

Sprouted Einkorn Bread

History, Baking Tips & Recipe

History

The first breads baked by Neolithic farmers were sprouted breads. They left behind red ochre cave paintings, hand prints, and the world's oldest evidence of bread. Soaked seeds crushed and roasted on hot stones are tastier, and easier to grind and digest than hard raw grains. Why would an intelligent hunter-gatherer struggle to mill hard grains when soaking, crushing and roasting are easier and sweeter? With a bit of rain or dew in a forgotten bowl, roasted sprouted grains transform into the first delicious brews. It is difficult to produce dry flour from a quern. The use of querns tells us that the first breads were sprouted bread. Discussions in the Talmud suggest that ancient Israelis typically soaked grain overnight before crushing and baking. *'Rabbi Rava said: It is not only permissible to soak the grains; it is actually a mitzvah to soak the wheat grains.'* Talmud Pesachim 40a¹



Baking Tips - I love sprouted einkorn flour. It comes alive in bread, imparting a fragrant sweetness with vital enzymes and tangy favor. Sprouted einkorn flour has more amino acids, vitamins and minerals, without the phytic acid that binds nutrients. Sprouted flour ferments and rises well, with high levels of antioxidants that neutralizes free radicals that age cells, and a prebiotic effect that enhances gut health and immunity.

I use a dehydrator to dry sprouted einkorn at the low temperature of 95 F to protect the enzymes. Sprouted whole grain flours can be substituted 1/1 with conventional whole grain flour but more liquid is required since dehydration removes moisture. In my baking trials a hydration of 70% water in regular einkorn flour equals 90% hydration in sprouted einkorn flour for a similar dough texture. Add 20% more liquid, even up to 100% hydration for some recipes.

The enzymes produced in sprouting decrease at temperatures above 115 degrees. For this reason dehydrate at low temperature. When baking breads at high temperatures the sprouted flour is still easier to digest and more nutritious than un-sprouted flour. Bread baked even at 450 degrees is done when the center reaches 200 degrees that minimally compromise the enzymes. Bake at a lower temperature for a longer time to protect vital enzymes. I bake my sprouted bread in small bread 3" x 5" pans at 325 F.

¹ <https://www.sefaria.org/Pesachim.40a.14?lang=bi>

Sprouted Einkorn Bread Recipe

Ingredients

500 g sprouted einkorn flour
450 g spring water
75 g active sourdough starter (or scant tsp yeast)
10 g salt
Optional: Add soaked chia or flax seed, tbsp maple syrup.



Directions

Mix starter in water. Add liquids. Mix dry ingredients, then add to liquid. Proceed to A or B:

Option A - Dutch Oven - Place dough in an oiled bowl. After a half hour gently fold and stretch the dough using a wet dough scraper. Shape. Place floured dough on parchment paper. Cover. Let ferment at cool shady room temperature for about two hours or slow-ferment overnight in fridge. Underproof. Preheat Dutch oven at 450 F for an hour. and place in heated Dutch oven. After 10 minutes turn down heat to 425. Bake for about an hour. Turn off oven but do not remove bread for half hour. Let cool and enjoy.

Option B - No Knead - Fold and shape the dough using wet or oiled hands. Dust flour all around the shaped dough. Place dough in an oiled, floured bread pan or structured bakeware. Cover. Slow-ferment overnight in the fridge. Bake next day. Let cool and enjoy.

<u>Amazing Peter Reinhart's Sprouted Bread Recipe</u> ¹				
Ingredients	Volume	Ounce	Gram	%
sprouted einkorn flour	3¾ cups	16	454	100
salt	1 teaspoon	0.25	7	1.6
instant yeast	1½ teaspoons	0.16	4.5	1
warm unchlorinated water	1 ¾ cups + one tablespoon	14.5	411	90
TOTAL		30.91	876.5	192.6

Notes: Einkorn absorbs liquids and fats slowly over 30 minutes. In trials, oil did not work well in sprouted dough. Avoid oil. Einkorn has delicate gluten so fold gently. Sprouted einkorn ferments so well that it tastes tangy without starter! Check dough often to not overproof.

1. Peter Reinhart, 'Bread Revolution: World-Class Baking with Sprouted and Whole Grains, Heirloom Flours, and Fresh Techniques' Highly recommended!



The Beauty of Sprouted Flour is that it has more vital nutrients that are easier to absorb and digest than un-sprouted flour. Sprouting produces a rich, sweet, tasty flour full of flavor. Sprouting grain changes the methods to create a full flavored digestible artisan bread. Sprouting accomplishes what pre-ferment and long fermentation do.

Grains are seeds. Un-sprouted seeds hold nutrients, vitamins and minerals in a dormant state, protected by phytic acid that prevents premature sprouting on the stalk of the plant. Un-sprouted grains stores nutrients that are locked in. Phytic acid, an organic acid in which phosphorus is bound, is present in the outer, or bran, layer of whole grain. Phytic acid, an enzyme inhibitor, binds with calcium, magnesium, copper, iron and zinc in the intestinal tract, blocking their absorption. Sprouted grains contain enzymes and lactobacilli that break down phytic acid, allowing the body to better absorb nutrients.

Milling un-sprouted grain merely grinds the dried seed state. Milling a whole grain does not change its properties. Sprouting and fermenting does! When the grain germinates enzymes are released to nourish plant growth. During the sprouting process, starchy carbohydrates are transformed into simple sugars that make complex carbohydrates in a form that is more easily absorbed. As the grain sprouts, transforming itself into a plant, the nourishment becomes more like a vegetable, naturally increasing vitamin C, vitamin B and carotene levels, absorption of calcium, magnesium, iron, copper and zinc.