## EVERYTHING UNDER THE SUN <br> Putting the Foods You Love Into Food Storage by Wendy DeWitt <br> everythingunderthesunblog.blogspot.com

What's for dinner? an age old question. But in times of crisis, that question becomes even more significant. Experience has shown that when disasters hit, having a supply of food and water can be life saving. But it doesn't take a natural disaster to need food storage. Personal economic disasters happen every day and the choice to pay the mortgage or buy food becomes a reality. It is essential for every family to have food storage in order to survive whatever crisis may be ahead.

There are many questions and concerns about food storage. What should you buy? What will it cost? Where do you store it? How do you cook it? What about rotation? The following information answers all of these questions and more. It will give you the knowledge you need to put the foods you love into your food storage.

## THE SYSTEM

This system is based on a worst case scenario, meaning there would be no running water or electricity. This scenario also assumes that families will be on their own and will not be banding together at churches or schools. There are many circumstances that would require isolation from other people, not banding together. Don't put your family at risk by assuming that you will be eating someone else's food.

Organization: How much food do you need? This system answers that question down to the last teaspoon of salt. Take 14 note cards and write down 7 breakfasts and 7 dinners that you would like to have once a week for one year. There are 52 weeks in the year, so you will be having these meals 52 times. Write on the left side of the card everything it takes to make the meal and on the right side everything multiplied by 52 . Don't forget to add the water you will need for cooking. My food storage has 14 dinners (x 26 weeks) 7 breakfasts (x 52 weeks) a daily loaf of bread (x 365 days) and a variety of desserts. This is a very simple system that saves time and money because you only store what you need and will eat. It can easily be adapted from a years' supply to a 2 weeks' supply or a 3 months' supply. The individuality of this system is also helpful for people with food allergies.

Organize all of the information from your cards into a notebook. Make a chart or table that alphabetically lists all the foods from your recipe cards. My table has 5 columns. The first column lists the food item. The next lists all the meals that food item is in. The third column lists how many cups, cans or jars are needed. The fourth lists how much of that item I have and the fifth, how much I need to buy.

| ITEM | Meals | Need | Have | Buy |
| :--- | :--- | :--- | :--- | :--- |
| Raisins | Oatmeal 20c, rice pudding 20c=40c | 10 quarts | 5 qts. <br> $2 / 07 \mathrm{mstr} . ~ b e d ~$ | 5 qts. |
| Rice | Salmon/rice 35c, Sweet \& sour 35c, rice <br> pudding $50 \mathrm{c}=120 \mathrm{c}$ | 12 - \#10 cans | 10 cans <br> $1 / 06$ bedroom 3 | 2 cans |
| Salmon | Salmon \& rice $=26$ pints | 26 pints | 26 pts <br> $3 / 07 \mathrm{mstr} . ~ b e d ~$ | 0 |

For rotation purposes, list in the "have" column when the food was purchased and what room it is in. Carry this notebook whenever you go shopping and shop the sales.

The equivalency page (page 16 of this booklet) gives you the information you will need to create your table. The equivalency page is an alphabetical listing of common foods and how their amounts translate into pounds, quarts, containers or \#10 cans.

Cost: The cost of using this system depends upon your menus. It can cost about one dollar per day per person if you shop wisely and bottle your own meats. This would include 2 cups of breakfast, 2 cups of dinner and a loaf of bread every day.

Storage: One person's year supply will usually fit under a twin size bed. Remember that heat and moisture can destroy your food so keep it inside your home.

Rotation: Food storage rotation is a once a year event with this system. Your food storage notebook shows how much food is stored, where it is stored and when it was purchased. Once a year, check your notebook to see if anything is expiring that year. (Because long shelf life is important, the shortest shelf life in my food storage is 3 years.) For vacuum sealed foods, visually check each jar to be sure it is sealed. Open one jar of each vacuum sealed item to check for freshness and then reseal it. If anything on your list is close to expiration, take it out, put it in your kitchen pantry for daily use and replenish your storage with fresh food. A food storage slush fund of even $\$ 10$ a month will give you $\$ 360$ after 3 years. Keep in mind, the food storage that goes from your storage into your pantry is going to cut your grocery bill.

Meat Rotation: If you are storing one pint (or quart) of meat per day, you will bottle 365 jars of meat.
While this sounds like a lot, I once used 3 pressure canners to bottle 150 pints of meat in 12 hours. To rotate, place 50 jars of bottled meat in your kitchen pantry and place the rest in your food storage. If you use 3 jars per week, those 50 jars will be gone in about 4 months. You will then bottle 50 more jars, place them in your food storage and take out another 50 jars for your pantry. Your entire stock will be rotated in about 2 years. If you use 2 jars per week, it will take about 3 years to rotate your supply.

## BOTTLING MEATS

(Caution: If you have a glass-top stove, you may want to use a propane camp stove outdoors to bottle meats. I have a glass top stove and have had no problems, but I still need to caution you.)

Bottling your own meats is extremely easy and it's what makes this food storage system so unique. It's real chicken in your sweet and sour and real beef stew. The meat is tender, juicy, ready to eat and needs no freezing or refrigeration...just like your tuna fish from the store. The shelf life is at least 3 years, but the process is so easy, you may want to rotate your meats more often to be sure the nutritional quality is high. You can bottle any kind of meat; chicken, turkey, beef, hamburger, fish, ham...I’ve even had moose.

Pressure Canners: You must use a pressure canner to bottle meats. Pressure cookers will not safely can meats. Canners come in quart sizes, meaning they hold a certain amount of liquid quarts, but don't purchase anything smaller than a 15 quart canner, which will usually hold 7 quart jars.

For used canners, check the internet. If you buy a used canner, be sure to have the gauge tested at your County Extension Center or buy a new gauge. This will ensure that you are cooking at the right pressure and your food will be safe. Try to avoid canners with the rubber gasket in the lid because the gasket will eventually leak. A good canner will have a metal to metal lid, a pressure gauge, a pressure release valve, wing nuts to hold the lid down and an inside tray. A canner is a great investment even if you're not doing food storage because canning meat will save time (no more defrosting chickens) money (shopping the sales) and a good canner will last forever. I have one that is over 70 years old and it still works.

Canning Meats: A pint bottle will hold 1 pound of meat, a quart will hold 2 pounds. Jars from thrift stores or yard sales are fine for vacuum sealing dry foods, but not for bottling meats. Old jars might crack under the pressure. Invest in some new jars when you first start canning and reuse them over and over.

Many books will tell you to cook the meat before you bottle it. With the exception of ground meats, I prefer the raw pack. Put your raw meat and $1 / 4$ to $1 / 2$ tsp of salt into a clean jar. Jars do not need to be sterilized. Fill jars to $1 / 2 "$ from the rim. No other spices should be added. With the exception of ground meats, no water is added to the meat. In a small pan, boil the lids for about 2 minutes to soften the rubber seal. Make sure the rim of the jar is completely clean before you put the heated lid and ring on. Tighten the ring down finger tight. Pour about three inches of water into your canner and place the tray inside. Place your jars in the canner on the tray, screw down the canner lid, making sure the top is even, and turn your stove on high. Don't put the weight on the pressure valve until steam has spouted out of the valve for about 10 minutes. This expresses the air out of the jars and the canner. After expressing the air, put the weight onto the pressure valve. In desert altitudes, can meats at the 10 pound mark. For other altitudes, check your manual. If you have an older canner, there may not be a weight but there will be some kind of pressure release mechanism. Keep this mechanism open to express the canner then close it to begin your pressure. When the gauge gets to the correct pressure, (according to your altitude) begin timing... 75 minutes for pints and 90 minutes for quarts (Fish is 15 min longer). This is the formula for all meats. You will need to immediately start turning down the heat to keep the pressure stable and continue turning it down over the allotted time. Keep the gauge at the correct pressure. When the pressure drops or increases, a vacuum effect causes the juices in the jar to be pulled out. Do not leave your canner. At the end of the 75 or 90 minutes your heat should be at a very low level and you will then turn the heat completely off. Don't move the canner; just let the pressure go down on its own. When it's back to zero, release the pressure valve (or remove the weight) take off the lid, put the jars on the counter away from cool drafts and wait for them to seal. You'll hear a "plink" when the lids seal correctly. If a jar doesn't seal, you can either refrigerate it for later use or re-bottle it using a new lid. When they are cool, wipe the bottles clean, remove the ring and put them back in the box for storage. Ground meats have a better texture if you brown them first, pack loosely in the jars, cover with water and process. When canning cooked meats like leftover turkey, add a soup broth before canning. Ham makes very little juice, so don't worry if the juice doesn't cover all the meat. Don't bottle spiral cut hams, use a shank cut and don't add salt. Don't bottle turkey hams or other processed meats like bologna or hot dogs.

