

EMERGENCY PREPAREDNESS

AND

FOOD STORAGE

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FOREWORD

Timing matters. I am writing this in the fall of 2008. In another year, what is written here may be slightly out of date. But most of it will always apply. This is important information. Follow it as if your life depends upon it because I believe it does. I didn't write this because I wanted to, I wrote it because I couldn't find anything that said what was needed. None were correct.

Economy is a factor. You can't do it all. Read all of it, then do what you are capable. Only you know. We will always have inflation jumps. Food storage before price increases can be real saving methods.

For some reason I have always been a survival person. I taught survival as a staff kid at Boy Scout Camp and am still doing that with scout troops now. I worried about it when I began to raise a family and went through a whole library of survival and storage books wherever I found them.

With all due respect, every one of those publications were mostly full of reasonable things written by people who should know what they were writing about but really didn't. I am sure now that none of them ever had to use what they wrote about. I know that because I believed them, and followed what they advised only to learn how much they

actually didn't know very much about in real situations. Their advise could not have come from personal experience.

I can only guess that somebody wanted a book on emergency preparedness but I did not find anyone around who really knew. But real emergency preparedness cannot be guess work. There is too much at stake.

I lost and wasted much by following what they wrote. If a real tragedy had developed, those well meaning but mistaken ideas could have hurt us. Here is the real thing not just a lot of made up stuff that only sounds good.

You will read a lot of exceptions along the way as I write. The first one is that one set of survival books really does know whereof they speak. I refer to military field publications, particularly the ones for downed pilots and snipers. Unfortunately, that stuff just will not do for any real extended period of time for your family.

With all respect for humility, the only written material I would advise anybody to follow is right here in these pages, nothing else.

I am not at all sure who I am writing to, but what is contained here will save someone a lot of grief. I write from experience and my own mistakes. Maybe you will be spared some of those I made if what is said here can help.

I apologize ahead of time if I ramble, but I cannot figure another way to organize this any better. I tried the list type of layout but it just left off too much of the rest. Like it or not this is all written in narrative and it is mostly my opinion. But at least I have experienced everything I write about.

One opinion I have is that the reason we are told to keep a year's supply of food is because not very much of it can be stored longer than that and still be any good. And if some strange blight or anything like that were to take a summer's crop, getting by until the fall of the next year for another harvest would be the goal.

The urgency of what I print is punctuated by the fact that even our government is now telling people to stock up. Many really good organizations have been warning us to prepare for so many years we may not be listening anymore.

But the best and most convincing reason for me to prepare happened this year. A really great man, of whom I will not name for several reasons, surprised everyone by walking in at a local wedding. Amazed that he might grace their ceremony they were compelled to seek his advise to the new couple. He smiled and knocked everyone over with his answer. It was not at all what was expected. He asked them where they were going on their honeymoon. They told

him. Then his advise was to sell the tickets and the cost of the trip then stay home and spend the money on emergency supplies. Dumfounded the wedding party watched while the great man thanked them for letting him attend then he left.

All our lives we have been counseled to listen to our leaders. We ignore that advise at our genuine peril. I am reminded of a biblical story. A story familiar to most. It is about the ten virgins that Jesus told in a parable. I would like to suggest another interpretation for your consideration.

You may remember that half were prepared for the bridegroom and went in with him when he arrived. And the other half? You will recall that they knew he was coming but did not have enough oil so they had to go at the last minute to buy some. When they got back to the gate, the bridegroom met them and the scriptures read that he never knew them. Better translations say that the bridegroom really said "You never knew me" Either way, the tardy people stayed outside because they procrastinated. I would like to entertain the idea that the parable was about all of us today. We know that disasters are at our gates. At the last minute we may try to go out and get what we need but may find we have just waited too long.

That story might be no more than just what it said. Maybe they really only needed lamp oil. But even that I ask you - how is your oil supply?

I write now to people who think they are basically ready and don't need to read this. To you I ask you to examine what you have. If it is many years old, you may not have anything at all. I just wanted to warn you. Every once in a while a few have checked their supply and open the barrels only to find that weevil finished most of it off long ago or have infected it beyond use. Maybe the foolish virgins thought they had oil because they bought enough some time back, but when the bridegroom was in sight and they went to light it, their oil had dried out! The parallel is the same. We are those virgins; those who knew better but when it came down to it, found out too late that we are not ready after all.

I marvel about what Joseph, the son of Israel did to store 7 years of food from 7 years of plenty. My experiences say today that would be a real problem. Well, enough of that. So read on:

*One Note: I really tried to keep this short. The only reason it is this long denotes the importance of everything. You will find as you read every detail is valuable, and I hope and believe new information for you.

CHAPTER ONE WHEAT AND BREAD

The first big mistake is to buy too many bushels and bags of wheat. A lot of people have done that. It is money spent that is mostly a waste. And the reason is that you do not eat that way. The only exception is if you really do grind and make your own bread from scratch. And if you do, then you should know by now how much wheat you go through in a year or so. And it is not ten bags is it!? Two years of bread wheat is about all you should even try to have. (1½ bushels a year for two people) And then, check it often.

And if you are going to bake your own bread, then if you don't have and use the rest of all the ingredients, the whole thing is a waste of money and will only give you false security. But, if you already bought the wheat, there is much you must do right now. You will need to have two kinds of good wheat grinders - one hand type and one electrical. No grinder, no bread. Stop right now. Save your money.

Next you need to know what you are doing. When was the last time you made bread like the little red hen? You know the story: grind it, make flour, add yeast, raise and kneed it etc. Do you even know the temperature to bake it at or for how long? Come on now. Tell the truth. Do you? If not find out first before you go out and buy a bunch of wheat.

You may learn a lot about yourself. If there really is a famine it could be caused by a whole bunch of different reasons. It may be as simple as a truck strike effecting fuel, or any other supplies. Don't look for the Katrina type of mess. It could be much more simple than that. Maybe just inflation that makes groceries too expensive. Back to bread.

Yeast and baking soda. It may be fine to have a year's supply of wheat but where is that year's supply of usable leavening? Don't have one without the other. And be realistic. When did you buy any of that last? It may be flat by now. Find out! You really want to do the bread thing? I lovingly and reasonably suggest to you to start doing it now and continue, or just give up on that whole concept. Really. Bake your own bread now so you rotate your supplies.

Remember the other ingredients too. Up to date powdered milk and rotated oil is a must. Remember that oil is not a long term thing. It will turn rancid. Baking pans? Get them out. I bet you don't have enough. If you are going to bake, you need to do what grandma did long ago, bake a bunch when baking time is on.

Finally, what will you bake your bread in? Did you consider that? Your oven? What about fuel and/or power shortages? The very thing that may cause you to use your year's supply of food may effect other things as well. Simple famine may be your own financial situation. If you have a loss of income, that year's supply may have to get you by without money. And if you cannot afford food then where is the cash to pay for the utilities? I am only putting you in touch with reality.

Conclusion? Get a camp type stove you can cook on and bake that bread. Get it big enough to bake in and make sure you have enough fuel on hand to run it for a good length of time. So, you have a year's supply of wheat or want to buy it? Get in touch with all I have cautioned you or face the fact that you may not be able to use that wheat at all.

Then put your money into things you can. But remember there is always an exception. I will talk about fuel and stoves later. You will need to pay very good attention to that as well.

CHAPTER TWO VEGETABLES

Fresh

In the previous chapter I mentioned wheat. The only one exception to cooking with it is to sprout it. But instead of thinking about that as another way to use wheat, think of it as the primary way to get much of your green nourishment during your time of famine or whatever the reason is. If you analyze your nutritional needs for an extended period of time, those five cases of corn, beans, and peas will run out very fast and they are not all the best for you anyway.

To stay healthy, fresh vegetables are a must. You must have a green, & yellow (or red) vegetable every day! And there are things that just are not there in the canned stuff. Your year's supply of food is to keep body together. If it is only calories, your liver and kidneys will kill you long before the bushels of wheat run out.

Here is a better solution for that need and what you should be doing right now anyway. Go out to those health food stores and buy yourself a bunch of sprout growers. Yup. We will make you a farmer yet like it or not. Get out some of that wheat and see if it will germinate. What if it doesn't? Time to throw it away anyway. It is only taking up space in your garage. Next go to Intermountain Farmers or some other grain place and buy several types of grain. Here is a list of musts: Alfalfa (yes for growing hay) Peas, Beans, Barley, Oats, and rye. (We already assumed wheat) And remember we are not necessarily going to put these in the garden, (we will deal with that next) this is for fresh green sprouts. That means for this purpose, rolled and

cooked oats and barley are not going to work. Grains prepared that way cannot sprout. Once again, drive or mail to the seed people where ever they are found.

Now. Change your life style. Start doing your sprouts and eating them now. Sure, put some on that sandwich or throw it in the salad. We want you healthy and strong for your walk to wherever you might just have to walk. But the main reason is to know how to do it, and do it now. I mentioned that a supply of food is only as good as what you are eating now for your health. If you are not eating sprouts, and don't want to, you are making a big mistake. Understand, this book is to keep you healthy and alive now and when survival is needed.

The other reality is that an extended food shortage must have some fresh vegetables no matter what. So, in addition to sprouts, keep a few seed packets in your food storage supplies with the intention of growing them somewhere. Plant carrots in a pot in your living room. Build window planters. Cut out part of your back yard and grow some beans and peas. If you are not a natural farmer you can just plant a bunch of seeds not even knowing what they are. No problem. When the tomatoes and the green beans are growing up next to each other do you care? I am not even sure that is not the way Mother Nature would have you do anyway. Bugs that want do dine on your lettuce may not find it when surrounded with some good bug resistant beets. Give that one some thought.

Many of you have fillers in your garden to cover places. Pull them all out right now and put in strawberries and raspberries. They fill in just like weeds when they get going but you can eat the fruit, not like what you have now.

Canned Vegetables

Well, you must have them. Yeah, even after what I said about sprouts. I haven't changed what I said about sprouts, it is just that there is a lot of good nourishment in cans, but limited. And the cans keep for a long enough period to get you through a time when you may not be able to even raise sprouts. What to buy and how much? Most people really do this way wrong. Don't think so? Ask yourself honestly. How many cases do you have of green beans? One? Two? The truth. Now reality. Three in your family? That is a can every four days for a year?! Do you have 91 cans of string beans? The count is four cases.(24 in a case) That extra case may not be realistic. At about \$10 a case or so, what is holding you back? Is your family bigger than three? Figure accordingly. Some of you say there are only two of you. Never. SOMEBODY will join you when times are tough. There is no minimum below three.

I mean it about buy now. Go out today. Take that extra movie money and buy two more cases of string beans. There is always a case lot sale somewhere or will be in a month or two. Then do it again in another month till you have enough. Do it now!

To make sure you are paying attention to my warnings, I start a new paragraph just to make a clear statement you cannot miss. When you buy those cans - DATE THE CASE and use it. Just keep buying like you always do and as you do, put a date on that case and use the oldest one in the storage inventory first. In time, the whole four cases will be rotating and you will not be eating eight year old cardboard beans when you really need the nourishment.

Everybody tells you to rotate, well here is a good way to do it. I say by the case because those rotating can dispensers are not really food storage. They take up too much room and by the time the top can comes around it is only a few weeks or a month away anyway.

Buy by the case and date it. I am the expert here remember? Just take my advise so you don't throw away \$5,000 worth of food the way I have.

But the second important part of the dated case thing is to actually rotate. It has been my experience that people get all this put together and look at the stack and never buy again for 6 months! The idea is to keep that much on hand all the time! Your buying habits cannot change. Keep buying what you use the way you always did but as you bring in the new supplies put it on use last list and take the next case in storage to use now. That way you will always have your supply and it will always be good.

Ah yes. We are not through are we! All I mentioned was string beans. Well if you are only going to have one vegetable then still stay with the green stuff. But, remember the yellow vegetable part? Canned corn is the best. And it is almost as good as frozen - yes it is. We are back to the amount. No need to repeat. Add it up. Three of you need a can of corn every fourth day. Back to the old rule. Three or four cases is barely enough.

Not everyone likes canned peas. Well get one case. Maybe two and put them in soup. Same thing. If you don't eat it, don't buy it. But I suggest that you do buy it and start eating it. I know you have a piece of ham or the bones thereof every once in a while. Get those canned peas out and make split pea soup with ham. Good food. Good for you. You should have a change in variety. Even though you

are reading about cans, remember those seeds? One of the seeds we said was peas. Cook and grow those too. More about that later.

Other vegetables. Get yourself a case of beets. It is good variety, and good for you. When all that corn makes you think you are becoming an Anasazi you will relish those beets. Take this advice and use these too in your diet from now on as well.

Canned carrots. Have some. We are all spoiled with fresh ones all the time but what if the stores are out of them for a while? There is little better for beta carotene than carrots. Even the name comes from this vegetable. If you don't like the stand alone flavor in canned carrots, then put them in soup. You get them in canned soup anyway so you are used to that. Keep a case and don't forget to mark them as to the date of purchase.

Canned yams. So you only eat those at Thanksgiving? Why? Didn't you like them then? Buy a case of them out of season at a good price. They are yellow vegetables and very good for you. Add that to your new eating life style. Heck, forget the food storage part. What we are doing here will make you a healthier person anyway and wouldn't that be worth the whole thing? I had a physician tell me that the more we learn about diseases the more we also learn that so much of that could have been helped if people nourished themselves better.

Getting age related maladies? Fix your diet and some of those complaints will get better. Just like quitting smoking, it is never too late to begin a repair of your body. Eat some yams during the rest of the year. Potatoes are great but may be a bit boring. Don't you agree?

Canned Tomatoes. Well, this is an area to be careful. Fail to rotate this and you may poison yourself. Canned tomatoes are very acidic. Keep them too long and they will eat right through the can. You may want to sample the cans to see if they have an inner coating of white enamel. This time though, you need a variety. Our diet calls for a lot of tomatoes. You need tomato juice, tomato sauce, diced tomatoes, whole tomatoes, tomato paste, stewed tomatoes and don't forget plenty of catsup. (or whatever way you spell it) We make all kinds of things with tomatoes. Get enough. Consider your current variety and get it before the prices are out of reach. The can every other day rule still applies. And besides, I'll bet you eat more Italian and Latin based recipes than you realize.

Other canned vegetables. Try them out first. Some vegetables are good. Many are not. Eat some. If you continue eating something get the cases to keep that up. And Please! Read this and heed. Buy what you eat!!! If you eat olives, BUY TWO CASES! Whatever you have once in a while, be honest and get a year's supply. A lot of a healthy diet must be what you have made of it over the past years. If it is too weird you will not eat it.

I heard that! The part about eating a lot of things when you are hungry enough? Well, no, here is some friendly advice: Researchers have found out differently. Some people will be hungry before they eat some things - especially children. And I do mean children which works down from 30 years old. If they don't like it, they will too go hungry! I didn't say starve. No, I said hungry and that is dangerous. Miss too many meals and your immune system becomes weak too. What good will a year's supply of food do

for a family which all died from a bad flu strain. Weak bodies are susceptible. Don't gamble on that one.

I highly recommend a case or two of V8. Liquid vegetables in a can - 46oz of it! And for economy, those store brands of multiple vegetable drinks are the very same thing. Western Family, Kroger, Albertson's, all really good. You drink that anyway, or should. Have a case or two to rotate then drink a can or bottle every month from now on. A year's supply of that is two cases or 48 of them. So after that buy one can every month, put it in back of the case and take the one in front to drink now. Great habit to start and keep right through your life and into a disaster if it comes.

Peanut butter and jam. Now most of this is in bottles and jars. It still falls in the canned vegetable category. And yes, nuts are vegetables too. We got big jars and filled them with a couple of bags of several kinds of nuts. Buy in bulk and in quantity and it can be reasonably priced food. But in your getting, get plenty of Peanut Butter. Then, as always, eat it regularly. The jam part is to help it go down well. There are enough jokes about peanut butter stuck on the roof of your mouth to clarify that one.

Jams? Get enough. You go through that much faster than most of you have honestly analyzed. And my suggestion is buy it 'no sugar added' We just eat too much sugar anyway. Look for ways to cut back on sugar. It is in almost everything. To do it purposefully merely puts you under the over-doing it category.

About no sugar added food. I did not say artificial sweeteners. Don't replace one bad thing with another. No sugar added jam has natural fruit and is a good source of fruit for you. I just meant there is no need to add more

sugar to fruit when there is plenty in it naturally. I like those labels that call their jam, "Spreadable Fruit" That is what it is!! What a wonderful way to eat a peanut butter sandwich than with just some fruit! Ask any doctor.

Another good lunch sandwich is peanut butter and bananas. When did you have one of those? No? Well we are doing all kinds of new things aren't we!? You just might live long enough to actually need this emergency stuff!

We bought three cases of peanut butter in medium sized jars for practical use. Two are creamy and one is chunky. Once we bought that we were astonished at how fast we are and had been going through peanut butter. I one day looked and half a case was gone! You must keep up the inventory.

It really is amazing how much food we buy each week. Well that is what you need for a year's supply!! It isn't cheap! Those once every two week visits to the grocery store is a lot of food. But if you think this is expensive, imagine what it could cost you in a shortage? Buy now in quantities while you have the means. If no famine comes, you have merely created a better food budget for yourself. You borrow money to buy a car and make payments. You can't eat a car. Borrow enough to buy your storage needs then make the payments on what you save on the bulk price and future inflation index for food.

Canned beans. I saved this until last because it is one of the most important. Besides being a vegetable it is one of the best sources of protein you can have. Load up and eat it. This is one of those diet changes I ask you to make. Loaded with complex B & A vitamins, a steady diet of beans will help your liver and pancreas work well. And, many of you may not have noticed the variety of canned beans out there. Look again and get a case or two of each.

Black beans, red beans, navy beans, pink beans, pinto beans, lima beans, kidney beans and butter beans - and all are full of stuff your body needs. Black beans are the most nutritious.

Finally the canned beans part two. Get several fresh kinds and can them. Go and buy those 3 to 5 gallon polypropylene buckets that are around with lids and fill a few up with some beans. Good beans that can sprout or be made into chili. Don't cook them first! Just put them in a bucket! Now take a small piece of dry ice and put it on top with a loose lid. The CO₂ will displace oxygen and kill most anything not desirable that came in with the beans. It will also save any discolorization from oxygen spoilage that may be waiting for you. After the ice is gone, snap that lid down and don't open again until you use them.

Another option will cost more money again but may be the best way to dissipate oxygen after all. There are in some places packets for sale that absorb oxygen. I found some at the family canning place run by Deseret Industries on 700 West and 700 South in Salt Lake City. Put one bag into any airtight container and it will do away with any oxygen left inside. Consider this caution about oxygen for any food you are storing.

But better than many foods, beans in particular will keep for up to ten years and longer when packed that way. Besides, one problem may be water in the wrong place. Those buckets will keep water out even when submerged. Can't find any? Save your poly detergent buckets and lids! (Oh yeah those things!) Next time don't throw them away.

