

## 100% Whole Wheat Bread Recipe

Make soft & fluffy 100% Whole Wheat Bread at home!

For best results, [watch this accompanying video](#) demonstrating the steps below.

### Equipment Required:

- stand mixer
- 9 x 4 x 4 inch (23 x 10 x 10 cm) pullman loaf pan OR 9 x 5 inch (23 x 13 cm) loaf pan
- oven
- digital scale in grams\*

\*Recommended for accuracy. If you don't have this, you can use amounts converted to ounces or measuring cups & spoons below.

INGREDIENTS		grams (g)	ounces (oz)	measuring cups & spoons
Whole Wheat Flour**	[100%]	350 g	12.35 oz	2 cups plus 3/4 cup
Skim Milk Powder	[4.9 %]	17g	0.6 oz	2 tablespoon
Instant Yeast	[1.4 %]	5 g	0.18 oz	1 plus 1/4 teaspoon
Sugar	[5.7 %]	20 g	0.70 oz	1.5 tablespoon
Salt	[0.9 %]	3 g	0.1 oz	1/4 plus 1/8 teaspoon
Egg	[9.7 %]	34g	1.2 oz	2/3 of a large egg
Water	[59.1%]	207 g	7.3 oz	1 cup minus 1.5 tablespoon
Unsalted Margarine or Butter***	[4.9 %]	17 g	0.6 oz	1.5 tablespoon

\*\* I used whole wheat all purpose flour. Whole wheat bread flour would work too.

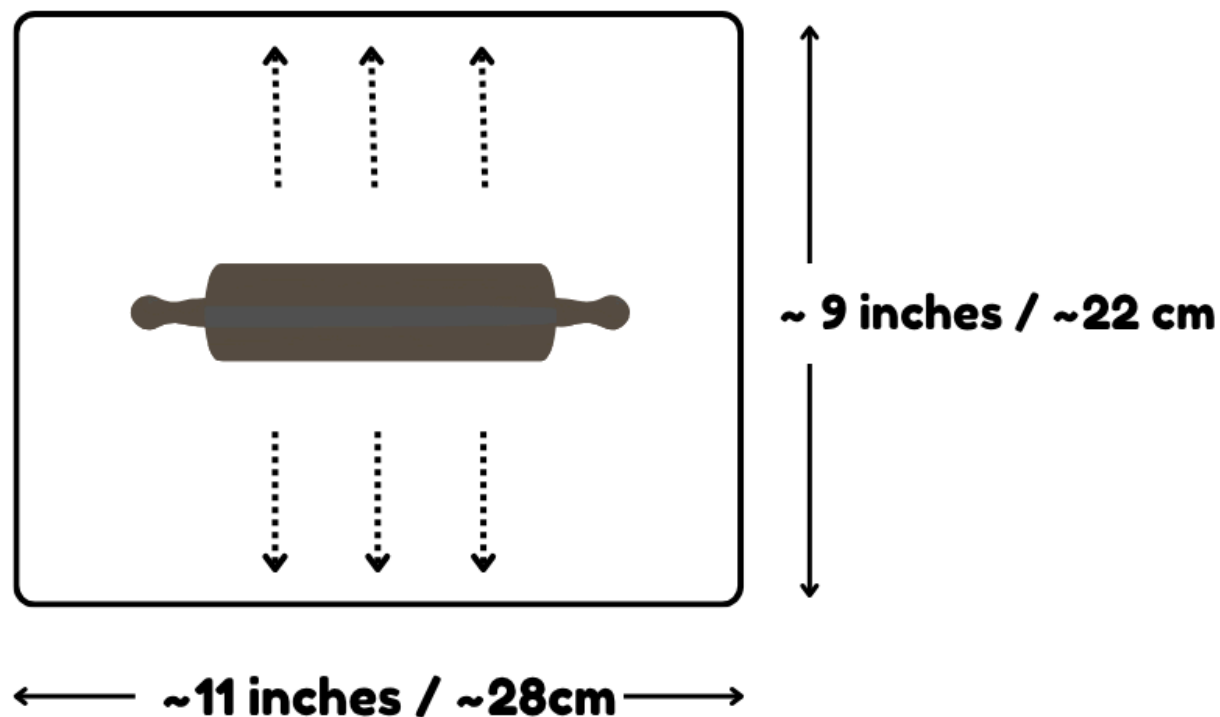
\*\*\*if using salted, reduce salt by 1g.

