

COOKING SKILLS

Cooking Skills: Bread 1

Loaves, flatbreads, no-knead and overnight breads, rolls and using bread up

8 Chapters | Philip Osztromok | Generated with Claude

COOKING SKILLS: BREAD 1

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Cooking Skills: Bread 1

Chapter 1 · How Bread Works

SKILL GOAL

Understand what the four ingredients of bread do, and bake three simple loaves from scratch.

Shopping list for this chapter

The basics

Bread is only **flour, water, salt and yeast**. What changes the result is how you combine them, how long you wait and how hot the oven is. This chapter shows what each ingredient does and gives you three loaves: one that needs no effort, one that needs no yeast, and one that needs a bit of both.



Figure 1. Four ingredients, four jobs. Almost every bread in this course is a variation on these four.

What each ingredient does

- **Flour:** wheat flour contains two proteins that join with water to make **gluten**, a stretchy network that traps gas. *Strong* (bread) flour has more protein than plain flour, so it makes a chewier, taller loaf.
- **Water:** makes the gluten and wakes the yeast. The amount of water compared with flour is called the **hydration**: more water makes a wetter dough and an airier crumb.

- **Salt:** adds flavour, tightens the gluten and slows the yeast. A loaf with no salt tastes flat and rises too fast.
- **Yeast:** a living organism that eats sugars from the flour and produces carbon dioxide gas, which puffs the dough up. Heat from baking kills it.

Weigh, don't scoop

A cup of flour can weigh anything from 120 to 160 g depending on how you scoop it, which is the difference between a good loaf and a brick. **Weigh flour and water on digital scales.** Bakers describe a recipe in *percentages of the flour weight*: 500 g flour with 320 ml water (320 g) is 64% hydration, and 400 g flour with 300 ml water is 75%.

YEAST TYPE	HOW TO USE IT	AMOUNT FOR 500 G FLOUR
Fast-action (easy-bake) dried	Mix straight into the flour	1 sachet (7 g)
Ordinary active dried	Stir into warm water with a pinch of sugar and wait for it to froth for about 10 minutes	About 7 g (check the pack)
Fresh	Crumble into the warm water	About 15 g (check the supplier's advice)

These conversions are a rough guide; follow the packet if it differs. The recipes in this course use fast-action yeast.

Water temperature

Use **lukewarm** water for a quick dough (comfortable on the inside of your wrist, roughly 35 to 40°C) and **cool** water for a slow overnight one. Very hot water (above about 55°C) can kill the yeast and the dough won't rise.

The bread-making steps

1. **Mix** the ingredients into a dough.
2. **Knead** (or wait) so the gluten develops.
3. **Prove** (rise) until it has grown.
4. **Shape** and give a second rise.
5. **Bake** until golden and hollow-sounding.

6. **Cool** before cutting, because bread keeps cooking and setting as it cools.

Try it

LEVEL 1 · START HERE

No-knead bowl loaf

20 minutes of work, 12 to 18 hours rising, 40 minutes baking | 1 loaf (about 10 slices)

letting time do the kneading

The easiest bread there is: mix, leave overnight, shape, bake. A tiny amount of yeast and a long rise give flavour and structure without kneading. Weigh everything.

INGREDIENTS (10 PORTIONS)

400 g	strong white bread flour, plus extra for dusting
8 g	fine salt (about 1½ tsp)
¼ tsp	fast-action dried yeast
300 ml	cool water

1. In a large bowl, stir the flour, salt and yeast together. Add the water and mix with a wooden spoon or your hand until there are no dry patches. It will be a wet, sticky, shaggy dough.
2. Cover the bowl with a plate or a damp cloth and leave at room temperature for **12 to 18 hours**, until it is bubbly and more than doubled.
3. Tip the dough onto a well-floured surface. Fold the edges into the middle, flip it over and tuck it into a rough ball. Place it, seam side down, on a floured cloth or baking paper and cover for **1 to 2 hours** until puffy.
4. Half an hour before baking, heat the oven to 230°C (210°C fan) with a baking tray on the middle shelf and an empty roasting tin on the bottom.
5. Slide the loaf (on its baking paper) onto the hot tray. Pour a cupful of boiling water into the roasting tin and close the door quickly. Bake for **35 to 40 minutes**, until deep golden and it sounds hollow when tapped underneath.
6. Cool on a wire rack for at least 30 minutes before slicing.

> **RAW FLOUR AND STEAM**
>
> **Raw flour:** flour is a raw ingredient and can carry bacteria such as E. coli, which are killed only by baking or cooking. Don't taste raw dough, don't let children eat or play with it, and wash your hands, bowls and surfaces after handling flour and dough.

Hot ovens, trays and steam: use dry oven gloves, pull the shelf out rather than reaching in, and put hot trays and tins on a heatproof surface. If you put a tray of boiling water in the oven for steam, pour it carefully with the oven door open a little and your face well back: the steam is far hotter than the water.

LEVEL 1 · NO YEAST

Soda bread

10 minutes of work, 35 minutes baking | 1 loaf (8 slices) | a bread with no yeast and no waiting

Soda bread rises from a chemical reaction between bicarbonate of soda and the acid in buttermilk, not from yeast. It is ready in under an hour. Handle it as little as possible.

INGREDIENTS (8 PORTIONS)

450 g	plain flour (white, or half wholemeal), plus extra for dusting
1 tsp	bicarbonate of soda
1 tsp	salt
400 ml	buttermilk (or milk with 1 tbsp lemon juice stirred in and left for 10 minutes)

1. Heat the oven to 200°C (180°C fan). Dust a baking tray with flour.
2. Sift the flour, bicarbonate of soda and salt into a bowl and mix. Make a well and pour in most of the buttermilk. Mix quickly with your hand into a soft, sticky dough, adding the rest only if there are dry patches.
3. Turn onto a floured surface, shape lightly into a round about 4 cm thick (don't knead) and put it on the tray. Cut a deep cross in the top, about two-thirds of the way down.
4. Bake for **30 to 35 minutes**, until golden and it sounds hollow when tapped underneath. Cool on a rack, wrapped in a clean tea towel if you like a softer crust. Eat the same or next day.

WHY THE CROSS?

The deep cross lets the heat reach the middle of a dense, thick loaf, so it cooks through. It is also where the loaf breaks into four easy wedges.

LEVEL 2 · YEAST DOUGH

A basic white tin loaf

2 hours 30 minutes in all (30 minutes of work) | 1 loaf (12 slices)

making, proving and baking a yeast dough

Your first kneaded loaf. Chapter 2 explains kneading and proving in detail; here just follow the steps.

INGREDIENTS (12 PORTIONS)

500 g	strong white bread flour, plus extra for dusting
1 sachet (7 g)	sachet fast-action dried yeast
10 g	fine salt (about 2 tsp)
320 ml	lukewarm water
1 tbsp	olive or vegetable oil, plus extra for the tin

1. Mix the flour, yeast and salt in a large bowl, keeping the salt and yeast on opposite sides. Add the water and oil and stir into a rough dough.
2. Turn out and **knead for about 10 minutes**: push the dough away with the heel of your hand, fold it back, turn a quarter, and repeat, until smooth and springy.
3. Put it in a lightly oiled bowl, cover and leave somewhere warm for about **1 hour**, until doubled in size.
4. Oil a 900 g (2 lb) loaf tin. Press the dough flat, roll it up tightly and place it in the tin, seam side down. Cover and leave for **30 to 45 minutes**, until the dough has risen just above the rim.
5. Heat the oven to 220°C (200°C fan). Bake for **30 to 35 minutes**, until golden and hollow when tapped underneath. Turn out onto a rack and cool for at least 30 minutes.

> RAW FLOUR
>
> **Raw flour:** flour is a raw ingredient and can carry bacteria such as E. coli, which are killed only by baking or cooking. Don't taste raw dough, don't let children eat or play with it, and wash your hands, bowls and surfaces after handling flour and dough.

Experiments

EXPERIMENT

Salt and yeast

Does salt matter?

1. Make two small doughs (100 g flour, 1 g yeast, 65 ml water): one with 2 g salt, one with none. Put each in a jar and mark the level.

Look for: The unsalted dough rises faster but tastes bland. The salted dough rises more slowly and steadily. Bake a little of each if you can and taste.

EXPERIMENT

Warm or cold water

Speed of the rise.

1. Make two identical small doughs, one with lukewarm water and one with cold water from the fridge. Leave both at room temperature and mark the level after 30 minutes.

Look for: The warm dough rises faster. Cold water slows the yeast, which is why overnight doughs are mixed cool.

EXPERIMENT

Strong or plain flour

Protein in action.

1. Make the white tin loaf recipe in half quantities twice: one with strong bread flour and one with plain flour. Bake both.

Look for: Strong flour gives a taller loaf with a chewy crumb; plain flour gives a squatter, softer, more cake-like loaf.

EXPERIMENT

Weighing or scooping

How accurate is a cup?

1. Scoop a cup of flour three times, weighing each cup on your scales.

Look for: The three weights will differ by tens of grams. That is why bread recipes use scales.

