

## *Spelt Porridge Bread*

Before there was fermented bread from grains there was porridge; a simple mixture of pulverized grains and very hot water. The resulting porridge was a creamy textured food that is still one of the most fundamental foods to most, perhaps all, ethnic groups in the world. The porridge could be sweetened by adding ground up sprouted grains or sprouted grain flour (enzyme active malt). The original breads were supposedly made starting from such porridge that likely had been left out long enough to ferment to a sourdough containing both yeast and lactic bacteria.

To make the bread here, raw flour and enzyme active malt are added to porridge. Raw flour and enzyme active malt contain enzymes that easily break down the cooked starch in the porridge. Thus the porridge becomes a rich source of maltose sugar for the sourdough microorganisms. Also the porridge starch is degraded to dextrin when the maltose is released; dextrin softens the bread texture. Another effect is likely the release of phospholipids from the amylose starch granules. Phospholipids are powerful emulsifying agents, so that although the amount released is very small there is likely some improving effect on the loaf structure, due to the emulsifying effect of these phospholipids. Since some of the gluten is denatured when the porridge is made, it is not expected that there will be a great volume increase over a simple sourdough whole wheat bread.

The proportion of whole wheat flour made into porridge can be varied between 5 and 20 percent without changing the technique. The softest bread will be obtained with the higher proportions of porridge.

The main effects of including the porridge are increased softness of texture and a reduced rate of staling, and a somewhat sweeter flavor. When adapting this recipe to your own whole wheat flour, it is best to begin with a stiffer dough, and if necessary, to add more dough water at the kneading stage. In this way no flour will be added to the dough after the first mixing, and all the flour will be well hydrated and fermented.

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*Amounts for one loaf containing 500 grams, or 16 ounces of flour*

<i>Ingredients</i>	<i>Bakers per Cent</i>	<i>Grams</i>	<i>Ounces</i>	<i>Cups &amp; spoons</i>
Salt	1.5	7.5	0.25	1 ½ teaspoons
Water	65	325	10.40	One & one third cups
Stone ground whole spelt flour	10	50	1.60	One third cup
Stone ground whole spelt wheat flour	90	450	14.40	Two & two thirds cups
Enzyme active wheat malt	1	5	0.16	1 teaspoon
Mature sourdough	10	50	1.60	2 tablespoons
Water, extra	5 - 10	25 - 50	0.80 – 1.60	1- 3 tablespoons

*Make the porridge at least one hour before intended time for mixing dough:*

- Measure salt and water into a saucepan. Stir to dissolve salt.
- Separately, measure 10% of total flour into a bowl. Add enough of the salty water to the flour to make a smooth paste.
- Heat the remaining salty water almost to boiling. Slowly with stirring add hot salty water to flour paste. Stir until smooth.
- Pour smooth paste into saucepan and heat to boiling point, over moderate heat, while stirring to maintain smoothness and prevent sticking. The porridge thickens and becomes somewhat translucent when fully cooked.
- Remove porridge in saucepan from heat, and cover with lid while it cools to (86°F, 30°C) or less.

*To make the dough:*

- Measure the remaining 90% of total flour and enzyme active malt into mixing bowl and mix them.
- Measure sourdough into the saucepan containing cooled porridge and mix well.
- Add the porridge-sourdough mixture to the flour. Mix until the flour is completely incorporated and a dough ball can be formed. Form the dough into a ball and place it in a bowl, punch it down. *Note that only a short mixing is required, dough development is not expected at this stage.*
- Cover the bowl. Allow the dough to rise until doubled in volume. For example, 6 hours at 77°F (25°C) or 12 hours at 68°F (20°C).
- Punch dough down. Add more water, perhaps 5-10% more if dough is too stiff. Knead until smooth. Form a dough ball and allow it to rest for 15-30 minutes.
- Re-shape into dough ball. Gently coat dough ball in spelt flour, and set to rise upside down in a cloth lined basket, covered with a cloth. Allow the dough to rise until doubled in volume, approximately 2 hours.
- Preheat oven at 475°F, with baking tiles or pizza stone in place, approximately one hour ahead of bake time.
- Sprinkle a small amount of flour on the risen loaf and invert it out of the basket onto an oven peel. Make a single lengthwise cut a half inch deep, or cross cuts about a quarter inch deep, on the top surface of the loaf.
- Reset oven to 400°F. Bake the loaf at 400°F for 40-45 minutes.
- Allow loaf to cool to room temperature before slicing. Store in a covered container at ambient temperature.