## INSTRUCTIONS:

1. Sift the whole wheat flour. Set aside the sifted wheat bran and germ in a bowl.
2. Add water, instant yeast, sugar, skim milk powder, egg and sifted whole wheat flour into the stand mixer bowl in this order.
3. Attach the dough hook and mixing bowl to the stand mixer.
4. Turn on the mixer to the lowest speed setting.
5. Mix on speed 1-2 (low speed) for 2 mins until ingredients are well combined.
6. Knead the dough for another 13 mins, starting on the lowest speed and gradually increasing to medium speed (speed 3–4).  
*Do not leave the stand mixer unattended. Alternate between speeds occasionally to prevent the mixer from overheating.*
7. Stop the stand mixer. Scrape the dough sticking onto the sides of the wall and place it on the dough.
8. Add margarine and salt into the mixing bowl.
9. Knead the dough for another 17 mins as follow:
  - **First 2-3 mins (low to medium speed):** knead until the margarine and salt is fully absorbed into the dough.  
You will know it's done when the dough no longer looks greasy.  
*Low speed to prevent the margarine from splashing. Increase speed to help absorption into dough.*
  - **Next 3-4 mins (medium to high speed) :** knead while alternating between medium and high speeds to build gluten and dough elasticity into the dough. Scrape sides when there's dough build up.
  - **Next 7 mins (low to medium speed):** Reduce to lowest speed. Add 2 teaspoons of the sifted wheat bran into the dough, and keep kneading until all the wheat bran is kneaded into the dough. Increase speed to medium-high for a few seconds. Then repeat this step until all the sifted wheat bran is incorporated into the dough.

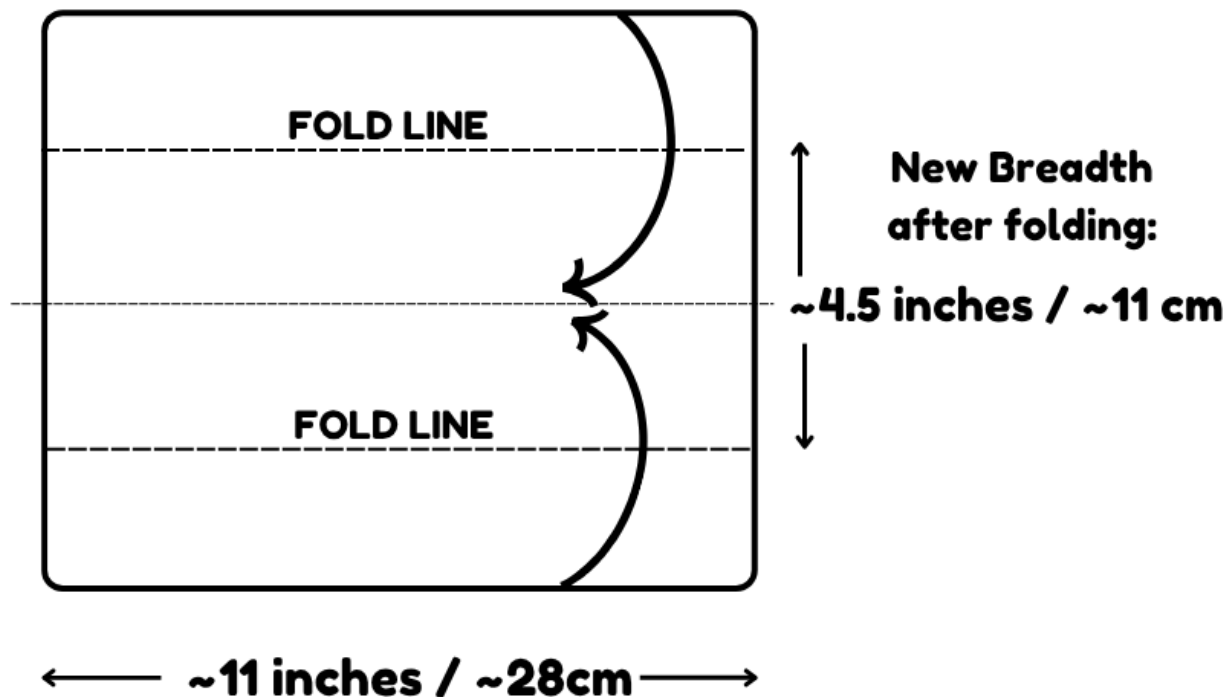
- **Final 3 mins (medium to medium high speed):** Knead while alternating between medium and high speeds to build gluten and dough elasticity into the dough.
10. Stop the mixer. Scrape down the sides. Transfer dough to a lightly floured bench.
  11. Using slightly wet hands, pick up the dough. Fold it into half. Turn 90 degrees, and fold it into half.
  12. Fold the dough over the seam which creates a new seam. Then fold it over the new seam. Pull the dough ball toward yourself a few times until we turn the dough into a smooth tight dough ball.
  13. Grease a large mixing bowl with a drop of oil.
  14. Transfer dough ball into mixing bowl, smooth side up. Cover with cling wrap or a large plate.
  15. Let dough rise until it doubles in size, approximately 75 mins.  
*Time is a guideline - move to the next step when the dough doubles in size.*
  16. After the dough has doubled in size, transfer the risen dough onto the bench, smooth side down.
  17. Weight the dough and divide the dough into two equal portions.
  18. Turn the two dough portions into two smooth tight dough balls by doing this:
    - Using slightly wet hands, pick up the first dough portion. Fold it into half. Turn 90 degrees, and fold it into half.
    - Fold the dough over the seam which creates a new seam. Then fold it over the new seam. Pull the dough ball toward yourself a few times until we turn the dough into a smooth tight dough ball.
    - Repeat the above two steps for the second dough portion.
  19. Cover each of the smooth tight dough balls with a bowl. Rest 30 mins.
  20. Grease the loaf pan and its lid with a bit of oil to prevent the bread from sticking while baking. Depending on the type of loaf pan, you may also need to line it with parchment paper to prevent the bread from getting stuck to the pan while baking.