New paragraph: Remember the emphasis? Now eat those beans. Change your diet to include them. And if you really can't stand them, DON'T PUT THEM INTO STORAGE! But if you can, then eat some and rotate them and keep a bucket or three around.

Dehydrated vegetables

Now we are in the real world of long term food storage. But what really matters is what and how. Many sun dried or dehydrated in those smoke dryers can be ok. Tomatoes for example do fine. You can even buy them that way for cooking. Carrots, potatoes, beets, - any root does well just with the water taken out. But whenever possible, it is the freeze dried stuff that really has good taste and rehydrates best. Most of that comes already packaged in good size cans. Emergency Essentials has all that, and many grocery stores carry it from time to time. Macy's often does. The one on 13th East and about 96th South has supplies.

We already talked about corn. Don't use dry corn unless it is freeze dried. We got a bunch of just old seed corn and we never could cook or soak it back to edible condition for humans.

Dried onions and garlic are so good dried that I think they are purely on par with fresh. I know there are chefs out there who will howl at that, but remember I told you this was my opinion. We cook with dried onions and can't even tell that it was not fresh after cooking for awhile.

While we are here, let's put in a pitch for flavorings to make your stored food good to eat. I will talk about herbs and spices in another chapter, but while here in the vegetable part, onions and garlic can really make a huge difference with dehydrated food or long storage meals. Fill at least one big poly bucket each of dried onions and dried

garlic. Or, you can go to the big grocery stores and buy those big cans of them. Get plenty; Four or five cans to be equal to a poly bucket. If you are not already using them, you are in for a pleasant surprise at how good dried onions are for every day use.

Hands down the top winner in dried vegetables that will keep for many years is what some companies call soup mix. Others call them stew blend. They are a mixture of parsley, beets, onions, peas, beans, carrots, potatoes and sometimes some alphabet pasta. But be careful. The mix is so good that weevil love the stuff and will attack it right off if you don't prevent their infestation. I already mentioned the dry ice method and nitrogen. But be advised that even those methods will sometimes fail you.

Another good method to protect yourself against invasion is to freeze it. Any way you can do it is ok. We put a bucket or can in the freezer for a day or even put it outside in subzero weather during the winter. You would think that because insects survive a cold winter they would survive your freezing. I looked into that and found the small weevil types stay warm during the winter months by being somewhere in hibernation; usually inside something that avoids a hard freeze.

The rest are either bigger and can live through severe cold or their eggs just hatch in the spring from selected and protected locations. We are just lucky that weevil eggs can be killed with severe cold. Give a day or two for all your grains and susceptible food in some hard freeze place. Combine all three ways; carbon dioxide, nitrogen and hard freeze and you can generally rest easy about your long term stuff.

Yet with all that, I strongly advise that you rotate what you have stored in your day to day usage and don't lose valuable foods to the critters just because you didn't think they were there. I repeat one more obnoxious time: Store what you eat, and eat what you store!! As good as dried stew blends are, get them out and feed your family a freeze dried soup and check it out. If they hate it, find out how to fix it better or don't buy any more. I will repeat that advice over and over again as you read all this. Get used to it but I will throw in a twist or two as we go along so read it all anyway.

There are some really marvelous things that you should look at which are non traditional. Among them are things like freeze dried mushrooms. That is a great thing anytime. The case lot sales often have canned mushrooms. You really ought to try them if you haven't yet. Already cooked, right out of a can into meat is a real treat and good for you. A can or two of those are really fine and can add to your daily cooking convenience. You can also buy them freeze dried. They cook up as though they are fresh and I believe you cannot tell which when they are served. And for long storage, mold does not ever attack. Hmmm, I wonder why? Unless you think I really didn't know, you can rely on the fact that one mold does not usually attack another

CHAPTER THREE GRAINS AND CEREALS

Wait a minute but we covered this. The wheat, remember? Ok, we did somewhat so I won't go into wheat again but there are other grains. The best is rice. The Chinese kind. Not that white long grain stuff that people like the most. That is mostly starch. Get the long sticky kind that Orientals eat. A billion Chinese can't be wrong. In third world countries including Latin countries like Guatemala and Bolivia, rice is the staple. We always called them the bean countries. Well they are wise enough to eat a lot of beans yes. But when it comes down to pure survival and trying to keep healthy on very little, it is the rice grain that is king. Learn that lesson good. In the Middle East the Persians and Arabs eat far more rice than most other things. That fact is amazing considering this part of the world to be known for their deserts.

Get more of those poly' buckets and ask yourself just how much starch and complex carbohydrates you need to sustain your health for a year. Make part, or most of that assumption to be from rice. As I look at so many who have covered their food supply anticipations with so much wheat, I would rather that those buckets were filled with rice instead. You would be much better off. And get some instant rice, any brand. Cooks in a few minutes and is convenient.

I have one regret as I talk about rice. Brown rice is better than all of them so eat it when you can. Here's the problem with brown rice. I tried three different brands and all three had a trace of oil in them so they all turned rancid when I tried to store them. It cost me a lot of money to buy brown rice. Let my loss of having to throw it

out be to your advantage and learn not to try and store it for more than a few months. Um,..you're welcome.

There are always exceptions, remember? Here is another. Potatoes. Good to eat. Good to store. Good for you. Not a grain you say? Ok, more of a vegetable. But it fits in the food chain the way grains do. Potatoes are one of the best sources for complex carbohydrates.

I don't even have the patience to deal with those of you on those carb' free diets. If you really succeed at elimination of all your carbohydrates be my guest. BUT, if you really mean that then here is my second invitation to stop reading right now. This paper is not for you. Why? Well you will be dead long before you need this. You must have carbohydrates to live. You cannot move or think without complex carbohydrates in your bloodstream converting into energy for your use. The whole carb' free diet is to force you to lose weight. And some diets are just another form of starvation with all the accompanying problems that come with starvation.

I know, I am lecturing you. You bet I am! Substitute meat for carbs? You know that part? Don't do that very long! The diet calls for that because your body will be forced to turn that piece of ham into carbohydrates and it will burn some calories and time to do it.

A short lesson in biochemistry. Carbohydrates are just that. Carbon, and water = $C_6H_{12}O_6$. And meat protein? Just a bit different. $C_6H_{12}O_6N_4P$ + or some similar form.

Protein or Amino Acids are just carbohydrates with some Nitrogen and Phosphorus thrown in. When you eat meat, what you don't use to repair cells becomes a carbohydrate but with a twist: Nitrogen and Phosphorus are set free and are now running around free in your bloodstream. Ever

wonder why your doctor tells you to cut back on too much meat and salt? The reason is for your blood pressure and bad cholesterol. Better known as hardening of your arteries. Right? The reason that is true is because excesses leave things over you should not have. All that free Nitrogen and Phosphorus cut loose from the carbon and water are in ionic form meaning their electrical charge is not balanced anymore. In that form they are looking for something else to combine with. Calcium and/or Chlorine are ideal to hook up with. When they do, they make a hard flake of Calcium Chloride crystals which are hardened and balanced with some phosphorus.

Last time I checked that was some of the chemical make up of your bones! But we are not talking bones here, we are talking about inside your arteries. Little flakes of hard stuff running through your kidneys and are making your blood plumbing into bones instead of soft hoses. Kidney stones can come from the same chemistry and are painful and a result of too much meat being converted from cell building blocks into carbohydrates.

Your first reaction to all that is, ok I understand calcium, but free chlorine? Where did that come from? It is all that salt you use too much of. Sure you need some but too many of you salt everything. Well quit it! Table salt is better known as Sodium Chloride (NaCl) Your nervous system and some of your fussy organs need traces of the rare metals to keep the communication going from the brain.

But too much and a lot of it ends up as an excess of free chlorine to mix with all that other stuff left over from too much meat. All the halogens (like chlorine) in your blood will do that when there is enough of it. Your body will store or use some of the Sodium and set free the other

part of the salt compound which will leave tons of Chloride (a deadly gas anyway) to look around for left over Phosphorus and calcium to make bones out of your blood system.

And again I say to all you who won't eat meat sparingly and use too much salt and not enough fruit and vegetables, you won't need much of what I write here because your heart will quit early and your high blood pressure will kill you in a massive stroke. Believe it or not at your peril.

Caution!! I did not say "no salt"? No, I said quit putting it on everything all the time. There are always the folks who want to take some health thing to extreme. Moderation in all things brother, moderation! Why some salt? The other word for these elements is "Electrolytes" Fail to keep enough Potassium, Magnesium, Sodium, cobalt and the like, your brain can't talk to the rest of you. Not enough rare salts and you can die from 'Runner's disease'. Too much sweat and no Gatorade, bananas, or other vegetables and/or fruit and your heart or lungs will just stop.

Perfectly healthy people have just died from electrolytic shock or the lack of enough rare metals in the system to keep the electricity flowing in the nervous system and other places.

A dear friend of mine years ago was trying to lose weight. He took only those diet powders and sweat heavy when running. In a matter of days his content of salts were just sweat right out of his body. He sat down after a run and died right there on the grass. Just like that. Otherwise healthy in every way, the examining doctors pronounced electrolytic shock and that was it. A simple

sports drink or a banana could have saved him. Have a few electrolytes with wholesome food then put away the salt shakers for most of your meals.

How is that possible you ask? Remember the experiment in school? The one where you tried to conduct electricity through water? If the water was pure, no electricity could pass. Then the teacher put some salt in the water and bingo the light went on. But with humans we need a trace of a bunch of stuff. Sodium alone won't fill the bill. We all need a little Zinc, Cobalt, Potassium, Copper, Lithium, Iron and a whole bunch of other metals. By the way all those different salts are contained in natural salt water. The ocean and the two salt lakes have trace metal salts mixed in with the Sodium Chloride. Once again - moderation. Ok enough lecture on body chemistry, back to grains and potatoes. I told you I had a hard time putting all this into an easy to follow organization.

About potatoes. Flake and powdered potatoes are great and store well. You can even have some, I say some with the butter and dairy right in them. Those taste the best. But a precaution: No long term storage with butter in your dry potatoes. If there is anything with any oil at all in those potato buds you like so much, it will turn rancid very quickly. (Note, potatoes have more Potassium than bananas.)

New paragraph!! Attention!! Don't store much of anything with oil in it! All of it will become rancid before you can ever use it. One of the most tragic is granola. Great food! Can't store it. There is just a touch of oil from those nuts. Store this, and it will all be rancid in six months almost every time.

Want to eat granola? Buy it at the store, observe the sell by date and eat to your hearts' content. But if you

try and keep it for a while, it will turn bad on you and will just be food for the garbage pile rats. Check your rice, potatoes and pasta for traces of oil. Many of those elbow pasta pieces have just a hint of oil on them. Can that, and you will have rancid macaroni when you go to use it.

The pastas fall in the grain category by the way. But you knew that. Get some of all of them - a lot of all of them. Add up just how much spaghetti you cook for the family and keep a year's supply..(do we have to remind you to date and rotate? I didn't think so!)

One more time, the amount you think is a years' supply is not right. If you like spaghetti once in 10 days, look at the size of what you normally put in the pan and multiply that by 35. Most use a whole package. You better buy a 40 case box of it or what you have is no year. It is our experience that most Americans eat far more pasta than they realize. The spaghetti every ten days is right, but in between we eat a bunch of the other kinds. And a better way to eat that is to recognize the way we really eat our pastas. Yup. Hamburger helper, macaroni & cheese, ravioli, etc. Boxed dinners are great. Just rotate them and you will be fine.

Here is one of those exceptions again. I told you I could not keep everything organized. But I saved this part because it fits in the grain area. Remember what makes pasta? The sauce. Face it. You need to buy several cases of all kinds of sauces: Cans & packets of every kind and description.

Dry sauces. Brown, turkey, chicken and white gravy are in packets and store well. Get bottled and can sauces: Spaghetti sauce -(at least four cases), Alfredo Sauce,

Plain tomato sauce, and any other favorites. Be honest with your usages and store them all.

And when you get them, forget how much you have and rotate as if you don't have any. Then every time you go to the store to buy what you want to eat in the next two days, buy it then date it then use the older stuff first just like you would have if you were to use what you just bought for tomorrows' dinner.

Some dry sauces come in 32oz. plastic containers. Get one or two of each of those. You will be surprised how much you will use them if they are around. Those bargain warehouse places sell big containers of different gravy's. Get some of each and use them. And as they are one third empty, go buy another and keep rotating.

As I finish up with grains, I am reminding you of the importance of variety. Sure have some germinating oats to eat but those rolled oats are good food too and very digestible. Bulk rolled oats store well in those poly buckets. Just make oatmeal with it and use it. Don't forget to use the dry ice or if you use the Deseret Cannery - (which is available to anybody not just Mormons!) they have nitrogen that can be blown into the can to displace the oxygen in it. Another good thing to use are those packets of oxygen eaters. The Deseret Cannery has those too. But if you go to the Deseret facility they have cans with lids so you can store smaller quantities than the normal poly buckets. But if you don't have time to do that, Emergency Essentials or similar stores have it ready on the shelf.

Corn. Hmmm. Five different ways to store and it is considered a grain as well as a vegetable. Get a bucket and fill it with corn meal for a hundred reasons including cooking corn bread. We talked about canned corn. Be careful

of dry corn. The stuff they feed cattle is clean enough but you can't eat it. Try and you will break all your teeth. If you want whole corn not canned, there are only two ways left that work.

The first is grits of several variety. It is prepared for human consumption. The second is freeze dried. That works really well. You can buy it already in big cans at many grocery stores. You can also get freeze dried corn in bulk to put in those poly buckets we talk about so much.

Breakfast Cereal. No contest. Stay away from the name brands. They will and are robbing you blind. Nobody should pay \$2.87 for three ounces for anything. If you must have them, and your family will feel slighted if you don't, then get those huge bags that Malt-O-Meal or other off brand cereal companies sell of those knock off cereals. Buy a big box and pile it up. Get half a dozen of those plastic dispenser things and fill them for daily use. Then refill them from the big bags. You can buy every flavor. It just may not have the right name on it. When the bag is half gone of each flavor buy another and keep a 10 month supply on hand. Even if you don't want to do food storage, this is a much more economical way to feed your family breakfast cereals. One more time; what you store should be what you eat every day.

I already talked about granola. It is very good for you, it is just that it cannot be stored well.

To end this chapter, add whatever grains you can find. Get some rye and barley at IFA or similar farm seed supply place. You want to eat it. You want to plant it. You want to sprout it. They are all the staff of life, and without them your nutritional needs are not met. I mentioned that

bulk rolled oats are good, but remember that rolled oats cannot sprout. Include whole oat seed to the list above.

And remember that those seeds we talked about sprouting are not just cereal anymore. Fresh and green they become important as vegetables. And not just any vegetables but in that state are the most nutritious vegetables available to you - bar none! Remember how I told you that some areas cross? Here is another one.

CHAPTER FOUR MEATS AND PROTEINS

I have been dreading this chapter because what I am going to tell you I know you will fight. And you may be somewhat correct but so far I don't know what else to do. Take the experience of a real food storage student who learned many lessons the very hard way. Fresh meat is fine but if you have to eat for a year without it what then? I know of only three ways to store meat and do it well.

The first is hard go get and pay for. Freeze dried. You will have to call around. And you will have to buy one can and eat it first before you buy a lot of it. Stored with too much fat and it will turn rancid just like the granola. If you find a really good source, this is one way to have reasonable fresh like meat when the freezer is not available or if fresh meat is not available safely.

The second is really good. A bit pricey but considering the weight per pound before processing not bad at all. Jerky in those sealed plastic bags. You will be wise to get a variety. Ham, beef and chicken jerky is easy to get. You should consider one or two whole cases with at least 20 bags to a case. You really do not realize how much meat you are used to eating every day. Be honest with yourself as to what will get you by for an extended period of time. I bought an entire gross: 144 bags. Guess what! We are eating it really fast. I will have to resupply as we use it up. If I don't, that year will become a month.

The third type, the most inexpensive and the most realistic is canned meat. Most of you have not ever really looked at that before. So few of you are used to canned meat, if there is a push on it, your grocery store will always be out. They never buy more than a case or two to

sell themselves. When I went in to the local Food Store next to us I took 12 cans of roast beef and their entire store wide inventory was gone! At under \$2.00 a can or so, it is reasonable beef at a reasonable price.

Easier to find is canned chicken. Not those whole chickens that Swanson sells. You don't need the bones. No, just canned, meat only, chicken. They are in the same can size as the roast beef. Most grocery stores have a sale from time to time. They run about the same price as the beef. The Warehouse food stores sell it at a better price. Six cans for \$8.99. That puts it at under a dollar a can. You can buy turkey and ham in the same size cans. Do it.

But go early. When I went to one store, I bought out their entire inventory with just a case of each. They had nothing in the canned whole meat department when I left. If several of you read this and go to buy, you may not be able to get any. Go now and ask for them to bring it in for you.

Exception again. Some canned meats will always have plenty. I doubt if there will be any shortage of the 'mystery meat' types. You may buy some of those but read the label. They contain an incredible amount of fat and salt for the ratio of protein. And those who have tried to sustain themselves for long periods on that get sick of it in a real hurry. The British ended up revolting against all the canned Spam the Yanks sent them during WWII. They still joke about how we tried to poison everybody as revenge from the revolutionary war.

You may want to keep a few cans of Vienna Sausages which are nothing more than canned hot dogs. A few chipped beef and deviled ham are a nice change. But once again, if you are going to store it - eat it or don't store it!! Canned meat is great in stews and on pasta.

The canned meat of choice is tuna fish. Watch the sales then buy three or four cases. It may still be bought in quantities at about \$.49 a can. One case is just a temptation. Make salads of it, sandwiches, and casseroles. Once again date the cases and keep them up to date in quantity.

Finally, some good advice on canned meat. The best buys are in restaurant size cans. You can go into warehouse food stores and buy tuna fish in cans big enough to hold half a case of the traditional size. And pound for pound the cost of the fish is way below that of the small cans. And, they have big cans of beef, chicken and ham too. All of them are at a really remarkable price per pound. Cooked meat is about a third that of fresh meat by weight. These cans of cooked meat are very close in price to that of fresh meat but ready to eat. I highly recommend buying a good supply of those big cans then feed the whole family or invite the neighbors in once in a while. Very good quality too.

A long time ago, those who sell canned meat realized that if it was too fat or had anything but lean meat, the public would find it revolting. I venture that most canned meat is likely a better quality than that steak you had the other night. And when you open a can consider how much fat is in fresh meat and how little if any is in that can. You know, I may be suggesting you reconsider your present eating habits and look at the quality of canned meats that are available. Fresh meat that lean would cost you over \$4.00 /lb. and up from your butcher.

