

Maximizing Your Storage Food Nutrition

Rice and Beans and Bread

By: *LabLover*

Most of us eat a relatively "balanced" diet, most of the time...right? You don't? OK, it's time to think about that. Remember one of the Rubicon bywords, that the best way to deal with a survival situation is to AVOID it! So fess up (to yourself) if you've got some issues you could improve. Now is a great time to rethink your nutritional and health status. It may well help you avoid a *personal* survival situation even if the world continues unchanged- diabetes, heart disease and cancer and others may all be caused or contributed to by poor nutrition.

Let me first mention this isn't going to be an article based on the "Food Pyramid". Since my suggestions may seem unconventional, I'll share my own success story to explain them and why I believe in them.

A few years back, I got tired of being fat, and out of shape. My cholesterol was 3 times normal, blood pressure creeping up, and blood sugar readings starting to be borderline. I tired really, really hard to lose weight the "traditional way"-and did so, after almost a year of deprivation. Low fat, low taste, low amounts and definitely low pleasure. Four or five days a week of walking several miles, weight work 3 or 4 times a week. I dropped 30 pounds, but was still not at my goal weight. When I went back to the doctor and had my blood work retested-he was pleased with the weight loss, but the blood work was actually worse!

For awhile, depressed and frustrated, I got slack. So did my waist line. Yep, gained it almost all back (sound familiar?). Then I found a great cookbook- **Nourishing Traditions** by Sally Fallon and Mary Enig. As a nurse, I had been indoctrinated and preaching the low fat diet for decades. This was the first time I'd heard-with interesting arguments, that fat-even saturated fat-is not the enemy! It was intriguing, and I researched quite a bit to learn more about their ideas. If they were as right about their premise and they were about their recipes (they're great), I'd have to rethink my eating habits. Many hours of internet research later, I was unable to prove them wrong. I'd highly recommend this book for every survivalist's library. Not only are the recipes delicious, but the book teaches you how to preserve foods safely and how to increase their nutritional value. A lot of what I'll talk about here comes from their groundbreaking work.

So, I jumped out and tried the way of eating their principles and my subsequent research led me to-a low carb diet, tweaked a bit to include the principles I'd learned from Fallon and Enig. Four months later, and *after* discontinuing all my prescription meds; I weighed over 40 lbs less-15 lbs less than my previous best effort- wore a size 6 jeans for the first time in my adult life, and my cholesterol, *normal* blood pressure and blood sugar levels brought a smile to my doctors face and the comment "Whatever you're doing, its working-keep doing it". That was accomplished with *no* meds, without going hungry, and a lot less exercise than I had done the first time. I felt better, and had much more energy. Even better, I found that I'm just one of many that have had the

same results, and *sustained* them. You can too, even without going on a traditional "Low Carb" regimen.

Consider *Your* Storage foods

Mentally review what is on your shelf and in those nice, stacked and sealed buckets. If TSHTF, and you and your loved ones NEED to depend on them, what will you be eating? Most folks talk about calories when they think of storage foods. I propose that calorie count may be one of the last things we need to consider in our storage programs. I'm striving for a diet that's full of vitamins, minerals and a variety of healthy foods that will keep us fueled with adequate calories and supplied with the nutrients we need to keep your body in top shape to meet challenges. One that's as close as possible and as healthy and satisfying as what I eat now. A common comment I hear when talking about these types of foods is that they tend to be more expensive. In my experience, any small increase in cost is outweighed by the health benefits, and the need to use less of them to provide better nutrition. By changing my diet I've been able to discontinue my prescription meds and the monthly saving more than outweigh the cost of quality whole foods. If the time comes that Rx meds for Type II diabetes, high blood pressure and high cholesterol are hard to come by, not needing them may be lifesaving. Let's look at some simple dietary changes that may provide many health benefits and reduce or prevent the need for expensive prescription meds to prevent their occurrence.*

Grains

No way to get your daily bread without them. Bet you've got lots of them-I do too! But, most whole grains contain phytic acid. Untreated phytic acid binds with calcium, magnesium, copper, iron and especially zinc in the intestinal tract and blocks the absorption of these essential nutrients. They end up as waste products instead of where they are needed in your body. Deficiencies of these important nutrients could cause illness or debilitation in a post fan diet especially if they make up a much larger part of the diet than usual. There's an easy way to remove phytic acid from whole grains.

