From: Chris Janowsky

FOOD FOR THOUGHT

Whether it be a natural disaster or one that's manmade, being prepared can mean the difference between life or death. Many of you readers know me as a writer and a wilderness survival instructor. This is World Survival Institute's 25th Anniversary year of teaching people the skills and knowledge they need to stay alive in most any emergency. We constantly emphasize to our students the value of being prepared. Putting food up for the future is a very important aspect of being prepared and is usually one of the first things most of us think about. There are a number of good companies out there that sell M.R.E.'s, freeze-dried, or dehydrated food for backpackers and for storage. You may well choose to have some of their products as part of your overall emergency preparedness inventory. However, it is just as important that you know how to preserve food yourself, especially meat. Meat is a significant part of most people's diet. From it, our bodies receive vitamins, minerals, electrolytes, and precious muscle-regenerating protein. In most wilderness survival situations, wild game and fish are very easy to procure if you know how. This makes meat and fish a natural way to go.

Whether you are in the wilderness or in the city, putting up meat is a wise idea. However, there are certain considerations that we have to think about when dealing with meat or fish. Depending upon the ambient temperature, meat can spoil very quickly. Meat by its nature is very heavy and if it has to be transported in the future, this should be of great concern, Especially if you have to pack it on your back.

There are many ways to overcome these problems either in the field or at home. First of all we have to know why meat spoils and what to do about it. We will address this issue soon but for now let's take a good look at the logistics and solution of the meat/weight problem.

Your first concern is your plan. What I'm talking about here is a complete plan. Nobody knows what is going to happen tomorrow but we should plan for the most likely emergencies. Your plan could make the difference between life or death for you and your family. As mentioned above, many people are stocking up on M.R.E.'s, or cases of freeze-dried/dehydrated meals. These, plus water and whatever you normally keep in

your kitchen cupboards should be the first part of your plan. Having extra food and water at home during and after a disaster means you don't have to worry about battling the mob down at the supermarket-if it is open. Let's call this plan "A." But you and I both know that whenever you have a single good plan some SOB will probably mess it up. This is why you need plan "B."

you need plan "B." Depending on the circumstances your plan "B" may have to be initiated. This plan would be implemented if you chose or were forced to move from your dwelling. Many people believe they will be able to use their trucks and cars to transport all their stuff to a safe haven. But what if the roads are closed? What if a natural disaster has destroyed bridges and covered highways with debris? I believe that it is a good idea to have your vehicles set up but don't depend on it. You may end up only being able to take what you can carry on your back, and folks, that ain't much. Remember that flies can easily get into the ole ointment. The next plan is plan "C." This plan should be a part of all the other plans. And that is having the KNOWLEDGE and SKILLS to make these plans work, maybe even to having a plan "D" in reserve. This plan I don't even want to think about but I-and you-must. You may have to take off with what is only on your person, no bags, no backpacks. Knowledge at this time is worth far more than gold. You'll have to find your food as you go and be able to transport it (with reduced weight) for tomorrow. When you are in a wilderness survival situation and on the move, you must procure food wherever and whenever you find it. Let's say you come across a nice lake abundant with fish. Naturally you are going to take some fish for dinner, but what about tomorrow and the next week? If you are on the move, you may not find another good food source for days. If the fishing is good, you'll want to catch as many as you can NOW. Let's say you take in 44 nice fish averaging 1 pound each. You cook and eat 4 fish during that day. There are still 40 fish left, which equals 40 pounds. This is far too much weight to transport on your back, and

You are going to have to dehydrate (dry) and smoke the fish. When you are done your 40 pounds of fish will weigh only 6-8 pounds. This you can easily carry and it's a 10 day supply of food for one person. Also, any part of the dry smoked fish you would normally

if freezing conditions do not exist, they will spoil

rapidly.

discard like skin and bones will become bait for small animals.

Once you trap or snare a small animal, you will do the same with them as you did with the fish, cook and eat what you can and dry the rest. You can see at this point that you are not only eating well but you have also created variety. This couldn't happen without the drying process. Even animals like squirrels deliberately gather and spread out food to dry, like mushrooms. When putting up meat for the future at home you will be cooking, drying, and packaging it. You may want to smoke some for the taste it gives the meat. Most important will be the different ways you will be packaging the meat for your back up plans.

The meat you stock in your residence is to stay there. You can cook, dry and smoke the meat if you like. You can simply can the meat in canning jars. The weight of the jars is not important for this plan. If canned properly, meat will keep for many years. I've eaten meat that I've canned ten years before.