I mentioned earlier to stay away from the ground up mystery stuff. Canned meat in chunks the way I suggest has nothing to hide and you can feel good about that. But the

ground mixes are something else. You are getting all kinds of throw away stuff in those cans. Read the ingredients. Ever do that? Pig snout, intestines, tripe, chicken pieces - would you serve that to your family alone that way? Get into reading labels. It is a real education.

Even Spam - I know we already mentioned that. But Hormel in the 40's did not know what to do with pig shoulder. It was a problem. Not much meat, and a lot of gristle, skin and fat. The answer was to grind it all up and flavor it with the same salt spices for ham. Add a little red food color and **Shoulder Pork Ham**, gives you SPAM. Cheap questionable protein and 70% saturated fat. No thanks.

This is a review, and it will be mentioned again. Make sure you have protein based plant products to meet some of your protein needs. Peanut butter, beans, & nuts are really great. You may wonder why I put peanuts separate from nuts. It is just a simple reminder but the good ole' South always called them 'goober peas' because they are not a real nut. Peanuts are in fact closer to peas and potatoes than other nuts as many may remember. You can't even eat them raw very well. They are a chewy shell protected root until baked. Still a very good source of protein!! George Washington Carver knew a gold mine of value before the rest of us learned that from him.

Another protein is soy. Soy everything. Try those soy meats that are flavored like ham, beef and bacon bits. But find out. Some people don't digest soy meats very well. Learn how to make tofu. Mixed and treated it will coagulate just like cheese. I know soy beans fit in the vegetable

category but the way they are prepared they best fit in the meat and protein food area. Soy milk is great! Try some.

Soy milk can be stored without refrigeration if still sealed. With gamma processing, soy and rice milk dairy substitutes can be totally sterilized in cartons. Unlike dairy milk, you will find these in the stores, on open shelves and not chilled. If you haven't tried any of them yet, do so. I have no problem at all using them on my cereal for breakfast and I am a really fussy eater. I don't like reconstituted dry dairy milk, but some of those soy and rice drinks are just fine. Really, buy one carton and see for yourself. They are even nutrition enhanced with calcium and other minerals so they are not a second place to milk at all for what you need. Originally created for people who are lactose restricted, this is a really superior product and just right for long term storage.

CHAPTER FIVE FRUITS

One more time. Fail to have enough and you will become sick and could die. One does not live by bread alone but many animals do just great on mostly fruits and vegetables. So can you. Frozen fine. But the freezer and power? Consider the reality.

My favorite is three great ways to keep and use fruit. The first is freeze dried. Those big cans of freeze dried everything can be found in big grocery stores like Macey's and at Emergency Essentials. It is easy to find and for the amount of fruit it takes to make a can of that is almost the same price as fresh! It is the same thing as canned meat. Analyze the quantity inside and what you pay per pound is really not far off. And you can get anything at all. My favorite is freeze dried peaches. Yum!

Speaking of freeze dried fruit, have you checked out the new cereals lately with dried peaches, strawberries and blueberries? Sooo good! And sooo expensive! If you want to do the same thing and keep some of your grocery money in your pocket; consider those big bags of cereal and then open a can of freeze dried fruit and throw a hand full in when you want that for breakfast. A quarter the price that way and you get more fruit. Take my word for it, or just continue to buy those 9 oz boxes of the same thing for \$6.99 each. Talk about expensive food! That stuff makes T-bone steaks a bargain! It is a trap. Stay away from it.

Frozen fruit is always going to lead the pack if you cannot get fresh. But again we are talking emergency food storage and under those conditions, you may not always have a freezer, or even the product to put in them.

What I would advise first is to take out those nice shade trees in your yard and replace them with apple, apricot, peach and pear trees. All give good shade too and the fruit on the ground when they fall is only a short term nuisance. A fruit bearing tree is a blessing when others are forced to buy from the stores. Consider it.

Canned fruit is of course the most convenient option. Get plenty. Be realistic. If you could not get any fruit for a while you would really rifle through those cans of peaches. You really would. Buy enough and rotate. I have two parts to pay attention to from my own sage advice bag. One is variety. Buy some cans of gooseberries, grapefruit, cherries, mangoes, Guava, pineapple and etc. They are on the shelf. Get some and use them from time to time.

Then second, when you buy that case of peaches avoid 'Heavy syrup' No good! Buy the 'lite' stuff. That only has a third as much sugar. Even that may be too much. You need the fruit not all that refined sweetener. Those 'lite' cans are not just for people on diets. You are looking for nourishment, not candy.

We have just too much sugar and corn syrup in almost everything. Looking at the labels, you may really be amazed at sugar in everything. Even spaghetti sauce! Stay away from all that sugar, it gets picked up by your body first and sometimes ignores the other foods you need. Empty calories do not a healthy person make. So, when you buy your canned fruit, get the less sugar kind and you will be better off. Many are canned in their own juice with no sugar added. Take the time to look.

This paragraph is to all of you that put up your own fruit. There are angels that must walk beside you I am sure. Nothing else except Deseret Industries canned fruit

tastes the same. And if you have not yet had the privilege of having that pleasure, then all you have to do is volunteer to work at the DI cannery one day and they will let you take some home for your kindly service. Anybody can go there to work. Anybody. But if you don't do that then get out those cases of bottles, boil them up, find grandma's recipe, and put it all into your own inventory.

Oh I know it is hard work. We haven't put up bottled fruit since I don't know when, but boy when we did what a treat. Only you know yourself about that one.

Dried fruit is a chore and sometimes hard work too but way easier than home canning. If you dare, get one of those driers and buy a bushel of everything in season and dry, dry, dry! Packaged dried fruit is really costly but that is another really good thing. If you have not yet dried fruit, it is an interesting experience, time consuming but very satisfying. Dried bananas are the best source yet of those Potassium electrolytes necessary for life. But do something about the oxygen. Put ox-free packets in the container.

You can't go wrong with a big bucket of raisins. They do in fact keep for years. There are some new varieties out too. Had any of those 'Crasins'? - Sweetened dried cranberries are great and store well. The AMA even says cranberries are good for your urinary tract so that is a plus. "Cranberries", according to Dr. Vinson at Scranton University, "top the list of disease-fighting foods."

So now you know what to get. My warning is get more than you think you need. When the fresh stuff is not there, you will need a whole lot more fruit than you realized. Heed my warning. You can live much better with plenty of fruit and enough vegetables longer than with much of the rest. And I mean longer in good health. We are an animal

dependant upon our intelligence. Our brain keeps us healthy. God made us that way.

You cannot live on grass the way horses do. All your unique chemistry demands that your brain must know and obey what it knows about what keeps us alive and healthy. The warning from the Creator about health in the navel and marrow in the bones to run and not be weary is all part of the great plan to give joy to we who are His children.

Ok we have looked at simple basics. The next chapters are even more important than any thing else written so far. Read on as your life depends upon it because - it does.

I plead with you to eat more fruit and vegetables. So many modern diseases we have that were uncommon to our ancestors are a direct result of what we consume. They ate healthier food. We have become so accustomed to the fast food variety and too much of the tasty stuff instead of what is more desirable to keep us healthy. The advise I have given you for your storage, converts into what you should consume every day.

CHAPTER SIX WATER

This should have been chapter one. Better minds than mine told me to give people the first part they worry about then get to the things they might take for granted later. Few things remind us of how dependant we are on some things than when we experience a water shortage, even if it is for only hours. If you have not had that experience yet I promise you that one day you will. Even when we are warned such as when the water department has to change a valve or some other common cause, one forgets how much we call upon our supply of water. I for one keep forgetting and turn to a tap for a drink or to wash my hands. Or use the toilet and have a rude reminder that there is only one flush waiting for the day until the water is back on.

I cannot warn you strongly enough to pay close attention to what is written here. I make a commitment to you that every sentence will have import, and not one word will be trivial. Then after you have read, go back and read it all again. My second promise is that in your second or third reading, something you either did not understand or fully realize will come to you. Now, pay very close attention.

Whatever might cause a food shortage will, or could, affect our water sources as well. Remember the truck strike we mentioned? It would not take much to disrupt the water coming through your tap. A pump down or filter break could shut that off. So, we are going to talk about storing water and other lessons I don't want you to learn the hard way.

One of the most often quoted Murphy's law is the one that says "If there are eight things that could go wrong and you only prevent seven of them, the one you failed to

consider will always be the one that will happen to you." So do it all.

Options. The best and the rest. The best is to have a tank in your home. They are out there. I bought a 200 gal. fiberglass model and put it right with my food supplies. It has a faucet on the bottom to hook up a hose and a ¼" supply tube with filter to fill it. One of those may cost you \$200. That is the best way of all. It just takes a little plumbing and, ahem, - money.

Another really good thing to do is start saving those polycarbonate juice bottles. You know, clear plastic, comes in gallon and smaller sizes; save them, especially the gallon ones. DO NOT USE THOSE GALLON MILK BOTTLES!!! That is PBS plastic and they will leak and break on you. They were literally designed to disintegrate over time in landfills after they are thrown away. These are not good to store water in for very long at all. If you like the square size and convenient handle like gallon milk bottles, you can buy the same design in polycarbonate at many grocery stores that sell filtered water. It is just that the juice bottles are the same thing and won't cost you anything to buy after drinking the contents.

I recently read an article that suggested that liquids stored in plastic bottles leach out toxic chemicals into the fluid. I looked into the facts surrounding that claim and found it to be totally false. It was based upon powerful chemicals tearing at the plastic and suggested that some juices could have an acidic ability to pull parts of poison into them.

Well, even the most powerful acids are kept in the same plastic bottles and are kept there safely with little leaching. No juice that we can consume has enough acid in

them to pull even the most minute toxins out of a polycarbonate bottle. So, if you read that, I report that it is all wrong and pay no attention to the suggestion.

Now, that behind us, let me jump right in and tell you how to fill them. There is a method that works well. First, never fill your water bottles from the cold tap. That will work 90% of the time but the 10% part doesn't sit well with me. First, flush out the bottle with as hot a water as you can stand without melting the container. In the flush water, put ONE DROP of chlorine bleach and shake it really hard. THEN POUR IT ALL OUT! I do not advocate having a couple of drops of bleach in your drinking water. Every storage publication I ever looked at says to do it. *I tell you not to!!!*

One more time I tell you that whoever authors those books have not had to use what they write about. Use it to clean, then get it all out. Keep in mind what free chlorine does when it is in your bloodstream. Besides, all tap water has a trace of chlorine in it anyway! Did you know that? It is a law from the board of health. But there is such a small trace of it there is plenty for your water storage bottles. Just don't fill them with cold water.

Time to clarify some things you may not have known. In some parts of the world, the drinking water is not safe. Even in health conscious North America, sometimes events make what comes out of your tap not what you should consume. In many places, the water comes from a nearby lake and/or river. Through no fault of your own, contaminates usually created by humans anyway can be present. However, that is very rare in our country. Laws here require constant monitoring and testing to assure your clean water.

I just set you up to warn you of rare problems but another fact about public water is known by few. I mentioned that all municipal water sources are required to put some chlorine in the water we drink. Ok, that is true, but did you know that the trace of that chemical is so small that another regulation takes almost every trace of it out? Chlorine is a poison, a real poison and far more than any toxin that was suggested could leach out of plastic bottles.

One regulation is that aerators come with our kitchen and bathroom faucets. Most think it is just a convenience of some kind. The fact is that the USDA has plumbing manufacturers put them on because that much air mixed with the water coming out of them will remove what little trace of chlorine might have made it down the pipes feeding into your home.

Every so often, tests are made downstream in municipal water systems to see if the chlorine is still there after distance and the aerators have done what they usually do. I smile when health based sales organizations threaten you with the need to filter chlorine out of your drinking water. Could some be left? Yes, but it is seldom. Just know that about your public water supply. If you still fear chlorine in your water then here is a suggestion. Let a glass of water stand for just a few minutes. Any chlorine left will boil off very quickly in open air.

Ask people who run public swimming pools how fast the chlorine escapes as soon as it is pumped into the pool. It has to be added continually to keep the level high enough to make sure the water cannot contain any other organisms. While we are on swimming pools, another fact I learned about was that anyone swimming in any pool will come in

contact with more chlorine in one hour than all the chlorine they will ever see in their whole life from their kitchen tap. So, let us put all this chlorine stuff where it belongs in factual reality, and not fear it from your kitchen nor add it in with your water storage.

Back to the real way to prepare and store your water. What you can do is let your storage water run from the hot side of your tap water until it is as hot as it will get. Now fill your storage bottles with that hot water and fill it to overflowing then let it sit for a few minutes. You need just a little time for the tiny bubbles in the water to rise to the top and disperse. Refill the bottle so that the water on top is rounded higher than the lip. You know what I mean. Fresh water will do that. With the bubbles gone, carefully put on the lid so that little or no air gets in the bottle. Once you have done that, turn the lid down tight and you have stored a gallon of water. Air in water can bring about some changes you don't want.

Another way to store water is to buy it already bottled. They pass those bottles through a gamma treatment to kill anything that might still be in it. But people who live in the Rocky Mountain areas are drinking the purest water possible. Gamma bombardment is not even necessary.

Filling gallon polycarbonate bottles is easy, and convenient to use any time. Besides that, it is simple and inexpensive. It won't take you long to fill and save a hundred bottles. (what you need!) As the bottled water inventory grows, get a small shelf system and stack them. Leave room in your storage area for bottled water and you will be really glad you did.

We have already used our bottled water many times. When we go camping and are in a hurry, grab one or two and

you have wonderful water to travel with. Every once in a while, something happens to water systems for a few hours or a day or two. People with those gallons just pick them up and are not put out at all. It beats boiling it as the board of health sometimes suggests. Drinking hot water is not fun. Your bottled water was hot long ago but is nice and cold now. The Katrina people all said the biggest problem for them was clean water to drink. Storing some bottles of your own takes away that worry.

Here is another pay attention Paragraph. There is no way you can store enough water for a year. The food is one thing. But water is something you cannot do. Don't try. If it looks like you have lost water for a long term, leave your food supply behind and go. Go find water. There is no choice. Dehydration will kill you faster than starvation.

Figure out very early where you will get your water for the duration of whatever you may have to do. Just know how important water is to you and put that fact into your mind for when or if the time comes. Just remember that you cannot store enough for very long.

You don't have to have your water right where you live. If you can reach it in a reasonable walk, you will be fine. So you walk to get your water every day. Most of the world has been doing that since time began. Your great grandparents did that for sure. But to be able to do that, the next paragraph is almost as important as the water itself.

Containers. Have a variety. Those polycarbonate bottles I am so fond of are not enough at all. Go to camping stores and buy at least five of those ABS 5 gallon square water bottles. You know the ones with the handle on top and a place for a plastic faucet on it? Yea, those. But

they are not for storing water in long term!! They are to have empty so you can go get what you need when and if you have to. Remember what I told you about milk bottles? It is the same plastic so water in them over an extended period of time will start to break them down, then leak. So get them and keep them dry until it is time to use them.

If you want to store water in 5 gallon bottles they are around. I am speaking of the ones that are used to put water in for drinking dispensers you see in offices. These too are polycarbonate but very expensive to buy and not practical to use. If you feel a need to store water in a bigger bottle than gallon ones, then better to put it in that type. Still, go get some of the square ABS ones to transport with. Then keep them clean and empty.

Another container I advise is to buy those blue or white plastic water storage tanks that some stores sell from time to time. They hold about 50 to 30 gallons or so. Fill them the same way I taught you to fill one gallon bottles. But the real reason to buy one or two of those containers is not for long water storage, but short term. They become a place to fill up from whatever you use to transport water where you want to use it. Having good sized water containers makes living without tap water bearable. When the tap water is gone you will learn really fast that you use far more water for other purposes besides drinking. You need water to flush out your toilet and water to wash your hands and clothing. Should you have to get by just for a week like that, you will be so glad you had a way to keep a hundred gallons available and ready to use.

I may remind you of a practice that your grand or great grand parents always remembered to do. They had a trough system to catch all the rain that fell on their

roofs and directed that water to a barrel. If you haven't heard the term rain-barrel then you need to read more. Those barrels were about 50 gallons, just like the ones I am telling you to buy two or three of and keep them somewhere until needed. If you need to, you can disconnect half of your rain diversion system on your roof and run it into one of those barrels I just told you to buy. It is perfect to clean with and wash your clothes. Just find a little used place like in your garage attic and put some of those empty barrels up there until you may need them. And don't feel guilty for storing them empty. From what we have talked about, you understand their usefulness better. Don't be without containers to hold your temporary water needs.

While we are in the area of emergency water, here are a few reminders that I did read about from all those other writers. If a water shortage looks imminent, quickly fill your tub then start transferring it into those barrels I had you put away. That is the time to fill them. Storing all that is not necessary or possible. You can do that over and over later on. Just think about and plan for it so you react in time.

Your water heater also has 40 or 50 gallons in it. Turn off the gas or electric power. If you are going to lose your tap water, you cannot take a hot shower anyway. Got a hot tub or pool of some kind? You may need that so put the top on it and hold it in reserve. DO NOT USE ANY OF THAT WATER FOR A BATH!!! It is now too valuable for such a luxury. Your body wash days are now from a pan with a wash cloth. Another chapter will explain what to do.

Back to the days before tap water. Near a lake or river? Lucky you. Use that for full body cleaning just refrain from soap out in it so as to not contaminate. Soap

down first then you can rinse off bringing it in from that precious body of water. Don't contaminate and make it useless. And if you maybe do find a small tub to enjoy a bath, be sure to use the water after you get out to water your garden or clean some clothes first.

I highly expect that some of the water you want to use is in fact in that hot tub. It may even be what is in the gutter. What then? Or that clear stream a short walk up the canyon. Do you trust it? You better be prepared to make sure. Boy scouts are aware that the cleanest water may contain organisms that could kill or make you very ill.

About 60 years ago a one cell organism showed up in all our lakes and streams: Giardia and a whole plethora of other nasty things. Over the decades there were die outs of wild animals. Deer, Beaver, Bear, even squirrels were lost in great numbers to this new infection. Of those who lived, they gradually gained an immunity or tolerance to the infection. For humans, we are not immune. Pain and severe stomach disorders put all of us in real danger. What we think is good water may harbor problems for us.

Remember the eight things in Murphy's law. My advise is to prepare with all eight. Here goes: Boil it. Yes, whenever you can heat it up and let it boil hard for at least ten minutes. But you might not always be able to do that.

The military tells soldiers in the field to put halazone tablets in their canteen. These sanitizer pills are really good at killing what is in the water without causing other problems, like chlorine. Most drug stores have it, all camper places have it. Put a bunch of that in with your water storage containers so you can give yourself some protection if you must drink what is there.

In old WWII inventories they still have iodine tablets to sanitize water. Those work, but make the water taste nasty. Still, if you are thirsty, well, yeah I told you kids will starve if it does not taste right. That is still true, but under stress you just might have to make them drink what tastes nasty anyway.