21. Deflate the dough ball by pressing it down with your knuckles or palms, careful not to tear the dough.
22. Lightly dust the deflated dough with  $\frac{1}{8}$  tsp whole wheat flour to prevent the rolling pin from sticking.
23. Roll out the dough into a rectangle. See graphic below, or [watch the video](#).



24. While rolling out the dough, try to deflate as many air bubbles as possible.

25. Fold the two long edges of the rectangular dough inward as shown in the diagram below. The new short side of the folded dough should be around half (or lesser than) the length of your loaf pan. See graphic below, or [watch the video](#).



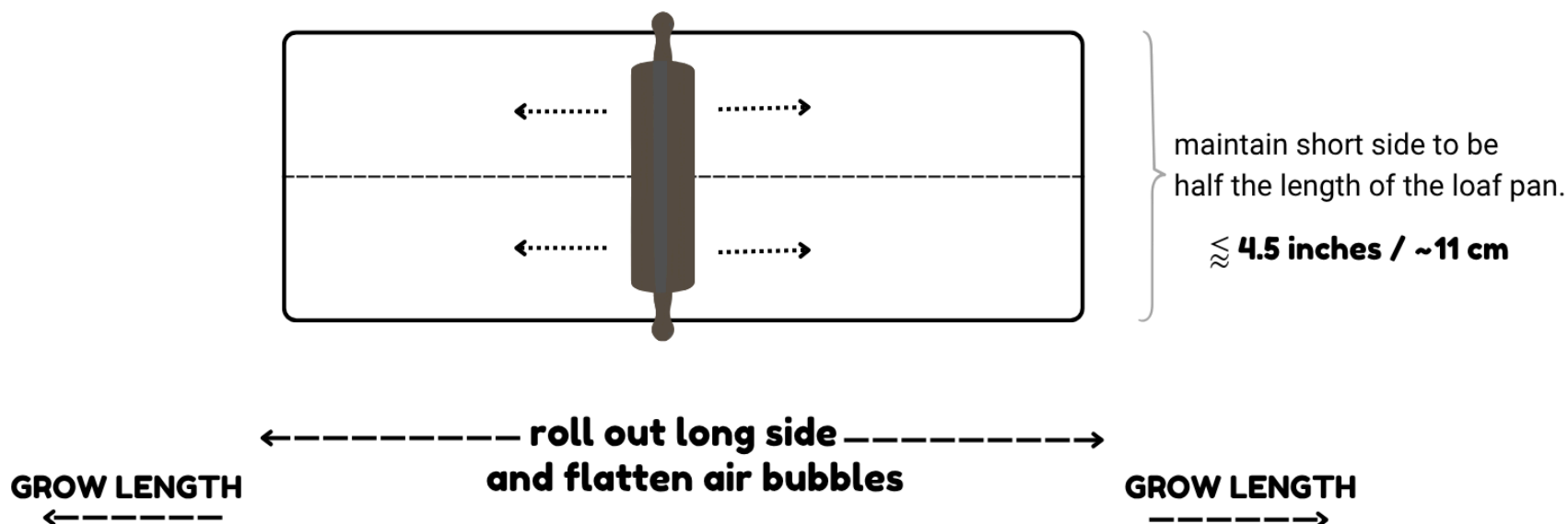
26. Lightly dust a marble or plastic rolling pin, and the dough.