## SOLAR OVEN COOKING

It is not uncommon in emergency situations for the power to be out. With a solar oven, if the sun is shining, you can cook. Have backup sources of fuel, such as wood or propane, but in sunny climates your solar oven will be your main source of cooking. Solar cooking is clean, it keeps the heat out of your kitchen, it's delicious and, best of all, it uses a free source of energy. You don't want to waste precious food when times are bad, so you should practice cooking with your solar oven to know what you're doing. The recipes have been included in this booklet to show the variety of foods that can be stored and how to cook them. Every recipe in this booklet was made in a solar oven.

With solar cooking, you can't start dinner at 5:00, so you may want to do what our ancestors did; have breakfast in the morning, a big meal in the afternoon and a light snack before bed. If possible, have two solar ovens so you can be cooking dinner in one and baking breads or desserts in the other. Cooking times and temperatures are always approximate and will depend upon how your oven is placed, the time of day and cloud cover. A general rule is that foods will cook in about twice the usual amount of time. Don't try to cook too much at one time. Larger amounts of food will cook faster if you divide it up and put it into smaller pots or cut foods into smaller pieces. Grains and beans need about $1 / 4$ less liquid because very little moisture escapes in solar cooking. There are other uses for your solar oven such as pasteurizing water, killing infestations in grains or dried foods, sanitizing dishes, drying firewood, sprouting foods, and decrystallizing honey or jams.

Some good safety rules are: germs can't grow at 120 degrees, water is pasteurized at 150 degrees, foods will cook at 180 and water boils at 212 . Remember, no matter how you do your cooking, there is a danger zone for foods. Some foods left at temperatures between 50 and 120 for 3 or 4 hours can grow harmful bacteria and carry a risk of food poisoning.

Cookware: Measure the inside of your oven before buying any pots or pans. Using dark pots with tight fitting lids will absorb the heat and your cooking will go faster. In addition, your foods won't have to be stirred as often. This is important because opening your oven drops the temperature by 50 to 100 in just seconds. Smoked glass cookware is good because you can see your food without opening the oven. Cast iron is great on partially cloudy days because it holds the heat. Cloudy days are good times to cook foods that just need a gentle simmer. The intermittent sun will provide enough heat to simmer soups and stews. Don't use stainless steel or shiny aluminum pans which reflect the heat instead of holding it in. If all you have is aluminum, you can cover it with a dark cloth. Mason jars painted black work well. Put a strip of masking tape from the top of the jar down to the bottom and up the other side. Paint the jar and remove the tape. This allows you to see inside the jar while cooking. Using sunglasses will help you avoid the glare from the reflectors and always use pot holders.

## FOOD STORAGE TIPS

Baking powder, baking soda, sugar, salt, cocoa: These are some of the items you don't need to can or vacuum seal. Keep them in their original containers or you can place them in buckets with lids.
Brown sugar: 2 Tb Molasses, 1 cup white sugar. Mix with pastry blender until blended. You can also vacuum seal brown sugar in mason jars to keep it fresh for years.
Butter.almost: 1 pound shortening (butter flavored works) $1 / 2$ tsp salt, $12 / 3$ c condensed milk
Whip the shortening and the salt until light. Add the condensed milk a little at a time and blend.
Butter bottled: Google "bottled butter". Real butter is best but margarine works too. Heat pint jars in the oven @ 250 for 20 minutes. Heat lids in boiling water for 3 minutes. Slowly stir and melt the butter in a pan. After it has boiled for 5 minutes, stir and then scoop the butter into the hot jars. Use a funnel to keep butter off the rims. Place the hot lid and ring on the jar and wait for the "plink". Shake jars several times over the next 15-20 minutes. The separation will stop. While still slightly warm, put the jars in the refrigerator. Eventually the butter will harden. Leave in refrigerator for one more hour. Bottled butter can store on your shelf for almost 3 years.
Butter canned: Check the internet for best prices. 12 oz can, 24 Tb or 3 sticks of butter.
Cheese canned: Check the internet for best prices. A Velveeta tasting hard cheese that can be shredded or sliced, comes in an 8 oz can. Minimum 5 year shelf life.
Corn syrup: 1 c sugar +2 c water. Cook in canning jar in solar oven about an hour or until thick.
"Eggs" from unflavored gelatin (Knox): Buy in bulk at bulkfoods.com. In all the recipes in this book I have substituted unflavored gelatin for the eggs. The gelatin is less expensive than powdered eggs (as little as 3 cents per tsp) and has an indefinite shelf life.
1 tsp gelatin $=1$ egg, 1 oz gelatin = 12 tsp, 1 pound gelatin $=192$ eggs.
Making one egg: Combine 1 tsp of unflavored gelatin with 3 Tb of cold water and stir until dissolved. Then add 2 Tb of hot water and stir. When using your own recipes, decrease the liquid called for in your recipe by about $1 / 4$ cup to compensate for the added water from the "egg". I have already done this for the recipes in this book.
Eggs: Storing fresh eggs for up to 1 year. Rub warmed mineral oil on your hands and coat the entire surface of the fresh egg with the oil. Replace egg in carton with the point down. In cold climates they can be stored in a cool, dark place. In warmer climates, place in the refrigerator. Rotate once a year.
Jar cakes \& breads: This method of baking has been done for years, but there has been some discussion as to its safety. Because the eggs were exchanged with unflavored gelatin in all of these recipes, it is unlikely that the ingredients used could support bacteria if prepared and cooked properly. If you feel at all uncomfortable with this method, don't use it.

Jar cakes are great for food storage and the solar oven, but you must be sure to sanitize all your jars and lids to be sure they are free from bacteria. Foods such as breads, cakes, muffins, cornbread, brownies, cookies and cinnamon rolls are cooked and sealed in mason jars and can be kept on the shelf for several weeks. Using a pastry brush, grease the inside of your jar with shortening (no Pam or Baker's Secret) and fill it $1 / 2$ to $2 / 3$ full with batter or dough and bake. No lid is used at this time. Let your breads rise in the jars and then bake. If it bakes too high, cut the top of your bread or cake off before sealing the jar. Just be sure your jar edge is clean and your lids are hot. Immediately after the food is cooked, place a heated lid on the hot jar and tighten with the ring (Use hot
pads). Within a few minutes, the lid will "plink" and the food will be sealed. The food will slip out of the jars easily if you use the straight sided "jelly jars" but any kind of mason jar will work. With this method, you can do your baking on your bright sunny days and have fully cooked baked goods waiting on your shelves for that rainy day.
Milk: Powdered milk: If you have electricity, powdered milk is best if you use warm water, mix with a blender and chill overnight.
Buttermilk: 1 c water, $1 / 3 \mathrm{c}$ dry milk, 1 Tb vinegar or lemon juice. Let it sit 5 min .
Condensed milk: $1 / 2 \mathrm{c}$ hot water, 1 c sugar, $1 / 4 \mathrm{c}$ dry milk, 1 c water. Place in canning jar with lid and shake until thoroughly blended.
Eagle Brand: 1 c hot water, $1 / 3$ c corn syrup, $12 / 3$ c sugar, $1 / 4$ tsp vanilla, pinch of salt, $1 / 2 \mathrm{c}$ butter, 2c dry milk. Place all ingredients except butter in canning jar with lid and shake until well blended. Gradually add the butter and shake each time until well blended.
Evaporated: 1 c water, $2 / 3 \mathrm{c}$ dry milk. Whole 1 c water $+1 / 3 \mathrm{c}$ dry. Skim: 1 c water $+1 / 4 \mathrm{c}$ dry milk.
Milk on the shelf: Technology has given us real milk that sits on the shelf and has at least a 1 year shelf life. It comes in quart containers, available in whole, $2 \%$, vanilla soy, almond and rice milk.
Peanut butter: 2 c peanuts and 4 Tb honey OR $21 / 2 \mathrm{c}$ peanuts and 2 Tb butter - salt to taste. Blend until smooth. This really needs an electric blender but it can still be done without one.
Rice: If your rice goes rancid, set it out for 2 or 3 days and rinse with water.
Shortening: I have substituted shortening for the oil in all my recipes because of the longer shelf life. Oil has about a 2 year shelf life, unopened shortening has 10+ years. If you can still find the hard lid shortening (not foil lids) they have an indefinite shelf life. Store shortening in a cool, dark place. Opened shortening has a less than one year shelf life. After opening shortening, melt it in the microwave or solar oven, pour it into mason jars and vacuum seal it for a longer shelf life.
Tomato powder: $1 / 2$ cup powder mixed with 1 cup water $=1 \mathrm{c}$ tomato sauce. Less water makes tomato paste and more water makes tomato juice. Shelf life is $10+$ years.
Vacuum sealing foods: Many foods with high oil or high sugar contents cannot be stored in \#10 cans because of the interaction with the metal (Chocolate chips, nuts and raisins for example). You can significantly increase the shelf life of your foods by placing them in mason jars and using a Food Saver and a Jar Sealer attachment to vacuum the air out of the jars. Put your ingredients in a mason jar, put a lid on the jar, place the jar sealer attachment over the lid and start the machine. If a jar won't seal, try placing one lid down and one facing up or heating the lid in boiling water. The jar can be opened and resealed over and over. If you take the lids off carefully, they can be reused indefinitely. You can seal nuts, raisins, chocolate chips, brown rice, cornmeal, candy bars, egg noodles, poppy seeds, dried apricots, malt-o-meal, cookies, granola bars...just about anything in the pantry. Shelf life should be 3 years or more if you keep the foods cool. Remember, the warmer the temperature, the shorter the shelf life.
You cannot vacuum seal foods that need refrigeration...only foods that sit on your pantry shelves.
Don't vacuum fine powders....they gum up the works of your machine. If you want to seal powders, put a plastic or zip lock bag in your jar, fill the bag, express the air, zip lock it then vacuum seal.
A new Food Saver can be expensive. Used ones are easy to find online and are very inexpensive. Just be sure it has the port hole on top of the machine where the jar sealer attaches. Jar Sealer attachments come in regular and wide mouth.
Water: I store water in the 55 gallon plastic barrels. You can add 1 tsp of household bleach for every 5 gallons of water, but most city water supplies already add sufficient chlorine. 2-3 of these barrels per person will fill most water needs for cooking. Store in the garage or on the north side of the house.
Yeast: Yeast has an indefinite shelf life in your freezer or one year on the shelf. ALWAYS test your yeast before adding it to your dry ingredients. Add the yeast to warm (not hot) water and wait a few minutes. The mixture will start to bubble and smell good. Add this to your dry ingredients.