Filters. All sizes. Get those small ones with a straw on it, a pump to fill a canteen, another big enough to fill a gallon bottle. And I don't mean just those nice Brita or simple filters for taste you can buy. No. Get the ones that say micron this and carbon that. They will publish data and say things like protection from organisms like Giardia and others. Then get replacements so when you put so much water through one you have a second or third to replace it.

While we are in the land of filters, I instruct you to buy a whole case of paper coffee filters and keep them in storage. They are designed to filter out the grounds in those automatic coffee makers that are so popular. But the filters are just right to filter out everything that floats in water too. Filter your water through that first before you do the rest. You might have to use water with all kinds of leaves and dirt floating in it. Coffee maker filters will actually get most of that out, and might even give it back to you reasonably clear.

Some filters and pumps might take some work. The best ones are those which must pump under pressure. The finer the pass size in microns, the more pressure or time it takes to pass water through. Gravity methods with fine filters are drip types at best.

Sponges and soaking materials. What if you find some water that is hard to pick up? In a puddle or dripping off trees after rain or fog? Maybe dew on the grass at night.

Get a box and fill it with really absorbent sponges or similar materials. Then use them to catch what there is.

Years ago in the Balkans, an American pilot was shot down and hid in the forest. Serb insurgents hunted all over for him. Water was only a few feet from him most of the time but to go get it could lead to his discovery. Upon his rescue, he told debriefing people that his sponge was the most important survival tool he had. He was able to soak up any moisture wherever it was and squeeze what it picked up for a small drink. Make sure you have a way to save water if and when it might be in small amounts not retrievable with a spoon or bottle. Even mud can be turned into water with a sponge and a coffee filter.

Spend some time looking around at what is there for water purposes. At some of the surplus or camping stores some really good containers are available. Collapsible gallon jugs, camp bottles with big lids, canteens, camp wash up dispensers - look around.

One really good one liter bottle is a drained saline bottle that the hospitals throw away by the case. When they give a water IV to patients, that is one of the hard bottles they use. Having never had anything but sterile water in it, you have no worries about contamination. The bottles are tough and hard to hurt or damage. You really do need about 20 one liter size bottles of different types to get you through a water shortage situation.

Now that you have water in containers, you are not done yet. There is a lot to consider and do to be convenient. Unless you want to always be filtering your water, once it is clean keeping a lid on will do wonders to keep it pure. So, I am not advocating that you continue to dip into your containers with a cup to get at it. Each time

you open the lid to do that, more debris will fall into your clean water. Time to talk about pumps.

The car parts places and survival stores have pumps that you can install on a barrel. If it can safely pump gas, it can pump water. Both liquids are similar in fluidity. The stainless steel ones are the best because they do not rust. There are handle pumps and round rotating pumps. Anything that can cleanly and safely move your water will do.

I have a good suggestion. At Harbor Freight, a place that imports a lot of tools, they have a plastic pump which is suggested as a way to pump fuels. One end is long enough to drop down to the bottom of your barrels and the other tube to send it is about 18" long. It is all plastic and can be kept sanitized. Put one of those in each of whatever barrels you have. They are also cheap - under \$10 depending on when you are reading this.

Who knows, years from now we could be using gasoline for our cars that is running us \$5.00/gal. That may change a lot of prices in time. Maybe your decision to buy a year's supply of food now could be purely economic. Transportation could easily double the cost of everything we eat within a year and then double again the year after. Those \$.49 tuna cans will look like pure gold with time.

Get enough pumps for all your liquids. We will be dealing with fuels as well in this publication and moving gas is just as big a problem as is water. Keep two in storage so if one of the ones you are using fails, you are not in trouble. There may not be an economical way to replace them in the future.

Part of your drinking plan must include juices and flavors for your water. I recommend a bucket or two of

powdered orange juice. In addition to being pleasant they all contain good quantities of food grade vitamin C. As the months may go on, some orange base punch is nice to give to your family as well as a variety for yourself.

There is a company in Salt Lake City that packages at least a dozen flavors of powdered fruit. Depending on when you refer to this paper, try calling Nellson Nutraceutical and/or Pioneer Powders. If they cannot sell to you they could tell you who can. You could have raspberry one day and Peach the next. The taste is great and the nutritional value is extraordinary.

There are even bags of real fruit juice crystals that are not even artificial, just dehydrated fruit juice. The flavors in that form are amazing. Here is another source of fruit but I put it in the water part for hydration reasons. Where to get the crystals? First try restaurant supply and wholesale broker places like Sysco, Emergency Essentials, Best Pack, Blue Chip, Nicholas Foods, Standard Restaurant Supply, Guygi Company and a whole bunch more. And these are the best way to buy at the best prices for quantity. While there, go into some of the restaurant supply companies, like Bintz. They have amazing items you may find very useful. These things should be in the neighborhood stores but they are not. There is always an exception so a few will have some after all.

I close out this chapter for those of you who are really ready to become self sufficient in future emergencies and don't mind, are willing, or financially sound enough to spend what you need to. To you I say to go to the health stores and buy a full water filter system. We did. It is a ceramic filter first, then several stages of charcoal, and silicone ion type levels dripped into a two

gallon ceramic tank with a spigot on it. You can pour gutter water in that and drink with total confidence.

The only precaution is this: Systems that are that refined will also clog up if too much contamination passes through. One way those types of things do their job is by stopping anything that could hurt you. After a while if enough of that goes through, they have become lodged inside the ceramic filter and now will block any more water trying to pass. We drink from our kitchen drip filter every day but buy filtered water first so when we do really want what it can provide, we know it is still clean. My advice is one I will follow myself next: Have another filter still boxed and ready to replace the one in the kitchen. You do the same.

So this chapter was not just about water was it! The idea here is to have sufficient liquid to live on. Adding something to water to make it taste better and even help your nutrition needs will help you meet that important part of your food storage plan. I will deal with this again in other chapters as well.

CHAPTER SEVEN DAIRY PRODUCTS

On purpose I put this here because much of this is in the drink category but I give it a chapter alone because there are more directions than just drinking milk.

Dairy products are still the best way to get assumable calcium. Sure broccoli and some of the green vegetables have calcium but nothing compares to milk products. If you are older you think you don't need calcium. That is totally wrong. As you age, your ability to use existing calcium becomes limited. Therefore you need more of it so your body always has enough when it can use it.

And we are not just talking about bones. Without a steady diet containing good calcium your muscles will not work smoothly. Didn't know that did you?! I am close to a local football team. Early in the season we have a lot of boys go down with muscle cramps during a game. It is painful and the strain on that muscle can take them out of the game.

A good Charlie Horse can stop you cold and keep you there until it has a chance to both release and rest. A lot of that bad cramp is simply due to not enough liquid but for sure it is a combination of dehydration and electrolyte shortage. Among the electrolytes these kids are short of is Calcium Carbonate salt. Without it, a muscle does not read the information well that the brain is sending. And, along with quantities of Lactic Acid build up from working that muscle, the imbalance can send muscles into a spasm. You and your loved ones need calcium all the time.

Storing dry milk is a good idea but remember the part about eating what you store? Most people don't like the taste of non fat dry milk. Well I am right there with you.

Maybe drinking that is not the best but you can cook with it! Keep some, but not too much. You will just be throwing it away if you keep it too long.

Another option is canned milk. I recommend a case. Taste wise it is in the same category as the dry stuff. But it is immediate and a great cooking material when recipes call for milk. (And remember the milk substitutes made from soy and rice - very similar nutrition value!)

I have an answer for those of you who still want to drink milk. Buy whey! There was a company around the west called 'Whey Good Milk'. Yum. I can drink that and not complain very much. For some reason whey tastes better. Whatever is different in dry milk, whey is the way to go. And whey is loaded in that essential calcium we were talking about.

Whole dry milk. No. It does not keep. What makes it whole is the fat is still there. Mix it right away and chill it and you really have a hard time telling it is not fresh. Why not store it? The fat. Fat and many oils go rancid remember? Store it and you can't keep it long. Now, I have heard of a method of freeze dry crystals of whole milk. I have heard about it but I have not found it yet. Perhaps you will on you own. And that is why the industry only boxes non fat dry milk that tastes so bad. Whole dry just spoils too fast.

Remember there are always exceptions. Years ago the army was trying to find a way to bring powdered milk to soldiers that they could, and would, drink. There was some research being done on gamma purifying whole milk with all the natural fat. They may have succeeded by now. I may even know something later on after this is finished. It would be packaged into Mylar bags to be included in MRI packages.

Butter, margarine and cheese. Buy it powdered in cans. It will keep. One of the reasons is because all the fat is gone. To make it into cheese and butter again you can rehydrate it and add a little fresh oil. Very good really. The dry powdered butter is the real thing. Get a can and play with it. You will be pleased, but have to teach yourself how to reconstitute. Just a drop or two of water and a table spoon of oil and it goes anywhere you wanted butter with the identical food value and taste.

Powdered Margarine? I got some. But I wouldn't buy more. Butter is more natural. If I have to go to the trouble to reconstitute why not the real thing? After all, margarine is only one molecule away from plastic. Stay with butter anyway for the rest of your life and in storage. But dry margarine is there if you desire.

If you want to store some cheeses you can. It is just that you will have to go back to methods used in Europe more than a hundred years ago. The whole reason for cheese in the first place was a way to preserve milk before refrigeration. There are round cheeses dipped in wax that will keep for many months without refrigeration. Most of those are cheeses from Holland. Ask your favorite deli person to help you. The dry cheeses are good too. The Italians have the corner on that. Romano and Parmesan dry cheese fall in that area. You can buy them in bottles and store it with everything else. Do not buy those small salt shaker sizes of dry cheese. TOO expensive. Buy a big restaurant can or bottle and fill your shaker size dispensers. That will cut down the price by at least half.

There are some German cheeses that keep but they are strong. So strong that I think that is how they don't spoil. It smells bad even to one cell organisms! (ahem)

Attacking organisms are killed off the way honey kills bacteria. Ok, Ok I don't really know that. It just is logical that's all. One cheese that really can last for a really long time stinks to high heaven. Limburger is really good to eat if you can get it past your nose. Roquefort or blue cheese stores well. One reason for that is because the obvious live blue mold kills off everything else.

Get your dairy products any way you can get it. These are the ways I have experienced and will promise you they will be there when you need them. The other cheeses are just good if you can refrigerate them and keep moisture and other organisms off of them.

A comment about those cheeses that you forget in your refrigerator until they are all green or white with something? You don't need to throw that away! Almost every time it is the very enzyme or mold used to preserve the cheese in the first place. It may not look good, and yes you can taste it, but there is actually nothing wrong. Cut off the green or white to the inner cheese and eat it! I am telling you that green stuff was what covered the cheese before they cut it off to sell to you! When cheeses age, they can look really revolting on the outside. Unless the cheese is all mold because it is a small piece, it is still good food and the mold or enzyme coating it is a very digestible material and good for your stomach. If you can stand it, go ahead and eat that green or white cheese. You are just spoiled by what things are supposed to look like all the time. Pretend it is Roquefort! You are conditioned to eat the green or blue mold in that! Why not the rest of them?

This has nothing at all to do with dairy products but because it is about calcium, this is the best place to tell

you. Don't drink soda pop for your thirst!! And I don't say that because of the sugar or syrup in them. (Although that is a good enough reason not to drink that can anyway) It is the carbonated water that will hurt you the most.

Athletes learned that long ago. Want and need oxygen? Drink a can of pop and you will be unable to get enough to sustain hard stress. You are drinking pure serum carbon dioxide, just what your body is trying to get rid of, and in liquid form no less! But even worse is the fact that carbonated water is in fact a strong acid, carbonic acid to be exact. To keep your body in PH balance (about 5.5) your system must strip the calcium off your bones to balance all that acid. Here you are trying to GET calcium and that can of soda pop is just tearing it off of you.

Some Physicians have reported young women with the osteoporosis of a 90 year old from drinking soda pop while they were in their growth years. If you are thirsty, the LAST thing you should drink is soda pop - ever.

I didn't know where to put the warning about soda pop so it is here in the dairy area. We will even deal with liquid needs in other chapters as I promised. But the danger of soda pop was not sufficient enough to earn its' own chapter. I told you I ramble and did not know how to organize better. But the information is here. Just read on.

CHAPTER EIGHT SWEETENERS

This will be short. Only four types to store: White sugar in powder or granulated. Brown sugar granulated. Molasses and honey. Don't store corn syrup unless you are going to use it right away. It will spoil.

Keep white and brown sugars in a moisture resistant can or bucket. It will keep for hundreds of years that way. Use them sparingly in your life and as part of your storage. Have some molasses but again, only if you really use it. Back to that use it or lose it line.

Honey. Now there is a jewel. Those bees knew what they were doing. No bacteria or virus can survive in honey. Remember that when you are faced with what to put on a cut without a medical grade antibacterial. You can literally put honey on a wound and not worry about infection. The natural materials will kill it on contact. But dilute it with water and mix in stomach enzymes and it becomes pure energy. Honey jars with edible honey have been found in places where it was stored for more than a hundred years. Now there is real storage for you!!

There is another benefit that some of you already know about but many do not. Allergies. If you get a honey made near where you live, the bees have made it with some of the very pollen that makes you sneeze. But under their method of manufacture it is harmless enough for your body to use it and not be bothered. And, as it is being used, your immune system takes it off the violent rejection list. Use local honey on a regular basis and don't be surprised if your hay fever improves.

A caution about honey for the very good reasons I told you, can be a problem for babies or very young children.

Until they have built up their own resistance to some allergenic situations, they could react to the contents in honey. In a few years when their system has adapted, it will welcome and use the subdued plant pollen in honey just like you do.

You do know what causes hay fever don't you? It is just your body over reacting to an organism that it is confused about. A strange pollen shows up and your body sends mountains of histamines to flush it away. Your eyes watering and nose running is just your body trying to flush you out. Even the sneezing is just a purge method. When you get a bad case of spring allergies, the medicines that let you breath and dry up your runny nose are merely histamine blockers. That is why they are called antihistamines. Antihistamines are not fighting your pollen, they are telling your body to chill out and not try to kill you with the cure for something not necessarily dangerous. A cold and/or flu brings on the same reaction. The symptoms that make you miserable are not necessarily the disease itself but the results of your body trying to get rid of it.

Next time when you want some honey, try and buy the one taken from where you live. Most will be from other places and they are still good for you, but if you want the allergy benefits to where you live, your home grown bees will give you that.

I won't take the time to talk about how to store it. Just keep it clean. Honey will protect itself. Just have enough and use it now in place of all that sugar. Our ancestors did not have all the kidney, liver, rotting teeth and pancreas trouble our society has. They also did not have all the sugar we do either. They used honey when they had it. Maybe there is a connection. I think so, but we may

never really know. Remember I am the expert here so follow my advise on this one! You won't regret it.

Molasses. Well now. Do you know why it is dark brown and sometimes red? Impurities - sure. But these impurities come right from the plant - beets and/or cane. The dominant color red is lots and lots of ferric oxide; a good old form of digestible iron. Got any tendency for anemia? Red blood count low? Some of grandma's molasses will pick you up!! Remember Geritol!? That energy giver from decades back!? Mostly molasses suspended in enough grain alcohol to warm up your insides, or even give you a buzz if you drank enough. Paid a bunch of money for it if you were around then. That stuff was just a snake-oil holdover from the 1800's. You can have the same benefit if you just put some molasses in your food once in a while. Tastes great and is what nature intended for a sweetener. When you can't get honey, molasses is a close second. It stores well too.

About artificial sweeteners. I cannot have a lot of sugar anyway, so to make some things taste better I must use them. You may need to do that too. The message here will be short. Most of them are not good for you. Your body may think they are the real thing and store them in your fat. Because they are not natural, the reaction to a food that is not real can make a cell react and work strange. That reaction is called cancer.

The USDA is aware of this condition and has called for a bunch of them not to be made anymore. There are a bunch of them: Aspartame, Sucret, Saccharin, I won't go into the long list. They are still coming out in diet drinks and some other products but it is my understanding that we are only using up what is left of what was made over the years then when it is gone, there will be no more.

There is only one that does not have any reactions (that we know of yet) but the complication is that it is a brand name and falls in that category of unfair monopoly that we don't like to live with and it has not been out long enough to become public domain like the rest of the artificial sweeteners.

It is a chemical that is natural, and made from real sugar. It is actually the very chemical in sugar that our taste buds pick up to know it is sweet. The difference is that it is just the taste and is not accompanied with any carbohydrates and therefore no calories. The brand name is Splenda.

I don't know what the chemical name is yet for this product. We may have to wait for the patent to run out and become public before we find all that out. Nevertheless, this material is a natural one and although it will confuse our taste buds, it will not remain as a time bomb in our cells to cause problems with our future use of this chemical.

*An update. Some of the grocery stores have come out with the very same material but in their own brand name. Look for the front note which might say (The same material as is found in Splenda) As time goes on after this publication that idea of generic material will become available but in other brands. Just look for it.

CHAPTER NINE COOKING TOOLS, FUEL AND LIGHT

If your civilized food source is temporarily out or some other cause, chances are your electric or gas stove might not be working. You can go out and buy a years' supply of propane for that big oven out on the patio. But I bet your budget can't afford even that many tanks let alone the gas. Well, the exception to that would be that you already live with a propane tank next to the house. Careful use and you could get by. You could buy ten, fifteen and even twenty five gallon propane tanks that are more practical than those five gallon only variety.

Speaking of big propane tanks next to the house. That is one way to solve the problem. Country and rural people already burn wood, coal and use oil and propane to warm the house and cook with. Look into that whole idea. Domestic petroleum and natural gas is so much in demand that the price is almost out of reach. It is not out of the question to go back to many of the warming methods some of us grew up with or what our grandparents did.

I bet coal will have a resurgence of usage one day soon. What we wouldn't give to get back that coal fed furnace my dad used when I was a boy! Even the coal smoke can be cleaned up now. There are scrubbers small enough for a home that could be put in place. One problem prior to the 50s in America was the terrible black smoke that hung over our cities from all the burning coal. Some of you may even remember the spring cleaning which included washing everything in the house including the walls, carpet, and drapes from all the coal smoke.

But in practicality we have other answers for now. There is no need to go over camp stoves. You can do that at any sports store. My interest is in helping you with some options that are right under your nose today. But let us do some things in order. I want you to go out and get some blue and red 5 gallon fuel containers. You can buy them at Lowes or Home Depot or many other hardware stores like Ace or IFA. These fuel containers look just like each other. The red ones are available anywhere that auto parts and supplies are sold. Red for gasoline and blue for kerosene. At least five each.

DO NOT STORE GASOLINE OR ANY OTHER FUEL IN WATER CONTAINERS! It is an entirely different plastic and THOSE plastic bottles really will leach into the liquid! But we are not talking toxins to drink from, instead the leaching will go into the fuel until the plastic falls apart and drains out dangerous fuel and becomes a fire hazard. AND, don't ever use a water container again for water if you filled it with fuel once before. That container is forever compromised as a drinking source.