Milled white flours have the bran and germ removed-which includes the phytic acid. It also removes most of the important and critical nutrients that whole grains can provide. IMHO, if you've got white flour stored, the best place to use it is as fodder for your compost pile; that's where I put mine. It supplies calories-but they are empty calories, and it cannot supply the nutrients we need. Empty carbohydrates that stimulate insulin release-and make you crave more food when your blood sugar drops because of it. Properly prepared whole grains make light, delicious baked goods-much different than the heavy, tasteless whole grain breads that were fleetingly popular in the 70's (those are the ones that scared most of us away from whole grain foods!).

Soak 'em. As little as 7 hours of soaking any gluten containing grains like oats, barley, wheat or rye in *acidulated* (acid containing) water improves their nutritional content and destroys phytic acid. Cover one cup of whole or cracked grain with an equal volume of water, and add about two tablespoons of acid to the water. Any live culture yogurt, buttermilk, kefir, or whey is preferable, or use a tbs. of lemon juice (vinegar in pinch) per cup. Let them sit in a room temperature spot overnight-at least 7 hours before you plan to eat them. Cover with a clean towel to avoid any unwanted visitors. (Whole rice and whole millet contain no gluten so soaking isn't as important for them, if they are gently steamed or simmered for about 2 hours it reduces their phytic acid content.) It's that easy to improve their nutrition. So, one you wake up in the morning, and look at the bowl of puffy, swollen grains, now so much more nutritious than they once were-look up on the shelf at that box of cereal, and back down-these sure ain't Wheaties! You want me to eat THAT for breakfast??? I eyed them like that myself, when I first tried them-quite unconvinced that I'd ever be able to choke them down. Boy, was I surprised...

It's as simple to prepare as oatmeal. If you've soaked in your cooking pot, add another cup of water and a pinch of salt to your grains. Or boil the water and salt first and then add the soaked grains to the pot. Bring to a boil and simmer or steam until tender-usually just a few minutes (remember brown rice and millet should be slowly simmered for much longer, with a higher volume of water, until the water is absorbed). Remove from heat. Add milk and sweetener or other flavorings if so inclined and give it a try!

One really nice benefit of this type of food is that not only is it nutritious and much higher in vitamins, enzymes, and easier to digest - it's filling-you need *less* of your precious stores to meet your needs and satisfy your appetite than if you'd just boiled it or milled it for flour. An average batch of 1 cup of cracked grains cooked as described makes 3 or 4 comfortable servings. That means your storage foods will last a bit longer and give you a bigger bank for your storage dollar buck. It's also much kinder to your digestion and your insulin levels than that box of Wheaties or any processed cereal could be. The lower glycemic index of soaked and fermented grains releases energy slowly than the unprepared form. *Without* the dips in blood sugar that tire you out and make you hungry so much quicker that you'll get from boxed cereals currently on the shelf. Important now, but doubly so in a crisis.

The Staff of Life

Good enough, now you know how to make grains taste better and be safer and more nutritious. But what about flour-after all, most of us want bread! Fear not, there's two good ways to improve your bread using the same principle. If you've got good milled whole grain flour already, this is the simplest-soak the flour your recipe calls for in an equal amount of (premixed) room temp acidulated liquid just like we did for the cracked grains eaten as cereal. The next morning, add your yeast-sourdough starter is awesome with this-and knead in a little more dry flour if needed to get the dough to the right satiny texture. An easy way to adjust your current recipes for bread machines is to place the liquid in your bread machine pan, measure out the amount of the flour your recipe calls for, add half of it to the liquid, then start the knead. Add a little more to get a loose dough, a little thicker than cake batter. As soon as it looks mixed, stop

the machine, and leave it alone for at least 7 hours. When you're ready to bake, add the rest of your ingredients, start the machine. Check it as it mixes; adjust it a little at a time until you see the right texture. A little practice will help you make that perfect loaf.

