

19/09/24

Sourdough bread from Tartine bread by Chad Robertson

Ingredients

Sourdough starter, standard and wholemeal flour, water and salt, preparation, persistence and practise.

Method

- 1. The night before you plan to mix the dough, discard all but 1 tablespoon of your mature starter and feed the starter with 100 g of water (25°C) and 100 g of 50/50 standard flour and wholemeal flour. Cover with a kitchen towel and leave the starter to rise overnight at a temperature of 18°C. This is your leaven. By morning the leaven will have increased in volume by ~20% and become somewhat frothy. A reliable indication of the readiness of your leaven is if a teaspoon of leaven should float on a cup of water as a result of carbon dioxide production. If it sinks, the process needs longer by putting the leaven in a warm place. If your leaven has failed, you can discard half of it and add 100 g of warm water and an equal weight of the flour blend, wait until the mixture ferments again and passes the float test in a few hours.
- 2. Add 100 g of your leaven to a bowl and add 330 mls of water (26°C). Mix well with a whisk and add 500 g of flour: 400 g of standard white flour and 100 g as wholemeal flour and mix by hand. This is a 66% hydration (330 mls/g of water/500 g of flour). Robertson recommends a 75% hydration, but I find that the final dough is a bit sloppy for New Zealand.
- 3. Ensure you keep some leftover leaven as your new starter and feed daily (as in #1 above) if you're making bread each day. Alternatively leave the leaven covered tightly in the fridge and rejuvenate the leaven twice over 24 hours again following instructions as above #1.
- 4. Add 2 teaspoons of salt to the dough and rest covered for 25-40 minutes



- 5. Mix salt in well by squeezing dough between your fingers to the extent that you can no longer feel the grains of salt.
- 6. Fold or turn the dough over on itself by lifting one end, stretching it up and pulling it over the main bulk of the dough, making 3 to 4 turns from different edges of the dough. This is achieved by having your hands slightly wet by a rinse under a tap, so the dough does not stick to your hands.

In the beginning of this process the dough is rather thick and unyielding, becoming more flexible and easier to fold with time. However, if you find the dough is unusually resistant to being folded rinse your hand for a slightly longer period under the tap so that you have an additional few mls of water for the turning.



7. The folding process should be done every 30 minutes over a period of 3-4 hours while the dough in the intervals remains covered in a warm environment at 25°C. The rise time is temperature sensitive. Chad Robertson has some mechanisms for achieving constant temperature (see Baker's tips below # 2).



8. Toward the end of the process the dough becomes more cohesive, softer and aerated with an ~20% increased volume and releases from the sides of the bowl after the turns. Air bubbles may be forming along the side of the container. This is an indication of the next stage.



9. Use a spatula to take the dough out of the container onto the work surface.



10. Lightly flour the surface of the dough with rice flour before flipping it so that the floured side rests on the workbench





11. Fold the dough onto itself from each side and form into a tight spherical shape as you rotate the dough, slightly pulling and tucking in the undersurface between the dough and the bench – building up tension as it remains slightly anchored to the work surface



12. Leave to rest for 20-30 minutes with a cover over the dough to prevent drying out.



13. After 20-30 minutes, the dough will relax and spread into a flatter structure which should appear rounded and not too flat. Again, lightly flour the top surface of the dough and flip over so again the floured surface rests on the work surface.



14. You're now going to make folds of the dough from the four quadrants. Do this by stretching out the dough horizontally from the quadrant closest to you and fold to the middle third of the round. Stretch out the dough horizontally to your right and fold this back to the centre. Stretch the dough to your left and of this back over top of the previous fold. Finally stretch out the dough furthest from you and fold this over all the previous folds.



NB the sequence of photos don't accord with the text but show the principle

15. Roll dough away from you so that the seams are on the bottom and gently round into a ball, rotating against the work surface with your fingers at the dough/bench interface – thus tightening and providing tension. Rest for a minute.



- 16. Place a 50/50 mixture of rice flour and wheat flour in a banneton (<u>Temu</u> https://shorturl.at/PQ95j) or in a suitable sized bowl lined with kitchen towels floured with the mixture. Place the dough in the floured bowl with the visible seam facing up
- 17. Cover in place in the fridge overnight 8 to 12 hours or leave to rise at room temperature for 3 to 4 hours, before baking.