Tasting notes

WHAT I TRIED	METHOD OR AMOUNT	WHAT I SAW	WHAT I THOUGHT	WILL I DO IT AGAIN?
No-knead bowl loaf				
Soda bread				
Basic white tin loaf				
Salt and yeast				
Warm vs cold water				
Strong vs plain flour				
Weighing vs scooping				

Troubleshooting

PROBLEM	LIKELY CAUSE	WHAT TO DO
Dough didn't rise	Yeast dead (old, or too-hot water), or too cold a room	Check the date; use lukewarm water; give it more time somewhere warm
Dense, heavy loaf	Not enough rising, too little water, or too little yeast	Prove until doubled; weigh the water; check the yeast
Pale, soft crust	Oven not hot enough, or no steam	Preheat fully; try the steam tray

PROBLEM	LIKELY CAUSE	WHAT TO DO
Flat top, spread-out loaf	Over-proved or too wet	Shorten the second rise; use a tin for wet doughs
Soda bread dense and bitter	Too much bicarbonate, or over-mixed	Measure level spoons; mix briefly
Gummy, damp middle	Cut too soon, or underbaked	Cool 30 minutes; tap the base for a hollow sound

FLOUR, HEAT AND ALLERGENS

Raw flour: flour is a raw ingredient and can carry bacteria such as E. coli, which are killed only by baking or cooking. Don't taste raw dough, don't let children eat or play with it, and wash your hands, bowls and surfaces after handling flour and dough.

Hot ovens, trays and steam: use dry oven gloves, pull the shelf out rather than reaching in, and put hot trays and tins on a heatproof surface. If you put a tray of boiling water in the oven for steam, pour it carefully with the oven door open a little and your face well back: the steam is far hotter than the water.

Allergens: bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

Mould: if bread has mould on it, throw the whole loaf away: the spores spread through the soft crumb where you can't see them. Don't sniff it. Keep bread in a bread bin or freeze slices to avoid waste.

CHECKPOINT: CAN YOU DO THIS NOW?

- ☐ I can name the four ingredients and what each does.
- ☐ I weigh flour and water.
- ☐ I can make a no-knead loaf and a soda bread.
- ☐ I can make a simple yeast loaf from start to finish.
- ☐ I never taste raw dough and I wash my hands after handling flour.

NEXT CHAPTER

Cooking Skills: Bread 1, chapter 2 is Kneading and Proving: how to develop the gluten and know when the dough has risen enough.

Cooking Skills: Bread 1

Chapter 2 · Kneading and Proving

SKILL GOAL

Knead dough until the gluten is ready, and prove it until it is ready to bake, not just for a set time.

Shopping list for this chapter

The basics

Kneading and proving are the two things that turn flour paste into bread. **Kneading** develops gluten; **proving** lets the yeast fill that gluten network with gas. Get these two right and nearly any recipe will work.



Figure 2. Kneading changes dough from shaggy and sticky to smooth and elastic. The windowpane test shows when the gluten is ready.

How to knead

1. Hold the dough with one hand and push it away from you with the **heel of your other hand**.
2. Fold it back over itself, **turn it a quarter**, and repeat in a steady rhythm.
3. Knead for **8 to 10 minutes** by hand. It starts sticky and gradually becomes smooth, elastic and less tacky.

4. Use as little extra flour as you can: too much makes a dry, tight dough.

Short of arm strength or time? Try **stretch and fold**: leave a wet dough in the bowl, stretch one side up and fold it over, turn the bowl and repeat four times, then rest for 30 minutes. Do this three or four times. The gluten develops without any kneading.

Proving

Proving is the rise. It needs warmth, time and a covered bowl so the surface doesn't dry out.

WHERE	TIME FOR A FIRST RISE	RESULT
Warm room (about 24 to 27°C)	About 1 hour	Quick rise, good flavour
Normal room (about 20°C)	1 hour 30 minutes to 2 hours	A good all-round rise
Fridge overnight	8 to 16 hours	Slow, more flavour, easy to fit into a day

These are guides: the dough, not the clock, is the judge. The first rise is ready when it has roughly **doubled**. The second rise (in the tin or on the tray) is ready by the poke test.



Figure 3. The poke test: press a floured finger about 1 cm into the dough and watch how fast the dent fills back.

Knocking back

After the first rise, press the dough gently to push out the larger bubbles, then shape. This spreads the yeast evenly and gives a finer, more even crumb.

SLOW PROVING

Slow proving in the fridge: dough can be left to prove covered in the fridge overnight (up to about 12 to 16 hours for a yeast dough like these). Cover it well, because the surface dries out, and let it come back to room temperature for 30 to 60 minutes before shaping or baking.

Try it

LEVEL 1 · START HERE

A classic white loaf with soft crumb

2 hours 30 minutes (25 minutes of work) | 1 loaf (12 slices) | kneading by hand and judging the proof

The butter makes a softer crumb and a slightly richer flavour. Follow the kneading steps closely and use both tests in this chapter.

INGREDIENTS (12 PORTIONS)

500 g	strong white bread flour, plus extra for dusting
1 sachet (7 g)	sachet fast-action dried yeast
10 g	fine salt
15 g	butter, softened
320 ml	lukewarm water (or half milk, half water)
1 tsp	oil for the bowl and tin

1. Mix the flour, yeast and salt in a bowl. Rub in the butter, then add the water and mix to a rough dough.
2. Turn out onto an unfloured surface (a little oil on your hands helps if it sticks) and knead for **8 to 10 minutes**. It starts sticky; keep going and don't add much extra flour.
3. Do the **windowpane test**: pinch off a golf-ball piece and stretch it gently between your fingers. If it forms a thin, see-through membrane without tearing, the gluten is ready. If it tears, knead for another 2 minutes and try again.
4. Shape into a ball and put it in an oiled bowl, turning it once to coat. Cover and leave somewhere warm until **doubled in size**, about 1 hour.
5. Knock back (gently press out the large bubbles), shape into a loaf and place in an oiled 900 g tin, seam side down. Cover and prove for 30 to 45 minutes. Do the **poke test**.
6. Bake at 220°C (200°C fan) for **30 to 35 minutes** until golden and hollow-sounding underneath. Cool on a rack.

FLOUR

> **Raw flour:** flour is a raw ingredient and can carry bacteria such as E. coli, which are killed only by baking or cooking. Don't taste raw dough, don't let children eat or play with it, and wash your hands, bowls and surfaces after handling flour and dough.

LEVEL 2 · WHOLEGRAIN

A wholemeal loaf

2 hours 30 minutes (25 minutes of work) | 1 loaf (12 slices) | adjusting water for wholemeal flour

Wholemeal flour absorbs more water than white flour and its bran cuts the gluten, so the dough is stickier, takes longer to rise and gives a denser, nuttier loaf. Resist adding extra flour.

INGREDIENTS (12 PORTIONS)

500 g	strong wholemeal bread flour, plus extra for dusting
1 sachet (7 g)	sachet fast-action dried yeast
10 g	fine salt
1 tsp	sugar or honey
370 ml	lukewarm water
1 tbsp	oil, plus extra for the tin

1. Mix the flour, yeast, salt and sugar. Add the water and oil and mix to a sticky dough. Leave it for 15 minutes so the bran can absorb the water.
2. Knead for 8 to 10 minutes. It will stay slightly tacky: wet your hands rather than flouring the surface. It won't pass the windowpane test as thinly as white dough does, so look for smooth and springy.
3. Cover and prove for about **1 hour 15 minutes**, until doubled.
4. Shape, put in an oiled 900 g tin, cover and prove for about 45 minutes, until the dough has risen just above the rim.
5. Bake at 210°C (190°C fan) for **35 to 40 minutes**. It should sound hollow when tapped underneath. Cool on a rack.

> **WHOLEMEAL TIP**
>
> Use water rather than extra flour to fix a sticky wholemeal dough: wet your hands and the surface. Extra flour makes the loaf heavy and dry.

LEVEL 2 · BLEND

A half-and-half loaf

2 hours 30 minutes (25 minutes of work) | 1 loaf (12 slices) | blending flours and judging the proof yourself

The everyday loaf: half white flour for lightness and half wholemeal for flavour. Use the poke test to decide when to bake.

INGREDIENTS (12 PORTIONS)

250 g	strong white bread flour
250 g	strong wholemeal bread flour
1 sachet (7 g)	sachet fast-action dried yeast
10 g	fine salt
1 tbsp	honey or treacle
340 ml	lukewarm water
2 tbsp	mixed seeds (optional)

1. Mix both flours, the yeast, salt and seeds. Add the water and honey and mix to a rough dough. Rest for 10 minutes.
2. Knead for about 10 minutes until smooth and elastic. Prove in an oiled bowl for about 1 hour until doubled.
3. Shape into a loaf and place in an oiled 900 g tin. Cover and prove until the dough has risen about 2 cm above the rim: use the **poke test** to check. A gently floured finger leaves a dent that fills back slowly.
4. Bake at 220°C (200°C fan) for **35 minutes**, until deep golden and hollow underneath. Cool on a rack.

> **SEEDS AND ALLERGENS**
>
> **Allergens:** bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

Experiments

EXPERIMENT

Kneading time

How much is enough?

1. Make two small batches of the white loaf dough. Knead one for 2 minutes and the other for 10. Do the windowpane test on both. Bake side by side.

Look for: The 2-minute dough tears when stretched and bakes dense and crumbly. The 10-minute dough stretches thin and makes a taller, softer loaf.

EXPERIMENT

Proving place

Warm, cool or fridge.

1. Divide one dough in three. Prove one in a warm place, one on the counter and one in the fridge overnight. Bake all three at the same temperature.

Look for: The warm one rises fastest; the fridge one has the most flavour and a slightly blistered crust. Note the time each took.