The second way provides even better nutrition than the first. It takes more prep time and bit more work but it's worth it. It works well with any grain (or bean) that normally sprouts. Use the first method for irradiated grain and dehulled oats since they usually won't sprout. That's a good reason to stock naked barley and hullless oat varieties in your seed storage program-not only do they require less processing to turn into food, sprouting them for flour or cereal greatly increases their available nutrition.

Sprouted Grain Flour

3 ½ cups whole sproutable grain

Water (chlorine-free: expose chlorine treated water to air at least 24 hrs before using to allow it to evaporate)

Place grain in a jar or bowl at least twice or three times the volume of the dry grain. Cover with water, let sit in a warm place for 24 hrs. Drain, cover again with water. After another 24 hrs, drain again. You might need to look closely to see sprouts, but the grains will have swollen to at least twice their size and the seed coat will be cracked open. That's perfect for flour. You can use immediately by processing the moist drained sprouted grain in a food processor with some of the liquid in your recipe. Another option is to dry the sprouts-spread on a flat surface like a cookie sheet and dry like any other food. When as dry as regular storage grain, you can then store in a cool dry place until use. It must be very dry or frozen to prevent spoilage or contamination. If refrigeration wasn't available I'd only make what I need at one time. Grind to flour in a grain mill and use in your recipe.

Legumes...and a word about soy

Beans! That other staple storage food. As Fallon points out, a preponderance of high protein legumes and whole grains with a small amount of animal protein and fat have formed the traditional diet of many cultures for centuries. Legumes are rich in minerals, B vitamins, and anticancer substances. All contain the essential Omega 3 and Omega 6 fatty acids.

Beans also contain phytic acid as well as enzyme inhibitors, and complex sugars that are difficult to digest-the culprit of their musical quality! Traditional cultures soak beans overnight or longer before cooking. They are slowly soaked, with the foam being skimmed off. Often the water is drained partway and replaced before cooking is finished. This attention ensures the phytic acid and enzyme inhibitors are neutralized, and breaks down the sugars to less "objectionable" forms. Mimicking that technique will give you the best quality of beans in your diet, enhancing the protein complementarily with the prepared whole grains. White rice and canned beans are a poor runner up in the food quality or taste categories. The high pressure and temperatures used in

commercial processing of canned beans reduce their phytate content, but it also denatures some of the proteins and destroys other nutrients that the traditional cooking methods preserve. I keep some canned beans for convenience-but in the long run, the old way is better.

Soybeans. The 40% protein darling of the nutritional and medical community. Soy is used ubiquitously in many human and animal foods and touted for its healthful, high protein properties. Texturized vegetable protein is usually processed and dried soy. But take a closer look...

Asians have traditional methods of preparing soy that involves inoculating soaked, cooked legumes like soy and creating traditional foods like miso, tempah, and natto. These fermented products have healthful traditional properties. Many of the benefits that are attributed to soy are based on studies of Asian populations that eat fermented soy products.

Fallon believes we should only eat fermented soy products. Until the changes caused by fermentation occur, soy is *very* high in the harmful phytic acid and enzyme inhibitors that prevent the assimilation of vital nutrients. High soy intake may lead to deficiencies in essential minerals and vitamins even though you are ingesting them in your diet or supplement form because they are blocked from absorbing through the gut wall. These bad guys are present in levels too high to be safely reduced by normal cooking and preparation methods. They may be responsible for the gastric problems (abdominal pain, bloating, gas, diarrhea or constipation) that many people experience when eating soy foods or soy milk. These problems are not present in fermented products, and they can usually be eaten safely by all but those with true soy protein allergies.

Soy has one more strike against it-the same chemicals that are supposed to make it healthy for peri-menopausal women! The isoflavones, genisten and daidzein that are being touted as cancer fighting might not be as attractive as they seem when you consider the tradeoff- they are potent inhibitors of thyroid function. Slowing down the thyroid can lead to chronic tiredness, hair loss, weight gain, constipation and other negative effects. Ingestion of too many thyroid inhibitors can tip those on the edge of hypothyroidism right down that slippery slope. (peanuts, uncooked broccoli and some other foods are also mildly goitrogenic, slowing thyroid function) Incidence of goiter, or swelling of the thyroid gland that occurs when function is abnormal, have become relatively rare since most salts were fortified with iodine. In a post fan diet, when fresh salt water fish or iodized salt is in short supply or unavailable, I hypothesize we may be even more vulnerable to this negative effect.