There are 2 goals to achieve in this step:

- Goal #1: Maintain the short side of the dough to be less than half the length of your loaf pan.
- Goal #2: Using the rolling pin to press out as many air pockets as possible.

Reason: This type of bread has a fine and even crumb texture, so we have to roll out and deflate all the air bubbles as best as we can.

The final outcome should be a long rectangle strip of dough with the short side at around 4 to 4.5 inches. See diagram below, or [watch the video](#).



Rolling pin material matters. If you don't have a marble or plastic rolling pin. See alternatives below:

- Bamboo / Wooden Rolling Pin: Place a large sheet of parchment paper over the dough, and use the rolling pin as per normal.
- Clean & dry sturdy round glass jar/bottle with no stickers on it. Use it like a marble rolling pin.

27. Once most of the air pockets are deflated, roll the dough tightly from one short side to the other into a log.

28. Seal the seams.

29. Press down the short log-shaped dough to press out any air bubbles.

30. Repeat steps 21 - 29 for the second dough ball.

31. Transfer both log-shaped doughs into the loaf pan, seam-side down.

32. Punch down both dough logs to ensure they fill up the space in the loaf pan. See reference photo below, or watch the video.



33. Cover the loaf pan with cling wrap.
34. Let it go on its final rise until the dough has risen to the height of the loaf pan, approximately 90 mins.  
*Time is a guideline - proceed to Step 35 when your dough has reached the height of the loaf pan.*
35. Preheat the oven to 400°F / 205°C. No fan-forced; **do not turn on** the convection setting.
36. Once the dough has risen to the height of the loaf pan, remove cling wrap.
37. If using a pullman loaf pan with lid, slide the lid closed over the pan.
38. Place the loaf in the center of the oven. Bake the first 15 mins at 400°F / 205°C.
39. Then reduce the oven temperature to 375°F / 190°C and continue baking for 15 mins.
40. If baking without a lid, check the bread after 10 - 15 mins of baking. Once the top of the bread has turned light brown, place an aluminium foil over the bread. This prevents its top from getting charred.
41. Remove baked bread from the oven.
42. Carefully transfer bread to a cooling rack, without the parchment paper.
43. Let bread cool for at least 2 hours before slicing. Do not slice hot bread, as slicing hot bread results in gummy slices. Its reasoning can be found in [the video](#).
44. After 1 hour of cooling, or when the bread is not hot to touch, loosely place cling wrap over the bread, to keep the crust soft.
45. After 2 hours, bread is ready to be sliced. Slicing tips can be found in [the video](#).



**STORAGE:**

- As there are no preservatives in this bread, set aside what you will consume within 24 hours in a zip lock bag or cling wrap.

**FREEZING:**

- Individually freeze each slice in cling wrap ([see video](#)). This prevents freezer burns and prolongs its lifespan in the freezer.

**HOW TO DEFROST SLICES:**

- Option 1: Leave frozen wrapped bread slices at room temperature for a few hours (or overnight) - and ready to eat.
- Option 2: Unwrap frozen slices, and place it in the toaster or oven at the lowest temperature setting.

# 100% WHOLE WHEAT BREAD