EXPERIMENT

The poke test

Under, ready or over.

1. Shape three tin loaves from one dough. Bake one after a 20-minute second prove, one at 40 minutes and one at 90 minutes.

Look for: The first is dense with a split side, the second is well risen, and the third is wide, pale and slightly collapsed. This is the difference the poke test is detecting.

EXPERIMENT

White, wholemeal and half-and-half

The flour effect.

1. Bake the three loaves in this chapter. Compare height, crumb and flavour.

Look for: White is tallest and softest, wholemeal densest and nuttiest, half-and-half in between.

Tasting notes

WHAT I TRIED	METHOD OR AMOUNT	WHAT I SAW	WHAT I THOUGHT	WILL I DO IT AGAIN?
Classic white loaf				
Wholemeal loaf				
Half-and-half loaf				
Kneading time				
Proving place				
The poke test				
White vs wholemeal				

Troubleshooting

PROBLEM	LIKELY CAUSE	WHAT TO DO
Dough sticks to everything	Normal early on, or too wet	Keep kneading with oiled hands; add flour a spoonful at a time only at the end
Dough tears when stretched	Not kneaded enough, or rested too little	Knead 2 more minutes; rest 10 minutes and try again
No rise after 2 hours	Cold room, old yeast or very hot water used	Move somewhere warmer; check the yeast date; start again if needed

PROBLEM	LIKELY CAUSE	WHAT TO DO
Big holes under the crust	Not knocked back and shaped tightly	Press out the gas and roll up tightly
Loaf collapses in the oven	Over-proved	Shorten the second rise; use the poke test
Dense, pale loaf	Under-proved or not enough kneading	Wait until the dent fills back slowly

FLOUR AND ALLERGENS

Raw flour: flour is a raw ingredient and can carry bacteria such as E. coli, which are killed only by baking or cooking. Don't taste raw dough, don't let children eat or play with it, and wash your hands, bowls and surfaces after handling flour and dough.

Allergens: bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

Mould: if bread has mould on it, throw the whole loaf away: the spores spread through the soft crumb where you can't see them. Don't sniff it. Keep bread in a bread bin or freeze slices to avoid waste.

CHECKPOINT: CAN YOU DO THIS NOW?

- ☐ I can knead by hand and do the windowpane test.
- ☐ I know when a dough has doubled and when the poke test says ready.
- ☐ I can adjust the water for wholemeal flour.
- ☐ I know how to slow a dough in the fridge.
- ☐ I can spot an over-proved dough.

NEXT CHAPTER

Cooking Skills: Bread 1, chapter 3 is Shaping and Baking: cobs, sticks, plaits and rolls, and how to tell when bread is done.

Cooking Skills: Bread 1

Chapter 3 · Shaping and Baking

SKILL GOAL

Shape dough with a tight skin, bake it with the right heat and steam, and tell when it is done.

Shopping list for this chapter

The basics

Shaping is about **tension**: pulling the surface of the dough tight so it holds its shape and rises up. Baking is about heat and steam. This chapter covers both, with four shapes from one dough.

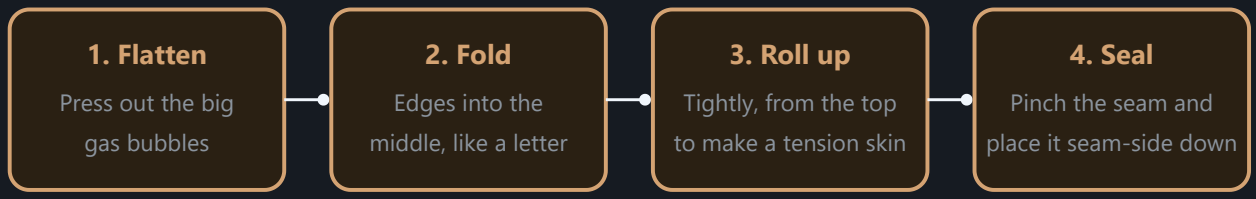


Figure 4. The basic shaping method. A tight surface holds the loaf up as it rises and bakes, and a sealed seam stops it splitting.

Shaping tips

- **Use as little flour as you can:** dough needs a slightly tacky surface to grip so it can be tightened.
- **Seam side down:** the seam goes underneath, so the smooth side shows and the loaf doesn't split along the top.
- **Be gentle:** after proving, the dough is full of gas. Handle it as little as possible.
- **Weigh pieces:** equal sizes bake evenly.

Scoring

A slash across the top gives the steam somewhere to escape and the loaf somewhere to expand, so it opens neatly instead of splitting where it likes. Cut quickly, about 0.5 to 1 cm deep, with a sharp blade held at a shallow angle.

Crust and steam

A hot, steamy oven keeps the surface soft for the first 10 minutes so the loaf can expand (called *oven spring*), then the crust sets golden and crisp. A tray of boiling water on the oven floor makes this steam at home. Without steam you get a thicker, paler, less glossy crust.

BREAD	OVEN TEMPERATURE	TIME	STEAM?
Tin loaf	220°C (200°C fan)	30 to 35 minutes	No
Cob	220°C (200°C fan)	30 to 35 minutes	Optional
Baguette-style sticks	230°C (210°C fan)	20 to 25 minutes	Yes
Plait (enriched)	200°C (180°C fan)	30 to 35 minutes	No
Rolls	220°C (200°C fan)	15 to 20 minutes	Optional

IS IT DONE?

Is it done? Turn the loaf over and tap the base: it should sound hollow, like knocking on a door. The crust should be a deep golden colour all over. A probe thermometer in the middle of a loaf reads roughly 93 to 99°C when bread is cooked; this is a guide, and tapping is enough for most home bakers.

Cooling

Cool bread for at least 30 minutes on a wire rack. It is still cooking inside and the crumb is gummy until it has set. A crisp crust will soften as it cools, and crisps again if you warm it for 5 minutes.

Try it

LEVEL 1 · START HERE

A cob

2 hours 30 minutes (25 minutes of work) | 1 loaf (12 slices) | shaping a round with a tight skin

A cob is a round freestanding loaf, baked on a tray with no tin. The shaping is the skill: a tight, smooth surface makes it rise up instead of out.

INGREDIENTS (12 PORTIONS)

500 g	strong white bread flour, plus extra for dusting
1 sachet (7 g)	sachet fast-action dried yeast
10 g	fine salt
320 ml	lukewarm water
1 tbsp	oil

1. Make the dough as in chapter 2 (Cooking Skills: Bread 1, chapter 2): mix, knead for 8 to 10 minutes, then prove in an oiled bowl for about 1 hour until doubled.
2. Knock back and shape a ball: flatten, fold the edges to the middle, flip it over and cup your hands around it, dragging it towards you on the surface to tighten the skin.
3. Place on a floured tray, seam side down. Cover and prove for 30 to 45 minutes until puffy.
4. Heat the oven to 220°C (200°C fan). Dust with flour, slash the top with a sharp knife or blade (a cross or a single curved cut about 1 cm deep), and bake for **30 to 35 minutes**.
5. Check it is done (see below), then cool on a rack.

> **SHARP BLADES**
>
> **Slashing:** use a very sharp knife, a razor blade held in a handle or a bread lame, cut away from your body, and keep fingers clear of the line of the blade. A blunt knife drags and tears the dough.

LEVEL 2 · LONG SHAPE

Baguette-style sticks

2 hours 45 minutes (35 minutes of work) | 3 sticks | rolling a long even shape and baking with steam

A long shape gives more crust per slice. They bake quickly in a very hot oven with steam, which gives a crisp, crackly crust.

INGREDIENTS (3 PORTIONS)

500 g	strong white bread flour
1 sachet (7 g)	sachet fast-action dried yeast
10 g	fine salt
330 ml	lukewarm water
1 tbsp	semolina or flour for the tray

1. Make the dough: mix, knead for 10 minutes and prove for about 1 hour until doubled.
2. Divide into 3 pieces. Flatten each into a rectangle, fold the long edges to the middle and seal, then roll with the palms of your hands from the centre outwards to a length of about 30 cm, tapering gently at the ends.
3. Place on a floured or semolina-dusted tray, cover and prove for 30 minutes.
4. Heat the oven to 230°C (210°C fan) with a roasting tin on the bottom shelf. Slash each stick 3 times on a slant. Slide the tray in, pour a cup of boiling water into the tin, close the door and bake for **20 to 25 minutes**, until deep golden.
5. Cool on a rack. They are best eaten the same day.

> **STEAM**
>
> **Hot ovens, trays and steam:** use dry oven gloves, pull the shelf out rather than reaching in, and put hot trays and tins on a heatproof surface. If you put a tray of boiling water in the oven for steam, pour it carefully with the oven door open a little and your face well back: the steam is far hotter than the water.

LEVEL 2 · PLAIT

A plaited loaf

2 hours 45 minutes (35 minutes of work) | 1 loaf (12 slices) | dividing, rolling ropes and plaiting

A three-strand plait looks impressive and is easy. Roll the ropes evenly and plait loosely: the dough will expand.