The red, blue, and sometimes even yellow or green fuel containers are chemically designed for fuel and are colored like that for a good reason. And to be sure, read the label or warning molded right into the container itself. It will always say that it is made to contain fuel and will usually even name the type. Gasoline, Diesel, and Kerosene are even made up slightly different so you are really advised to look at what they tell you.

People have even found surplus military fuel cans made of plastic that look like the metal kind. Fine. Use those. I have some. Just make sure they are real fuel cans and not some of them that look just like the "Jeep" fuel cans but

are really just for water. Most labels will tell you so read them and assume nothing. If you are not sure don't experiment. One kind you can safely use are the metal fuel cans. They are often painted red or camouflage green. They even have printed in raised steel that they are U.S. Gasoline Containers. Those would be good to have and maybe the best of all but they cost three times as much as the plastic variety.

I don't know when gas prices might go down but they do fluctuate. Buy when the price is in a down cycle. You will need at least 25 gallons of gasoline to run a car or truck when pumps might not be working. That is not a lot. Some trucks carry that much in one tank. At a five gallon average, remember that we are talking about five cans! But if you have to move or go somewhere, those five red containers will make a difference. And, again, rotate. Every few months, use them and replace them always keeping five full. You WILL use these cans, emergency or not. I am giving you wise counsel here.

Yes, I do follow my own advise, and I can tell you the practice has saved me money and not just been for disaster preparation. Think about it. Gas prices fluctuate. I buy when it is low and use it when prices are high. That is a low brainer isn't it? This whole food storage idea does the very same thing: Bought cheap then used when replacement is expensive.

About the blue plastic containers for kerosene. Five cans at least but eight to ten is better. You may need that kerosene to light and heat your house for extended weeks. I know of nothing more practical in cost per unit of heat than kerosene. In Utah the best place to get kerosene at the best price is Jardine Petroleum in Woods Cross. Call

around to find other distributors like this one. 40 or 50 gallons of kerosene could be life saving in an emergency winter. And yes it will cost you more than a hundred dollars. But what would you pay when your family is cold? Go do it right now.

Many of the same hardware stores sell kerosene in 2½ and 4 gallon cans already loaded. It is a bit more expensive that way, but the metal cans stack well and are therefore easy to store. But be careful with steel cans. If they are outside, or where there are temperature changes, the condensation will create rust spots and it will drain away. It happened to me. If you buy the cans, check them from time to time. If rust is showing you have limited time to pour the kerosene into a better container, or use it.

Next do you have a small shed or can you afford to buy one? One option is that there are big plastic storage bins like a big freezer or giant coffin. Those outdoor storage chests are not very expensive and are a good place to keep your fuel in. I advise you not to keep this kerosene or gasoline in your house. Heaven forbid if something caught fire. It is not a good idea to have a lot of fuel in your garage or in the house. Where you store it should be detached or away from the house. Another reason I ask you for this caution is because keeping that much fuel inside a dwelling is also against the law. I doubt if you will ever be fined for doing it, but if your home is damaged or destroyed and that much fuel is discovered to be in your house, it will void your home insurance. Don't take any of those chances.

Kerosene heaters. You will need one or two. There are real expensive ones out there at the hardware stores. If you have the money buy at least one. You can heat and cook

on them. The ones that are the most practical are the ones designed more than two hundred years ago.

They still make kerosene heaters like the ones your grandparents had. Real simple. It is a simple kerosene tank on bottom; wick dispenser with geared feed; glass and sheet metal top. This century old design is timeless for efficiency and practicality. Farm implement places have them. You can also find them in the back section of magazines like Field and Stream, Popular Mechanics and any camping or construction publications. These heaters are used everywhere regular furnaces are not available. They heat a room, cook food and give off good light at night.

Right now while I still have your attention I have to jump in and warn you of a lesson our grandparents knew and you may not remember. If you are old enough, the last generation had sleeping porches. Remember those? Kinda like a room outside with a roof over it and open to screens on one side. Ever wonder why they did that? Well, it was to avoid the 'sleeping death'. Back in the days of the coal stoves and kerosene lanterns and heaters, should you sleep in a room with one you most likely did not ever wake up.

The danger? - Carbon monoxide! Burning any fuel open to a room will give off enough CO that in your sleep death becomes a real possibility. That still happens now and then with families just sleeping in a closed room with an open fire place burning wood during the night. What the grandparents knew you must not forget.

Burn wood, but close the firebox so that heat enters the room but the deadly gasses do not. And if nothing to close it off, make sure there is a way for fresh air to enter and keep the chimney flue open for the hot gasses to escape. Same for Kerosene heaters. Warm room while awake.

Warm room at night but without you in it, even in the winter time. Get yourself out of a carbon monoxide room and keep warm under a roof but without heat. Blankets and comforters are fine right up to 10 below. If snow can blow in on you, throw a tarp over your bed or do something tent like.

Remember the exception rule? (like there always is one) The exception to carbon monoxide gas is to leave a window open or door ajar so breathable air can come in and CO can get out. You will never keep the room toasty warm that way but it is endurable with a jacket on or a blanket around you. This is a compromise you can live with. (no pun intended)

Speaking of wood burners, should you buy some of those single and double burner butane stoves, buy enough replacement tanks for them. I bought three of them and put one each in 72 hour kits. With a good supply of fuel, this system is really superior and will serve you well.

For the long duration and pure entertainment convenience there are some wonderful big steel oven/cookers that are made of 55 gallon and 30 gallon drums. They are made cut in half both the round way and the long way. Both are clever ideas. You can burn anything in them. Have one of those in your back yard or in your covered patio and you are in really good shape. There is your cook anything oven with use anything fuel. They are ready made or plans to make your own are around. A few pieces of steel, some good hinges, and a welder or welding friend and you can really have some functional stuff.

I have a perfect heating device. You cannot go wrong with these. Start saving your tuna fish or canned chicken cans. Just the right size. For a tuna can, put a corrugated

brown cardboard strip about one and a half inches wide and about 10" long into the can. Zig-zag the cardboard so it does not just go around the outside of the can but is in the center as well. This makes a long wick of brown cardboard. Then fill the can with melted wax. Find your wax anywhere. Canning wax, old candles, crayons, anything made of wax. After they cool the first time you will have to go back and put in more wax to fill them better. The cardboard soaks it up and the wax shrinks quite a bit when cool from liquid anyway. When they cool just throw them anywhere. What you have is an instant fire that burns with the same heat and sometimes more than a good propane burner on full. This fire will burn with amazing heat for about two hours. Plenty of time to cook and wash up with. It will heat and boil a three gallon cooking pot from cold in about 12 minutes. Yes, it is that hot.

Make the same thing out of a bigger can such as a canned meat can and it will burn for four hours or more.

Now begin to gather those large cans that hold about a gallon of water. You know the size, it is a #304 can that holds about 104 liquid oz., or 6 lbs 10oz or 3Kg. The discount commercial stores sell this size can for almost everything. Lids are available and plentiful for them. The best cans for what I want you to do with them are the same size round but half or three fourth as tall. Planters big cans of peanuts is about that size. I am not only looking for a shorter wide can but I want the lip that surrounds the inner open end ring. We are going to make stoves out of these. While we are at it we want to make a few stoves out of the full size cans as well. They will just be lacking that strength reinforcing ring at the open end.

Here is the design. Remove the lid and put the contents elsewhere. If they are nuts, put them in gallon bags or plastic jars of the same size. You will need what used to be called a beer key. It is a triangle shaped opener that can cut a half inch triangle in the top of a can. Now, never cut a hole in the top or lid of the can. But I do want you to cut triangle holes in the sides just below the lid. Put them all around the can about two inches apart. Then flip the can over and put the same number of holes in the other end on the sides of the can. When you turn your nut can upside down with the bottom steel lid on top, you should have room inside to put one of our wax heaters and allow air to come in from the bottom and exit the top just below the round lid.

This makes an amazing stove and for no cost. When you are through, just wear some heat gloves or hot pads and remove the can from the heat source. Put a flat piece of metal or some other non burnable object to snuff out the fire. Now you have a ready to burn again fire with wax still inside for several more meals. Keep three or four of these little stoves for whenever you need them. A box full of wax -cardboard wick heaters will do amazing things for you. Use them for any purpose at all. And they last indefinitely.

Two cautions with these stoves. Make sure the triangle metal cut out of the open side is curled around the lip of the can. Use pliers to do that. It will also keep your stove from cutting you with the jagged metal sticking out from the open side. And from the closed side, push the holes in a bit so they don't cut fingers if somebody puts theirs in the holes. If somebody could do it they surely will, sometimes purposefully just to see. When you have

done all that, you will see that our 'Boy Scout' cooker will do it all and can meet your many needs in every way.

Then go out and look for kerosene lamps. You should try and get at least ten. They light a room well and put out good heat to go with the light. Look around. Some of the import stores will sell 'hurricane lamps' for really good prices. There is an ARMY NAVY store in West Valley Utah that has a lot of them. And they are really inexpensive. (Now, - but try and buy them when there is a panic for things like that and there won't be any) Get these now when nobody needs them.

If you really get sophisticated, there are kerosene lamps with a silk filament wick on them like a Coleman lantern. These babies put out light equal to a 60 watt electric light. I have two. Almost every winter a storm takes out power in our neighborhood for a night or a few hours. When I light my really bright lamps I sometimes get a call from a neighbor asking if our power is on because they can't believe how bright my windows are. Candles certainly don't put out light of that magnitude.

Next is candles. There is a place in Salt Lake City just off Redwood Road and 17th South called Market Square that sells candles for the price of the wax. I bought eight boxes of long candles with a dozen in a box. The candles cost me about \$.20 each that way. Look around, you can find places like that who sell freight damages goods or excess store inventory. You can find similar places if you look. Even when the lights don't go out we always have some candles for pleasant surrounding when we want it.

A caution: Don't buy wax from craft stores! It is four times too expensive that way. If you need a quantity of wax get on the internet and buy enough to get it wholesale. The

best way is just to start saving those Christmas candles you always throw away when they are three quarters burned. We throw away wax all the time. If you dare, ask your neighbors to give you what they throw away. Tell them you are making boy scout stoves. Maybe they will do it with you. Then save it somewhere until you can melt it down to make those heaters I described.

Good, you have a supply of candles? Do you have candle holders? I bet you don't if you are most people. Go to those hand me down second hand stores and buy up a slew of candle holders. Now you could light 20 candles on a dark night.

Sometimes there is a sale on votive candles. They are about 1½" around and 2" high. A really good place to put them for light are those baby food bottles. If you know anybody with a new baby, ask them for the bottles they throw away. You will need about 20 of those.

Have you ever cooked in a Dutch Oven? Cowboy cooking and it is really great. Cookbooks are everywhere. Get yourself two or three iron Dutch Ovens for your enjoyment and survival. Two of them should be 12" around and my advice is to buy a 14" to bake bread in. (The wheat - remember?!)

You will need briquettes to use them, but I remind you that they work just as well with coals from an open fire. I really advise you to get into the iron cookware game for every day as well as for survival. We ended up with a total of 11 Dutch Ovens in all the sizes and we love to use them. They have a way of cooking things in such a delightful way that it is hard to believe that food that good was done in an open fire or with briquettes. Iron cook ware comes with big cast iron fry pans, muffin cookers, corn cob bakers and

the best pancake griddles made. Cast iron cookery is without peer. Be smart enough to have some then use them.

You can even hang these pots over an open fire from a tripod. Aw c'mon, you know about that. We see Halloween pictures of a witch making a brew that way. They even sell plastic pots to imitate that for Halloween! Only I am telling you to get the real thing and not the plastic copy. That method of cooking is centuries old for good reason. Now you really cook like a cowboy - or a witch!

The last cooking item is merely an option and not necessary. But if you get one, you and your neighbors will be using it all the time. I speak of a cast iron two burner propane stove. You can cook as good as an in kitchen stove with one of these. The only catch is to have plenty of pressurized propane on hand for a long usage. But if not for survival, they will take care of those out door family dinners in your back yard with style.

You will need a flashlight or two for instant light to find your kerosene or propane stuff. I advise that you do not put your trust in battery flashlights. Sure you can have those too, but what if the batteries are dead when you really need the light to work and work now? The answer is in two parts. The first one is to get one or two battery less flashlights. Instead of a battery, there is an internal coil surrounded by a round magnet hooked to a big storage capacitor. All you do is shake it for a few seconds and you have a few minutes of light. And if it burns out, just shake it again and your light comes on over and over and over. There are crank types too. Same thing.

The second part is to buy and use LED (light emitting diode) flashlights. They will put out the same amount of light a regular flashlight will but will last at least 20

times as long on the same batteries as a standard light. These babies are really stingy on electric power. The army gave soldiers single LED lights in Iraq years ago. They only had one AA battery in them. Most soldiers use these lights for a little while every night. How long do you think the batteries survived? Some men have not changed theirs for two years now. Granted that is not common, but single LED lights draw .002 amps per one lumen/hour. Compare that to an incandescent with .10 amps per lumen/hour. No wonder boy scouts often burn out their flashlights on the first night and almost always by the second. The same boy would still have his light almost a year later with an LED.

Finally I want you to gather about a dozen round wire cookie cooler grates. You know those wire things for putting bread or other baked goods to cool? They make great grills to cook on over any fire. The round ones even fit into the top of poly buckets if you are putting an emergency kit together. As for the best of the best without having to fit them in anything, go to a junk dealer and buy the oven racks out of a home oven. Heat treated and cobalt hardened, these racks were designed to survive the hottest oven without warping. They do great over an open fire too. So if you are ever going to replace your oven, save those tempered inside shelves for open fire cooking.

We have covered all you need for ovens, hotplates and related equipment. We even covered some propane, butane, kerosene and candle heaters. Last in this chapter I put in the idea of having one fireplace that can burn whatever you put in it. If you have a natural gas fire place, you can convert it whenever you want. Or if you have an open wood burning fireplace get a glass covering so carbon monoxide

is not a danger. Hardware stores call them fireplace inserts. Such equipment is practical without being in an emergency. Let me tell you that those inserts, some even with a fan in them can really heat up a home on a cold night. With the price of fuel where it is, an insert makes practical sense right now. What are you waiting for?

And if you don't have a fireplace, get the equivalent of a Franklin or similar stove and put it somewhere. In an emergency, you could put a flue out a window and put it in the middle of the room the way they did since 1700 when good ole Ben Franklin showed everyone how. Better yet, put one of those right in a family room in your basement and heat the whole room with any fuel.

Whatever you do, set aside a cord of wood to burn in something. And while you are at it, buy a half ton of coal. It is hard now to buy coal convenient for a household, but look around. You will find it or, if you have a pickup truck, go to a coal mine and ask to fill your truck. The cost will be so low you will wonder why you didn't do that years ago. We talked about coal furnaces earlier but now I remind you that they are good in fireplaces and other reasons for efficient heat fuel. A little coal mixed in with your wood and kerosene is real survival preparedness.

As I end this chapter we have not covered starting those all important fires. Matches are the best. Buy the wooden ones. You will go through a great deal if you are lighting a fire three times a day or more often in cold weather. Figure accordingly.

But there is another way that is almost as fast and totally dependable. We call them hot sparks. You buy them where camp equipment is sold, I think even large grocery stores have them. It is a piece of magnesium about 3" long,

1" wide and 3/8" thick. On one long side is a bar of high carbon soft iron. With a pocket knife, one can shave some magnesium into a small pile surrounded by some paper towel. Harbor Freight sells them for \$2.00. Have a couple on hand.

Emergency stores and camping gear retailers have a variety of ways to start a fire without matches. Most are the soft steel type with a good handle on them. These mag strips and carbon soft steel rods work well. Here's how to use them. By running my knife across the iron I can throw down more fire on that magnesium and paper than anyone else can even with a match. When the magnesium starts, there is instant fire you cannot put out until it is spent.

These are the recommended ways to start fires in emergency situations. But buy a few boxes of matches anyway, just be sure to store your matches in a water proof container. I keep mine in those three gallon buckets that are sold everywhere including the hardware stores.

Another way to protect matches is to dip them in wax. We did that as scouts and it works fine. They can become totally wet but still strike when we needed them. I think that when we struck them, the little bit of wax on them helped maintain the fire to light whatever we wanted. The waterproof matches you buy are just covered with wax but are far more expensive than if you dip them yourself.

Since my first printing some have complained at the cost of buying wood. Well, don't tell me that you have not had a tree cut down or trimmed yet in your neighborhood. What happened to all that wood? You saw it all piled up afterward, remember? Then they hauled it away didn't they!? Nobody wanted it. It even cost the tree company money to dispose of it. Next time tell them you want it. They will be happy to stack it in the corner of your yard or

somewhere else you designate. Now you have emergency fuel and you got it for a good priced - free! I know you have experienced what I described. Next time don't make the same mistake. Everyone wins here, the tree company even more than you.

So much of emergency preparedness is all around you thinking ahead day to day. We are just wasteful. Change the way you see what goes on around you. Stop at garage sales and buy gas cans for pennies on the dollar. Look at your life around you with a different set of eyes and thinking. Altering that thinking will give most of what you need to you at a cost anyone can afford. I really have done what I write about, and I have not done it with extra money. I really do stop at garage sales and find a lot of what we need. (just don't start buying junk - only what you need and nothing more!) But the point is that if you are at least thinking about emergency preparedness, your sub consciousness will find and equip you without breaking your budget. Please take this to heart and do, not just read about all of this.

Some of you may notice that I have not talked about those white gas Coleman stoves or lanterns. If you have them, fine. But don't go out and buy any more. The reason is the availability of white gas. You cannot get it anymore at gas stations the way you could decades ago. Many of you don't even know it is called white gas. The only way you can get white gas any more is at camping stores and it only comes in Coleman cans so it is not even called white gas anymore, but Coleman fuel. And it is only sold in gallon cans.

As for safety? Be careful. Never put gasoline for your car into a Coleman heater. Gasoline is explosive, and for a

reason. It is designed to explode inside an engine, not burn slowly in a stove. Mix that in by mistake and you are in mortal danger.

Not only that, there are some other safety problems associated with those pump things used to build up pressure to send it into the burners. It is messy and many have struck matches to light their stove only to have what is on their hands and maybe clothing catch fire from the match. No, I don't like them and the propane or LP gas variety stoves which even Coleman now makes are much more practical and safe. I don't advocate throwing your white gas stove away, but the ever increasing cost of white gas and the possibility of problems suggest that maybe those things have seen their day and might better be delegated to museums and not in your camping stuff anymore.

CHAPTER TEN EDIBLE OIL

This chapter is so short it may not even qualify for its' own heading but because it is a separated issue we are going to treat it this way.

I do recommend one oil that you need but not in quantities. I am referring to fish oil. Remember the old stories of cod liver oil? I don't necessarily mean that one but there are things in fish oil which are invaluable to you. Most of it is sold in bottles and packed in gelatin capsules as 'Omega 3 Fish Oil' Some of it is cod liver oil alright but most of it is a combination from many fish. This is one where grandma was right and generations learned from this. We cannot throw away this wisdom. Have it and use it.

