Combine and boil the sugar, water, shortening, raisins, salt and spices for 5 minutes. Dissolve soda in a teaspoon of hot water. When all ingredients cool, mix in the flour and dissolved soda. Pour batter into two loaf pans. Bake at 325 degrees for 45 minutes. (Note from recipe book: "Notice this here recipe ain't got no eggs, milk or butter. Now I guess you know where it got it's name. Cause of them Yankees there wuz no eggs, milk or butter after THE WAR.")

Hard Times Spice Cake 1-1/2 cups milk 1/4 cup vegetable oil 1/3 cup molasses 1-1/4 cup whole wheat, unbleached or all-purpose flour 1 cup cornmeal 1 tbsp. baking powder 1/2 tsp. salt 2 tsp. cinnamon 1/4 tsp. cloves 3/4 to 1 cup raisins Mix together the milk, oil and molasses. In a separate bowl, combine the remaining ingredients except raisins. Mix together the two mixtures and stir in raisins. Pour batter into a greased 9x9-inch pyrex baking dish. Bake at 350 degrees for about 30 minutes.

Old Fashioned Stack Cake 1/2 cup sour milk or buttermilk 1/2 tsp. baking soda 1 egg 1/2 cup shortening 1 cup molasses flour 1 quart cooked dried apples sugar allspice or nutmeg (Schilling Pumpkin Pie Spice combines cinnamon, ginger, allspice and nutmeg and is good with stewed fruit) Mix sour milk, soda, egg, shortening and molasses real good. Then add flour to make a stiff dough. Roll thin and cut layers round, the size of cake desired, and bake. To stack, drain juice from cooked dried apples, mash, sweeten and spice to taste and use between layers.

Stack Cake 3/4 cup shortening

1 cup sugar 1 cup sorghum molasses 3 eggs 1 cup milk 4 cups wheat flour 2 tsp. baking powder 1/2 tsp. baking soda 1 tsp. salt 3 cups sweetened, spiced applesauce Sift well the flour, salt, soda and baking powder. Cream in shortening. Then add sugar a little at a time, blending well. Add molasses and mix thoroughly. Add eggs one at a time, beating well until smooth. Pour 1/3-inch deep in greased 9-inch pans and bake. This will make 6 or 7 layers. When cool, stack using applesauce between layers. Commercial applesauce can be used or you can try the next recipe.

Windfall Applesauce Cut apples, peels and all. Place in pot and add small piece of cinnamon and a small amount of water. Cook covered for 20 minutes. Cool slightly and add 1 tablespoon butter per quart of apples and add grated nutmeg, ginger, grated lemon peel and ground cloves to taste. Cool and serve.

Dried Apple Cake 2 cups dried apples 2 eggs 1 cup sugar 1 cup milk 1 cup molasses 3 cups flour 1 tsp. baking soda 2/3 cup baking powder 1 cup raisins cinnamon and nutmeg Soak apples long enough to soften. Chop apples up small and boil them for 15 minutes in the molasses. Dissolve the soda in hot water, put into molasses when cold. Mix in all ingredients, beat well and pour into cake pan. Bake in moderate (350 degrees) oven until done.

Confederate Puddin' 3 cups hot milk 3 cups cold boiled rice 1 tsp. salt 1/4 cup molasses 1/4 cup raisins 1/2 tsp. nutmeg 1 tbsp. butter Mix hot milk and rice, add molasses, butter, raisins, nutmeg and salt. Bake in a greased pan at 350 degrees for an hour. Stir after 30 minutes. (Note from recipe book: "Southern folks always had a sweet tooth. After the war white flour wuz hard to come by so they came up with this here recipe. It wuz so good they kept right on eatin' it even when they could git flour.")

Baked Cornmeal Pudding 2 cups cornmeal 1 cup flour 2 well beaten eggs 1/4 cup shortening 1 cup sorghum molasses 1/4 tsp. allspice 1 tsp. baking soda 1 tsp. salt 1 cup buttermilk

Sift meal twice. Mix all dry ingredients real good. Add eggs, milk, molasses and shortening. Mix all together good, adding more milk if too stiff. Bake at 350 degrees in well greased pudding pan until golden brown. Test with toothpick, if it comes out clean, pudding is done. Serve hot with any kind of fruit.

Southern Bread Pudding 2 cups milk 4 eggs beaten 1 tbsp. vanilla 1 cup raisins 4 cups biscuit crumbs 2 tbsp. butter nutmeg to taste Mix milk, eggs and nutmeg together in a saucepan. Place over heat until hot but not boiling. Line baking dish with biscuit crumbs mixed with melted butter. Pour milk mixture over biscuit crumbs (you can use store-bought light bread, but biscuits are better). Sprinkle with nutmeg. Place the baking dish in a pan of hot water in a 350 degrees oven and bake for 45 minutes.