INGREDIENTS (12 PORTIONS)

500 g	strong white bread flour
1 sachet (7 g)	sachet fast-action dried yeast
10 g	fine salt
30 g	butter, softened
300 ml	lukewarm milk, or half milk and half water
1	egg, beaten, mixed with 1 tbsp milk, for glazing
1 tbsp	sesame or poppy seeds (optional)

1. Make a dough with the flour, yeast, salt, butter and milk. Knead for 10 minutes and prove for about 1 hour.
2. Divide into 3 equal pieces (weigh them). Roll each into a rope about 40 cm long, thicker in the middle than at the ends.
3. Pinch the three ropes together at the top and plait loosely: right over middle, left over middle, and so on. Pinch and tuck the ends under.
4. Place on a lined tray, cover and prove for 30 to 45 minutes. Brush with the egg glaze and scatter with seeds.
5. Bake at 200°C (180°C fan) for **30 to 35 minutes**, until deep golden and hollow underneath. If it browns too fast, cover loosely with foil. Cool on a rack.

> **RAW EGG AND ALLERGENS**
>
> **Egg glaze:** use eggs with the British Lion mark and wash your hands after handling raw egg. The glaze is baked fully. **Allergens:** bread contains wheat (gluten). Check the recipe for milk,

> butter, egg, sesame and other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

LEVEL 2 · SMALL

Bread rolls

2 hours 15 minutes (30 minutes of work) | 8 rolls | dividing and shaping evenly

Rolls are the best way to practise shaping, because you get eight tries. Weigh the pieces so they all bake at the same speed.

INGREDIENTS (8 PORTIONS)

500 g	strong white bread flour
1 sachet (7 g)	sachet fast-action dried yeast
10 g	fine salt
1 tsp	sugar
25 g	butter, softened
300 ml	lukewarm milk or water
1 tbsp	milk for brushing

1. Make the dough and prove for about 1 hour until doubled.
2. Weigh the dough and divide into 8 equal pieces (about 100 g each, or 60 g for small rolls). Shape each into a tight ball: cup your hand over it on an unfloured surface and move it in small circles until smooth and taut.
3. Place on a lined tray, leaving 3 cm between them. Cover and prove for 30 minutes. Brush with milk.
4. Bake at 220°C (200°C fan) for **15 to 20 minutes**, until golden and hollow-sounding underneath. Cool on a rack.

> **EVEN ROLLS**
>
> Weigh the dough first, divide by eight, then weigh each piece. Rolls of equal weight bake in equal time.

Experiments

EXPERIMENT

Scoring or not

Does the slash matter?

1. Shape two identical cobs. Slash one and leave the other unscored. Bake together.

Look for: The scored loaf opens along the cut and rises evenly. The unscored loaf may burst at the side or hold a smaller, rounder shape.

EXPERIMENT

Steam or dry oven

The crust effect.

1. Bake two identical sticks, one with the steam tray and one without.

Look for: The steamed stick has a thinner, crisper, shinier crust and better rise. The dry stick is paler with a thicker, duller crust.

EXPERIMENT

Oven temperature

Hot or moderate.

1. Bake two rolls at 220°C (200°C fan) and two at 180°C (160°C fan).

Look for: The hot oven gives a golden crust and good spring. The cool oven gives pale, flatter rolls with a tougher texture.

EXPERIMENT

Cut early or late

Cooling and crumb.

1. Cut one roll straight from the oven and another after 30 minutes.

Look for: The warm roll is gummy and compresses. The cooled roll has a clean, set crumb. Patience pays.

Tasting notes

WHAT I TRIED	METHOD OR AMOUNT	WHAT I SAW	WHAT I THOUGHT	WILL I DO IT AGAIN?
Cob				
Baguette-style sticks				
Plait				
Bread rolls				
Scoring or not				
Steam or dry oven				
Oven temperature				
Cut early or late				

Troubleshooting

PROBLEM	LIKELY CAUSE	WHAT TO DO
Loaf spreads out flat	Weak skin, over-proved, or too wet	Shape tighter; prove less; use less water
Bursts at the side	Not scored, under-proved or shaped loosely	Score deeper; prove a little longer
Pale crust	Oven too cool or no steam	Preheat well; add a steam tray; bake a few minutes longer
Burnt base	Tray too low or too thin	Move up a shelf; double the tray
Raw middle	Pulled out too early or oven too hot	Tap the base; lower the temperature and bake longer
Plait loses its shape	Ropes uneven or over-proved	Roll evenly; prove less

HEAT, STEAM AND ALLERGENS

Raw flour: flour is a raw ingredient and can carry bacteria such as E. coli, which are killed only by baking or cooking. Don't taste raw dough, don't let children eat or play with it, and wash your hands, bowls and surfaces after handling flour and dough.

Hot ovens, trays and steam: use dry oven gloves, pull the shelf out rather than reaching in, and put hot trays and tins on a heatproof surface. If you put a tray of boiling water in the oven for steam, pour it carefully with the oven door open a little and your face well back: the steam is far hotter than the water.

Allergens: bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

CHECKPOINT: CAN YOU DO THIS NOW?

☐ I can shape a tight round, a stick, a plait and rolls.

☐ I know how and why to score a loaf.

☐ I can make steam in a home oven safely.

☐ I can tell when bread is done by tapping the base.

☐ I wait for bread to cool before slicing.

NEXT CHAPTER

Cooking Skills: Bread 1, chapter 4 is Flatbreads: breads cooked in a pan, with no oven needed.

Cooking Skills: Bread 1

Chapter 4 · Flatbreads

SKILL GOAL

Make breads that need no loaf tin: roll them to the right thickness, cook them on a hot pan and keep them soft.

Shopping list for this chapter

The basics

Flatbreads are the oldest breads, and many of them need nothing more than a hot pan. They are quick, forgiving and a good use of the dough skills you have learned. This chapter has one with no yeast, one thick and one thin yeast bread, and one that puffs into a pocket.

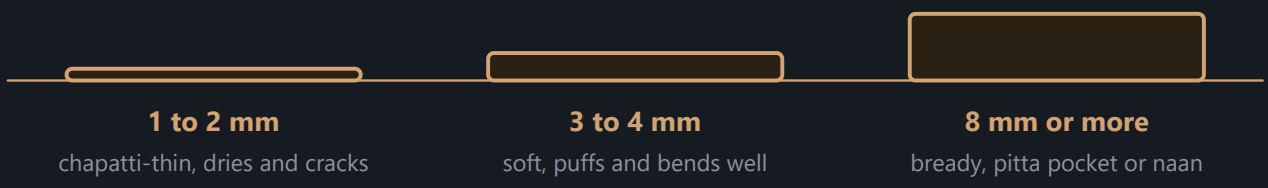


Figure 5. Thickness decides the texture: thin and quick, medium and puffy, or thick and bready.

The flatbread rules

- **A very hot pan:** hot enough that the bread starts bubbling within 30 seconds. A cool pan dries the bread into a cracker.
- **Dry pan, no oil:** most flatbreads are cooked dry, then brushed with butter or oil afterwards.
- **Roll evenly:** thick and thin spots cook at different speeds. Turn the dough a quarter between each roll.
- **Rest the dough:** a rest lets the gluten relax so the dough rolls out without springing back.
- **Keep them soft:** stack cooked flatbreads in a clean tea towel so the steam softens them.

FLATBREAD	RAISING AGENT	THICKNESS	HOW COOKED
Yoghurt flatbread	Self-raising flour	3 to 4 mm	Dry pan
Naan-style	Yeast	About 5 mm	Hot pan with a lid
Chapatti-style	None (steam puffs it)	About 2 mm	Dry pan, pressed
Pitta	Yeast	About 5 mm	Very hot oven

Try it

LEVEL 1 · START HERE

Two-ingredient yoghurt flatbreads

25 minutes | 6 flatbreads | mixing a quick dough and cooking in a dry pan

No yeast, no waiting: self-raising flour and yoghurt make a soft dough in a minute. You can have bread with dinner in half an hour.

INGREDIENTS (6 PORTIONS)

250 g	self-raising flour, plus extra for dusting
200 g	thick Greek-style yoghurt
½ tsp	salt

1. Mix the flour, yoghurt and salt in a bowl to a soft, slightly sticky dough. If it is too wet to handle, add a spoonful of flour at a time.
2. Knead gently on a floured surface for 1 to 2 minutes. Divide into 6 and roll each into a round about 3 to 4 mm thick.
3. Heat a dry non-stick or cast-iron frying pan over a medium-high heat. Cook each flatbread for **2 to 3 minutes a side**, until puffed with golden-brown spots.
4. Stack in a clean tea towel to keep them soft and warm.

> **HOT PAN**
>
> **Hot dry pans:** a pan hot enough to cook flatbread is hot enough to burn. Never leave it unattended, keep the handle turned in, and use a dry cloth to lift lids. Flatbreads puff with hot steam inside, so open them away from your face.

LEVEL 2 · YEAST

Naan-style bread

1 hour 30 minutes (30 minutes of work) | 4 breads | a yeast dough cooked in a pan with a lid

Naan is traditionally baked in a tandoor. In a pan with a lid you trap the heat and steam, so it puffs and blisters.

INGREDIENTS (4 PORTIONS)

250 g	strong white bread flour, plus extra for dusting
1 tsp	fast-action dried yeast (about 1 tsp)
½ tsp	salt
1 tsp	sugar
100 g	plain yoghurt
80 ml	lukewarm milk
1 tbsp	oil, plus extra for brushing
1	garlic clove and a little melted butter for brushing (optional)

1. Mix the flour, yeast, salt and sugar. Add the yoghurt, milk and oil and mix to a soft dough. Knead for 5 minutes until smooth. Cover and leave for **1 hour** until doubled.
2. Divide into 4. Roll each into a teardrop shape about 5 mm thick.
3. Heat a dry heavy frying pan over a high heat. Cook each naan for about **1 to 2 minutes**, until bubbles form on the top. Flip and cook for another 1 to 2 minutes with a lid on, until blistered and golden.
4. Brush with melted butter (with crushed garlic if you like). Keep warm wrapped in a tea towel.