The weakest part of this system is the lids. All lids are not equal! Over the years I've done a lot of canning. When I use my fish wheel to take in sockeye salmon, it's not uncommon to catch several hundred 5 to 8 pound fish in a night. And that represents a lot of jars and lids.

Once the jars are filled, they are placed in a pressure canner and cooked at the proper heat, pressure, and length of time. Afterward, the pressure is relieved from the cooker and the jars are left to cool slowly. As they cool, the center of the lids will be sucked down toward the contents of the jar. At this point the screw rings that held the lids in place can be removed. The jars of meat are ready for storage. Any lids that are not sucked down warn you that there is no vacuum in that jar and you DO NOT have a seal. The contents in these jars will spoil. This situation is called a "failure." I've found over the years that the best lids with the least amount of failures are Ball lids. If you have a failure it's usually because of a inferior brand of lid, a defective mouth on the jar, or you didn't clean the rim of the jar well enough after adding the contents. Stick with Ball lids and you will be in good shape.

When you pull a jar from the shelf later, always check the lid. The center of the lid should still be sucked down very solidly. Tap it with your finger: it should sound solid and not move. If the lid sounds hollow and moves up and down, you have a failure. DO NOT eat

the contents.

Another little trick is if your jars are stored in your freezer, or are stored where they are subject to being frozen in the winter, always leave at least 1 inch of head space at the top of the jar. If you do this, the jars will not break when frozen. I've had jars that were packed in this fashion that experienced ambient temperatures of 70 degrees below zero and none broke.

When I can meat it may be in chunks or in other forms. My store house does have meat in chunks but it also has many jars of my favorite homemade chili, Moose stew, and sausages in sauce. This way you can open a jar and your meal is already prepared for you. All you have to do is heat it up.

This whole operation only requires reusable mason jars, lids, screw rings, a good pressure cooker, and a 1,200 pound moose. The type of pressure cooker you purchase is important. I've used many and feel the ones made by American Canner are without a doubt superior in every way except weight. They are heavy but they are built to last.

They also have many safety features that the others don't have. The best thing is that they use no rubber O-ring. It's a metal-to-metal seal that will never wear out. Let's say you are set up at your wilderness home and it's two years from now. The rubber seal goes bad on your cheaper cooker. Where are you going to buy a new O-ring? The scary part is right then you'll need this cooker to put up more food, or you and your family could be in dire straits. It's something to think about now!

The next way to go is to preserve the same food in metal cans like those you see in the supermarket. It's easy to do and you have the advantage of lighter weight and no glass to break. This is a good way to go if you have vehicle transport. You will need cans, lids, a pressure cooker and a mechanical can canner. I put up a lot of food this way each year. Also you can seal up most anything from ammunition to medical supplies (You won't be using the pressure cooker for these items, especially the ammo!).

The difference between canning in jars and in cans is the procedure. With jars you add heat and pressure and then the sealing happens. With cans you mechanically make the seal then add heat and pressure. The lids on the cans will suck down, just like the canning jars. Your next step is to put up the light weight stuff. This is the food that you can carry on your back. Also,

if you have a storage problem as far as space goes, cooked dried meat is the way to go. Not only does the meat lose weight, but there is a considerable reduction in its size. These are all plus factors for you.

One way that I do this is to take some very lean meat; game meat like deer is the best. You can use beef, but make sure that it's lean. Usually the more inexpensive cuts are the leanest. That's good news! Take the meat and trim off any fat you can find. Put the meat in a pan on the cooker rack in a pressure cooker. Add about 1 inch of water to the cooker, put the top on, and you are ready to go.

You'll want to cook the meat until well done. Once you've gotten the water boiling and the steam gauge has risen to the right amount of pressure, you will be cooking 12 to 15 minutes for each pound of meat. You should keep the pressure at 15 p.s.i. during the entire cooking time. When the cooking process is over, the meat, no matter how tough it was, should easily flake into small slivers with the use of a fork. Next spread these flaked pieces of meat out on a cookie sheet or sheets. All you have to do now is to dry it completely. This can be done in many ovens at very low temperature with the door cracked open for ventilation and to get rid of moisture. This can also be done in a food dryer or a small smoker oven (The Sausage Maker company in Buffalo, NY makes several different size smokers, all of them excellent.).

As soon as the meat is completely dry, take it out and put it in containers that exclude all moisture. Vacuum sealers work very well for this purpose, and can be applied to canning jars and plastic resealable bags like M.R.E. packages. You can dry vegetables and add your favorite spices, mix it all together and then package it. When you need it, just add hot water and you have a meal ready to eat. You will want to cook the veggies before you dry them or they may be too tough for your liking. Pre-cooked dried rice or beans are a good addition also. Remember: cook it, dry it, keep it dry and it will last.