Apple Brown Betty 2 cups soft bread crumbs 1/4 cup margarine 3 cups apples, sliced (they need not be peeled) 1/2 cup sugar 1 tsp. cinnamon 3/4 cup water In an oven-proof skillet, saute bread crumbs in margarine. Add apples, sugar, cinnamon and water. Cover and bake at 375 degrees for 30 to 40 minutes, until apples are translucent and tender. If mixture becomes too dry during baking, add 1/4 cup water (apples vary as to moisture content).

Apple Custard Pie filling ingredients: 3 apples, sliced and peeled 1-1/4 cup sugar 1 tsp. cinnamon 1 egg 1 cup evaporated milk (or 1 cup double-strength powdered milk) crust ingredients: 1-1/2 cups flour 1/2 tsp. salt 1 stick butter For crust, mix flour, salt and butter with a fork until mixture resembles coarse meal. Press firmly on the bottom and sides of a buttered pie plate. Place sliced apples on crust. Sprinkle with 2/3 cup sugar and cinnamon. Bake at 375 degrees for 20 minutes. Beat together egg, remaining sugar and evaporated milk. Pour over apples and return to oven to bake 30 minutes longer.

Timeless Gingerbread 2/3 cup molasses 1-1/4 cup sour milk or buttermilk 2 tbsp. vegetable oil 2 cups whole wheat flour 1 tsp. baking soda 1/4 tsp. salt 1 tbsp. ginger Mix the liquids. In another container, mix the dry ingredients. Beat together the two groups of ingredients and pour into a greased 9-inch square pan. Bake at 350 degrees for 25 to 30 minutes or until a toothpick inserted in the center comes out un-sticky.

Scotch Shortbread 2 sticks butter 1 cup sugar 2-1/2 cups flour 1/2 cup chopped nuts (optional) Cream butter with sugar until soft. Add flour and mix well with hands. Add nuts if desired. Chill dough 1 hour, then roll thin. Cut into shapes or short strips. Place on ungreased cookie sheet. Bake at 300 degrees for 20 minutes. Makes about 3 dozen pieces.

Grandma's Molasses Cookies 1 cup molasses 1 stick butter 3 cups flour 1 tsp. baking powder 2 tsp. baking soda 1 tsp. salt 1-1/2 tsp. ginger Heat molasses and butter. Remove from heat. Mix remaining ingredients together and add to molasses mixture. Mix well and chill 3 hours. Roll

thin and cut with cookie cutter. Place on greased cookie sheet and bake at 350 degrees about 12 minutes. Cool.

Molasses Crisps 1-1/4 cups flour 3/4 tsp. baking soda 1/2 tsp. ginger 1/2 cup molasses 1/4 cup shortening Sift the dry ingredients. In a saucepan, bring the molasses and shortening to a boil. Cool slightly. Add flour mixture. Mix real good. Chill thoroughly. Cut into desired shapes and arrange on greased cookie sheet. Bake at 375 degrees until done, about 8 or 10 minutes. Makes about 2 dozen.

Domestic Animals and Vermin. Most Americans have an aversion to eating dogs, cats or horse meat while they don't give a second thought to eating a piece of chicken, beef or pork. It's also a culinary taboo to eat vermin like rats and groundhogs, but many people eat other rodents like rabbits and squirrels. Cultural culinary taboos have nothing to do with nutrition and if you can "unlearn" them a wide variety of new potential protein sources is available to you. If you have trapped a nice juicy rat or if Fido and Tabby aren't performing a vital task like protecting your food larder, garden or hen house you may find the recipes in this section of interest.

Fried Cat 1 cat, 2 to 3 pounds 1/2 GI canteen cup flour 2 GI mess kit spoons paprika 1-1/2 GI mess kit spoons salt 1/4 GI mess kit spoon pepper 1 GI canteen cup shortening Cut cat in serving pieces. Blend flour, paprika, salt and pepper in a clean container. Shake 2 or 3 pieces of the cat at a time until well coated with flour. Save any left over flour for gravy. Heat shortening in a heavy pan. Place cat pieces in pan and brown slowly on all sides. Cover and cook slowly until cat is tender. Uncover about 15 minutes to crisp cat.

Clay Cat 1 small cat salt & pepper aromatic spices such as bay leaves, juniper berries or lemon grass (use what is available) 5 garlic cloves 2 oranges, peeled and halved Dress and clean the cat, leaving the fur on. In the stomach cavity (which should be patted with salt and pepper) place the peeled oranges, peeled garlic cloves and aromatics. Tie the cavity closed or pin closed with little wooden skewers, threaded in and out of the soft belly skin. Coat the whole animal with clay. Do several coats so you have a good shell formed. Put in a hole with hot coals at the bottom and pile hot coals on top of the clay cat. Throw a blanket of banana leaves (or other green vegetation) over the hole. Let bake for 2 or 3 hours while you are tending to other things. The fur will come off when you strip the clay away.