HOT PAN, STEAM AND MILK

Hot dry pans: a pan hot enough to cook flatbread is hot enough to burn. Never leave it unattended, keep the handle turned in, and use a dry cloth to lift lids. Flatbreads puff with hot steam inside, so open them away from your face.

Allergens: yoghurt, milk and butter contain milk. **Allergens:** bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and other seeds, and nuts, and label them if you

share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

LEVEL 2 · THIN

Chapatti-style breads

1 hour (25 minutes of work, plus 30 minutes' rest) | 6 chapattis | rolling thin and puffing on a hot pan

Chapattis are thin, soft, everyday breads. Rolling them evenly thin is the skill: a round, even disc puffs into a balloon on the heat.

INGREDIENTS (6 PORTIONS)

200 g	chapatti flour (atta), or half wholemeal and half plain white flour, plus extra for dusting
½ tsp	salt
125 ml	lukewarm water
1 tbsp	oil or melted butter, plus extra for brushing

1. Mix the flour and salt. Add the water and oil and mix to a soft dough. Knead for 5 minutes, then cover and rest for **30 minutes**.
2. Divide into 6 balls. Roll each into a thin round about 2 mm thick, dusting lightly.
3. Heat a dry frying pan over a medium-high heat. Cook one chapatti for about 30 seconds until bubbles appear, flip and cook for 30 seconds, then press gently with a folded cloth so it puffs.
4. Brush with butter or oil and stack in a cloth to keep soft.

HOT PAN AND STEAM

Hot dry pans: a pan hot enough to cook flatbread is hot enough to burn. Never leave it unattended, keep the handle turned in, and use a dry cloth to lift lids. Flatbreads puff with hot steam inside, so open them away from your face.

LEVEL 3 · POCKET

Pitta bread

1 hour 30 minutes (30 minutes of work) | 6 pittas | puffing a pocket in a very hot oven

Pitta puffs into a hollow pocket in a very hot oven because the steam inside can't escape through the crust. The skill is rolling evenly and baking on a really hot tray.

INGREDIENTS (6 PORTIONS)

250 g	strong white bread flour, plus extra for dusting
1 tsp	fast-action dried yeast (about 1 tsp)
½ tsp	salt
1 tsp	olive oil
150 ml	lukewarm water

1. Mix the flour, yeast and salt. Add the oil and water and mix to a soft dough. Knead for 8 minutes until smooth. Cover and leave for about **1 hour** until doubled.
2. Heat the oven to 240°C (220°C fan) with a baking tray on the middle shelf.
3. Divide the dough into 6 balls and roll each into an oval about 5 mm thick. Rest for 10 minutes under a cloth.
4. Slide the pittas onto the hot tray (use baking paper or a flat peel). Bake for **4 to 5 minutes**, until puffed and just starting to colour. They should stay pale.
5. Wrap in a clean tea towel straight away so they stay soft as they deflate.

> **VERY HOT OVEN**
>
> **Hot ovens, trays and steam:** use dry oven gloves, pull the shelf out rather than reaching in, and put hot trays and tins on a heatproof surface. If you put a tray of boiling water in the oven for steam, pour it carefully with the oven door open a little and your face well back: the steam is far hotter than the water.

Experiments

EXPERIMENT

Thickness

Thin, medium or thick.

1. Roll three yoghurt flatbreads to 1 mm, 3 mm and 8 mm. Cook all in the same pan for the same time.

Look for: The thin one dries out and cracks, the medium one is soft and flexible, and the thick one is doughy in the centre. Pick your favourite for wraps or dipping.

EXPERIMENT

Pan heat

Too cool or hot enough.

1. Cook one chapatti in a pan on a low heat and another in a pan on a medium-high heat.

Look for: The low-heat one dries out and stays flat and stiff. The hot one puffs and has golden spots.

EXPERIMENT

Resting

Rest or roll straight away.

1. Roll one ball of chapatti dough straight after kneading and another after a 30-minute rest.

Look for: The unrested dough springs back and is hard to roll thin; the rested dough rolls out easily and stays thin.

EXPERIMENT

Fat in the dough

With or without oil.

1. Make two small batches of chapatti dough, one with oil and one without.

Look for: The version with fat is softer and stays pliable for longer; the version without is drier and stiffens as it cools.

Tasting notes

WHAT I TRIED	METHOD OR AMOUNT	WHAT I SAW	WHAT I THOUGHT	WILL I DO IT AGAIN?
Yoghurt flatbreads				
Naan-style bread				
Chapatti-style breads				
Pitta bread				
Thickness				
Pan heat				
Resting				
Fat in the dough				

Troubleshooting

PROBLEM	LIKELY CAUSE	WHAT TO DO
Flatbreads dry and stiff	Pan too cool, or rolled too thin	Heat the pan more; roll a little thicker; stack in a cloth
Raw, doughy middle	Too thick or pan too hot	Roll thinner; lower the heat a little; cook longer

PROBLEM	LIKELY CAUSE	WHAT TO DO
Chapattis don't puff	Uneven rolling, or pan not hot enough	Roll evenly; use a hotter pan; press gently
Pitta doesn't make a pocket	Oven or tray not hot enough, or dough too thick	Preheat the tray; roll to about 5 mm
Dough springs back when rolling	Gluten tight	Rest for 10 to 30 minutes
Sticky dough	Too much water	Add flour a spoonful at a time; flour the surface

HOT PANS AND ALLERGENS

Raw flour: flour is a raw ingredient and can carry bacteria such as E. coli, which are killed only by baking or cooking. Don't taste raw dough, don't let children eat or play with it, and wash your hands, bowls and surfaces after handling flour and dough.

Hot dry pans: a pan hot enough to cook flatbread is hot enough to burn. Never leave it unattended, keep the handle turned in, and use a dry cloth to lift lids. Flatbreads puff with hot steam inside, so open them away from your face.

Hot ovens, trays and steam: use dry oven gloves, pull the shelf out rather than reaching in, and put hot trays and tins on a heatproof surface. If you put a tray of boiling water in the oven for steam, pour it carefully with the oven door open a little and your face well back: the steam is far hotter than the water.

Allergens: bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

CHECKPOINT: CAN YOU DO THIS NOW?

☐ I can cook flatbread in a dry hot pan.

☐ I can roll dough evenly to a chosen thickness.

☐ I can make a yeast-free dough and a yeast dough for flatbreads.

☐ I can puff a pitta in a very hot oven.

☐ I keep cooked flatbreads soft.

NEXT CHAPTER

Cooking Skills: Bread 1, chapter 5 is No-Knead and Overnight Breads: wet doughs, time instead of effort, and baking in a pot.

Cooking Skills: Bread 1

Chapter 5 · No-Knead and Overnight Breads

SKILL GOAL

Let time and water do the kneading, handle very wet doughs and bake in a pot or from the fridge.

Shopping list for this chapter

The basics

Kneading develops gluten by effort. **Time can do the same job:** if you mix a wet dough and leave it, the gluten forms by itself. These breads trade your effort for the yeast's time, and they have more flavour as a result.

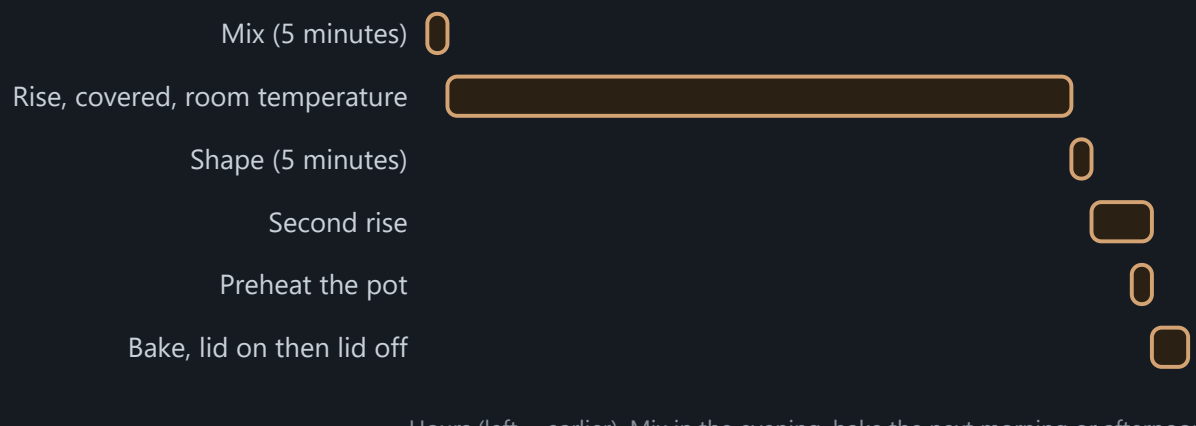


Figure 6. A no-knead day, in hours. Almost all of the time is waiting, which the yeast does for you.

Wet doughs

The more water in a dough, the more open and airy the crumb, and the stickier the dough. Hydration is the water as a percentage of the flour weight.

