

With the Grain

Ancient preparation methods that increase nutrients and digestibility.

Grains contain antinutrients therefore they deserve careful preparation. Most of these antinutrients are part of the seeds system of preservation—to prevent sprouting until the conditions are right. Modern farming practices halt that process and as a result, certain components in the grain never go through the natural process they were intended to. These antinutrients include:

- Phytic acid; which can combine with calcium, magnesium, copper, iron and zinc in the intestines and block their absorption.
- Enzyme inhibitors; which inhibit digestion and puts stress on the pancreas.
- Tannins; complex sugars that the body has difficulty breaking down.
- Gluten and other hard to digest proteins; which can cause digestive disorders and allergies.

Sprouting and Fermenting Grains

Prior to industrialization, nearly all cultures around the world soaked (sprouted) or fermented their grains before making them into cereal (porridge), breads, cakes and casseroles.

Sprouting and fermenting effectively deactivate these antinutrients making them easier to digest. This is partially due to the healthy bacteria that are produced which aid in the digestive process, also known as probiotics. Soaking grains is the first step in the natural fermentation process that reduces the enzyme inhibitors and the starch content. Soaking typically takes 12-24 hours. Longer than that, the process of fermentation begins which can be an even more complete way to pre-digest the grain and neutralize the antinutrients.

Sprouting



Sprouting the grain is the process of seed germination which is a complete biological transformation of the seed. To sprout, the grain seed needs moisture and warmth just like it would in the soil. The process increases the protein and amino acid composition and the B vitamin content. The steps are the same for all grains, but the time to germinate varies depending on the size and type of the grain seed.



Ancient Grains

Before the advent of factory farms, grain was partially germinated, but modern grain consists of dormant (resting) seeds...In former times grain was harvested and sheaved. The sheaves were put into shocks and were gathered and built into stack which stood in the field for several more weeks before threshing.

During this period of weathering in the field the grain seeds were exposed to rain and dew which soaked into the sheaves. The grain could pick up the moisture and with heat from the sun, conditions were ideal for favoring a degree of germination and enzyme multiplication in the grain.

The modern combine harvester removes the grain from the stalk immediately after cutting and permits it to be hauled away to the granary. Hence, there is no weathering and consequent enzyme development, resulting in a mature, but dormant seed...Food enzymes are destroyed by the heat associated with cooking, canning, pasteurization and other food processing techniques.

In the absence of these enzymes, the body is forced to secrete more enzymes, acid & bile to deal with the increased digestive burden. The increased digestive burden robs the body unnecessarily of energy and resources which contributes to degenerative disease.

Edward Howell, MD, *Food Enzymes for Health and Longevity*



What you will need to sprout Mason jar with a screen lid, most any grains or seeds

1. Fill a mason jar 1/3 full with any grain or seed*
2. Add filtered water to the top of the jar.
3. Screw on the top and allow to soak overnight, for one night only. Drain off the water the next morning and rinse well.
4. Invert the jar and let it sit at an angle so it can drain and allow air to circulate.
5. The seeds should be rinsed every few hours or at least twice a day.
6. In 1-4 days (depending of the type of grain/seed) the sprouts will be ready. You will see a tiny sprout from the seed.
7. Rinse well and shake out any excess moisture. Replace the screen insert with the metal insert and store in the refrigerator.
8. Use them in any recipe that calls for grains or eat them cold in tossed salad, etc..

*Sprouted grain such as, wheat berries, barley, rye berries, buckwheat, amaranth, einkorn, farro, kamut, millet, quinoa, brown rice, sorghum, spelt—any type of whole grain- can be used. Note: Oats can be soaked, but will not sprout after they have been separated from the hull.

Nut and seed sprouts: Such as almond, pumpkin seed, sesame seed or sunflower seed sprouts. This does not work for flax seeds as they are too mucilaginous to rinse properly.

Fermenting

Take the process a step further to neutralize the antinutrients and increase the vitamin content through fermentation, which is sometimes referred to as “souring”. This is a process that had been widely practiced for thousands of years in cultures around the world.

Today, sourdough bread is the most widely recognized type of grain fermentation. But it can be done with any grain and is a great way to make a breakfast cereal, using roughly cracked grains. The process creates an acidic environment that will predigest the grains for you. It also aids in naturally preserving the items longer, which was important before the widespread practice of refrigeration.

What you will need to ferment:

1. 1 cup coarsely ground whole grains, covered with 1 cup warm filtered water.
2. Add 2 Tablespoons whey, yogurt, buttermilk or kefir to kick start the fermentation process. If you have a milk allergy, you can use vinegar or lemon juice as a fermenting agent instead of dairy products.
3. Add ½ teaspoon sea salt.
4. Cover and place in a warm place for at least 7 hours, and up to 24 hours.

5. Drain excess liquid and use the fermented grain as your recipe indicates.

Tip: Double or triple the recipe and store in refrigerator for later use.

Source: *Nourishing Traditions*



Whole Grain Bread Versus Sprouted Grain Bread

Many people report that they feel better when they cut wheat from their diet. Isn't it curious as to why a grain that has been cultivated for thousands of years, is causing digestive issues in modern society?

Nutritionally, today's bread is nothing like what our ancestors ate. Modern bread is made of flour, while traditional bread was made from ground germinated (sprouted) seeds.

Modern grain is treated heavily with pesticides and is often genetically modified. In addition, we grind the grains at high temperatures, we often extrude them into different forms and separate them into bran, germ and simple starch.

Sprouted Grain Bread

You can make your own sprouted bread or purchase it. When buying, look for breads with the majority of their grains listed as sprouted in the ingredient list. Most of the 100% sprouted versions, are in the refrigerator section (sometimes frozen). Some of the non-refrigerated versions contain preservatives to allow them to last longer at room temperature.