

Grain

The Staff of Life?

A Religious Perspective

Dr. Matthew McClean & Amy McClean, Registered Dietitian Nutritionist

Biblical Leavening

Between 1600-1300 BC, the Israelites were led out of Egypt by Moses, which is recorded in the Book of Exodus in the Bible. The people had to leave their homes in such haste that they did not have time to leaven their bread. "And the people took their dough before it was leavened, their kneading troughs being bound up in their clothes upon their shoulders."

(Exodus 12:34)

Later, the deliverance of the Israelites from the bondage of slavery under the Egyptians was ritualized through the feast of unleavened bread known as Passover. Clearly, this verse shows that leavening was used during this era. Many people assume that because the Feast of the Passover is of unleavened bread, that we should actually be eating unleavened bread as part of our daily diet. Remember that the eating of unleavened bread was not the way that the Israelites normally prepared their bread. How did Israelites leaven bread?



Grain in the Scriptures

Many of Christ's parables talk about grain, bread, and leavening. Ancient cultures of that day revolved around bread and the grain harvest. Grain has come to be known by Christians as "the staff of life". Grain is the central food used in family food storage programs, because it can store for extended periods of time. Joseph in Egypt was told to collect grain for seven years in preparation for a coming seven-year famine that affected all of Egypt. Grains, in the whole form, contain natural preservatives. After prolonged dormancy, grains maintain nutrition and will still sprout when conditions are right.

Science sometimes questions the staff of life

When natural preservatives and wheat proteins are consumed, studies find they can potentially harm the human body.

Phytic acid, a natural preservative, is found primarily in the bran of grain, which is removed to make white flour. Phytic acid binds with minerals such as calcium, magnesium, copper, iron and zinc and inhibits their absorption in the digestive tract. When we eat nutrient-dense whole grains, we are not absorbing much of these nutrients.

Incompletely digested grain can lead to worsening overall health.¹

Grain contains difficult-to-digest protein such as gluten. Gluten intake has been linked to a plethora of health conditions such as back pain and irritable bowel syndrome, as well as most autoimmune diseases such as type 1 diabetes, rheumatoid arthritis, and thyroid disorders.² It is no wonder that many prominent researchers believe

that man should not eat grain at all with the exception of non-glutinous grains in small quantities.

How do we reconcile the Word of Wisdom's admonitions?

"All grain is ordained for the use of man and of beasts, to be the staff of life..." (D&C 89:14)

"All grain is good for the food of man" (D&C 89:16)

"...wheat for man..." (D&C 89:17)

The Last 200 Years of Leavening

Man's bread-making processes drastically changed during the 19th century

Throughout history prior to the mid-to late-1800s, grain was fermented using a natural leavening process. Natural leavening is several strains of yeast and several strains of beneficial bacteria that grow harmoniously together in an acidic environment.

It is the yeast that causes bread to rise and gives us that sought-after lofty, soft loaf of bread. However, it is primarily the bacteria portion of a natural leaven that neutralizes phytic acid to release minerals for better mineral absorption.¹ It is the bacteria that breaks down gluten into free amino acids that the body can use as building blocks, thus drastically lessening harmful effects.³ It is the bacteria that promotes normal blood

sugar levels.⁴ It is the bacteria and long rising time that improve bread flavor. These and many other health benefits help to transform detrimental grains into super foods.

Over the years, man figured out how to separate yeast from bacteria in their symbiotic relationship. In 1780, Dutch distillers began selling baker's yeast commercially in the form of cream. This process was improved upon but didn't gain widespread favor in the United States until 1876 when Charles Fleishchmann presented his yeast cakes in the 1876 world's fair. The decreased leavening time, improved reproducibility and increased loaf volume catapulted his compressed yeast into modern fame.

Current research is rediscovering why and how the

ancient ways of using natural leavening aid in human health and how natural leavening can prudently help many people to consume grains without deleterious effects. Natural leavening is not only beneficial with gluten containing grains such as wheat, barley, and rye, but it can also be used with all gluten-free grains such as rice, quinoa, teff, amaranth, oat, millet, sorghum, and buckwheat to improve nutrient availability and decrease inflammation.

Natural leavening can be used to improve nutrition in any grain recipe – from batter breads to flatbread and loaf breads.

1. H. W. Lopez, et al. Making bread with sourdough improves mineral bioavailability from reconstituted whole wheat flour in rats. *Nutrition*, 19:524 – 530, 2003.
2. A. Vojdani, T. O'Bryan, et al. The immunology of gluten sensitivity beyond the intestinal tract. *European Journal of Inflammation*, 6(2), 2008.
3. R. Di Cagno, et al. Use of selected sourdough strains of *Lactobacillus* for removing gluten and enhancing the nutritional properties of gluten-free bread. *J. Food Prot.*, 71:1491 – 1495, 2008.
4. A. Mofidi, et al. The acute impact of ingestion of sourdough and whole-grain breads on blood glucose, insulin, and incretins in overweight and obese men. *J Nutr Metab*, 2012:10, 2012.

Naturally Leavened Batter Bread

Begin with Batter Breads.

Naturally leavened crepes, muffins, waffles, sweet breads, biscuits, bars, pancakes.



Naturally Leavened Flat Bread

Follow with Flat Breads.

Naturally leavened pita pocket bread, bread sticks, focaccia, Indian naan, scones, sweet rolled breads.



Naturally Leavened Loaf Bread

Last up, Loaves.

Naturally leavened sandwich bread, no-knead bread, Dutch oven bread, stone-baked bread, rolls, buns.



Free recipes and instruction at naturalleavening.com