BREAD	HYDRATION	FEEL	CRUMB
Tin loaf	About 60 to 65%	Soft, easy to knead	Even and fine
No-knead pot loaf	75%	Wet and shaggy	Open, chewy
Focaccia	80%	Very wet, stretches in the tin	Open, soft, oily
Ciabatta-style	85%	Almost pourable	Large irregular holes

Handle a wet dough with **wet hands** (or oiled hands) and a **dough scraper**. Flour makes it sticky; water doesn't.

Stretch and fold

Instead of kneading, wet your hand, lift one side of the dough, stretch it up and fold it over the middle. Turn the bowl a quarter turn and repeat four times, then rest the dough for 30 minutes. Do this three or four times. It builds strength gently, without tearing the gluten.

Why overnight works

- **Little yeast, long time:** a tiny amount of yeast over 12 to 18 hours gives a deeper, slightly sour flavour than a lot of yeast over 1 hour.
- **The gluten builds itself:** water and time do the kneading.
- **The fridge is a pause button:** it lets you decide when to bake.

> DOUGH IN THE FRIDGE
>
> **Dough in the fridge:** bread dough is safe to prove overnight in the fridge: the cold slows the yeast. Cover it well so it doesn't dry out or pick up smells, and bake it within 16 hours or so for the best result. Don't taste raw dough.

Try it

LEVEL 1 · START HERE

No-knead pot loaf

20 minutes of work, 12 to 18 hours rising, 1 hour baking | 1 loaf (10 slices)

baking in a preheated lidded pot for a bakery crust

The no-knead dough from chapter 1 (Cooking Skills: Bread 1, chapter 1), baked in a very hot lidded pot. The pot traps the dough's own steam, which gives a thin, crackly, golden crust with no steam tray.

INGREDIENTS (10 PORTIONS)

400 g	strong white bread flour, plus extra for dusting
8 g	fine salt (about 1½ tsp)
¼ tsp	fast-action dried yeast
300 ml	cool water

1. Mix the flour, salt, yeast and water to a shaggy dough as in chapter 1 and leave covered for **12 to 18 hours**, until bubbly and more than doubled.
2. Tip the dough onto a floured surface, fold the edges into the middle and shape into a rough ball. Place it, seam side down, on a sheet of baking paper in a bowl. Cover and leave for about **1 hour 30 minutes**.
3. Half an hour before baking, put a lidded cast-iron pot (or ovenproof casserole) in the oven and heat it to **230°C (210°C fan)**.
4. Slash the top. Carefully lift the dough by the baking paper into the hot pot, put the lid on and bake for **30 minutes**.
5. Remove the lid and bake for another **10 to 15 minutes** until deep golden brown. Lift out and cool on a rack for at least 30 minutes.

VERY HOT POT

A pot at 230°C: a preheated cast-iron or ceramic lidded pot is dangerously hot, and the lid handle and the rim burn instantly. Use thick, dry oven gloves, lower the dough in on baking paper rather than dropping it, take the lid off away from your face (the steam is scalding), and leave the pot on a heatproof surface to cool. Check that your pot and its lid knob are oven-safe to 230°C (many plastic or wooden knobs are not).

> **Raw flour:** flour is a raw ingredient and can carry bacteria such as E. coli, which are killed only by baking or cooking. Don't taste raw dough, don't let children eat or play with it, and wash your hands, bowls and surfaces after handling flour and dough.

LEVEL 2 · WET DOUGH

Focaccia

3 hours (30 minutes of work) | 1 tray (12 pieces) | handling a very wet dough with stretch and fold

Focaccia is a flat, dimpled, olive-oil bread. It uses a wet dough (80% hydration) that is too sticky to knead, so you stretch and fold it instead.

INGREDIENTS (12 PORTIONS)

500 g	strong white bread flour
1 sachet (7 g)	sachet fast-action dried yeast
10 g	fine salt
400 ml	lukewarm water
5 tbsp	olive oil, divided
1 tsp	flaky sea salt
2 sprigs	rosemary, leaves picked

1. Mix the flour, yeast, salt and water with 1 tbsp of the oil in a large bowl until no dry flour is left. Cover and rest for 30 minutes.
2. With wet hands, **stretch and fold**: pull one side of the dough up and fold it over to the middle, turn the bowl a quarter and repeat four times. Rest for 30 minutes and repeat the folds twice more.
3. Pour 2 tbsp of oil into a 30 x 20 cm tin. Tip the dough in, turn to coat, and stretch gently to the corners (if it springs back, rest for 10 minutes). Cover and leave for **45 minutes**.
4. Heat the oven to 220°C (200°C fan). Drizzle with the remaining oil, dimple deeply all over with oiled fingertips, and scatter with salt and rosemary.
5. Bake for **20 to 25 minutes**, until golden. Slide out of the tin onto a rack. Eat warm the same day.

ALLERGENS

> **Allergens:** bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

LEVEL 2 · FRIDGE

Overnight rolls

30 minutes the evening before, 25 minutes in the morning | 8 rolls

proving in the fridge and baking straight from cold

Shape the rolls at night and bake them for breakfast. The fridge slows the yeast so nothing over-proves while you sleep.

INGREDIENTS (8 PORTIONS)

500 g	strong white bread flour, plus extra for dusting
1 tsp	fast-action dried yeast (about 1 tsp)
10 g	fine salt
330 ml	cold water
1 tbsp	oil, for the tray

1. Mix the flour, yeast, salt and cold water and knead for 5 minutes (or stretch and fold). Divide into 8 pieces and shape into tight balls.
2. Place on an oiled tray, leaving 3 cm between them. Cover the whole tray loosely but completely (oiled cling film, a large upturned tray or a clean shower cap) and put in the fridge for **8 to 16 hours**.
3. In the morning, heat the oven to 220°C (200°C fan). Leave the rolls out for 20 to 30 minutes while it heats up.
4. Dust with flour, slash if you like, and bake for **18 to 22 minutes**, until golden and hollow underneath. Cool for 10 minutes and eat warm.

> FRIDGE DOUGH
>
> **Dough in the fridge:** bread dough is safe to prove overnight in the fridge: the cold slows the yeast. Cover it well so it doesn't dry out or pick up smells, and bake it within 16 hours or so for the best result. Don't taste raw dough.

LEVEL 3 · VERY WET

Ciabatta-style loaves

4 hours (30 minutes of work) | 2 loaves | handling a very wet dough with flour and confidence

Ciabatta (Italian for slipper) has a wet dough (85% hydration), an open, holey crumb and a floury crust. The dough is almost pourable: use plenty of flour on the surface and a light touch.

INGREDIENTS (2 PORTIONS)

400 g	strong white bread flour, plus lots of flour for dusting
8 g	fine salt
½ tsp	fast-action dried yeast
340 ml	lukewarm water
1 tbsp	olive oil

1. Mix everything in a large bowl until no dry flour is left. Cover and rest for 30 minutes.
2. With wet hands, stretch and fold the dough 4 times, then rest for 30 minutes. Repeat 3 more times, until the dough is smooth and bubbly. Cover and leave for another 30 to 60 minutes.
3. Flour the surface generously. Tip the dough out gently without knocking out the bubbles and stretch into a rectangle. Cut in half and lay each half, floured, on a floured cloth or baking paper. Rest for 30 minutes.
4. Heat the oven to 230°C (210°C fan) with a tray and a roasting tin of water. Slide the loaves onto the hot tray, add the boiling water to the tin and bake for **20 to 25 minutes**, until golden. Cool on a rack.

> **STEAM**
>
> **Hot ovens, trays and steam:** use dry oven gloves, pull the shelf out rather than reaching in, and put hot trays and tins on a heatproof surface. If you put a tray of boiling water in the oven for steam, pour it carefully with the oven door open a little and your face well back: the steam is far hotter than the water.

Experiments

EXPERIMENT

Rise time

Short or long.

1. Make the no-knead dough. Bake half after 6 hours' rise (with a little extra yeast) and the rest after 16 hours.

Look for: The long-risen loaf has a stronger flavour, a more open crumb and a crisper crust; the short one is blander and denser.

EXPERIMENT

Hydration

Drier or wetter.

1. Make two small batches of the no-knead dough: one with 65% water (260 ml for 400 g flour) and one with 80% (320 ml). Bake the same way.

Look for: The wetter loaf has bigger holes and a softer crumb but spreads more; the drier loaf is tighter and easier to shape.

EXPERIMENT

Pot or tray

The crust effect.

1. Bake one no-knead loaf in the lidded pot and one on a hot tray with a steam tin.

Look for: The pot loaf has a thinner, glossier, crisper crust with more rise. The tray loaf is flatter with a thicker crust.

EXPERIMENT

Fridge or room

Where to prove overnight.

1. Prove overnight rolls: half in the fridge and half at cool room temperature (about 18 to 20°C), both covered. Bake in the morning.

Look for: The room-temperature rolls over-prove and sag, while the fridge rolls hold their shape and bake high.

