

What's the Deal with Sprouting?

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Better nutrition, enhanced digestion, less allergic potential – WOW, who could refuse sprouted foods? When I used to think of sprouting, I envisioned sheets of wheat grass; however, now I know there is much more to this process than meets the eye. Sprouting, or germinating, goes far beyond the long-stemmed sprouts we often see in the produce section. When applied to grains, legumes, nuts, and seeds, this process not only enhances the digestibility and absorbability of the nutrients, but it also increases their overall nutrient content. Furthermore, many of the common allergens found in these foods seldom produce an allergic reaction when sprouted.¹ This is good news in a time when so many people are becoming sensitive to grains like wheat, and legumes like soy.

Sprouting History

In the past, we ate most of our grains partially germinated. Grain stood in stacks in open fields and often began to sprout before it was brought into storage. In fact, many traditional societies still soak or ferment their grains before eating them.² Modern, industrialized farming and food preparation techniques prevent this natural germination process today.

Better Digestion & Absorption

Sprouting is the “pre-digestion” of grains, legumes, nuts, and seeds to change their composition in a number of ways. The process begins by converting starch into simple sugars, protein into amino acids, and fat into fatty acids, which allows the nutrients in the sprouted food to be more easily assimilated and metabolized. This may explain why sprouted foods are less likely to produce allergic reactions in those who are sensitive.¹ Sprouting, or more specifically soaking, begins germination, which increases the enzymatic activity in foods – or what I like to call “getting the juices flowin’.” The germination process actually increases the enzyme activity as much as six times. Enzymes are present in raw foods and initiate the process of digestion, automatically lowering the body’s need to produce its own. If the pancreas is overburdened by producing the enzymes that should be found in foods, dysfunction may result over time. This is often the reason for poor digestion in older adults who have relied on over-processed, enzyme-less foods. Furthermore, releasing these “sleeping” enzymes usually prevents much of the intestinal gas that occurs with these wholesome foods.³

The germination process inactivates substances called *enzyme inhibitors*.³ These inhibitors prevent the activation of the enzymes present in the food and, therefore, may hinder optimal digestion and absorption. Finally, soaking eliminates any concern there might be regarding the presence of phytic acid, a component of plant fiber found in the bran and hulls of grains, legumes, nuts, and seeds. Although this substance may possess antioxidant properties,⁴ it has been associated with reduced mineral absorption.⁵ Sprouting neutralizes the phytic acid so this is no longer a concern.¹

More Nutritious

Sprouting also causes a beneficial modification of various nutritional elements. According to research undertaken at the University of Minnesota, sprouting increases the total nutrient density of a food. For example, sprouted whole wheat was found to have 28% more thiamin (B₁), 315% more riboflavin (B₂), 66% more niacin (B₃), 65% more pantothenic acid (B₅), 111% more biotin, 278% more folic acid, and 300% more vitamin C than non-sprouted whole wheat. This phenomenon is not restricted to wheat. All grains undergo this type of quantitative and qualitative transformation. These studies also confirmed a significant increase in enzymes, which means the nutrients are easier to digest and absorb.⁶

More research validating sprouting comes from Japan at the Shinshu University in Nagano. A group of scientists recently found that soaking brown rice turbocharged its nutritional value. Soaking the

rice stimulates the early stages of germination where a tiny sprout (less than a millimeter tall) grows from the grain. “The birth of a sprout activates enzymes in the brown rice all at once to supply the best nutrition to the growing sprout,” explains Dr. Hiroshi Kayahara. The researchers soaked the brown rice in warm water for 22 hours to allow the sprout to form. They found that sprouted rice is not only more nutritive with higher amounts of vitamins and minerals than non-germinated rice, but it is also sweeter and easier to cook.⁷ I can confirm these cooking results from personal experience.

Sprouted Products

There are several pre-made sprouted products on our shelves that are worth trying. One of my favorites is the Sprouted Wheat Tortillas by *Alvarado St. Bakery*. They are made with terrific ingredients and are delicious, to boot! *Alvarado St. Bakery* also makes great bagels, breads, and pizza crusts made from a variety of grains. *Food for Life* makes Ezekiel breads, bagels, and tortillas that are made from sprouted grains and are also very tasty.

You can sprout your own whole grains, legumes, nuts, and seeds. Have you seen the prices of bulk products lately? Cheap! So really, the most that is involved is a few minutes of your time. Almost any grain or seed can be sprouted. Here is a rough idea of what is involved when sprouting at home. All you need is clean, filtered water and a container with a lid that will allow air to circulate, like a gallon plastic jug with a pour spout lid. The method is the same for all grains, legumes, nuts, and seeds; however, the length of soaking time varies. Put the food and water into your chosen container (along with optional sea salt), soak for 8 to 22 hours at room temperature, drain the water completely, and rinse. The goal is not to have an actual sprouted stem appear (although long-stemmed sprouts are highly nutritive as well), rather just to initiate enough germination to get the enzymatic “juices flowin’.” The grains and legumes are now ready to cook. Place nuts on cookie sheet and dry them in a dehydrator or low temperature oven (150°) to make them crunchy. A book that gives more detailed directions is *Nourishing Traditions* by Sally Fallon. Bear in mind, soaking may not work for some foods. Flaxseeds become too mucilaginous to rinse and dry properly (however, you can blend the soaked seeds directly into recipes), and irradiated foods are lacking the enzymes needed for germination to occur.

Do not be intimidated by sprouting. Remember, it can improve the digestion, nutrition, and assimilation of food, as well as reduce the potential for an allergic reaction. Personally, I have experienced the advantages of sprouted foods. Although I do not sprout everything, I can sure tell a difference when I do. Happy sprouting!

¹ Pitchford, Paul. 1993. *Healing with Whole Foods*. North Atlantic Books. Berkeley, California.

² Steinkraus, Keith H, ed, *Handbook of Indigenous Fermented Foods*, 1983 Marcel Dekker, Inc, New York, NY

³ Fallon, Sally. 1995. *Nourishing Traditions*. Promotion Publishing. San Diego, CA.

⁴ Graf E, Eaton JW. Antioxidant functions of phytic acid. *Free Radic Biol Med* 1990;8:61–9 [review].

⁵ Morris ER. Phytate and dietary mineral bioavailability. In *Phytic Acid Chemistry and Applications*, Graf E (ed). Minneapolis: Pilatus Press, 1986, 57–76 [review]

⁶ Crisafi, Daniel, ND, MH, Ph.D. 1995. *Alive Magazine* 1995.

⁷ Soaking brown rice enriches nutritional value. 12/00. Found at www.healthcentral.com on 12/27/00.