## BREADS

The question most often asked about solar cooked bread is, "Does it brown?" The answer is yes. It bakes and browns beautifully. As with all other foods, breads take almost twice as long to cook in a solar oven. They will bake in a cooler oven (200) but hotter ovens are best. Cooking times and temperatures will always depend on how hot your solar oven is. Pint references are connected to cooking in pint jars.

Cinnamon and Raisin Bread Makes 1 loaf or 3-4 pints.
1 recipe wheat bread (use white wheat if possible) $1 / 8 \mathrm{c}$ butter, 2 tsp cinnamon, 2 Tb sugar, $1 / 4 \mathrm{c}$ raisins.
Make the bread recipe and before you roll it into a loaf, spread the butter on the dough, sprinkle on raisins and a mixture of sugar and cinnamon. Roll it up, place in loaf pan or jars and bake until browned.

Cornbread Makes one $8 \times 8$ pan or 3-4 pints.
$12 / 3$ c flour, 1 2/3 c yellow cornmeal, 2/3 c sugar, 2 "eggs", 5 tsp baking powder, $1 / 4$ c dry milk, 1 tsp salt, $1 / 3$ c melted shortening, $11 / 4$ c water.
Make your "eggs". Melt $1 / 3 \mathrm{c}$ shortening. Mix the flour, sugar, baking powder, salt and dry milk in a large bowl. Stir in the cornmeal until well blended. Add "eggs" and water and stir until the batter is smooth. Gently stir in the melted shortening just until blended. Do not over-stir. Pour into your greased pan or jars and bake for 60 to 80 minutes or until browned.

Oatmeal Raisin Muffins Makes 12 muffins.
1 "egg", 3 tsp baking powder, $1 / 2$ c milk ( $1 / 8 \mathrm{c}$ dry $+1 / 2 \mathrm{c}$ water), $1 / 2$ tsp salt, $1 / 2 \mathrm{c}$ raisins, $1 / 4$ tsp ground nutmeg, $1 / 2 \mathrm{c}$ melted shortening, $1 / 2$ tsp cinnamon, $1 / 3 \mathrm{c}$ sugar, 1 c white or wheat flour, 1 c rolled oats.
Melt the shortening. Make your "egg". Mix "egg", milk, raisins and shortening. Stir in remaining ingredients and stir just until moistened. Fill muffin cups $3 / 4$ full or mason jars just over half full. Bake until browned.

Wheat Muffins Makes 12 muffins.
2 c wheat flour, $1 / 2$ c melted shortening, 1 c sugar (or brown sugar), 1 "egg", $1 / 4 \mathrm{tsp}$ salt, 1 tsp vanilla, 1 tsp baking soda, $3 / 4$ c water, $1 / 3$ c dry milk, $1 / 4 \mathrm{c}$ raisins.
Melt shortening. Make your "egg". Mix dry ingredients in a bowl. Mix liquid ingredients, raisins and "egg" and pour over the dry mixture. Stir just until moistened. Spoon into greased muffin tins or fill mason jars to just over half full. Bake until browned.

Whole Wheat Bread Makes one loaf or 3-4 pints.
2 tsp yeast, 1 c water, 3 c wheat flour, $11 / 2$ tsp salt, 2 Tb applesauce or shortening, $1 / 4 \mathrm{c}$ sugar or honey.
Solar oven: Warm $1 / 4 \mathrm{c}$ of the water, stir in the yeast and set aside. Mix 2 c of the flour, the melted shortening, sugar, salt and the rest of the water in a large bowl. A little at a time, add enough of the rest of the flour, kneading until smooth and elastic. Cover the bread and let it rise until doubled in size. Punch down the dough, shape it into a loaf, place into a greased pan or jars, cover and let it rise again until doubled. Bake for 45-60 minutes or until browned. For a regular oven, bake at 350 for $25-30 \mathrm{~min}$.

365 Loaves of Bread White wheat bread - 1 loaf per day
2 c white wheat ( 3 c flour) x $365=730$ c ( 12 c / \#10 can)
1 c water x $365=365$ c ( $16 \mathrm{c} / \mathrm{gal}$ )
$11 / 2$ tsp salt x $365=547$ tsp ( 117 tsp/container)
2 Tb melted shortening x $365=730 \mathrm{~Tb}(17 \mathrm{~Tb} / \mathrm{c}, 21 / 4 \mathrm{c} / \#)$
$1 / 4$ c sugar $x 365=91 \mathrm{c}(2 \mathrm{c}=1 \#)$
(or honey=91 c (13 oz=1c=74\# honey)
2 tsp yeast x 365=730 tsp=243 Tb (48 Tb/\#)
Follow instructions for whole wheat bread.

## Total for One Year

61 \#10 cans white wheat
23 gal of water
$42 / 3$ containers of salt
19 \# shortening
46\# of sugar
(or 74 \# honey)
5\# of yeast

## CEREALS

You will need to add the separate serving of $1 / 2 \mathrm{c}$ water $+1 / 8 \mathrm{c}$ dry milk and 1 Tb sugar to your totals.
Granola Makes 5 cups or 3 pint jars.
3 c oats, $1 / 3$ c honey, 1 c sliced almonds, 1 tsp cinnamon, $1 / 4 \mathrm{c}$ shortening, $1 / 2$ tsp salt, $1 / 2 \mathrm{c}$ raisins.
Melt the shortening. Place all the ingredients (except raisins) in a large bowl and mix well. Spread onto a shallow pan (or put into 3 uncovered pint jars) and bake until browned ( 60 minutes or longer). It shouldn't have to be stirred but you can turn the jars half way through. Watch it closely so it doesn't burn. For jars, add the raisins and place a lid and ring on the jar as soon as you remove it from the oven. The jar will seal and keep the granola fresh for weeks. For pans, let it cool, add the raisins and store in airtight containers.