Tasting notes

WHAT I TRIED	METHOD OR AMOUNT	WHAT I SAW	WHAT I THOUGHT	WILL I DO IT AGAIN?
No-knead pot loaf				
Focaccia				
Overnight rolls				
Ciabatta-style loaves				
Rise time				
Hydration				
Pot or tray				
Fridge or room				

Troubleshooting

PROBLEM	LIKELY CAUSE	WHAT TO DO
Dough too sticky to handle	That is normal for wet dough	Wet or oil your hands; use a scraper; don't add lots of flour
Loaf spreads out flat	Too wet, or over-proved	Use a pot or tin; shorten the rise a little

PROBLEM	LIKELY CAUSE	WHAT TO DO
Dense, gummy crumb	Under-risen or cut too soon	Wait for bubbles and a doubled dough; cool for 30 minutes
Focaccia is tough	Too much flour, or over-baked	Keep the dough wet; bake until just golden
Pot loaf burnt on the base	Pot too hot or too thin	Put a tray beneath the pot; check the oven temperature
Rolls over-proved in the morning	Fridge not cold, or too long	Check the fridge is about 5°C; bake within 16 hours

HEAT AND FLOUR

A pot at 230°C: a preheated cast-iron or ceramic lidded pot is dangerously hot, and the lid handle and the rim burn instantly. Use thick, dry oven gloves, lower the dough in on baking paper rather than dropping it, take the lid off away from your face (the steam is scalding), and leave the pot on a heatproof surface to cool. Check that your pot and its lid knob are oven-safe to 230°C (many plastic or wooden knobs are not).

Raw flour: flour is a raw ingredient and can carry bacteria such as E. coli, which are killed only by baking or cooking. Don't taste raw dough, don't let children eat or play with it, and wash your hands, bowls and surfaces after handling flour and dough.

Allergens: bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

CHECKPOINT: CAN YOU DO THIS NOW?

- ☐ I can mix a no-knead dough and bake it in a lidded pot safely.
- ☐ I can handle a very wet dough with wet hands and a scraper.
- ☐ I can do stretch and fold.
- ☐ I can prove dough overnight in the fridge and bake from cold.
- ☐ I know how hydration changes the crumb.

NEXT CHAPTER

Cooking Skills: Bread 1, chapter 6 is Rolls, Buns and Savoury Loaves: dividing evenly and adding cheese, herbs, seeds and olives.

Cooking Skills: Bread 1

Chapter 6 · Rolls, Buns and Savoury Loaves

SKILL GOAL

Divide dough evenly, glaze for the crust you want and add fillings without spoiling the rise.

Shopping list for this chapter

The basics

Once you can make a good dough, you can turn it into almost anything: **rolls, buns and loaves filled with cheese, herbs, seeds or olives.** The skills are dividing evenly, adding extras without spoiling the dough, and glazing for a good crust.



Figure 7. Bigger rolls need longer in the oven, so bake rolls of the same size together.

Dividing and shaping

- **Weigh the whole dough,** divide by the number of rolls and weigh each piece.
- **Shape into tight balls:** cup your hand over the dough on an unfloured surface and move it in small circles until smooth and taut.
- **Space them out:** about 3 cm apart for crusty rolls, or touching for soft pull-apart rolls.
- **Bake the same size together,** because small rolls bake faster than large ones.

Glazes

GLAZE	RESULT
None, dusted with flour	Rustic, matt, floury crust
Water	Crisp, light crust (good for seeds to stick)
Milk	Soft, lightly golden crust
Beaten egg (Lion-marked)	Deep golden, glossy crust
Egg with a little milk	Golden and glossy, less rich
Melted butter after baking	Soft, shiny, buttery crust

Adding flavours

- **Dry additions** (herbs, spices, grated cheese): knead them in late, so they don't tear the gluten.
- **Seeds and grains:** soak most of them first so they don't dry out the dough.
- **Wet additions** (onion, olives, tomatoes): dry them well, and cool anything cooked.
- **Sugar and fat:** a little makes bread softer. A lot slows the yeast, so enriched doughs rise more slowly.

FILLINGS AND KEEPING

Cool the fillings: any cooked ingredient (such as softened onion) must be fully cold before it goes into the dough, because heat kills the yeast and can start the dough cooking.

Keeping bread with cheese or egg: bread with cheese, or glazed with egg, is best eaten within about 2 days; keep it covered, and in the fridge if the room is warm. Throw it away if it grows mould.

Try it

LEVEL 1 · START HERE

Soft rolls

2 hours 30 minutes (30 minutes of work) | 10 rolls (about 80 g each)

making a soft, enriched dough and shaping even rolls

Milk, butter and sugar make a softer crumb and a golden crust. Weigh the dough and divide it evenly.

INGREDIENTS (10 PORTIONS)

500 g	strong white bread flour
1 sachet (7 g)	sachet fast-action dried yeast
10 g	fine salt
2 tbsp	caster sugar
50 g	butter, softened
300 ml	lukewarm milk
1	egg, beaten, for glazing

1. Mix the flour, yeast, salt and sugar. Rub in the butter, then add the milk and mix to a soft dough. Knead for 8 to 10 minutes until smooth and elastic.
2. Cover and prove for about **1 hour** until doubled.
3. Weigh the dough and divide into 10 equal pieces. Shape each into a tight ball and place on a lined tray, 3 cm apart. Cover and prove for 30 to 40 minutes.
4. Heat the oven to 200°C (180°C fan). Brush the rolls with beaten egg.
5. Bake for **15 to 18 minutes**, until deep golden and hollow underneath. Cool on a rack.

> **EGG GLAZE AND ALLERGENS**
>
> **Egg glaze:** use eggs with the British Lion mark and wash your hands after handling raw egg; the glaze is baked fully. **Allergens:** bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

LEVEL 2 · SAVOURY

Cheese and herb loaf

2 hours 30 minutes (30 minutes of work) | 1 loaf (12 slices)

adding a filling to the dough without spoiling the rise

Cheese and herbs make a lovely loaf for soup. Fold most of the cheese in near the end of kneading, and keep a little for the top.

INGREDIENTS (12 PORTIONS)

500 g	strong white bread flour
1 sachet (7 g)	sachet fast-action dried yeast
10 g	fine salt
1 tsp	English mustard powder
320 ml	lukewarm water
150 g	mature cheddar, grated, divided
2 tbsp	chopped chives or parsley

1. Mix the flour, yeast, salt and mustard powder. Add the water and knead for 8 minutes until smooth.
2. Flatten the dough, scatter on 100 g of the cheese and the herbs, fold it up and knead for 1 minute to spread them through.
3. Prove in an oiled bowl for about 1 hour, until doubled.
4. Shape into a loaf and place in an oiled 900 g tin, or shape into a round on a tray. Cover and prove for 30 to 45 minutes. Scatter the rest of the cheese on top.
5. Bake at 210°C (190°C fan) for **30 to 35 minutes**, covering with foil if the cheese is browning too fast. It should sound hollow underneath. Cool on a rack.

MILK AND KEEPING

Allergens: bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course. The cheese adds milk.

Keeping bread with cheese or egg: bread with cheese, or glazed with egg, is best eaten within

> about 2 days; keep it covered, and in the fridge if the room is warm. Throw it away if it grows mould.

LEVEL 2 · SEEDS

Seeded rolls

2 hours 30 minutes (30 minutes of work) | 8 rolls | adding soaked seeds to a dough

Dry seeds steal water from the dough. Soak most of them first and the rolls stay moist.

INGREDIENTS (8 PORTIONS)

250 g	strong white bread flour
250 g	strong wholemeal bread flour
1 sachet (7 g)	sachet fast-action dried yeast
10 g	fine salt
60 g	mixed seeds (sunflower, pumpkin, linseed, sesame), plus extra for topping
60 ml	boiling water for soaking the seeds
340 ml	lukewarm water
1 tbsp	honey

1. Cover the seeds with the boiling water and leave to cool (about 30 minutes).
2. Mix both flours with the yeast and salt. Add the lukewarm water, honey and the cooled soaked seeds (with any water that is left). Knead for 8 to 10 minutes.
3. Prove for about 1 hour 15 minutes. Divide into 8 pieces and shape into balls.
4. Brush with water and dip the tops into extra seeds. Place on a tray, cover and prove for 30 to 40 minutes.
5. Bake at 210°C (190°C fan) for **18 to 22 minutes**, until golden and hollow underneath.

> **SEED ALLERGENS**
>
> **Allergens:** bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course. Seeds, especially sesame, are a common allergen. Label them clearly if you share the rolls.

LEVEL 3 · FILLINGS

Olive and onion loaf

3 hours (40 minutes of work) | 1 loaf (12 slices) | adding moist fillings without making the dough slack

Olives and onion are wet, so the dough is stickier. Pat the olives dry, cool the onion completely and fold both in at the end.

INGREDIENTS (12 PORTIONS)

500 g	strong white bread flour
1 sachet (7 g)	sachet fast-action dried yeast
8 g	fine salt (olives are salty)
320 ml	lukewarm water
1	onion, finely chopped, softened in oil and fully cooled
100 g	pitted olives, chopped
1 tbsp	olive oil
1 tsp	dried oregano or thyme

1. Soften the onion gently in a little oil for 10 minutes until sweet. Cool completely. Pat the olives dry on kitchen paper.
2. Mix the flour, yeast, salt, herbs, water and oil and knead for 8 minutes until smooth.
3. Press the dough flat, scatter on the onion and olives, fold and knead lightly for 1 minute to spread them. Prove for about 1 hour.
4. Shape into a round or oval and place on a lined tray. Cover and prove for 40 minutes.
5. Slash the top and bake at 220°C (200°C fan) for **30 to 35 minutes**, until golden and hollow underneath. Cool on a rack.

HOT ONION AND KEEPING

Cool the fillings: any cooked ingredient (such as softened onion) must be fully cold before it goes into the dough, because heat kills the yeast and can start the dough cooking.

