

Crust and crumb

What makes a great loaf of sourdough bread? There's more going on inside than you might think...

The crust – the hard layer that holds the bread together and gives your loaf its structure as it bakes. Scientists are undecided as to whether it is the healthiest part of the bread, or not: it contains higher levels of a beneficial antioxidant, called pronyl-lysine, than the crumb; but it also contains very low levels of a less friendly compound called acrylamide.

The crumb – the interior of the bread. This example has an 'open' crumb, meaning that the bubbles in it are particularly large: this is the classic white sourdough look, but a tighter crumb is fine too (and more practical for sandwiches). In general, wholemeal and rye flours will give you a tighter crumb; long kneading will, too. For big bubbles you need a dough with high water content, very strong white flour, and plenty of folding, but not too much kneading.

The score – this loaf has two scores cut through the crust. As well as being decorative, these are vital to the quality of the bread, releasing hot steam and air from the crumb as it bakes, and therefore regulating the pressure inside the loaf. Think of them as a pressure valve that also happens to look great.

The ear – formed by a part of the crust rolling back on itself as the score widens in the heat of the oven. A prominent ear is a sign that everything has gone well, but you can have tasty bread without one.

The base – this is where the baking starts, as it's where the 'oven spring' begins. When you put proved dough on to a hot surface in a hot oven, the heat rises into the bottom of the loaf first, heating the water in the dough and turning it into steam, which expands. However, as the bottom of the crust is also where there is the least oxygen, it's also the last part of the loaf to fully bake, so it's here that you check that your bread is done. If the base's crust is browned, and the crumb inside fully gelatinised, you will hear a satisfying hollow sound when you tap the base.



Three ways to create a distinctive crust



Floured banneton lines

This loaf shows the distinctive stripes of a wooden banneton that was well-floured before the dough was put into it to prove.



Glazed

This loaf was glazed with milk before the scores were made, so the crust is clean and smooth. (The scores were a little off centre, which accounts for the irregular shape of the loaf, but it is still good to eat!)



Floured basket

If you don't want a striped pattern, you can line your banneton with a cloth. The flour that you dust it with goes on to form an even coating on the loaf.



12 Preheat the oven to 220°C (200°C fan)/ gas mark 7. Put your baking stone or baking tray on the oven's middle shelf to heat up. The oven needs to be steamy, so put about 250ml (a coffee mug's worth) of boiling water into an ovenproof dish and place it on the oven floor.

2cm deep into the top, forming a square. Place the baking tray back in the hot oven and set the timer for ten minutes.

14 When the timer goes off, open the oven and have a quick look. Your loaf should have risen dramatically, parted at the vents on top, and taken on an orange colour. If the back edge of the loaf is darker than the front, turn it through 180 degrees to even things out. Check that there is still water in the ovenproof dish and top it up if not. This whole process should take about 10 seconds. Close the oven door, reduce the temperature to 180°C (160°C fan)/ gas mark 4 and set the timer for 40 minutes.



15 When the timer goes off this time, take the loaf out of the oven. It should be crusty, with rich brown and grey tones. Lift it with the oven glove and look at the bottom: if the underside is evenly baked to a brown crust, tap it firmly. If it sounds hollow, the bread is baked. If it doesn't sound hollow, or the crust hasn't yet formed on the bottom, return it to the oven for another 10 minutes, then test again.

16 When the loaf is done, place it on a wire rack to cool – and don't eat it immediately. This can be a hard instruction to obey, but the bread is still developing as it cools and won't reach its best for an hour or so.

13 (left and above) When the oven has heated, have ready a pair of scissors, an oven glove, and the bag of flour. Pull the hot baking stone or tray out (beware of a cloud of hot steam when you open the oven door) and shut the oven to keep the heat in. Gently tip the loaf out of its bowl and on to the hot baking surface. It should feel very soft, like a cushion, and have a delicate, smooth skin. Dust it lightly with flour. Then, using the scissors, snip four cuts about

Overnight white sourdough

Many home bakers use a casserole (or Dutch oven) for their regular baking, as it means minimal work, and minimal washing up. With only a small amount of starter, the dough needs to have a high water content, and a long prove, to allow the yeast to multiply and spread through the dough.

Ingredients

- 50g starter
- 400ml warm water
- 600g strong white bread flour
- 10g (2 tsp) fine salt

1 In a large mixing bowl, whisk together the starter and warm water.

2 Add the flour to the wet mixture and mix thoroughly until you have an even dough. Cover the bowl with a clean tea towel and leave the dough to rest for 30 minutes.

3 Mix the salt into the dough, adding it slowly to ensure that it is evenly spread.

4 Wet your hands, then pull, fold and rotate the dough eight to ten times (see page 35) so that it forms a ball. Cover the bowl with cling film or a damp tea towel, and leave the dough to prove for about 8–10 hours (or overnight) at room temperature. The dough will become soft and puffy, and expand significantly.

5 About an hour before you want to bake, lightly flour the work surface, and tip the dough out onto it. The dough will stick to the bowl: use your fingertips to ease it away. Pull, fold and rotate the dough 8–10 times, so it becomes tighter, and you have shaped a round

loaf. Place the ball gently into a floured proving basket and let it rest for an hour.

6 Preheat the oven to 230°C (210°C fan)/gas mark 8 and cut a piece of baking parchment about 35–40cm square. When the oven is ready, tip the loaf gently out of the proving basket and onto the centre of the baking parchment. Place the parchment and dough into a 1.8l casserole and use scissors to make a couple of cuts, 1–2cm deep, into the top of the dough. Put the lid on the casserole.

7 Place the casserole on the middle shelf of the oven. There is no need to add a source of steam, as the loaf will steam itself in the casserole.

8 After 20 minutes, remove the lid of the casserole so the crust can brown. After another 25 minutes, remove the casserole from the oven, remove the loaf, and tap its base: if it sounds hollow, the loaf is done. If not, place it back directly on the oven shelf for another 5–10 minutes, then test again. Leave to cool on a wire rack before eating.