Grape Nuts Makes 4 cups.
6 c whole wheat flour (4 c wheat), 1 c brown sugar, 2 c buttermilk ( 2 c water $+2 / 3 \mathrm{c}$ powdered milk +2 Tb vinegar or lemon juice.) 1 tsp baking soda, 1 tsp salt
Mix everything in a bowl, press onto 2 cookie sheets and bake until dry (1-2 hours) Grind with a meat grinder to the size of grape nuts and bake again until golden brown. Cool and store in airtight container.

Oatmeal Makes 1 cup.
$1 / 2 \mathrm{c}$ rolled oats (or quick), 1 c water, pinch of salt.
Place salted water and oats in separate canning jars or covered pots and heat. When heated, add warmed oats to hot water and cook to desired consistency. Serve with milk and sugar. Add raisins or dried apples.

Rice Cereal or Rice Pudding Makes 4 cups.
$11 / 2 \mathrm{c}$ rice, 4 c water, 1 tsp salt, 3 Tb sugar. Pudding: 2 "eggs" $1 / 2 \mathrm{c}$ raisins, $1 / 4$ tsp nutmeg, $1 / 4$ tsp vanilla. Place salted water and rice in canning jars or covered pots and place in solar oven. When water is hot, add warmed rice and cook for 40 to 50 minutes or until rice is done. Add milk and sugar. For rice pudding, add 2 or more "eggs", sugar, raisins and nutmeg to the hot rice. Stir well and return to the oven, repeating the process until rice is thick like pudding. Add vanilla and stir. Add $1 / 2 \mathrm{c}$ milk if desired.

Wheat Cereal Makes $1 \frac{1}{4}$ cups.
$1 / 2 \mathrm{c}$ wheat +1 c water. Soak overnight. ( 1 or 2 more c of water will be needed to cook). Place water, soaked wheat and pinch of salt in a jar or pot with tight fitting lid. Cook 2 hours. Add water as needed.

## MAIN DISHES

Beef and Beans Makes 8 cups. Start early....beans take a long time.
1 pound washed pinto beans ( $21 / 2 \mathrm{c}$ ) 7 c water, 1 pint bottled beef (undrained), 2 tsp salt, $2-3 \mathrm{~Tb}$ dried onion, $1 / 2$ tsp thyme, $1 / 4$ tsp garlic powder, $1 / 4$ tsp basil, 1 tsp parsley, $1 / 4$ tsp pepper, 1 bay leaf.
Place water in covered pot and heat to as close to boiling as possible. Add beans. Cover and soak out of the oven for 1 hour. Do not drain. Add all other ingredients and simmer 4-5 hours or until done.

Beef Soup Makes 12 cups.
1 pint bottled beef (undrained) 8 c water, $4-8$ tsp (according to taste) beef soup base, 1 c dehydrated diced potatoes, 1 c dried carrots, $1 / 2$ c dried celery, $2-3 \mathrm{~Tb}$ dried onion, $1-2$ tsp salt, 1 tsp pepper, 1 bay leaf, $1 / 2-1$ tsp thyme.
Mix all ingredients in large covered pot and simmer for several hours.
Beef Stew Makes 8 cups Creamy or Tomato style. 1 pint bottled beef, 1 recipe cream of mushroom soup (using beef soup base instead of chicken soup base) (Tomato style: 1 c tomato powder +2 c water=2 c tomato sauce) 1 c dried carrots, 2 Tb dried onion, $1 / 2$ tsp salt, $1 / 4$ tsp pepper, 1 bay leaf, 1 tsp thyme, 1 c diced potatoes. Use the beef juices and water to make the cream of mushroom soup. (Or make the tomato sauce). Place all ingredients in large covered dish and simmer in solar oven for several hours.

Chicken Alfredo Makes 10 cups.
1 recipe Alfredo sauce, 1 pint bottled chicken (drained) 1 pound spaghetti noodles, 8 c water, $1-2 \mathrm{~Tb}$ parsley, $1 / 2$ - 1 tsp garlic powder, 1 tsp salt, $1 / 2$ tsp salt, $1 / 8$ tsp pepper.

Make the Alfredo sauce. Heat salted water and spaghetti in separate large covered pots (or canning jars w lids). Add warmed spaghetti to hot water, cook 15-20 min. and drain. Stir noodles, sauce, parsley, garlic, salt, pepper and chicken together gently and return to oven for 20 min . or until hot.

Chicken Creole Makes 10 cups.
$11 / 2 \mathrm{c}$ rice +3 c water $+1 / 2$ tsp salt ( 5 c cooked rice) 1 pint bottled chicken (drained) $1 / 4 \mathrm{c}$ dried celery, $1 / 4 \mathrm{c}$ dried carrots, 1 bay leaf, 1 c tomato powder +2 c water, 2 Tb dried onion, $1 / 2$ tsp sugar, $1 / 2$ tsp seasoning salt, $1 / 4$ tsp pepper, 4 tsp Worcestershire sauce, 3 Tb cornstarch, 1 c water, $1 / 4 \mathrm{c}$ dried parsley optional: $1 / 2 \mathrm{c}$ dried mushrooms. Split the 3 c water, $1 / 2$ tsp salt and $11 / 2 \mathrm{c}$ rice between 2 canning jars, cover and cook about 40 min . Hydrate vegetables. In a large covered pot, put vegetables, tomato sauce, bay leaf, sugar, salt, pepper, and Worcestershire. Cook 30-45 min. Put the 1 c water or broth and cornstarch in another jar and shake until smooth. Add chicken and cornstarch mixture to vegetable mixture and cook uncovered until thickened. Serve over the rice.

Chicken Delight Makes 9 cups.
$11 / 2 \mathrm{c}$ rice, 2 Tb beef soup base, 3 Tb dried onion, $1 / 2$ recipe cream mushroom soup, $1 / 2 \mathrm{tsp}$ salt, $1 / 4$ tsp pepper, 2 c water, 1 pint bottled chicken. Optional: $1 / 2 \mathrm{c}$ dehydrated mushrooms.
(May use broth and water to equal the 2 cups liquid.) Mix all ingredients in a large covered pot. Cook in solar oven for 4 hours or until rice is cooked. Remove lid and cook another $1 / 2$ hour or until browned.

Chicken Fricassee Makes 6 cups of broth and 8 cups of potatoes.
4 tsp chicken soup base +4 cups water, 4 tsp dry onion, 1 tsp salt, $1 / 2$ tsp pepper, $1 / 2 \mathrm{c}$ white flour and water as needed, 1 pint bottled chicken (undrained) 6 c instant potatoes $+4-6 \mathrm{c}$ water.
Combine the 4 cups of water, soup base, undrained chicken, onion, salt and pepper in a large covered pot. Place the $51 / 2 \mathrm{C}$ of water in another covered pot (or jars) and heat both pots in solar oven until hot. Take out the broth and slowly add flour and water mixture. Return to the oven to thicken. Take out the pot of hot water and stir in instant potatoes. (Make sure they're nice and thick) Place the potatoes on a plate, scoop the center to the sides, making a "bowl" and spoon the chicken and broth mixture into the "bowl".

Chicken and Rice Casserole Makes about 12 cups.
1 recipe cream of mushroom soup, 1 Tb lemon juice, $1 / 2 \mathrm{tsp}$ salt, 2 c rice, 4 c water +1 tsp salt (Don't add salt if broth is used) 2 Tb dried onion, 1 pint undrained bottled chicken, $1 / 4 \mathrm{tsp}$ pepper, $1 / 3 \mathrm{tsp}$ paprika Optional: $1 / 3 \mathrm{c}$ dried celery and $1 / 2 \mathrm{c}$ sliced toasted almonds.
Add broth and water to make 4 cups. Add the rice to the liquid and cook in solar oven about 40 minutes or until done. In a large covered dish, mix the cream of mushroom soup, lemon juice, onion, paprika, pepper, salt, chicken and cooked rice. (And optional celery and almonds) Cover and bake until done.

Chicken Soup Makes 12-14 cups.
8 tsp chicken soup base +8 c water, 4 tsp dried onion, 1 c dried carrots, $1 / 2$ tsp salt, $1 / 4$ tsp pepper 1 pint bottled chicken (undrained) $1 / 2 \mathrm{c}$ dried celery, $1 / 2 \mathrm{c}$ dry rice. Mix all ingredients and simmer.