Most digestible oils will all keep for about a year anyway. Just be aware that most of them will become rancid if you try and keep them any longer. If you must try and store a gallon of corn, Canola or peanut oil don't break the seal! And if you do open it, then use it until it is gone. I don't know why that makes a difference. I believe it may just be oxygen invasion, so avoid letting any get to your edible oils. I called two of the oil wholesalers and they insist that they do not gamma sanitize. I don't know if they really don't know, or maybe just the act of opening a bottle or can in your house contaminates it. But for sure, something happens to oil once the lid has been removed for the first time.

I have an oil of choice. It does keep longer than any of the others and it is better for you than all the others as well: Olive oil. But let's talk about that a bit.

Do you know the difference and why? All the salad people tell you to buy extra virgin oil. Sounds good doesn't it? Sure! Fresh first press, right? Well, that may be good for immediate eating and for salad but not for storage. Look at first press or virgin oil. You may notice a slight green tint. That is because there is just a trace of olive fruit in it. Good nourishment, bad for storage.

There are four general types of olive oil and each is cheaper than the next. First and most expensive is Extra Virgin. Then in order is virgin oil, then light then extra light. And the price generally goes down with the name. For you who are trying to keep emergency food on hand, the inverse is true. The extra light is for you and it is the most pure. Extra light comes from the last press for oil they can extract from the olives. In the first three, that rich olive flavor and just a hint of the olive itself is in it. By the fourth or last press, nothing but pure oil is left to obtain. Extra light is just that and, quite frankly is the better of the four for you. It is the pure olive oil that is the most healthy and hardest to contaminate.

The first objection I get from some is, "But that oil doesn't have any flavor!" Well, that is good. We are not looking for that. The purer it is the less your taste buds can detect anything. We don't want oil for the taste. You can put all the flavor you want with your herbs and spices. For long storage, the purer the better.

I wanted to also point out that extra light olive oil is the choice of doctors who are talking to heart patients. Olive oil does not clog you up the way some oils do. That alone is a good enough reason for me to switch to olive oil in everything. It really is a fact that people who use olive oil in everything don't seem to have the cholesterol

issues that many other do. With all their pasta, the Italians have one of the lowest rates of heart problems in the civilized world. There has to be a connection.

A bonus, and a surprised benefit. I remind you again of the story of the virgins. Remember how they went to get oil for their lamps? It was olive oil that they were talking about. Olive oil in its' cheapest form is not only for cooking food in and adding to our food, it is great fuel! Extra light burns clean without any burned smell to it. Therefore don't burn virgin oil because the rest of what is in it will smoke and give off a burned odor.

A close examination of some types of smokeless oils that you buy in bottles for your oil candles will say 'distilled olive oil' so don't be surprised any more. Extra light, in addition to being the cheapest of them all, is totally the most versatile. Buy plenty. Consider it for fuel as well as the ideal oil to add to powdered butter and cheese to reconstitute it. Remember that part? Call around, some companies will sell it in gallon or larger cans. Many restaurants use it to fry their foods in. It is clean and does not falsely flavor their food.

If olive oil were not the best oil for cooking I would have placed it in with the chapter talking about fuels. It is so good, that if push comes to shove, olive oil works well as a diesel fuel for those who have that kind of engine. And Kerosene lamps work well with clear olive oil. It is just more expensive than kerosene if you were wondering. Yes, a good supply of extra light olive oil is highly advisable.

And if extra light olive oil is not at a good price buy Canola Oil. It too is cholesterol free and very light. Canola oil is grown in the Western States, mostly in Idaho

and Montana. It is being grown more and more in Wyoming and Utah. You see, Canola oil is a generic hybrid that was developed in Canada years ago (thus the name Canadian oil - Canola) Utah State University has continued the research and has changed it again so the name had to change a second time to "Camolina", but it is still marketed as Canola Oil for the sake of recognition. But for food storage, it is the very light, clean, non contaminated oils that you need.

A note here is that the very reason these oils store well, is coupled with the reason they are cholesterol free. Their purity makes them that way for both reasons. Keep that in mind.

I mentioned that extra light olive oil can be burned in a hot engine for diesel fuel. Well, so can Canola Oil for the very same reason. And as a reminder, both are excellent as oils to burn. Remember oil lamps and oil heaters? Kerosene is the best for those but when this fuel is not handy, light vegetable oils like the ones I have talked about will serve a dual purpose.

Why not corn oil or soy oil? They are too heavy, and too contaminated with other things. These are "macro molecule" oils, big water - attached oil that is very hard to burn and not at all cholesterol free. So much for long term oil storage advise.

CHAPTER ELEVEN HEALTH AND MEDICAL

I don't like this chapter because it is just that, only a chapter. I am no doctor and I will not pretend to be one. I took the EMT courses when I was a scoutmaster but most of what you need can be found in good first aid books. What I would like to give you is not in print but should be a book by itself. We cannot go there in this publication.

Lacking that I will say that there are, however, going to be things I will advise which every first aid book says never to do. But without proper help available, you will have to perform some of these taboo things like it or not. I am also going to look at what the musts are for emergency purposes.

What I can tell you is that whatever may cause you to need a long term emergency lifestyle as predicted, will likely limit access to fully equipped hospitals. They may even be there but with limited power, supplies, or personnel. But I bet you know a few real medical people in your neighborhood who, if just happened to have some extra supplies, could make a difference for you and those around you. It will be those supplies that they will most likely be out of. Go get good quantities and have them on hand.

The first thing is a shopping list for emergency supplies. This time I do think most of you are there. And if you are not, allow me to remind you of some things that may make a difference for you.

Pain killers. You need a lot, and a variety. Suggest that you don't need brand names but do need at least the generic equivalents. And when I say two bottles I mean the 500 pill size for each of them. Ibuprofen, Acetaminophen, Aspirin, and Naproxen Sodium. As I tell you to live what you prepare for, use these big bottles to refill your small

ones but make sure the big bottles are kept available as you use them. Same goes with other medicines. Along with getting a big bottle of them, I will also tell you to get a small bottle of each in children's dosage.

Once again my advice is not just for emergency reasons but practical financial reasons right now.

As we will look at emergency medical needs, I am sadly reminded of how all our technology has caused us to lose the tried and true folk remedies and native natural medicines that our ancestors knew. Granted, a lot of that is pure nonsense and based only upon old folk lore and superstition. However, having said that, a whole bunch of it is for real and has come from honest to goodness cause and effect reality passed on for generations. Read on.

Of all the pain killers, I do have a favorite. It is the only one that was originally made naturally, and of all of them this natural medicine is the true wonder drug.

I am referring to aspirin, or acetylsalicylic acid. It not only relieves pain by calling upon your body to use its' own anamorphins to reduce pain, but it also blocks the body's prostaglandins which are hormone type chemicals often given off at the wrong time with adverse effects. It is the very best at reducing swelling usually accompanied by injury and/or allergic reactions. Its' documented ability to reduce blood clotting has had tremendous beneficial effects upon strokes and other related dangers. The chemical footprint for aspirin is $C_9H_8O_4$, so it has all the same parts as carbohydrates but just put together differently.

I mentioned that it is the only natural medicine among the list I gave you. Aspirin is manufactured by willow plants and can be found just inside the soft pliable bark

of any willow type. Anciently, injuries were treated and bound by the bark stripped off of willow plants. It not only had analgesic properties, but an amazing ability to ward off infection when used as a bandage, and had the curious effect of reducing swelling and easing pain as you might imagine. Ever run out of bandages? Head for a willow tree.

Traces of the chemical also have been found in a native North American tree named for the wonderful chemical which it also has in it's bark. If you can't find willow bark, the white bark of Aspen trees will do almost as well. The aspen name was given by Germanic tribes at least a millennia ago for the tree bark they used for bandages. When European people moving into the new land saw a similar (and related) white bark tree, they gave it the same name. It was in the mid 1800s that a German company finally figured how to buffer the wonder drug enough so it could be taken internally without creating stomach cramps. That is where the name Bufferin comes from.

That is what I mean by the tragic loss of the knowledge of folk remedies. Would you have known about willow or aspen bark if somebody hadn't told you?

Now instead of turning this into a folk medicine book, the real ones are around. Go get one. I only told you about aspirin to whet your appetite that there are plenty of medical options out there in nature and there may be a time that such knowledge could save you.

Antihistamines. Same quantities. You are still going to run into things that you will need to fight off a severe allergenic reaction. You may notice I did not say cold remedies. That does not mean don't use them. I am talking about emergency problems, remember? You need at least two

bottles or about 800 to 1000 doses on hand. Dyphenhydromine (25mg) commonly known as Benadryl is the most common and may be the safest in most cases. The generic brands cost less.

I know you are hesitant to buy a years' supply of health remedies but look at it another way. The cost per unit of large quantities is so small that buying it this way will save you a fortune over buying the same amount one small bottle at a time the way you always have. And, you will find that you did not over buy at all as you use it up in a year or more. It will teach you that you use and spend far more on remedies over time than you realized.

Along with the pills, buy at least five bottles of liquid Diphenhydramine for faster treatment and a half dozen tubes of the same medicine in a cream. You can use it for topical treatment on skin for rash reactions. Many companies have these things with their own brand name on them. They are on the shelf with the rest of the allergenic medicines.

Another really good decongestant is pseudoephedrine HCl, but for unfortunate reasons it may be hard to get anymore. Chemists have come up with a close to it medicine called Phenylephrine Hydrochloride. Yes, I am making you go to your favorite drug store to look those chemicals up. Any Pharmacist will tell you and help you with any of those things.

While doing it, you will teach yourself things that you should know. If you still have some real pseudoephedrine DO NOT DISCARD IT!! The only reason it was taken off the market is because illegal drug cooks were using it for the wrong reasons.

Next for severe stomach problems you should buy three medicines. The first is three big bottles of antacids like tums or their other imitations with store names on them. The second is a big box of Ranitidine or Famotidine tablets. These chemicals will tell your stomach to stop making excess acid so you don't get that sometimes acid reaction we all occasionally get for various reasons. They will get you through some indigestion trouble that you will get for certain.

Third, get a big box of Loperamide Hydrochloride to assist in a diarrhea attack. Or again, talk to your local Pharmacist. There are always good things coming out on the market. I just suggest that you don't get trapped by advertising or the excess of cost that usually accompany non generic products. Ask! Your druggist will help you.

Yes I am going to make you go look them up too for the same reason - I don't need to keep repeating this do I? Besides the brand names are too expensive anyway. Just an aside in case you were wondering, I took the time to find out where the off brands come from. Would it surprise you that most of them are made by the same companies that sell the name brands? They just put on the label of the store or company that is buying in bulk. Then the store just passed on the bulk price for you.

Some of the drug companies who admitted that to me said they decided to sell their product as an off brand rather than allow a competitor to earn money on what was their original product just because it was now public domain. The extra price for the non generic product was a reward for being the first to put the product out. They were also very aware that many people still go by the idea that you pay for what you get, and therefore paying more

for something means it is better. Benadryl IS -
Diphenhydramine, no matter what the price may be.

The tried and true remedies are mostly generic now. The best expectorants to clear phlegm from your lungs after a cold was developed and sold under the name of Robitussin years ago. The chemical is called Guaifensesin. Now you can buy the same expectorant from anybody with the generic name "Tussin" on the bottle. We have covered this area enough now have we not? I add this because you should have a bottle or two of Guaifensesin in your cabinet to clear out your lungs and help cut down on the cough left over from what you were sick with last.

Whatever other medicines you use, make sure you have enough if you could not buy them for a few months. I won't venture any further about drugs in this book.

In the same category as medicine, another chemical belongs here. Go out and buy plenty of (far more than you think you need) insect repellent. A lot of brands. Find the cheap stuff loaded with N-Dithyl-m-tolamide, better known as DEET. Don't bother with any other kind. If you still have some 6-12 laying around throw it away. You may have to be somewhere or in a condition where insects might be a problem. Your health may depend on how well you can keep them away from you.

Maybe malaria is not a worry where you live, but biting insects transmit far more disease than most of us realize. And yes, Mosquitoes do carry many dangerous diseases other than malaria. Flies and hornets can pass on poisons that can really hurt you. Don't take this area lightly. We will mention this again but buy some small space light cloth that will serve as mosquito netting for when or if you sleep outside or in other similar areas.

For injury purposes I am telling you to buy two kinds of bandages and have them in quantity. You should do this anyway just for economical reasons even without any emergency. Go to the supply places and buy a whole case or a big box of mixed band-aid style bandages. Dollar stores have small versions of what I am talking about. Out of the big box you can resupply your small box of adhesive bandages. One more time, small boxes expensive, big boxes cheap. Same usage over time. Why pay double for it?

Then go to the sports stores and buy an entire case of sports tape, commonly called white adhesive tape. It is a white cloth tape for wrapping ankles and such. You will need it for a hundred reasons if you are in an emergency. If you buy it one at a time in the grocery stores, you will pay ten times too much. You can get 20 rolls for the price of six one at a time. Sports stores call them "coach tape" and will sell you a box of them.

There are many common bandages such as what is called a triangle bandage. You don't need to pay a premium to buy those. Tear a piece of sheet or a neckerchief does the same job. I do suggest that when you have a tattered sheet that you want to throw away, wash it one more time then tear it into strips and put them into zip lock bags for later use.

What you will find is that you use rags and paper towels far more than you realize and by using old torn sheets then really throwing them away the way you would a paper towel will save you some money as well as having a superior product anyway. Remember we are changing habits here not just preparing for disasters. The difference is that if hurt, a clean torn sheet is a better bandage anytime than a paper towel. You cannot tie soft paper.

Ointments and creams. It is really hard to tell you what is enough. Only your good judgment must come into play here. Just remember to think in terms of not being able to buy any for many months. There are four I will tell you are important. We already mentioned a good itch relief type for allergenic reactions. Make sure you have a good size jar or tube of Petroleum Jelly. Next have a tube or two of a variety of different ointments - and maybe they should each be different chemicals like miconazole nitrate an/or Tolnaftate to topically kill infectious molds or yeast. When you cannot bathe enough, these will save you from pain and discomfort.

Next buy several tubes of any kind of multiple antibiotic ointments. They are known by many names. Neosporin is one common name but several stores have good products that just say "Antibiotic Cream/ointment" which is really the same thing. You will need this for wounds and any topical situations where infection is a concern.

Next, get some good old zinc oxide. The very stuff you put on babies for diaper rash. You can use this anywhere it is needed, even on your nose for severe sunburn or protection from same. Ionized Zinc is a natural antibiotic. Zinc throat lozenges are the same principle.

And again I remind you that if you have nothing to cover a wound to protect it from infection, you can always use a little honey, nature's natural bacteria killer.

Along with an assorted types of creams and ointments, have two bottles each of Hydrogen Peroxide and Rubbing Alcohol. They are both essential sanitizers. Hydrogen Peroxide is not painful when applied to an open wound. I would like you to also have a third sanitizing liquid handy. It can be either Tincture of Benzoin or Betadine.

And if you don't know what to do with these liquids I assure you there will be people around who will.

Now, go get a moisture resistant box and put in the following: Five forceps or stainless steel grip tools that can be set as clamps, two of them offset, one extra long. Make sure they are the kind that tension can be adjusted. Obtain two surgical scissors, one of them short. At a medical supplier, buy a handful of different single use scalpels. Or buy a handle and a small box of blades to fit. If you cannot get a variety of blade styles, get the #10. Three sizes of tweezers, a blood pressure kit and a stethoscope. Make sure all of them could be boiled or sanitized in severe conditions. Once again, you may not know how to use many of these things or what much of it is for, but the day will come when people who may be trying to help you will be glad you have them.

In another similar box put a good size box of triple layered non stick gauze pads, a roll of sanitized gauze, and a box of sanitary latex gloves. Get three boxes of medium size Butterfly Cloture bandages, a box of 3" X 4" adhesive pads, and two large rolls of ace type stretch bandages. Don't know how to use all this? I remind again - others will!

I end this chapter with two procedures that anyone will tell you not to do. But they tell you that because they want skilled people to do them right. I tell you to learn them because there are times that not knowing how will lead to death or non repairable problems later. And if someone you know is dead, waiting for trained personnel will be too late.

I have been given good advise from a physician that setting a bone is not advisable at all. However a

compromise is that you should learn something about it and what goes on with this procedure, especially if it is a compound fracture and protruding. If you are many hours away from trained people, too much time without treatment can have overwhelming results. In general, most bones that break are legs and arms. After that it is toes and fingers. Find a way to get the patient somewhere that trained people can take over. But don't take any action unless you know trained personnel are not available!

As you wait or transport, look at the color of the toes or fingers. If they are purple, black or pale white and/or not getting pink, you may have to find the bleeder or blockage so the patient does not lose a limb later on, or bleed to death. But, there might be a time.. . . .be ready for it and don't panic and/or fail to do what could be done if there is no other option.

Next go and find out just where the clavicles meet at the top of the sternum. There is a soft opening there. Understand clearly where the bottom of the larynx is and know how to feel for the trachea. You should know how to perform a Tracheostomy/Tracheotomy and where to insert a tube to open a breath way. Have sharp and clean instruments such as a real scalpel to do it and the courage to perform this procedure should no other option remain. There are classes given to learn how to do these things right so take the class and know what you are doing or leave it alone.

I purposely gave you terms that if you don't know them you will be forced to find out and perhaps learn how to perform them. Statistics suggest enormous numbers of deaths have occurred with someone standing right there watching them die because they didn't know what to do and could have saved them with simple knowledge.

Please, don't hap-hazard try these things or do them when you don't have to. But, there is a good chance that in a serious, long term emergency, you may have to save a life. Go find out how to do what I have outlined. Many lives were lost when Katrina hit, simply because no medical help was quickly coming and those there could have saved lives if they knew what to do. Don't let that fact haunt you if found in a similar position.

I have not found many emergency preparedness books that even deal with medical issues but survival is determined on all of the problems you may face, not just food or a tent. We have become used to things that are common to us. If and when problems come to us, the common things will be gone. Failure to be prepared in all of the areas of our lives will find us suffering in all the rest because of our short sidedness.

Do not think you will not run into these situations. I have needed to perform these things several times to save a life. At least learn how to do the Heimlich maneuver for a blocked wind passage. Four times I have needed to perform that in critical situations. In every case, death would have been the result if we had waited for emergency personnel. I am sure of at least a dozen other situations where the result would have been the same but someone other than myself also knew what to do and did it. BE PREPARED!!

Now read about Herbs and spices for more of our health needs. But this much is true. All of these chapters deal with our general health needs.

CHAPTER TWELVE HERBS, SPICES AND FLAVORINGS-& Health tips

How many cartons of salt do you have? One like most people? Remember there may not be any store to go to! I recommend at least five cartons. In the store brand they can be purchased for under a dollar. Just rotate them like everything else. We talked about too much salt, because it already is in everything. But you need to fill your salt shakers for a little shake at the table. Along with that get one box of extra course salt sometimes called Ice Cream Freezer Salt.