- 18. Preheat the oven to 230°C and place your Dutch oven or an oven dish (eg roasting pan) with a same sized cover to make a firm seal (you need a cover) until the oven reaches the appropriate temperature.
- 19. Remove the Dutch oven or oven dish from the oven USING HEAVY THICK OVEN GLOVES. Flour the bottom of your Dutch oven or oven dish with wholemeal flour and gently drop the dough onto the container's surface. Score the top of the bread with a cross with a splintered razor blade to allow the bread to breathe so it rises in the oven, without rupturing.
- 20. USING HEAVY THICK LENGTHY OVEN GLOVES, place the Dutch oven or heating pan back in the oven for 20 minutes at 230°C for 20 minutes
- 21. USING HEAVY THICK LENGTHY OVEN GLOVES open the oven, remove the covered Dutch oven or oven dish—and place on an appropriate surface and remove the top lid. (BE CAREFUL OF STEAM WHEN OPENING!)
- 22. USING HEAVY THICK OVEN GLOVES replace the bottom pan back in the oven and cook for a further 25 minutes without its cover.
- 23. USING HEAVY THICK OVEN GLOVES remove the pan from the oven and place on a rack to cool.



NB The dough was not scored sufficiently deeply to 5-10mm depth at the top, so it has slightly ruptured. See # 19 above

NOTE:

If you are making bread every day then you can refresh the starter with a 50/50 blend of flour as above and an equal volume of water and leave, covered with a kitchen towel, at room temperature at 20°C. For less frequent bread making, the residual starter can be stored in the fridge for days or a few weeks and then again rejuvenated 18 to 24 hours before using, as above.

Baker tips for sourdough

- 1. The rising power of the leaven is important and although you can leave your leaven in the fridge for a couple of weeks, it then needs to be rejuvenated if you're not cooking every other day. This is done overnight but if you're not getting an adequate rise in the sourdough and it's a bit dense, then you can do two rejuvenations of your leaven, in the afternoon of the day before and the night before, so it's ready for you in the morning. As above, the leaven rise is temperature dependent and in the summer you can usually get an adequate overnight rise with the ambient temperature of the kitchen but in the winter with your kitchen at 10-15°C the rise in development of a frothy leaven may be inadequate. You can improve the rate of rise by then putting the leaven in a warm place or, if you're time-dependent, have your leaven rise in a controlled temperature environment overnight with a special heat box.
 - If you're not getting an adequate rise and your bread is a bit dense you can experiment a bit with the hydration ratio (see # 2 above) and slowly increase this.
- 2. There are a lot of processes in making sourdough and although mostly straightforward, they are all interdependent and not doing one properly affects the other. The critical phases are an adequately risen starter, an appropriate hydration and adequate folding or turning without over-proofing as the dough will then collapse. As a reference book I recommended Tartine Bread by Chad Robertson. In addition to the basic recipe with tips this also includes other variations on the sourdough.
 ISBN 978-0-8118 7041-2. Definitely worth the investment.

<u>Neville.chun1@gmail.com</u> in Lower Hutt is also happy to supply important equipment including a cast-iron Dutch Oven, banneton's (and recommendations for preparing a starter and making sourdough).

https://brodandtaylor.com/blogs/recipes/make-sourdough-more-sour/

Currently his bread making equipment stock is listed here ... https://nz.brodandtaylor.com
But he will be transferring everything over to here very soon ... https://nzyuzu.com/

- 3. You're dealing with high temperatures at 230°C with hot cast iron dishes and your first investment should be in reliable and durable good oven gloves (I have IroncladCo) which may be available at Moore Wilson's. They are expensive but provide confident burn protection.
- 4. Ideally You need a special knife with a razorblade inserted for cutting the crisp sourdough bread top and these can be obtained from the House of Knives in Petone.

It is worth reading the references to hone the process.

Critique and discussion welcome.

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Stuart Mossman

stuart@mossman.net.nz