Chili Makes 12 cups.
1 pound (or $21 / 2 \mathrm{c}$ ) washed pinto beans, 7 c water, $1-2$ tsp salt, $1 / 4 \mathrm{c}$ dried onion, $1 / 2-1$ tsp garlic powder, $3-4 \mathrm{~Tb}$ chili powder, 3 tsp cumin, $1 / 4$ tsp cayenne pepper, 1 Tb sugar, 1 pint ground beef, 2 c tomato powder +5 c water. Place water in a large covered pot and heat to as close to boiling as possible. Add beans. Cover and soak beans out of the oven for 1 hour. (Use soaking water to cook beans) Cook beans in covered dish $4-5$ hours. Add remaining ingredients and simmer until done.

Chili-Mac Makes 10 cups (add more water or broth if it's too dry)
2 c macaroni, 2 Tb dried onion, $1 / 4$ tsp garlic powder, 2 Tb chili powder, $11 / 2 \mathrm{c}$ tomato powder +3 c water (3 c tomato sauce) $1 / 2$ tsp salt, $1 / 4$ tsp pepper, 1 pint bottled ground beef.
Add beef broth and water to equal 3 cups of liquid. Add water and tomato powder to make tomato sauce. Add liquid, tomato sauce, macaroni, garlic, chili powder, salt, pepper and ground beef. Cook until macaroni is done.

Goulash Makes 14 cups.
3 c macaroni, 6 c water, 2 c tomato powder +6 c water ( 6 c tomato juice) 2 tsp dried onion, $1 / 4$ tsp garlic powder, 1 tsp salt, $1 / 2$ tsp pepper, 1 pint ground beef (undrained) 1 can of corn (undrained.)
Heat the 2 c water and salt in solar oven until very hot. Cook the macaroni in the water about 20 min or until done. Do not rinse. Add rest of the ingredients to the macaroni, return to oven and cook until done.

Macaroni and Cheese Makes 10 cups.
4 c macaroni, 8 c water, 10 Tb mac + cheese powder, 1 tsp salt, $1 / 3 \mathrm{c}$ dry milk $+1 \frac{1}{2}$ c water, 2 Tb butter, $1 / 2 \mathrm{tsp}$ salt, $1 / 8$ tsp pepper.
Heat the 8 c of salted water and the macaroni in separate containers. When the water is hot, add the macaroni and cook for 15-20 min or until done. Drain. Add butter, cheese powder, salt, pepper and milk.

## Rice-a-Roni Makes 8 cups.

2 c rice, $1 / 4-1 / 3$ pound spaghetti (1 cup of 1 " broken pieces) 1 Tb . dried onion, 2 tsp dry parsley, $1 / 2$ tsp dry ginger, $1 / 2$ tsp garlic powder, 1 tsp salt, $1 / 4$ tsp pepper, 4 Tb shortening, 4 tsp chicken soup base +4 c water, optional: 1 pint jar chicken, $1 / 2$ c sliced toasted almonds and $1 / 2 \mathrm{c}$ each dried carrots and celery.
In the solar oven, heat the shortening in a large pot. Dutch ovens are great but this can also be done in several canning jars with lids. Break the spaghetti into 1" pieces. When the shortening is hot, stir in the rice and broken spaghetti and cook until browned. (Jars can cook on their sides for this) Add the rest of the ingredients, cover and cook for 40-50 min. or until done.

Shepherd's Pie Makes 12 cups.
1 can corn (drained) 1 can green beans (drained) $1 / 2$ recipe tomato soup, 2 Tb dried onion, 1 tsp salt, $1 / 4$ tsp pepper, 1 pint bottled ground beef (drained), 3 c instant potatoes +3 c water ( 4 c potatoes)
Make the tomato soup. Heat 4 c water in jars or covered pot until very hot. Mix the ground beef, corn, green beans, tomato soup, onions, salt and pepper into a covered pot. Take the water out of the oven and wrap it in a dark cloth to keep it hot. Place the meat mixture in the oven and bake 45 min . or until hot. When it's done, mix the instant potatoes and the hot water and spread on top of the meat mixture.

Spaghetti Makes 10 cups.
1 pound spaghetti noodles, 1 recipe marinara sauce, 1 pint bottled ground beef or sausage (drained) 4 c water, 1 tsp salt.
Make marinara sauce and add drained meat . Heat salted water and spaghetti in separate covered pots (or use caning jars) add spaghetti to hot water and cook 15-20 min. Mix sauce and noodles.

Sweet and Sour Chicken Makes 7-8 cups.
1 pint chicken, 1 1/3 c rice, 2 2/3 c water, 1 can pineapple, $2 / 3$ c vinegar, 1 1/3 c sugar, 4 Tb cornstarch, 4 Tb soy sauce, 1 tsp Molasses, 1 Tb . dried onion. (opt. $1 / 2 \mathrm{c}$ sliced almonds, $1 / 4 \mathrm{c}$ dehyd. celery.)
Heat the rice and water in separate jars. When hot, combine and cook until done. (Heat bottled chicken at the same time.) Put the pineapple juice, vinegar, sugar, cornstarch, soy and molasses into a qt jar. Shake well and cook in solar oven. Cook and shake this sauce repeatedly until thickened. On the bed of cooked rice place the heated chicken, almonds, pineapple, and hydrated celery. Pour sauce over the top.

Taco Soup Makes 12 cups.
1 pint bottled ground beef or sausage, 1 can corn, 1 can kidney beans, 129 oz . can stewed tomatoes, 2 c water (OR 1 c water and 1 c tomato sauce) $2-3 \mathrm{~Tb}$ taco seasoning, 2 Tb onion, $1 / 4 \mathrm{tsp}$ garlic.
Place all ingredients in covered dish and let simmer.
Tamale Pie Makes 10 cups.
1 pint bottled beef or ground beef (drained) 1 c tomato powder +2 c water $=2 \mathrm{c}$ tomato sauce
$1 / 2$ pound ( $11 / 4 \mathrm{c}$ ) washed pinto beans +3 c water +1 tsp salt ( 3 c cooked beans) 2 Tb dried onion, $1 / 2$ tsp salt, 1 tsp garlic powder, 1 tsp oregano, 2 Tb chili powder, $1 / 4 \mathrm{tsp}$ pepper.
Topping: $12 / 3$ c cornmeal, $12 / 3$ c white flour, $2 / 3$ c sugar, 2 "eggs", 5 tsp baking powder, $1 / 2 \mathrm{c}$ dry milk +1 c water, $1 / 3 \mathrm{c}$ melted shortening, 1 tsp salt.
In large covered pot, heat 3 c water as close to boiling as possible. Add beans. Cover and soak out of oven 1 hour Add 1 tsp salt to beans and cook in oven 4-5 hours or until done. Melt the $1 / 3 \mathrm{c}$ shortening and set aside in the sun. Put the beef, tomato sauce, cooked beans, onion, garlic, oregano and chili powder in a covered baking dish and bake 20-30 min. While it's cooking, make the topping by stirring together the flour, sugar baking powder and salt. Stir in the cornmeal until well blended. Add "eggs" and milk and stir to a smooth batter. Fold in the melted shortening just until blended. When meat mixture is done, remove from oven, spoon topping over meat and bake again about 30-40 min. or until cornbread is done.

## Tomato Soup (Condensed) Makes 2 cups.

1 c tomato powder +2 c water $=2 \mathrm{c}$ tomato sauce, 2 Tb dried onion, 3 Tb melted shortening, 6 Tb white flour, $1 / 4$ tsp pepper, milk if needed, $1 / 2$ tsp seasoned salt, $1 / 2$ tsp soda, 2 tsp sugar.
Melt 3 Tb shortening in a canning jar in the solar oven. Place the flour, milk, salt and pepper together in another jar, shake to mix well (no lumps!) and heat. Add heated flour mixture to the melted shortening and stir or shake well. Heat another $10-15 \mathrm{~min}$. Continue to shake and cook until thickened. Add the onion, soda and sugar to the tomato sauce and slowly blend the two sauces together. Add milk if needed to attain consistency of condensed tomato soup. Return to solar oven and gently heat. Do not boil. (For soup, add 3-4 cups of milk then stir and heat.)

## COOKING PASTAS

To keep pasta from getting pasty, use 2 pots with lids or jars with lids. Heat the dry pasta with a little oil or shortening in one; heat the salted water in another. When the water is hot, combine the two.

Macaroni Makes 5 c cooked.
2 c macaroni, 2-3c water $1 / 2$ tsp salt.
Heat water and salt until very hot. Add heated macaroni to the water and cook for 15 to 20 minutes.
Spaghetti Makes 4 c cooked.
$1 / 2$ pound spaghetti (break noodles to fit cookware) + 1-2 tsp shortening, 3-4 c water, $1 / 2 \mathrm{tsp}$ salt.
Heat water and salt until very hot. Add heated spaghetti and cook 15 to 20 minutes.