And pepper! Nobody ever thinks about storing that! You will go through eight cans or more. You put it in soups and meats and a lot of things. Have enough. I don't care what kind; black, white, red, they all will do the job.

Just like seeds for vegetables, keep some spice seeds to grow on your own and start growing them now. I got a kick a while back at one of my sons homes for dinner. He sent me outside to gather up what I thought were just a bunch of weeds. They were a whole variety of spices fresh and flavorful. I learned a lot that day. My wife grows some in little pots that look like indoor plants. Anybody can do it, so join the club.

Aside from that, look at your spice rack and ask yourself if you could go a year without buying any more. If you can't, then fix it. You know.

We already talked about sugar. Remember that sugar really is pretty much a flavor enhancer. Consider it a spice just like everything else. But we did not discuss storing sugar. Well the answer is easy. Leave it in the ten or five pound bags and put plenty of it in poly buckets,

snap down the lid to keep out moisture, and forget it. Brown and white sugar will keep forever if dry.

Another flavor to remember is cocoa. It is interesting that in 2006 the USDA listed cocoa as the most concentrated known way to obtain antioxidants. Obviously immediate eating is chocolate. But I approve of two ways to store it. Both are good. The first is six boxes of powdered, pure chocolate with nothing added. You can make whatever you want by adding ingredients. There are many brands now.

My favorite second way to store cocoa is in the form of powdered chocolate milk. I don't like non fat dry milk to drink alone but chocolate milk is the greatest. On cereal, hot warm up in cold times, refreshing cold and even poured on anything, this is one way to put dry dairy milk into anybody. Go ahead and add more dry milk to the mixture! It only makes it creamier!

I put up 17 #304 cans of cocoa mix at the Deseret family canning center. Boy was that a smart thing to do! And we have been drinking it down. When I noticed how fast we were going through it, I put back some of several flavors on the shelves. We have Nestle's Quick, Ovaltine, Stevens Cocoa, Swiss Miss and Hershey's powdered cocoa mix.

How could we miss? Even the off names all taste great. Throw in some water and drink away at any temperature. Don't add as much water, add more powdered sugar and a drop of oil and you have as good of a frosting mix as you have ever bought or made.

Among the flavorings be sure to have three more at least. I include vanilla, lemon, and almond extract. The liquid forms are best. Real lemon, if unopened will keep for a very long time. The other two have enough alcohol in them they will not spoil either.

We already talked about dried onions and garlic. I mention them again to discuss another old medicine. Many years ago people used to believe that a garlic clove around your neck would ward off colds. Well by now we know that is not true. But do you know why they believed that? The answer has merit.

Onions and garlic have a powerful chemical in them that will cause your eyes to water; remember that part? Fact is that what can cause a membrane to weep or hydrate, can also cause the opposite. People with onions or garlic around their necks did not have cold symptoms as bad as those who didn't wear one. Both had the same cold or flu, but the garlic people did not have symptoms as severe.

The very laboratory study of antihistamines derived the first understanding of watering eyes and runny noses by the chemicals that effect membranes the way onions and garlic does.

Many of the herbs we merely use as flavorings have origins in medicinal applications. Mint, sage, eucalyptus menthol, and others have benefits that go beyond just how they taste. One of the best chemicals for controlling diabetes according to Dr. Richard Anderson head of the United States Department of Agriculture Human Research Department is Cinnamon. A half a teaspoon a day reduced most blood sugar levels by 20% of those tested. Dr. Wang in the same lab published that Oregano has 42 times more antioxidants than apples, 30 times more than potatoes and 12 times more than -(are you ready to be surprised?)- oranges.

This is another reminder to get books on folk medicine. You have good reason and intelligence. Don't go back to mustard plaster to burn off a cough. There are a

lot of really nutty remedies from years past, but many are the real thing and the knowledge of them could serve you well in an emergency situation.

There are two books that are really for every day but are so full of common home remedies that they will also make a difference in case of an emergency. Both are publications of Bottom Line/Health. The titles are Uncommon Cures For Everyday Ailments and The World's Greatest Treasury of Health Secrets. Every section is a compilation of articles and reports from several medical schools and many well known physician authors. Each of them talk about things that people can do to help themselves with disease and medical emergencies.

I may regret saying what I am about to but I will anyway for now. There is a duplicity about herbs. So many of them are really wonderful to improve your health and benefit your taste buds. And it really is true that some new ones arrive from time to time from our out of the way forests. But I have also learned that there is a great deal of charlatanism too. Books and books are full of outright lies about wonder herb this and that. You can go into health stores and hear and read totally outlandish stories and claims about some wonder herb that does this and that with the claim that we can't be healthy without them.

Sadly, the harder I try to look up and verify those claims, the more I find out that most of it is not even reasonably true. Go ahead, look at the shelves full of all that stuff. Read all the claims! And it is expensive! Criminally expensive! I refuse to give you the ones that I found to be total lies, but I will tell you that it was most of them.

I'm sorry to tell you that, but I say in solemn faith that I do not misrepresent what I just told you. What I did find real was that all the things you have been given by your mom for your whole life had it all and you do not have to pay through the nose for herbs that make wild claims to the contrary. Licorice root does not need to be bought at \$10.00 an ounce the way you could buy it for bowel regularity at the health stores. Go to your local grocery store and buy a bag of Licorice candy and eat it for \$1.25. I promise you it will turn you loose from any constipation you suffer from, and you got to enjoy some great candy along the way!

My advice here is to be careful and hold some good reasonable doubt when you hear wild claims that are not universally known. Here is an example of when some claims are real.

Many years ago, a health company was touting the benefits of a sap that came from a desert plant. They sold it for a very high price and said it was the closest thing to human body liquid available outside of human manufacture. Because of that, it was a very good moisturizer for wounds and as a dry skin healer. Well they were right! And now aloe from the aloe plant are in almost everything. But you can buy it today for a twentieth of what they sold it for two decades ago. Good things will be recognized very quickly if they do what is claimed.

Just be careful with your money on not-established things. Fair enough?

CHAPTER THIRTEEN LIVING QUARTERS

If you don't have a family tent, get one. You may not always have your present home to sleep in. Even if it is only for a few days, you must have a way to stay dry and protected in a simple way. The size depends upon how many there are of you. Remember there is no number less than three. My rule is room for two to every one. In other words, three people need the room for what is called a six man tent and so forth. This does not mean a tent that big, it may mean two three man. But I will help you with this one.

One more time, money may be a premium. Tents can cost you. However, try the surplus places and explain your need. Sometimes they have seconds with silly problems that you can repair yourself. Yard sales often have family tents for sale. Start going to those!!!

Look up companies like one in our town: "Tent Man". They buy and repairs tents and seconds like you were looking for. He/she could even make one to your specifications cheaper than that nice one you were drooling over at Sam's Club. There are many camping niceties which run the cost up. Just a cover, floor and zippered opening is good enough for what you need. They will often throw one of those together for you, and what do you care if all the fabric does not match? We are talking survival. Remember that. War surplus places often have tents at a fair price.

I like to create my own shelters in an emergency. If you buy two tarps 12X15 you can make your own acceptable tent for very few pennies. You will need some rope and a small spool of duck tape. (Some spell it duct tape because

it is often used to hold air ducts together) Use one tarp for a floor and turn the sides up to make a 9X9 space, this is some pretty good room. I know, I told you at least a 12'X15'. The rest is for over and under-lapping. Put the rope, tarps, a pocket knife, and some allowance for ground pegs and put it all in a banana box and put it away.

Here is what can be done in two ways. For both methods, use the tape to tape the tarps together where they need to be. You can make a shape with some pipe or tie the rope between trees and throw one tarp over it to hold up the top. Use your head and you can make a reasonable living space. Larger tarps make larger spaces.

The first and most common is to make a rectangle tent. Flat top, square sides. Use the excess tarp on the floor to make a back of your tent, the excess top part to cover the door. For both front and back the tarp will hang like a pleated drape. No problem, tape it into the right shape. Make sure you leave enough floor tarp to raise up at least two inches so ground water does not get in. You will need that to keep you dry in a rain or snow situation. As you assemble this tent, you will see and get ideas as to how to make it good for you.

My favorite dwelling and most practical in the worst of situations is to make a tepee. Ten or twelve poles, pipe, even suspended rope from a high tree, you put up a structure that is as tall as it is round. Native Americans had eons to find the best shelter. They knew why they made them. Take my word for it, the unforeseen will teach you why they and I like this method best.

In heavy snow or high winds, nothing compares to a tepee. I have stayed in one at below freezing and been warm enough inside to simply be in T-shirts completely oblivious

to the weather outside. Snow just slides off the steep sides and piles up around the outside making more insulation against the cold. The way they are built, let the high winds come. The shape causes the wind to push down on it, not pick it up. Provide for an opening in the top and you can cook safely with the smoke directed right up and out even in on a windy day. In fact, the wind makes a draft to draw air up and out the top.

Sure you can buy one, or make your own tepee from just poles and tarps. Put up whatever you have for poles, use the same tarps we talked about before. Put one on the floor, and one over the top. You will be amazed at how little of the tarp you will use up for the space you get. It is more practical and economical for the square yardage and the resulting inside room. Cones use less outside area than boxes do for the same floor space. Take advantage of that.

We took scout troops to camporees with just poles and tarps. All the other troops were jealous and came over to see our throw together tepee. They could not get over all the room and comfort we had. It was so fun we decided to sew our own tepee. The pattern is to make a half circle with the radius of the cloth equal to the circumference of the floor.

We made a twenty foot tepee out of heavy nylon cloth. That thing was a monster to be in, but it all fit into one banana box when it was time to go. We made our poles out of electrical pipe by fitting a five foot $\frac{1}{2}$ " one inch piece into a full size 10' stick of $\frac{3}{4}$ " EMT then put that into a full 10' stick of 1" EMT pipe. WE used duct tape to hold the ends together and had a great time. We had room for 18 boys and all their gear.

If you want to make one like we did, be sure to look up tepee designs on the internet. You need to allow for an opening to get in and out, and flaps for the top. Our 20' tepee cost us about \$65 for the cloth and floor tarps. The poles cost me about \$140 for the steel poles. Most tepees use 12 poles. Each should be about 5' higher than the radius or length of the cloth. You can even get permission to harvest small "lodgepole pine" trees for a tepee from the forest service. Gee, I wonder why they call those straight pine trees "lodgepole"? Hmmm. Real wood is cheap; much less expensive than steel pipe.

Until it was made, I had no idea of what an immense structure it was. Should I make another I would only make a 12' to 16'. Everything becomes more simple and there is still room for five and all their stuff from just a 10' teepee. And for your 10'tepee, throw your tarp right over the top of the 10' poles. You don't need smoke holes and all that for an emergency shelter. And the opening can just be a taped piece at a natural way in and out.

Sleeping bags, if you have them you are ready. If not watch the sales and buy one good enough for freezing weather.

If you take this dwelling thing seriously, look into the design and concept of Asian Yurts. I am about to make one. They make wonderful sense. Mongols and Native Americans knew what they were doing with both types.

About comfort. Should you have to sleep on the ground it might be uncomfortable. We did something that may work for you. We bought those 3" thick foam slabs big enough to sleep on, then cut them up into shapes to fit in king size pillow cases. After the family made them, they are out on loan all the time for everything imaginable and make a

quick & easy way to put a foam floor in the basement or in a truck for a bunch of people to sleep on. The kids still all come home and do that for Christmas eve. We store our pillow case filled foam anywhere we want. The only real expense was the cost of the Pillow cases.

Naturally, you could keep a few of the foam mattresses as they are without cutting them up. They are just more bulky that way, so storing can be to put them in your attic or garage rafters.

Air mattresses work too. They can be expensive though and they need to be watched for punctures. A good queen size will cost you about \$35. (at this writing)

Should a disaster really come, you will find your dwelling place to be equally as important as your food and water. Really, do what I have suggested here. Anybody can buy a few tarps, rope and some poles. That is no big financial deal. And if you need it?! The little money you spent will be nothing for you and I promise you will thank me day by day for the advise.

So, like everything you read here, do it now. At least start assembling things now. Time will only make everything more and more expensive and harder to afford as inflation eats away at us. Nobody knows what is in store for us right away. Just know and believe that the emergency for everyone is some day. Why tempt fate? If you KNOW there will be a need someday why not be ready when you had the ability? Don't wish on another day that you had started when the now was here and passed.

CHAPTER FOURTEEN CLEANING UP

Time to buy again. Look around and find the cheapest price on 33 gal. Garbage/lawn bags. This time you figure it out. Have enough for a year! Now, buy it and put it away until you need them. Then buy at least three rolls or large boxes of heavy bags capable of holding together in rough conditions.

You will need about 10 boxes of gallon size zip lock bags, fifteen boxes each of quart and pint zip lock bags. You will end up using most of the zip locks for absolutely everything as a year passes.

Five cases..yup five... of paper towels. You will wish you had doubled that, so perhaps you should. Got a place to save some newspaper? Save a box of them - Just a box!! Be sure to throw away the rest as it piles up. If an emergency seems imminent, maybe you should save all the newspaper you get from that time on. You will need it to wrap things and start your fires.

If you think about it, when you buy your laundry soap, buy two. Then when one is gone, go back and buy two more. Keep that up until you have enough to last a year. Then don't stop buying! When you use up one, replace it so you have a good reserve. Do not just look at the four or five buckets and think you don't have to buy for several months. The idea is to have a reserve, and if you deplete it, the reserve is gone. Your purpose is defeated.

Bar soap. All of them have stuff in them. You never know what will effect what, so I recommend a case of Ivory soap. You may have to go to a janitorial place to get a case. Sometimes the discount stores will have one. Use it on your body and your hair. Why that brand? It is just

soap, not full of all kinds of other chemicals which may not always agree with what you are washing. Play it safe and get the plain and simple.

Besides the price is right too. No, I don't want you to get a case of Dial or Dove, even if you are used to it. Sure, have some, but the reason is that if it is your only soap, those moisturizers and other stuff will in fact foul up your hair, clothing or other things when you wash them.

I told you that some things you will object to but I will defend my case when I give advise. Look at all your cleaning liquids, especially shampoos. One common solvent (the stuff that breaks down oils) is Sodium Laureth Sulfate. Another is the family of Methylparaben types. Both are so close chemically to estrogen, a hormone that some skin reacts as if it were. You and your family have that regulated naturally in your own bodies. Having it on your skin may have questionable reactions. I just wanted to warn you about that. Generally, however, Laureth Sulfates are just detergents which break down oil for cleaning. Sometimes they can irritate your skin by just drying out the natural oil. If you do use these shampoos with that in it, use a conditioner. Why? Those chemical solvents and/or detergents will take out enough of your hair oil to where a conditioner might be needed to put it back in again. So I just repeat, use Ivory Soap - as natural as grandma's home made, but better!

As you buy shampoo and other liquid soaps, you might look at the ingredients. If those things are there, buy the kind that don't have them. The FDA is aware of the similarity and are gently nudging the soap people to cut back. You do it with your purchasing power. More and more liquid soaps have come up with alternate solvent materials.

There is a new trend being taught to beauty shop operators to clean hair with a pure soap like Ivory. The only resistance to that has come from the fact that beauticians make money selling the more expensive stuff. I am letting you know better. Next time you get a perm and they wash your hair, see if your favorite person already knows about all this. Don't be surprised when you realize they do. Oh yes they will talk about soap scum, but the only way that happens is if you do not rinse.

Laundry methods. Do you have a tub? If the power is out, your washing machine will not only fail to work, it cannot purge the water. The answer comes in two parts. The first is to have a tub of some kind. Maybe one of those plastic tubs for parties to put cold drinks in. Have you seen them? They have rope handles on the top to pick them up. That would make a good laundry tub if we cannot use our electric washers we all depend on.

The second is to buy three or four of those big canvas laundry bags. This works amazingly well. Put colors, whites, (you know how to divide them) in each bag. When the cloth bag is full, put it in one of those plastic 33 gal. garbage bags I told you to buy. Put in a little soap, and fill half full of water. Tie up the canvas bag first and seal off the plastic bag so the water does not escape.

Now knead and manipulate the bags with the clothes inside. This forces the soapy water in and out of your clothes. Work it enough until you think they are clean. Drain some or all of the soapy water. Add more back in and do it all again. Do this several times until you believe they are clean and rinsed. You will have used very little water and your clothes are clean. Try it the next time you

go camping. Just remember not to contaminate the clean body of water you are near with soap residue.

If the emergency goes for a long time, you may want to buy one of those mechanical sweepers. Just like a vacuum cleaner but no power. Every restaurant I know uses them. And restaurant supply companies are the ones who sell them. Great way to clean your carpets without taking them outside to beat on the way grandparents did.

You will have cans and paper to throw away. Have an old metal can - maybe the old style garbage can. Better yet get a 30 or 55 gallon steel can. Now cut holes in the bottom to let in oxygen. You may have to burn your waste. The can will act like a home incinerator. Burn everything that can be burned, yes even your plastic waste. But burn it away from the house. Some plastics give off toxic gasses you should avoid breathing. Put the cans in those big garbage bags and find a remote place then bury your crushed metal cans.

Keep your living quarters wherever they are, clean. I would have saved that for the next chapter but now is a good time when you are cleaning up. If you don't pay attention to this category, you will be run over by unpleasant and noxious critters that may endanger you.

There are many things that I have not mentioned such as a shovel. I have assumed you had one as a part of normal living. If I am wrong about that, think about what you need to carry out the tasks I ask you to perform, and what is necessary to carry them out.

The last caution about personal cleanliness is to do what the pioneers did. If you cannot get a regular bath, soap up and dry your groin area often to avoid infection there. It uses little water and is important to your

health. For the rest, we already told you what medicines to have on hand if you forget to wash enough.

So much of all of this is so vital to your health. Forget any of it and you may find yourself where so many of the Katrina victims ended up: Dead and in hospitals recovering from ailments we all thought were gone a century ago. Cholera, diphtheria, dysentery, tetanus, and others like them will all return when cleanliness is not observed. Value your cleaning skills with the same value you put on your food reserve for your preservation.

CHAPTER FIFTEEN REFUSE AND WASTE

After you cleaned up, what to do with the trash. The computer people say it best: Garbage in and garbage out. What you use always results in something to dispose of. Years ago when we used to go to the store with the kids they saw a pattern we had not noticed before. The more food we bought, the more toilet paper we needed. Hmmm wonder why?

But first we must deal with just plain garbage. I told you to burn it all. Then I told you to bury the metal cans at a distance. What I want to add to that is to mark and prepare a garbage dump. You will dig it all up and discard it when the emergency is over.

