



breadmaking



Fresh sourdough loaves.

what is it?

It's making bread with your own hands, with flour, water, salt and (if you're making leavened bread) some kind of raising agent. The other essential ingredient is time. There are two main types of bread - leavened and unleavened (or flat). Leavened bread contains gases from fermentation, produced by some sort of raising agent. This could be baking powder (Irish soda breads), baker's yeast (most commercial and home-made breads) or wild yeast (sourdough breads). Unleavened breads have no raising agents, and are therefore flat - like chapatis, tortillas, focaccia, rotis and dosas. Pita and naan breads are slightly leavened.

Sourdough breads are at the core of the recent explosion of 'artisan baking' - people have rediscovered ancient ways of making bread. Baker's yeast is one particular strain of yeast, chosen because it's good at raising bread quickly. But there is a huge range of wild yeasts all around us in the air and on plants. With sourdough, wild yeasts are nurtured in a 'starter culture' - from old dough that can be 'fed' more flour and water, and kept indefinitely at room temperature. The starter culture is a medium full of micro-organisms that will raise your loaf for you. It's called sourdough because the fermentation is not just by yeast, but by a combination of wild yeast and bacteria; the bacterial fermentation gives a slightly sour flavour. The earliest evidence for very basic breadmaking is, unbelievably, around 30,000 years ago, from the starch of plant roots. Each culture has its own special techniques and recipes. In Europe, bread has always been the staple - the 'staff of life'.

what are the benefits?

After the war, large commercial bakers developed the Chorleywood breadmaking process, that uses flour, water, enzymes, chemical oxidisers and emulsifiers, vast quantities of yeast and very little

time. The ingredients are blended at high speed, left for 45 minutes and baked for 20 before cooling and packaging. Speed is of the essence, and the result is something pretty indigestible. Lots of people think they are wheat intolerant, but they're just not tolerant of bread made this way. Some wheat sourdough breads are so well fermented that they can be tolerated by coeliacs (people with wheat allergy). Because of this, people started to bake their own or buy well-made bread from artisan bakeries. Sourdough breads became so popular that they can be found in supermarkets now. The Chorleywood process was developed to make more money. It's an inferior product in terms of taste and nutritional value, but it's quick and makes more money for large commercial bakers - the ones who advertise on TV. As with many things, we took a wrong turn after the war, but we're beginning to change now. Home-made bread tastes better, is better for you, makes the whole house smell good and is a great way of making friends.

Your bread will have even more nutritional value if you use stone-ground flour, as stones don't destroy nutrients during milling. Commercial baking involves steel roller milling and heat, which damages the oils, particularly vitamin E oil. It will have environmental benefits too if you use organic flour, especially if it's locally-sourced. If you're a purist, you could get flour from UK wheat, milled by water or windmill. This may sound unlikely, but it's not impossible - there's been a renaissance in this kind of milling. Check your local wholefood shops, and see resources.

A potential disbenefit of home breadmaking is the use of many small ovens instead of a few large ones - possibly increasing energy use. However, when you bake bread - that's the time to cook something else too - biscuits as the oven's warming up for example, and a stew underneath the bread as it's baking. You could also use a wood-fired oven; and home baking has to be measured against the disbenefits of a centralised system with huge factories and fleets of trucks.



Kneading the dough.



what can I do?

Artisan bread is more expensive than commercial bread (not surprisingly, as it contains things like flavour and nutrients, as well as requiring more time and skill). Look out for small artisan bakers, or check the Real Bread Finder on the website of the Real Bread Campaign. Or you can save money by making your own. To get a really good, nutritious, tasty bread you have to nurture it. It takes time, but you don't have to attend to it for the whole time - it can be left to do its own thing.

You will need: hands; a mixing bowl; an oven; baking tins / baking sheet; something to measure / weigh with; and a timer, so you can carry on with other things and be reminded when you need to do something. You don't need any specialist equipment - you can find everything in charity shops.

For yeasted or sourdough bread: mix together the flour, water, salt and yeast (if you're using it) and knead. Kneading is to make sure it's mixed well, and to develop the gluten. Gluten is present in wheat flours (and others, but there's a lot in wheat) - it's a protein, and it's elastic. It forms a web that traps the gas (CO₂) from the fermentation of the yeast (the yeast dies during baking, by the way). Kneading makes the gluten stronger and more elastic so it does its job better. Leave to rise in a bowl (this first rise is called bulk fermentation by bakers) - for around 2 hours for yeasted or 4-8 hours for sourdough. Then divide and shape it and put into tins or onto a baking tray



Bucket containing sourdough starter culture - think of it as a pet yeast.

(or into baskets that can be tipped out onto a tray later). Leave it to 'prove' for 2 (yeasted) or 4 hours (sourdough). Make cuts in the top (which allows the loaves to rise evenly) and bake for 35-45 minutes (yeasted or sourdough). Take out and leave to cool on a rack.

For flat breads, you can either add some raising agent (e.g. pita), or none (e.g. chapatis). It's the simplest and oldest bread making technique. You just mix flour, water, salt and a bit of oil and cook it on a griddle or a hot stone. Naan bread is often cooked by sticking it to the inside wall of a tandoor oven. You can make white bread if you prefer it, but wholemeal bread has more minerals, vitamins and fibre.



See tcmg.org.uk for a list of working wind and water mills in the UK.

resources

- see lowimpact.org/breadmaking for more info, organic flours, links, courses & books, incl:
- Andrew Whitley, *Bread Matters*
- Diana Sutton, *the Bread & Butter Book*
- Elizabeth David, *English Bread & Yeast Cookery*
- Tom Jaïne, *Building a Wood-fired Oven for Bread & Pizza*
- Real Bread Campaign, fighting for real bread in Britain - sustainweb.org/realbread
- pastrywiz.com/archive/category/yeast.htm - loads of different bread recipes
- breadinfo.com - lots of bread info, including how to mill grain for flour
- doughblogs.com, interesting site by an enthusiast passing around sourdough starter

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