High levels of phytoestrogens (plant chemicals that mimic mammalian estrogen hormone) may increase the risk of estrogen dependant cancers, such as common breast cancer. There are some reports in the medical literature that it may contribute to the feminization of men who ingest high levels, as their estrogen levels rise they gain weight and experience an increase in breast tissue mass. Although there is a paucity of research to verify Fallon's concerns, neither is there much to disprove it. I'd say the jury is still out on the soy controversy, and I've decided to look at the risk/benefit ratio. As a result I don't feel the benefits of the cheap protein outweigh a potential risk, and I've removed soy products from my storage plan and minimized my current dietary intake of unfermented soy.

Recipes from Nourishing Traditions by Fallon and Enig

A small sample to entice you to buy the book (usual disclaimers apply, I'm just a very satisfied customer) and to convince you that good food, real food; can also be real good! I've chosen the ones that I've tried (and may have slightly altered) and seem very amenable to common storage foods.

IRISH OATMEAL (does not require a roller mill!)

Serves 4-6

1 cup whole oats grains

2 cups warm filtered water

4 tbs (live culture) whey, yogurt, kefir, or buttermilk

1 tsp sea salt

2 cups filtered water

Place oats on a baking sheet and bake at 350 until they turn light brown. Process roasted oats to medium grind in a home flour mill or blender. (The resultant meal will be part coarse flour, part small bits) Soak from 7-24 hrs in a warm place in 2 cups water with the live culture additive. (Those with milk intolerance can use lemon juice or vinegar) The finer flour particles will rise to the top and be spooned off easily.

Bring additional 2 cups water and salt to a boil, add soaked oatmeal and cook over very low heat, stirring frequently, for about 10 minutes.

The consistency and flavor is just a bit different than the rolled oats you buy in the store. It's higher in nutrition and has the phytates removed, so the benefits are clear. Don't ruin it by adding white sugar! Try a natural sweetener, or cheat and use splenda like I do...

FIVE GRAIN CEREAL MIX

Makes 10 cups mix

2 cups wheat or spelt

2 cups millet

2 cups short grain brown rice

2 cups barley or oats

2 cups split peas or lentils

Mix together and grind coarsely. Store in refrigerator.

Five Grain Porridge

Serves 4 (*I estimate more like 3 large servings*)

1 cup 5 grain mix

1 cup filtered water (Acidulated as in Irish Oatmeal recipe)

½ tsp salt

1 cup filtered water

1 egg yolk (optional, I haven't used it)

Soak grains in acidulated water overnight or at least 7 hrs. Cook as in Irish Oatmeal recipe. Stir in egg yolk. Serve with butter, milk or cream, and sweetener such as honey, maple syrup or sucanat and spices if desired.

Leftover porridge gets sticky and thick. It can be formed into cakes and fried as a snack or side dish, or added to bread dough with some adjustment to avoid waste of food. Also good for livestock-chickens love it.

Sourdough Bread

3 large or 5-6 smaller loaves. Keeps for a week without refrigeration. Traditional sourdough is a heavier grained loaf than most are used to-spelt gives the lightest results (or cheat and use 3 cups white unbleached flour and 10 cups whole wheat)

2 quarts room temperature, active (bubbly) sourdough starter (*good recipes for traditional starter in the book*)

13 cups freshly ground spelt, kamut or hard winter wheat flour (*unfermented flour is OK for sourdoughs, the leavening process helps reduce phytates*)

2 ½ tbs. sea salt (*the book recommends sea salt in place of regular, since it is higher in many of the micronutrients. Regular salt works fine*)

about 1 ½ cups cold filtered water

Place starter, salt and one cup water in large bowl and mix with wooden spoon until slat is dissolve. Slowly mix in the flour-you may need to hand knead, or add up to an additional ½ cup water if the dough becomes too stiff. It should be rather soft and easy to work. Knead by pulling and folding over, right in the bowl, for 10 or 15 mins. (Or use food processor or large mixer with dough hooks).