Dig a good sized pit then fill those garbage bags full of nothing but burned out and crushed cans. Throw them in the pit but don't bury them. Dig a bigger pit or another one but keep in mind your garbage dump will one day be emptied. Should a really long time go by, then perhaps you must bury the pit but mark it for future removal.

Human waste. We both knew we would have to deal with this some time. Avoiding learning about this is a serious mistake. Wherever you live, efforts will be made almost above anything else to maintain your sewer system. You will just need to be careful with water to flush with. That soapy water from your laundry would be good. Remember that part?

But there may come a time that your sewer may back up for a time. Shoot! That happens now! Do you have a plumbers friend to force it down? Better get one! I caution you about storing too much Draino type chemicals. That is dangerous stuff. More dangerous is sulphuric acid. BUT - I

want you to buy at least six quarts or liters of this acid. We will cover the reason here soon.

Unless you want to use that newspaper, be smart to buy enough toilet paper. We bought six cases of Charmin. By case, I mean those big 36 roll bags wrapped in plastic. We seem to go through about a half a case a month, but my instinct says we need more. At \$14.00 or so each, that is only \$90! So I will practice what I preach and get one more at just over \$100. You know, it is not like we won't use it! You will buy this much anyway over time. I am just saving you the gas from all the extra trips to do it. I should not be concerned, but I see how you feel trying to buy all this. But buy it we must if we want to be prepared. Oh yes.

Next, if the sewer will not hold it, there are two very simple answers that I like anyway. One is an RV portapotty. It is designed to handle the problem. Why re invent the wheel? Just make sure you have the supplies as they are spelled out. That includes the chemicals that go with the self flush equipment. Then you have to obtain the courage to deal with this. You will not be able to pull up to a campsite and pour your refuse into the tank. Remember that.

The cheap way we used was to buy two more of those famous twenty gallon polybuckets we have been storing everything else in. At emergency supply places and camper stores you can buy a toilet seat that snaps on those. With them you can buy a few bags of enzymes that eat the effuse away, and even plastic bags that just fit on the bucket. Modern technology to the rescue! Analyze what you need and put it all inside the bucket ready to go.

You can get by for awhile with these things but if time goes on too long and no sewer or septic tank to put it in, here is what you will have to do. We are going to build our own septic tank so pay attention. When your buckets are overflowing you will need a place to dump them and remember that your toilet doesn't work anymore.

ATTENTION! ATTENTION! NEVER and I do mean N E V E R !!!! put your refuse in your or anyone else's open property. Not on top or bury it. We are not going to infect ground water for anyone - - ever! Let alone the noxious insects that will plague your neighborhood. Instead we are going to learn what to do, and do it right. NO EXCEPTION!

Find a secluded place and dig a big hole. We are doing latrines just like the army. And latrines are built just like a septic tank so do all the details right. We may not have concrete to line the tank the right way. But we can line it and find clay to make it correctly. The whole idea of a good tank is to isolate the liquid and let nature and warm air dry it up. And we will treat it too with organisms that will eat some of it up while drying.

Some time or another find clay. There is usually a layer of it down a few feet under top soil. You will know when you find it. It is slippery, has few or no rocks in it. It packs well when damp. You will just have to find some. Either where you dig your hole or take the clay to the hole doesn't matter. With moist clay, pack the hole with a lining of it so as to make a moisture barrier.

Next while it is still wet, take either a piece of one of those tarps you bought and line the hole with it. If you don't have any tarp left use those plastic garbage bags and carefully stick them together with duck tape. Then do it again with a second layer, over lapping the seams

underneath with whole plastic. Now line the barrier with more clay mixed with sand and let dry. You may want to find a covering. Be creative. This tank must be water proof; good enough to hold water as if it were a pond you were making. It will hold water from draining into the ground then it will hold your human waste and not poison you or someone else when it works its' way down into the ground. Ok, now that I have explained, let's be ready to do it.

Insects will attack the material you pour in. That is what nature intended. Most of it will just dry up from warm air. As it does, cover with light soil. Do it right and your tank will last a long time. When it is full, make a mark so it can be carried away when technology and the emergency ending can have it done. The main thing is not to let the waste leach down into the soil. If your pit is good enough and you can figure out a way, you can make a real latrine out of it right over the top. Use good judgment with what I have just told you and all will be good.

Don't forget that this will have a stench, so do it a ways away from you house. You may even want to talk to your neighbors when and if you really need to make this, and have a neighborhood waste dump that you all care for together. Sure this is unpleasant. But what is the alternative? Be realistic about this and don't fudge. NOT doing this will bring about some really awful problems later on.

A second option is to find a large tree stump or fallen log and hollow it out. It may take some work, but the wood is a good filter, and will also work like your pit. You can even bury the tree below ground level and make a latrine over it as well. I hope you understood this. The big tree, whatever the shape will become the latrine. All

the other worries remain. Carving out a tree is real work. It may take time and you will need some very heavy sharp tools. It will be the equivalent of making a hollowed out canoe. But it is a good enough way to handle things that maybe you ought to start hollowing out a tree anyway while your other latrine is filling up.

Follow this advise carefully and your ancestors who had to do these things many years ago will smile down on your careful efforts. And your children who follow you will smile on you for not contaminating the land you used during this time.

When it may be time to cover your septic tank or leave it for any reason, there is a way to sanitize it. And you should have been using that enzyme stuff I told you to buy. Remember that sulfuric acid I had you get? Now is the time. Carefully pour it over your dry or liquid waste and kill anything that may be alive in what you have built up. I say carefully because I don't want you to spill any on yourself. It could cause a serious burn.

Keep all your waste under control and it will not waste you. Ignore it and it will run away from you. Follow this advise carefully and you will do fine.

Ok, admit something to me. I have never read anything about human waste methods in any other book on survival anywhere. But it is important enough that I think you agree that forgetting to deal with this is a serious mistake. Well, every chapter is a must. Do you see that? And if you don't then problems can come to you. Please. I beg you for your own well being: DON'T IGNORE ANYTHING AT ALL THAT HAS BEEN WRITTEN SO FAR.

Murphy's law is in full force. Whatever you fail to prepare for or be informed about will always be the one

thing that will come and get you. All those parables are true here, "Chain is only as strong as the weakest link", "It is always the one you never saw coming that will kill you", "If you don't do it who will?", "If you don't take the time to do it now when will that change?" "A stitch in time saves nine", "If you didn't have time to do it right the first time, when will you have time to do it again?", "Good advise will keep you out of the holes that others fell in before you" . . .and a hundred others just like them. The list is long and all true, are they not? You have been reading about the minimum, you have no idea about the maximum so I plead with you again not to be forced to find out when you can't do anything about it. Failure to heed my warnings and help ideas will be done at your peril. I promise you, one way or another, some or part of what I have written will be needed by you someday. Do not kid yourself that you are the exception. The law of averages says I am right. Betting against the house in Vegas is a bad idea. Ignoring all this is the same thing. You are betting against a winning hand. You might as well be one of those guys who just throw out everything of value and allow yourself grief.

What good will it do you to someday look back and say to yourself, Hmm, I should have listened and acted. I will not be there to say I told you so. And even if I did, what good would it do? I would gain nothing, and you are out the plane with no parachute. Not a good idea.

FAREWELL

We have come to know each other have we not? This whole document was never intended to be this long, but no words were wasted. Every sentence was either telling you something important or explaining why it was. I have no idea if you got it all. If not, go back and read it again. But for sure, you must do all of it. (Yes I know this is another repeat) Certainly do more if you can or want to. But I have given you everything at a minimum for you to be ready.

There is a way we seem to have about this subject. We treat it as if it were a hobby and do one small thing here and one more thing there. We add only if we have extra and only once in a while. Please, that is foolish reasoning.

The great man I wrote about says the time is up. No more procrastination. Cost? Well in dollars it will cost you about \$6,000. In heartache and loss, should you fail to follow all the things I told you, the cost could be endless.

You will borrow more than that much to remodel a room in your house, or triple that for a car. Other than the house, whatever you put in for luxuries is gone. But every penny you spend to prepare will be worth more right away and will not be one dime lost. You will spend more than that in the next year anyway on similar things. (More because you buy better this way). I even suggest that following my recommendations will save you at least \$1,500 in the first year over your old shopping methods. And if followed should even improve your health.

The Bridegroom is in sight. Run and check your supply of oil now so you can go into the wedding with Him. There

is no tomorrow. I have been a voice of warning to you crying from within these pages. Read and obey. And if nothing else, if you are already there, what a great thing to know you covered everything by comparing these pages with your own knowledge, preparation and reasonable intelligence.

There are those of you who have weapons to defend your family should extreme conditions exist. Ok, but be careful. Err on the side of caution. But most of all I do advise you to put away your weapons to fight off hungry neighbors. Feed them instead. They are the children of God just like you. Do this and have faith. The Creator, knowing your kindness will provide you with all the rest. Please believe that.

If you give all your food away to those who are hungry around you, do you not remember that God brought manna out of desert trees to feed Israel? Where is your faith? The Father of us all is still in command. He has not forgotten how to care for his followers. How like Him to provide for those who sacrifice for each other. Christ fed the multitude with a few fishes and bread. Much of the Sermon on the Mount was about caring for the less fortunate. No it is not God's way to shoot the hungry.

I am reminded in the scriptures of a city that the Lord loved. He loved them so much that He took them unto himself before the flood: The city of Enoch. Imagine that, translated the entire city into heaven. But if you want to know what made them so great in the eyes of God, we have but one scripture that tells us. As we believe that all sacred and holy writ is the word of God, then He was short on words with what He had the prophets write about them. I

will quote the verse exactly. "For they had no poor among them."

Was everyone the same? I doubt that. None of us are. Was everybody rich? Didn't say that. What it did say was that these people took care of each other. That's it. And that fact must have been important enough for the Almighty. Because that is all He required to be written about them. I believe Father wanted us to notice. I did. But more I believe He wanted all of us to notice. Our Father in Heaven puts a great price on taking care of His children; all of them.

As Jesus was being taken away unto death, what were his last words to his disciples? He spoke to Peter: "Feed my sheep" All of us are sure it was in reference to spiritual food. But may I remind myself and some of you that equal emphasis has always come from the Almighty about temporal food as well. Maybe the reason the message was repeated three times was that He wanted all three kinds of food included: Spiritual, temporal, and emotional. That may have been the rest of what was true for the City of Enoch.

Even in the most sacred words spoken in holy places, the final messages include marrow to our bones and health to our bodies. Only then, are the rest of the blessings of the heavens included.

So I speak to you in this, my heartfelt belief. I feel very safe in saying that it is not His will that we shoot each other, especially over food and our well being.

I close these words as a loving and personal letter to you all. I bid you farewell and peace. I hope to see you someday when we are all safe and supplied. Be healthy. Be happy. And, be prepared.

Sincerely, John F. Jackman

THE 72 HOUR KIT

This is a requested add on. I was not going to do this part for several reasons. But here it is anyway. I will tell you that I have looked at many kits available for sale at various locations. None of them seem to address what a three day emergency is all about. Each have a different theme. One deals only with food, another with signaling and so on. All look more like something just to sell, not use.

If you are serious about what you really need to survive for three days, then the best thing I can do is give you what we did. And, like other things you have read about, it will cost you. And it will be more than you were expecting. Just be ready for that so you are not surprised. First the reasons for it and what matters.

Understand that you need to look at priorities. You need enough things to survive under adverse circumstances. Food IS NOT the most important thing! You can make it for three days without food so just forget that as the most important prospect. If you like those little kits with a power bar in it and some water go for it. Won't hurt. Not really expensive, but not made for real survival.

What you really need to prepare for are the elements. If you have to pick up and run, it will most likely be away from your safe house. In order, I will dictate what matters to you the most in three days, and few of those commercial kits they sell look at these issues. They are listed by priority:

1. A place to sleep and get out of the weather. Sunstroke and or freezing will kill you faster than starvation. It also includes safety from insects and other harmful dangers.

2. Water. You cannot let yourself dehydrate. But there are limits. You need balance. But find a place to live first, consider water second.
3. Nourishment. Ok, if you are covered and have something to drink, eating will keep you strong. Balance and calories are the order here.
4. Comforts. If you are reasonably comfortable you will have a better attitude and that will keep you from panic which usually follows an emergency.

It is very true that the why of every item could take up several pages. But you would not read all that would you? Let it stand that there is a purpose for everything that there is not room to write about, so I won't. But here is an example:

I will tell you to get a wool blanket. Why not one of another weave, like cotton? Rot and wet is the reason. Everything else will not dry out, and will cause other problems. You have a good chance to get wet because you will be outside. Stay wet and hypothermia is a dangerous, life threatening problem. I will say again, there is reason for everything. Here is the list for each person older than twelve. For younger children, each can have a small back pack with personal items. This list also considers weight. Avoid the temptation to put in more. It will be too heavy. Now, check it off:

1. Medium cloth back pack to hold it all, and walk with.
2. A Light long sleeve nylon wind breaker with lining.
3. Two Synthetic, Canvas, nylon or plastic ponchos. (one large and one cheap vinyl type)

4. Synthetic cloth stretch gloves.
5. A small batteryless LED flashlight. (crank or coil)
Put a climbers D-ring with it on a string or shoelace.
6. two, 2 oz bottles of waterless hand sanitizer.
7. Seven, 4oz mylar bags of preloaded emergency water
8. Two small plastic sealed packet of pocket tissues
9. A small portable water filtration kit.
10. A 4oz size medicine bottle with \$25 in big coins.
Wrap the bottle with 8' of duct tape. (You can make a tent with ponchos or wrap things together)
11. An 8oz porcelain/enamel coated metal cup.
12. A washcloth in a sandwich size zip lock plastic bag.
13. 1½ cups of dry soup mix in a small zip lock bag. You should have vegetables, pasta and grains in it.
14. A small sponge to soak up water. (night time dew and moisture on the ground or elsewhere-even mud)
15. A 4oz bag of a good freeze dried campers meal.
16. A bag of Jerky. (about 3.6oz)
17. Small plastic sealed travel pack of 'wet ones' (etc.)
18. A 3'X 4' soft synthetic material blanket
19. One mylar survival blanket folded up in a packet.
20. One mylar survival sleeping bag in a folded packet.
21. Three tall kitchen garbage bags & one 33 gallon bag.
22. One tuna can size cardboard candle burner. (See book)
23. One army style aluminum canteen cover cup w/handles.
24. One small box of waterproof matches.
25. One small tube of bug stuff. Must have 'deet' in it.
26. One small tube of sun block.
27. Small zip bag of powdered orange drink. (like Tang)
28. Any light fold up hat.
29. Pocket first aid kit with swabs and medicine.

30. Small ziplock bag with six cubes of chicken or beef bullion. One to a cup of water.
31. Set of stainless steel knife, fork, spoon. The scout set is the best.
32. Synthetic rope or cord. 25ft, 100 lb. test.
33. Two main menu bags from an MRE kit.
34. One snack size zip lock bag full of instant rice.
35. One big survival hunting type knife in sheath. 10" blade, with a saw on back. Compass, matches and fish hooks in handle. (harbor freight has them)
36. One synthetic chamois. (works like a towel but small)
37. One ordinary cotton bandana, (large handkerchief)
38. A bag with a whistle, tweezers, safety pins and multiple tool Swiss type pocket knife.
39. A one quart wide mouth plastic bottle with lid. Put inside the following with lid closed:
 - a. Two stainless steel spoons
 - b. Two wrapped granola bars.
 - c. Three small bags of dried fruit.
 - d. Two emergency power bars
 - e. One jam bag from military MRE kit.
 - f. One quart size zip lock bag.
 - g. A hand full of multivitamins sealed in a bag
40. 4'X 4' Mosquito netting.

The last item (#41) is a wool blanket. Not big. Barely enough to cover you. Too big and it becomes a problem to carry. You will not be putting this blanket in your back pack. At some army/navy stores, they have military blankets with handles to swing over your shoulder. Or, roll it up and tie onto your back pack. These are called "Soldier Blankets" for a very good reason.

Now, if you are not sure what some of these items are for, read the book again for an explanation. A three day kit like this will find you on foot without any chance to think; just time to throw it on your back and go.

There is another kind of 72 hr. kit that you could throw in a car. Put it in a 5 gallon poly bucket. Think in terms of what is in the back pack list. But this time put in more and include a roll of toilet paper and a can stove. (See the book again to see what a can stove is). This time get the round cookie cooler grate. It fits right in your bucket. Use it to cook on with coals.

Perhaps you can make three buckets plus to put in a car if you are several in number. That is what we did. One bucket is all cooking equipment with aluminum pans, stoves, spatulas, big spoons, spices and dish washing stuff with that wire rack on top. In this bucket include plates and utensils for your family. The best plates are those heavy aluminum ones that come under commercial ready made pies like 'Marie Calendar'.

The second is full of a variety of food. You should consider who is in your group and add for one more. You can store some food in a good size plastic picture to mix orange drink in. Think about weight. Find freeze dried or camp meals.

The third bucket is for camp protection. Tarps, ropes, stakes, small hatchet, duct tape, and any other sanitary consideration such as plastic bags, toilet paper, towels and similar items will go here. Take the time to think through what you put in them then put all where they can be reached when you go to drive away.

You will note that the above said three plus. The plus is a tent and sleeping bags for each in your household.

Many people keep all their camping stuff in one place. We keep our drive away buckets there too with notes on them telling what each is. If we had to go in a hurry, two things would happen. First, we grab the back pack kits. Second we each grab a sleeping bag and the family tent. Then each will pick up one each of the three poly buckets. Take some blankets and all goes to the car or truck. We are out the door in one motion, and no return trips. Then, just inside the garage door we grab two gas cans we have always full of gas. If we have to drive a ways, we will need it.

We have tried this only once, and we left the house in under three minutes from go. One of the minutes was putting on shoes and coat. (We are not always fully dressed all the time.) Anything under ten minutes is good. If you have time to drive, there is at least that much time. Anything faster is back pack mode.

A few years ago, we challenged ourselves to see if we really knew what we were doing. The dare is to just blindly pick it up with no warning and see what works. It was an education. We went to a national park for two days. What a wake up call!! You will really teach yourself a ton and have some fun if you try a dry run like that. Everybody learns. Now we know what to expect and are more realistic about all of it. And if the real emergency happens, we go with confidence and no surprises or regrets.

There is one item that you might consider. A Boy Scout Handbook. In it, you will see things like stripping a tree of leaves to make a pile to sleep on. Comfortable, soft and warm when we are used to a mattress and not the hard ground. You may not have known about those things but they are there to read about. It also has so many other survival ideas inside. And, in that book will be better explanations

about what can be done with the list I just gave you. It is not always obvious. Ok, here is an adder to the addendum. DO NOT just dismiss the scout book. Scoutmasters I know forgot that there is a list of forest plants that are edible and survival advise in winter time. I have never found anyone including scouts who have gone through it page by page, cover to cover. Now don't presume anymore and go get one.

I promise, the day will come that you need all this. So, everybody be a scout and 'Be prepared'. I wish you well.