## SAUCES

Alfredo Sauce...almost Makes $21 / 2$ cups.
$1 / 2 \mathrm{c}$ water $+1 / 3 \mathrm{c}$ dry milk $=1 / 2 \mathrm{c}$ evaporated milk, $3 / 4 \mathrm{c}$ Parmesan cheese, $1 / 8$ tsp white or black pepper, pinch of nutmeg, $1 / 2 \mathrm{c}$ dry milk +2 c water ( 2 c skim milk.)
Place 2 cups of milk in a canning jar and cook until hot ( 20 min ). Place the $1 / 2 \mathrm{c}$ evaporated milk, pepper, Parmesan, and nutmeg in another canning jar and shake to mix. Slowly add a little of the evaporated milk mixture to the hot milk and shake. Repeat until it's all mixed together. Return the jar to oven for 15 to 20 min . to thicken. (You may have to add 1 Tb cornstarch and 1 Tb of water if it doesn't thicken.)

Cream of Mushroom Soup (without the mushrooms) Makes 4 cups.
$1 / 2 \mathrm{c}$ dry milk +2 c water, 1 c white flour, 3 Tb shortening, $3 / 4 \mathrm{tsp}$ seasoning salt, $1 / 8 \mathrm{tsp}$ pepper, $1 / 4 \mathrm{tsp}$ onion powder, $1 / 2$ tsp thyme, $1 / 4$ tsp garlic powder, 2 tsp chicken soup base $+1^{1 / 2} \mathrm{c}$ water.
Melt the shortening in a canning jar, add the milk and heat. Heat flour and seasonings in a second jar. Combine the two and shake well. Put soup base in a jar and place both jars in the solar oven. After 10 min. take the milk jar out and shake it well. Return to the oven for another 10 minutes. Repeat until thickened. Remove both jars from the oven and slowly begin to add the hot broth to the thickened milk mixture, stirring or shaking until you have the consistency that you desire...either condensed or as soup.

Marinara Sauce Makes 4 cups.
2 c tomato paste +4 c water ( 4 c tomato sauce) 1 tsp garlic powder, $1-2 \mathrm{~Tb}$ dried onion, $11 / 2$ tsp dried basil, $1 / 2$ tsp oregano, $1 / 4$ tsp salt, $1 / 4$ tsp crushed red pepper, 1 tsp sugar. Or use 2-3 tsp Italian seasoning in place of other spices. Mix all ingredients in 1 or 2 canning jars and let it simmer.

## SNACKS AND DESSERTS

Apple Crisp Makes (1) 9x12 pan.
2 c dry apples, 3 c water, $2 \mathrm{~Tb}+1$ tsp cornstarch, $3 / 4 \mathrm{c}$ sugar, $1 / 3 \mathrm{tsp}$ salt, 1 tsp cinnamon, $1 / 3$ tsp nutmeg, 2 Tb lemon juice.
Topping: 1 c rolled oats, 1 c brown sugar, 1 c flour, $1 / 4 \mathrm{tsp}$ salt, $1 / 3 \mathrm{tsp}$ baking powder, $1 / 2 \mathrm{c}$ shortening.
Mix dry ingredients for apple crisp in large covered pot, add water and lemon juice; mix well. Bake in covered dish 1-2 hours or until done. Mix the topping with pastry blender or fork, spread over cooked apples and return to oven for 30-40 min (uncovered) until browned.

Brownies Makes $18 x 8$ pan or 4 pint jars.
1 c shortening, 2 c sugar, 2 c white flour, 1 tsp vanilla, 4 "eggs", 2/3 c baking cocoa, $1 / 2$ tsp baking powder, $1 / 2$ tsp salt. Optional: 1 c chopped walnuts.
Make your "eggs". Mix shortening, sugar, and vanilla. Add eggs and mix. Add flour, cocoa, baking powder, salt and vanilla and mix. Bake in $8 x 8$ pan (or jars) about 45 min or until done.

## Frosting:

6 Tb shortening, 6 Tb cocoa, 2 Tb corn syrup, 1 tsp vanilla, 2 c powdered sugar, 2-4 Tb milk.
Chocolate Cake Makes (1) $9 \times 12$ pan or 6 pints.
$31 / 4 \mathrm{c}$ white flour, 2 tsp baking soda, 1 tsp salt, $11 / 2 \mathrm{c}$ sugar, $1 / 2 \mathrm{c}$ cocoa, $1 / 2$ tsp baking powder, 2 c water, 2 Tb vinegar, $2 / 3$ c melted shortening, 5 tsp vanilla. $1 / 2$ c chocolate chips, $1 / 2$ cup walnuts.
Melt shortening. Combine dry ingredients in large bowl. Mix together melted shortening, water, vinegar and vanilla and stir into the dry mixture until smooth. Pour into $9 \times 12$ greased and floured pan (or greased jars) and bake for 30-40 min or until done.

## Chocolate Chip Cookies Makes 3 dozen.

1 c shortening, 3/4 c sugar, $3 / 4$ c brown sugar, 1 tsp vanilla, 2 "eggs", $21 / 2$ c white flour, $1 / 2$ tsp water, 1 tsp salt, 1 tsp baking soda, 1 c chocolate chips. 1 c nuts.
Mix shortening, sugars, vanilla, water, soda and salt until creamy. Add "eggs", flour, nuts and chips.
Bake in oven on cookie sheets or in jars until done.
Chocolate Pudding or Pie Makes 7 cups.
3 c pudding mix, $51 / 3$ c water ( $1 / 4$ to $1 / 3$ ratio)
In a container with a tight lid, combine mix and water and shake until blended. Let sit for 5-10 min until set. Use as a pudding or make a graham cracker crust and have pie.
To make a pie crust, crumble enough crackers to equal 1 cup of crumbs. Add $1 / 3$ c brown sugar and $1 / 4$ cup melted butter and press into a pie pan. Use as is or you can bake the crust in the oven until browned.

## Graham Crackers

$11 / 2$ c white flour, $3 / 4 \mathrm{c}$ wheat flour, $1 / 2$ tsp salt, $1 / 3 \mathrm{c}$ brown sugar, $1 / 3 \mathrm{c}$ shortening, $1 / 3 \mathrm{c}$ honey, 3 Tb water, 2 tsp cinnamon, 2 tsp sugar.
Combine all dry ingredients except cinnamon and sugar. Cut in shortening to consistency of cornmeal. Stir the honey and water into dry ingredients. Divide in half and roll each half out onto ungreased cookie sheet to $1 / 4$ " thickness. Cut into squares and prick with a fork. Sprinkle with cinnamon and sugar and bake 15-25 min. Store in airtight container.

Grapefruit and Oranges - Bottled 1 pint holds 1\#, 1 Qt holds 2\# of fruit.
Boil water and sugar at a 6 to 1 ratio to make a syrup. ( 6 water to 1 sugar) Cut fruit from the peel. Tightly pack grapefruit and oranges OR grapefruit only (don't do oranges alone) into canning jar. Pour syrup ( $1-11 / 2 \mathrm{c}$ per qt) over fruit to $1 / 2$ " from top. Exhaust 10 min. Cook@ 10\# pressure - 8 minutes.

Spice Cake Makes $19 x 12$ pan or 6 pint jars.
3 cups white flour, 2 c sugar, 1 tsp salt, 2 tsp baking soda, $11 / 2$ tsp ground cloves, $21 / 2$ tsp cinnamon, $21 / 2$ tsp nutmeg, $2 / 3$ c melted shortening, 2 Tb vinegar, $11 / 2 \mathrm{c}$ water, 2 "eggs", 2 Tb vanilla.
(grease pan with 1 tsp shortening +1 tsp flour) optional: $1 / 2 \mathrm{c}$ raisins and $1 / 2 \mathrm{c}$ walnuts.
Melt the shortening in solar oven. Mix dry ingredients in a bowl. In another bowl, mix the melted shortening, water, vinegar, "eggs" and vanilla and stir into the dry mixture until smooth. Pour into a greased and floured $9 \times 12$ pan or greased jars and bake about $11 / 2$ hours or until done.