Baked Dog DiRocco 1 small dog 10 bay leaves or any aromatic spice 1 onion 1 pod hot red pepper 1 GI mess kit spoon salt black pepper 3 slices bacon Mike DiRocco, who served three tours in Vietnam, offers a good tip on selecting the best dog for cooking. He says the Vietnamese judge how tender the dog will be by color; a white dog is best, brown second best and lastly a black dog. Skin and clean dog. Remove the glands from under the legs (they have a strong taste, though they are not harmful if eaten). Cut into sections. Put pieces in a pot. Add bay leaves or aromatics, then onion, red pepper and salt. Cover with cold water. Cover pot and boil gently for 30 minutes. Drain meat and discard water and seasonings. Cover again with cold water and boil for 1 hour. Again pour out the water and drain. Cover dog with cold water for a third time and cover pot. Boil gently until tender, about 1 hour. Drain. Put dog in pan. Season with plenty of black pepper and salt if needed. Cover with slices of bacon or fat pork. Put in a clay oven or a covered pan placed in hot coals and covered with coals. Bake for 1-1/2 hours. Make gravy with pan juices.

Barbecued Dog Dress dog, removing any glands from under the legs. Take off all fat, if any. Cut into serving pieces and parboil in salt water for several hours until tender. Place on spit or grill and pour your favorite sauce recipe over the pieces. Grill, turning as needed to brown evenly. Baste with sauce throughout cooking. (improvised sauce: mix a GI canteen cup of tomato sauce or juice with a GI mess kit spoon of garlic powder, two GI mess kit spoons of worcestershire sauce and a dash of pepper)

Bunker Beef Curry 2 cups boned bunker beef (any meat on the hoof that you find down in your bunker; usually rats) 1/4 cup flour 3 large onions, sliced 4 tbsp. butter or oil 1 cup boiling water 1/4 tsp. ground coriander 1/2 tsp. ground cumin 1/2 tsp. turmeric 1/4 tsp. cayenne pepper 1 cup tomato juice Sprinkle the "beef" with seasoned flour. Cook "beef" and onions in butter or oil until brown. Add water and spices and bring to a boil. Cover pan. Simmer for a couple of hours until "beef" is tender. Stir in tomato juice. Serve with rice. Any condiments such as coconut, raisins, nuts or chutney which are available can be sprinkled on top of Bunker Beef Curry on rice.

Barbecued Bunker Beef 4 cups cooked bunker beef, boned 1/4 cup vinegar or wine 1/4 cup sugar 1/2 cup butter or oil 1/2 tsp. black pepper 1/2 tsp. cayenne pepper 2 onions, peeled and sliced 1-1/2 cups water 4 tbsp. mustard 1 tsp. salt 2 slices lemon 1 cup catsup 3 tsp. worcestershire sauce Steam enough "beef" to make four cups, pulled from the bone. Set aside to cool. Combine vinegar or wine with sugar, butter or oil, peppers, onions, water, mustard, salt and lemon slices in a pan. Bring to a rolling boil. Add catsup, worcestershire sauce and "beef". Simmer for 15 minutes. Serve over bread or rice.

Rat Roulade 2 medium rats, dressed (cut off heads, paws and tails) 4 slices bacon, diced 1 onion, chopped 1-1/2 cups toasted bread cubes 2 tbsp. minced parsley 1/2 tsp. celery seeds 1/4 tsp. sage 1/2 tsp. salt 1/2 tsp. pepper 1 cup bouillon (1 cup water, 1 bouillon cube) 1 8-ounce can tomato sauce Saute bacon with onion until onion is tender. Mix in bread cubes, parsley, celery seeds and sage. Season rats with salt and pepper. Stuff each rat with stuffing. Tie rats closed with strings by wrapping around bodies. Place in pan and pour bouillon over roulades. Cover pan and simmer 45 minutes to 1 hour or until rats are tender. Add tomato sauce and cover pan again. Cook for 30 minutes more.

Jane Fondue or Meat with Red Sauce 3 pounds meat (beef, pork, horse, monkey, water buffalo, dog, cat ... any red meat) 3 cups cooking oil (any kind) Red Sauce (see next recipe) Cut the meat into 1-inch cubes and set at room temperature for about 30 minutes. Fill a pot 1/2 full with cooking oil and heat to 375 degrees (meat will brown quickly when oil is heated properly). Place cubes of meat on sticks and cook in oil for 10 to 30 seconds until browned. Dip into Red Sauce. (Note: If fowl is substituted for red meat in Jane Fondue recipe, be sure to use only the left wings of the chicks).

Red Sauce 1 8-ounce can tomato sauce 2 tbsp. brown sugar 1/2 cup steak sauce (or your favorite bottled steak condiment) 2 tbsp. cooking oil Combine all ingredients in a saucepan and heat thoroughly.

Hopefully the recipes in this "Militia Cookbook" will give you some ideas on how to prepare meals from your stockpiled staple foods during an emergency so you won't have to choke down plain uncooked flour and break your teeth on dry beans.