Without pressing down the dough (*it flattens it and slows the rise by removing air*), cut or pull into desired shapes and place in buttered loaf pans (traditional free form rounds work too) Cut a few slits on the top of each loaf. Cover with a damp warm cloth and let rise from 4-12 hours, depending on temp, until about double. Bake at 350 degrees until about double. Allow to cool before slicing (if you can wait that long...)

WHEY

Whey is the light straw colored, fairly clear fluid left after making cheese. Making your own fresh whey is very easy if you start with yogurt (Plain commercial or homemade yogurt-the flavored ones often contain thickeners that inhibit draining). Place a coffee filter in a kitchen strainer, hang strainer in a bowl. Pour live culture yogurt into the filter. (to drain larger amounts, substitute a colander, and a thin cloth like a single layer of an old worn out pillowcase, and a larger bowl- I easily drain almost a half gallon of homemade yogurt at a time with this set up) Wait a couple of hours, until the yogurt has drained to almost half its initial volume. In the strainer you now have yogurt cheese, about the consistency of whipped cream cheese or ricotta. It can be substituted in recipes for either with minor adjustment as needed. Its also delicious sweetened, and flavored with fruits and syrup, or mixed back into some undrained yogurt to give it a thicker consistency (homemade yogurt is not usually as firm as store bought) Refrigerate the whey in the bowl before use. It will last up to a couple of weeks in the refrigerator. Sniff test before use if it's been awhile, and discard (pour it on your compost pile!) if any other than a clean, fresh odor. Whey is very high in B vitamins and other nutrients, and contains active lactobacilli that do the fermenting and are so essential to our intestinal health. Add to drinks, soups, stews and baked goods. If you end up with too much, your animals will love it poured on their food. I keep a gallon jug in the freezer, and when I get a gallon collected I can use it to make whey cheese such as ricotta or mozzarella, getting even more production from what many would consider a waste product.

LINKS

** Some of the concepts that Fallon and Enig present are controversial in the fields of medicine and nutrition. Here are a few links to help jump start your own research to determine if the dietary principle discussed in this article might be right for you. If the principles presented in my article or in the book conflict with any medical advice you have received from your physician, they are good starting points to discuss with your doctor, who may not yet be aware of some of this research. You may want to print out the articles and take them with you to discuss-I did, and my personal physician was very supportive of the changes I made after reading them and seeing the results. YMMV. Remember that your personal physician is your best advisor for personal health and should be consulted before making changes to your diet, health or medication regimens.*

Nourishing Traditions by Sally Fallon and Mary Enig

<http://www.amazon.com/exec/obidos/tg/detail/-/0967089735/103-7769738-9496653?v=glance>

A short and simple introduction on why Low Fat diets don't work for continued weight loss: *Low Fat Diets* by Enig http://www.westonaprice.org/know_your_fats/lowfatdiets.html

Explains cholesterol levels and risk, and why low fat diets don't control high cholesterol and make the pattern worse: *High Cholesterol and Cause - Find our Solution* by Jan McBride, MD <http://www.low-carb-diet-physician.com/high-cholesterol-and-cause.html>

Nutritional Content of Whole grains VS Refined flour: <http://waltonfeed.com/grain/flour.html>

Whole grain intake reduces the risk of cancer and diabetes by as much as 40%: *Whole Grain intake and cardiovascular disease, a review* Jacobs MD and Gallagher MD http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15485586&itool=iconabstr

Dietary fibre: more than a matter of dietetics. Application in prevention and therapy. Trepel, F. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15471177&itool=iconabstr

High phytate diets, especially in populations undergoing famine, contribute to zinc deficiencies, illness and death. *Zinc Deficiency, Malnutrition and the Gastrointestinal Tract.* **Raul A. Wapnir** <http://www.nutrition.org/cgi/content/full/130/5/1388S>

Why Whole Wheat is Way better current MEN article: <http://www.motheearthnews.com/article/2148/toparticles>

Texturized vegetable protein from soy leads to deficiencies and abnormal growth rates: Pub Med article abstract: *Developmental effects and mineral interactions in rats fed textured vegetable protein.*

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=2392780&itool=iconabstr

Soy isoflavones do not prevent bone loss in post menopausal monkeys. Register et al
<http://jcem.endojournals.org/cgi/content/full/88/9/4362>