## Tapioca Pudding Makes 9 cups.

1 c sugar, 9 Tb minute tapioca, $21 / 4 \mathrm{c}$ dry milk $+71 / 2 \mathrm{c}$ water, 3 "eggs", 1 Tb vanilla.
Put all ingredients except vanilla into your painted canning jar. Cook in solar oven for about 30 min . Remove, shake well and return to oven. Continue cooking and shaking jar every 15-20 min until tapioca swells up (total time: $60-75 \mathrm{~min})$. Add vanilla, shake and pour into dishes. Pudding thickens as it cools.

## Wheat Thins

$1 / 2 \mathrm{C}$ wheat flour, $1 / 2 \mathrm{C}$ white flour, $1 / 2$ tsp salt, $1 / 4 \mathrm{C}$ shortening, 1 Tb dry milk $+1 / 4 \mathrm{c}$ water, 1 tsp molasses.
Melt shortening. Mix dry ingredients in large bowl. Combine milk and molasses and stir into dry mixture. Place a ball of dough the size of a tennis ball in the middle of a greased cookie sheet and cover with a sheet of waxed paper. Roll out thinly, covering sheet. Peel off the waxed paper and cut with pizza cutter into desired shapes. Bake 30-40 min or until browned. Salt while hot.

## USER FRIENDLY FOODS AND MEAL IDEAS

Some of these recipes may need electricity and will not be suitable for the solar oven.

## Breakfasts

Remember to add the milk, sugar and dash of salt to your breakfasts if needed. Try cold cereal, Pop Tarts, granola bars, flavored instant oatmeal. They have a decent shelf life and kids love them.

Malt-o-meal ( 1 cup, once a week) $1 / 4$ c $M / \mathrm{M}=1$ c cooked. 28 oz box = $41 / 2$ c dry or 18 c cooked. 1/4 c x 52=13 c=...................................................................................... 3 boxes Malt-o-meal 1 c water per $1 / 4 \mathrm{c}$ malt-o-meal=52 c (add salt).................................. 3 1/4 gal. water

Oatmeal (two cups, once a week) 1 c raw oats=2 c cooked \#10 can=24 c cooked
1 c oats $\times 52=52$ c $=$ $41 / 3$ \#10 cans oats
2 c water $\mathrm{x} 52=104 \mathrm{c}=\quad$ (add salt) ................................................ $61 / 2$ gal water
Pancakes (5-6 pancakes, once a week) 1 c Krusteaz=5-6 pancakes. A 10 lb bag Krusteaz $=40 \mathrm{c}$.
1 c Krusteaz x 52=52 c=
1 1/3 bags Krusteaz

$1 / 2 \mathrm{c}$ syrup $\mathrm{x} 52=26 \mathrm{c}=208 \mathrm{oz}=$............................................................... 9-24oz bottles syrup
Scrambled eggs and sausage (or ham) (4 eggs, twice a month)

Dinners
Chicken and rice (makes 6 cups, once a week)
1 pint chicken x 52=
52 pints chicken
1 can cream of chicken or mushroom soup x $52=$
52 cans soup
$11 / 2$ c rice (makes $41 / 2$ c cooked) x 52=78 c=
$61 / 2$ \#10 cans rice
3 c water x $52=156$ c= ............................................................................ 9 3/4 gal. water
1 Tb onion $\times 52=52 \mathrm{~Tb}=$
$31 / 2$ c dry onion
Cook the rice in the water. Add the rice, chicken, soup, onion and bake. Opt. top with cheese.
Chile and fry bread ( 6 fry breads covered with chile, once a week) or Chile and cornbread.
$1-15$ oz can chile $\mathrm{x} 52=$
52 cans chile

$1 / 2$ tsp salt $\times 52=26 \mathrm{tsp}=$
26 tsp salt
1 Tb shortening $\mathrm{x} 52+4 \mathrm{~Tb}$ for frying $\times 52=260 \mathrm{~Tb}$ 7 \# shortening
$1 / 2 \mathrm{~Tb}$ baking powder $\mathrm{x} 52=26 \mathrm{~Tb}=$......................................................... 3/4 \# baking powder
3/4 c (+ or -) water x 52=39 c= ............................................................... $2 ½$ gal water
Mix the flour, salt, 1 Tb shortening, baking powder and most of the water together and knead. (Add more water as necessary.) Let this dough sit for 30 min . Pull off pieces of dough, flatten into disks and fry in melted shortening on your stove. Cover with the heated beans and optional cheese.

Hamburger pie (makes 5-6 cups, once a week)
1 pint bottled beef or hamburger x $52=$.................................................... 52 pints beef
1 can corn x 52 = ................................................................................... 52 cans corn
1 can green beans $\times 52=$.......................................................................... 52 cans green beans
1 can tomato soup x $52=$......................................................................... 52 cans tomato soup

2 Tb dried onions x 52=104 Tb= $\qquad$ 7 cups dry onion
$11 / 2$ c potato flakes $\times 52=78$ c= $61 / 2$ \#10 cans potato flakes
3 c water $\times 52=156 \mathrm{c}=$ $93 / 4$ gal. water

Place everything except the water and potato pearls in a casserole dish and heat in the solar oven. Heat the water at the same time. When the mixture is hot and the water is hot, add the potato pearls to the hot water and top the mixture with the potatoes. (Top with cheese?)

Parmesan chicken (makes 7-8 cups, once a week) Make Italian bread crumbs for extra flavor.
1 pint chicken x 52= 52 pints chicken
$1 / 2$ pound spaghetti(4 c cooked) x 52=26 pounds=.................................... 6 \#10 cans spaghetti
1 jar Ragu x 52=
52 jars Ragu
$1 / 2$ c Parmesan cheese x 52=26 c=.............................................................. 5 \# Parmesan cheese
3 c water $\mathrm{x} 52=156 \mathrm{c}=. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ 93 / 4 ~ g a l ~ w a t e r ~$
Cook the spaghetti in the water. Layer spaghetti, chicken, Ragu, bread crumbs, cheese and bake.
Salmon and rice (makes 6-7 cups, once a week)
1 pint salmon $\mathrm{x} 52=$................................................................................. 52 pints salmon
$11 / 2$ c rice (makes $41 / 2$ c) x 52= ............................................................... $61 / 2$ \#10 cans rice
1 Tb lemon pepper $x 52=52 \mathrm{~Tb}=\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ 13 ~ o z ~ l e m o n ~ p e p p e r ~$
1 can corn or other vegetable $x 52=$......................................................... 52 cans corn
Cook rice in the water and serve salmon over the rice. Corn is a side dish.
Sweet and Sour Chicken (Makes 7-8 cups)
1 pint chicken x52=
52 pints chicken

3 c water $\times 52=156 \mathrm{c}=$ 9 3/4 gal. water

2/3 c vinegar $x 52=35$ c $=280 \mathrm{oz}=. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ 2 ~ g a l . ~ v i n e g a r ~$
$11 / 3$ c sugar $x 52=70$ c= ......................................................................... 35 \# sugar
4 Tb cornstarch x $52=208 \mathrm{~Tb}=. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~ 41 ⁄ 2 ~ \# ~ c o r n s t a r c h ~$
4 Tb soy sauce $\mathrm{x} 52=208 \mathrm{~Tb}=$.................................................................. 1 gal. soy sauce
1 tsp Molasses x 52= ................................................................................. 12 oz molasses

(opt $1 / 2$ c sliced almonds, $1 / 4$ c dehyd. celery)
Cook the rice in the water in a qt jar or covered pot. (Heat the chicken in its jar at the same time). Put the pineapple juice, vinegar, sugar, cornstarch, soy and molasses into a qt jar. Shake well and cook in solar oven. Shake occasionally and cook until thickened. On the bed of cooked rice place the chicken, almonds, pineapple, and hydrated celery. Pour sauce over the top.

Taco soup (makes 9-10 cups, once a week)

| 1 pint ground beef or sausage x 52= | 52 pints meat |
| :---: | :---: |
| 1 can kidney beans x 52= | 52 cans kidney beans |
| 1 can corn $\times 52=$ | 52 cans corn |
| $129 \mathrm{oz} \mathrm{can} \mathrm{stewed} \mathrm{or} \mathrm{reg} .\mathrm{tomatoes} \mathrm{x} \mathrm{52=}$ | 52 cans tomato |
| 2 c water $\times 52=104 \mathrm{c}=$ | $61 / 2$ gal. water |
| 3 Tb taco seasoning $x$ | $211 / 2$ \# taco seasoning |

## Easy meal ideas:

Bottled meat and barbeque sauce over rice, potatoes or bread.
Bottled meat with green chili, onions and Mexican spices on fry bread or tortillas.
Chicken, tuna, beef or peanut butter sandwiches on homemade bread(Use mayo and pickle packets). Chicken or tuna mixed with cooked noodles and cream of chicken soup.
Hamburger Helpers....add a pint meat.
Boxed macaroni and cheese.
Ragu or Prego and bottled sausage over spaghetti or on a homemade pizza crust....top with cheese. Tomato soup and oyster crackers with a toasted cheese sandwich. Ramen soup, Cup-a-soup, Campbell's soups, dry packaged soups.