When putting up any meat for long-term storage, start with fresh meat, keep it cold, and process it as soon as possible. Bacteria like the C. Botulinum need a nice moist environment that lacks oxygen in order to grow. When we are canning meat we are creating this very environment. Luckily, the bacterium needs one more thing in order to survive, and that is the proper temperature. So when we can, we do it in a pressure cooker at 15 lbs. p.s.i. This creates a temperature

of 250 degrees F., much too hot for the bacterium to live. This procedure is similar to sterilizing medical instruments in an autoclave.

The C. Botulinum bacterium cannot survive jerky making either, because in making jerky you take away the moisture and fully expose the meat to the air. As an added precaution, if you wish, you can also add a cure such as Prague Powder #1 to the marinade. This cure destroys the bacterium. Let's make some jerky! Jerky is easy to make and it's delicious. It's something you may want to always keep on hand. Because of it's nature, it's light in weight and easy to transport. It's a nutritious snack and good emergency food.

Start out with some nice lean meat. Beef works well but, again, wild game is by far the best. Next, slice the meat in strips 1/4 of an inch thick by 3/4 to 1 inch wide. I make these about 4 inches long. Make sure any fat or gristle is trimmed off. This is the secret to good jerky with a long shelf life. Fat can cause the meat to become rancid.

The meat is then mixed in a marinade of your choice. I will give you the recipe that I use. I'm sure that you will like it, but remember that it can be easily altered to your taste. Let the meat soak for no more than 24 hours in the refrigerator. Stir it around several times while it's soaking.

Next day, blot the excess liquid off the meat and place on drying racks. The meat can be dried in many different ways so long as you can hold the temperature somewhere between 95 and 115 degrees F. Make sure there is good air circulation so moisture can escape. Depending on what type of drying system you use, the jerky will be ready in 8-10 hrs.

Many kitchen ovens will do a good job drying jerky if the heat can be kept low enough and the door is left cracked open to allow the moisture to vent. A food dehydrator or a small smoker also can be used. You'll know when the jerky is ready. It will be dry around the edges and rubbery in the center. It will smell wonderful and have taken on a pretty reddish color. At this point you'll probably be getting "Old Betsy "out to guard your precious prize, cause if there's other people around, it'll disappear as fast as you can make it. And nobody'll fess up!

At our survival school, the students make jerky in several different ways, and they also add smoke to it. If you like the smoke flavor, liquid smoke can be added to the marinate. There is a liquid smoke available

that is very concentrated and all natural smoke. Or, if you use the small smoker, you can smoke the meat while you are drying it.

Jerky that is properly made will have a moisture loss of 70-80%. You should store the jerky in glass jars, like mason jars with lids. These lids should have several holes punched or drilled in them to promote good air circulation and prevent mold. If all the guidelines are followed and it is kept in a dry environment, your jerky will last for months. Here are two good recipes for the marinade. This will do 5-6 pounds of meat, reducing it in 8-10 hours to delicious jerky weighing only 1-1/2 pounds.

Mild

- * 1 tbs. salt
- * 1 tsp. Prague Powder No. 1
- * 2 tsp. garlic powder
- * 2 tsp. ground black pepper
- * 2 tsp. onion powder
- * 1/2 cup soy sauce
- * 2/3 cup Worcestershire sauce
- * 4 cups water

Hot

- * 1 tbs salt
- * 1 tsp. Prague Powder No. 1
- * 2 tbs. ginger
- * 2 tbs. garlic powder
- * 1/8 cup (1-1/2 tbs.) ground red pepper
- * 1/4 cup sage
- * 1/4 cup onion powder
- * 1/4 cup chili powder
- * 1/4 cup black pepper
- * 1 cup soy sauce
- * 4 cups water

As you start out, I would suggest you get some good books on food preservation. One I particularly recommend is called, "Great Sausage Recipes and Meat Curing," by Rytek Kutas. It's the best reference book on the subject I have ever seen. It is available from the Sausage Maker Company listed below, and I know it will be a welcome addition to your survival library. Whether you decide to buy the proper provisions or put them up yourself, you should at least learn how to do it. These are important skills you may need in the future, and learning them can be a lot of fun for you and your family right now. Remember, knowledge and skills are your best insurance for an unpredictable future.

Chris Janowsky is the founder of the highly respected

World Survival Institute, which offers courses in outdoor survival and self-reliance. These folks also carry a full series of video tapes which makes it possible to learn many of these skills from home. For further information you can write the author at P.O. Box 394, Tok, AK. 99780; or call (907) 883-4243.