## Freeze Dried Foods:

The advantages of freeze dried foods are numerous: They take little space, are easily prepared with hot water, the taste is very good, there is a wide variety from which to choose, the cooking time is just 10 minutes and they have a 30 year shelf life. The disadvantages are the high cost and the fact that the industry considers a serving to be one cup of prepared food.

## SOURCE LIST

Shop around for your best prices. Use the internet...Ebay, amazon.com Google etc.
Blendtec.com 1-800-253-6383 (The LDS Church rarely endorses a product, but because $90 \%$ of those who have food storage don't have a wheat grinder, they have chosen to endorse the Blendtec electric and hand wheat grinders.)

Bulkfoods.com: Buy unflavored gelatin, powdered molasses, dried fruits and vegetables, etc.
Cost Co/Sams Club: Good prices on chocolate chips, flour, sugar, nuts, Parmesan cheese and yeast.
Food Saver and Jar Sealer: Most stores carry these but the internet is the best place for inexpensive ones. The Jar sealer attachments can also be found here.

Internet-grocer.com Canned cheddar cheese (\$2.75 / 8 oz can) or butter (\$4.50 / 12 oz can)
Spices: Sahuaro Spice Co. Phoenix 602-272-8557. Fresh spices sold by the pound. Price list can be faxed. Store spices in mason jars to preserve freshness, but don't vacuum seal fine powders...it can clog the works.

Solar ovens: Do some research on the internet or at the library. Global Sun Oven sells for about $\$ 200$ at survivalunlimited.com/solar aimdiscount.com/SOven or kansaswindpower.net/solarcookers.

Walton Feed Lots of bulk food items (dehydrated celery, sweet peas, sour cream, etc) 1-800-847-0465.

## EQUIVALENCY INFORMATION

| PLESAUCE ......................... 16 Tb / c |  |
| :---: | :---: |
| APPLE SLICES | 10 c in a \#10 can $=11 / 4$ \# 1 c dry $+1 / 2 \mathrm{c}$ water=2 c fresh |
| BAKING POWDER | . $32 \mathrm{~Tb}=1 \#$ |
| BAKING SODA ......................... $32 \mathrm{~Tb}=1 \#$ |  |
| BEANS | . 1 \#=2 $1 / 2 \mathrm{c}$ dry $=6 \mathrm{c}$ cooked 12 c in a \#10 can |
| BUTTER (canned) ................ $12 \mathrm{oz} \mathrm{can=24} \mathrm{~Tb} \mathrm{or} 3$ sticks of butter |  |
| CARROTS ............................... 12 c in a \#10 can=2 1/2 \# 11/2 c dry=1 c hydrated carrots |  |
| CELERY | $2 \mathrm{oz}=1 \mathrm{c} 12 \mathrm{c}$ in \#10 can $1 / 2$ c dry=1 c hydrated celery |
| CHEESE (canned) .................. 8 oz per can |  |
| CHEESE POWDER ................ 4 c in 1 \# of powder $96 \mathrm{~Tb}=1$ \# 1 Tb per 1 c cooked macaroni |  |
| COCOA... | $.90 \mathrm{~Tb}=1 \# 20+$ years shelf life. Store in jars. Don't vacuum pack |
| CORNMEAL $\qquad$ 4 c=1 \# |  |
| CORNSTARCH....................... 45 Tb=1\# |  |
| EGGS (powdered)..................... 32 eggs=1\# 2 eggs=1 oz |  |
| FLOUR.................................... 19 c=5\# 12 c in a \#10 can |  |
| GELATIN (Knox ................... 1 oz unflavored gelatin=12 tsp of gelatin=12 "eggs" 1\# gelatin=192 "eggs" .................................................... egg substitute) 1 tsp gelatin +3 Tb cold water +2 Tb hot water=1 "egg" |  |
| HONEY | $.20 \mathrm{~Tb}=1 \mathrm{c} \quad 13 \mathrm{oz}=1 \mathrm{c} \quad 6 \mathrm{c}=5 \#$ |
| HOT CHOCOLATE ................ 12 c in a \#10 can \#10 can=56 liquid c |  |
| MACARONI........................... 12 c in a \#10 can $4 \mathrm{c}=1$ \# 2 c dry=5 c cooked |  |
| MALT-O-MEAL ..................... $1 / 4 \mathrm{c}$ dry=1 c cooked 128 oz box=4 $1 / 2 \mathrm{c}$ dry or 18 c cooked |  |
| MEATS ................................... 1 pint bottle holds 1\# of meat 1 qt bottle holds 2\# |  |
| MILK $\qquad$ $1 / 4$ c dry milk +1 c water= 1 c milk 12-13 c powder in a $\# 10$ can$\qquad$ about $1 / 3$ \# dry $=1$ c dry a \#10 can=58 liquid c |  |
| MUSHROOMS ......................... 4 c dehydrated=3 oz 20 c=1 \# |  |
| NOODLES ............................... 4 c=8 oz 2 c dry=2 c cooked |  |
| REGULAR OATS .................... 12-13 c in a \#10 can $1 \mathrm{c}=4 \mathrm{oz}$ |  |
| ONION..................................1⁄2 onion=2 - 3 Tb dry 16 Tb dry=1 c $12 \mathrm{c}=\# 10 \mathrm{can}=192 \mathrm{~Tb}$ |  |
| PARSLEY ............................... $30 \mathrm{~Tb}=1 \mathrm{oz}$ |  |
| PEPPER .................................. 6 Tb=1 oz |  |
| PIZZA SPICE .......................... 42 Tb=1\# |  |
| POPCORN .............................. 12 c in a \#10 can 1 с popcorn=16 c popped |  |
| POTATOES (instant) ............. 12 c in a \# 10 can $11 / 2 \mathrm{c}$ flakes $+11 / 2 \mathrm{c}$ water $=2 \mathrm{c}$ potatoes |  |
| PUDDING MIX ........................ 12 -13 c mix in a \#10 can |  |
| RAISINS .................................. 4 c=1\# |  |
| RICE....................................... 12 c in a \#10 can $21 / 3 \mathrm{c}=1 \#$ \# 1 c raw=3 c cooked |  |
| SALT.................................... $11 / 2 \mathrm{~Tb}=1 \mathrm{oz} 1$ container= $26 \mathrm{oz}=39 \mathrm{~Tb}=117 \mathrm{tsp}$ |  |
| SHORTENING $\quad . . . . . . . . . . . .227 \mathrm{~Tb}=6 \#$ can $17 \mathrm{~Tb}=1 \mathrm{c}$ c $21 / 4 \mathrm{c}=1 \# 1 \mathrm{c}$ shortening + 6 tsp water=1 c butter |  |
| SOUP BASE ............................. 1/8-1/4 c dry makes 6 c broth |  |
| SPAGHETTI............................4-5 \# in a \#10 can $8 \mathrm{oz}=4 \mathrm{c}$ cooked |  |
| SPICES.................................. $1 \mathrm{c}=4 \mathrm{oz}=16 \mathrm{~Tb} 64 \mathrm{~Tb}=$ approx. 1\# |  |
| SUGAR (white)........................ 12 c in a \# 10 can $2 \mathrm{c}=1 \#$ ( ${ }^{\text {m }}$ = $32 \mathrm{~Tb}=96 \mathrm{tsp}$ |  |
| SUGAR (brown) ....................... 1 1/3 c=1\# |  |
| TAPIOCA ................................ $40 \mathrm{~Tb}=1 \# 1 \mathrm{~Tb}=1 \mathrm{c}$ cooked |  |
| TOMATO POWDER ................ 1 c powder + 2 c water=2 c tomato sauce |  |
| WHEAT .................................. \# 10 can=5.8 \# =12 c=18 c flour when ground |  |
|  | . 1 c wheat $=11 / 2 \mathrm{c}$ flour, $1 \#=21 / 4 \mathrm{c}$ wheat=3.37 c flour |
|  | 1 \# compressed=8 oz=24 Tb Shelf life: indefinite in freezer.. 1 year out of freezer |

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