Allergens: bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and

> other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

Experiments

EXPERIMENT

Dough weight

Small, medium or large.

1. From one batch of soft roll dough, make rolls of 40 g, 60 g and 100 g. Bake them together and check each at the times in Figure 7.

Look for: The small ones are done first and the large ones need longer, and may be pale outside and raw inside if you take them out together.

EXPERIMENT

Glaze

Egg, milk, water or nothing.

1. Shape four identical rolls and brush each with a different glaze.

Look for: Egg gives the deepest, glossiest colour; milk gives soft golden; water is crisp; the unglazed roll is pale and matt.

EXPERIMENT

Early or late

When to add the cheese.

1. Make two small cheese doughs: knead the cheese in at the start in one and fold it in at the end in the other.

Look for: Early kneading breaks the cheese up and can make a slacker dough with streaks. Late folding keeps nice pockets of cheese.

EXPERIMENT

Tray spacing

Touching or apart.

1. Bake two trays of rolls: one with rolls 4 cm apart and one with rolls touching.

Look for: The spaced rolls get all-round crust and brown evenly. The touching rolls pull apart soft and pale on the sides.

Tasting notes

WHAT I TRIED	METHOD OR AMOUNT	WHAT I SAW	WHAT I THOUGHT	WILL I DO IT AGAIN?
Soft rolls				
Cheese and herb loaf				
Seeded rolls				
Olive and onion loaf				
Dough weight				
Glaze				
Early or late				
Tray spacing				

Troubleshooting

PROBLEM	LIKELY CAUSE	WHAT TO DO
Dry, tough rolls	Over-baked, or too much flour	Check at the shortest time; use a tacky dough
Filling leaks and burns	Added too much, or on the surface	Fold fillings in; keep cheese on top covered with foil if it browns too much
Dough won't rise with fillings	Salty, wet or hot additions slowed the yeast	Cool, dry and drain the fillings; prove longer

PROBLEM	LIKELY CAUSE	WHAT TO DO
Rolls different sizes	Divided by eye	Weigh each piece
Seeds dry and fall off	Not soaked or no glaze	Soak the seeds; brush with water to stick
Pale, matt crust	No glaze	Brush with milk, egg or water

ALLERGENS, EGGS AND KEEPING

Allergens: bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

Keeping bread with cheese or egg: bread with cheese, or glazed with egg, is best eaten within about 2 days; keep it covered, and in the fridge if the room is warm. Throw it away if it grows mould.

Raw flour: flour is a raw ingredient and can carry bacteria such as E. coli, which are killed only by baking or cooking. Don't taste raw dough, don't let children eat or play with it, and wash your hands, bowls and surfaces after handling flour and dough.

CHECKPOINT: CAN YOU DO THIS NOW?

- ☐ I can divide dough evenly by weight and shape rolls.
- ☐ I know which glaze gives which crust.
- ☐ I can add cheese, seeds, olives or onion without spoiling the dough.
- ☐ I bake rolls of the same size together.
- ☐ I label allergens when I share bread.

NEXT CHAPTER

Cooking Skills: Bread 1, chapter 7 is Using Up Bread: storing, freezing, refreshing and cooking with stale bread.

Cooking Skills: Bread 1

Chapter 7 · Using Up Bread

SKILL GOAL

Store and freeze bread so it doesn't go to waste, and cook with the stale end.

Shopping list for this chapter

The basics

Homemade bread goes stale faster than shop-bought, because it has no preservatives. The answer isn't to avoid baking: it is to **plan for the second day**, whether that means freezing slices, refreshing a loaf or cooking with stale bread.

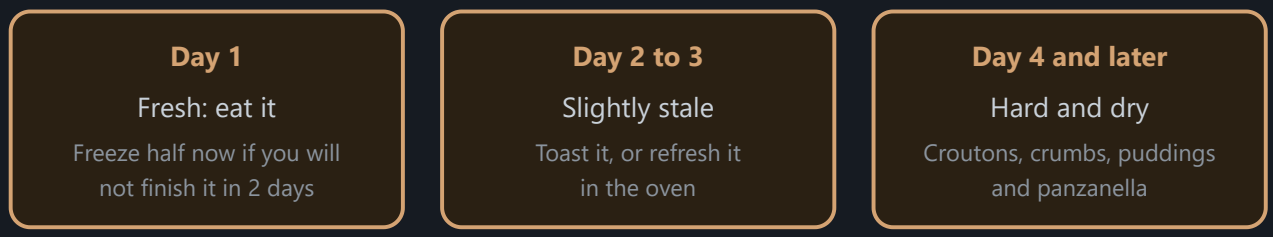


Figure 8. Bread has a use at every age. Plan for the old loaf when you bake the new one.

Why bread goes stale

Staling isn't just drying out. As bread cools and ages, the starch in the crumb slowly re-crystallises and squeezes out water, making it firm and crumbly. **The fridge makes bread go stale faster** (it is the temperature at which this happens most quickly), and **the freezer stops it.**

Storing bread

BREAD	BEST STORAGE	NOTES
Crusty loaves	Paper bag or bread bin, cut side down	Keeps the crust crisp; best the same day or next
Soft, enriched breads and rolls	Bread bin or plastic bag	Stays soft but can go mouldy sooner
Any bread you won't finish in 2 days	Sliced and frozen	Toast from frozen
Not recommended	The fridge	It speeds staling, except in hot weather or with a filling that needs it

FREEZING BREAD

Freezing bread: slice it first, put it in a freezer bag with the air pressed out, and label it. Toast slices straight from frozen, and defrost loaves and rolls at room temperature in their bag, or warm them in the oven. Use within about 3 months for the best taste.

Refreshing a stale loaf

A loaf that is dry but not mouldy can often be revived: run it quickly under the tap (or sprinkle it with water) to dampen the crust, then bake it at **180°C (160°C fan) for 10 minutes**. It will be crisp outside and soft within, but only for a few hours: eat it the same day.

MOULD

Mould: if bread has mould on it, throw the whole loaf away: the spores spread through the soft crumb where you can't see them. Don't sniff it. Keep bread in a bread bin or freeze slices to avoid waste.

Try it

LEVEL 1 · START HERE

Croutons

20 minutes | 4 portions | turning stale bread into crunchy croutons

Croutons are the easiest way to use up bread. Stale bread crisps better than fresh because it is already dry.

INGREDIENTS (4 PORTIONS)

4 slices	stale bread (about 200 g), cut into 2 cm cubes
3 tbsp	olive oil
1 pinch	salt
1 tsp	dried herbs or garlic powder (optional)

1. Heat the oven to 180°C (160°C fan).
2. Toss the bread cubes with the oil, salt and herbs on a baking tray, spread in one layer.
3. Bake for **12 to 15 minutes**, turning once, until golden and crisp all the way through.
4. Cool completely on the tray, then keep in an airtight tin for a few days.

> HOT TRAY
>
> **Hot ovens, trays and steam:** use dry oven gloves, pull the shelf out rather than reaching in, and put hot trays and tins on a heatproof surface. If you put a tray of boiling water in the oven for steam, pour it carefully with the oven door open a little and your face well back: the steam is far hotter than the water.

LEVEL 1 · STORE CUPBOARD

Breadcrumbs, fresh and dried

20 minutes | about 8 portions | making and storing two kinds of crumbs

Breadcrumbs freeze well and are useful for coatings, stuffings and toppings.

INGREDIENTS (8 PORTIONS)

1 loaf loaf of stale bread (about 400 g), crusts on

1. **Fresh crumbs:** tear the stale bread into pieces and blitz in a food processor to coarse crumbs. Freeze in a bag; use straight from frozen.
2. **Dried crumbs:** spread fresh crumbs on a tray and bake at 150°C (130°C fan) for 15 to 20 minutes, stirring every 5 minutes, until dry and pale golden. Cool completely.
3. Store dried crumbs in an airtight jar for up to a few weeks.

> **FOOD PROCESSOR**
>
> **Food processor:** unplug it before you handle the blade, and keep fingers away from it.

LEVEL 2 · PUDDING

Bread and butter pudding

1 hour 15 minutes (20 minutes of work, 20 minutes' soak) | 6 portions | making a baked custard with bread

A classic: buttered bread layered with sultanas and soaked in a custard that sets as it bakes. Older bread soaks up more custard and holds its shape better.

INGREDIENTS (6 PORTIONS)

6 slices	stale white bread, buttered, cut in triangles
50 g	butter, softened
50 g	sultanas
300 ml	milk
150 ml	double cream
3	Lion-marked eggs
50 g	caster sugar, plus 1 tbsp for the top
1 tsp	vanilla extract
1 pinch	grated nutmeg or cinnamon

1. Butter the bread slices and lay them, overlapping, in a buttered 1.5 litre ovenproof dish, scattering the sultanas between the layers.
2. Heat the milk and cream until steaming (not boiling). Whisk the eggs, 50 g sugar and vanilla in a bowl, then pour the hot milk over them slowly, whisking.
3. Pour the custard over the bread, pressing down gently. Leave to soak for **20 minutes**.
4. Heat the oven to 180°C (160°C fan). Sprinkle with the extra sugar and nutmeg. Stand the dish in a roasting tin of just-boiled water.
5. Bake for **35 to 40 minutes**, until golden and the custard is set with only a slight wobble in the middle and no liquid egg. Serve warm.

> **EGGS, HEAT AND ALLERGENS**
>
> **Egg puddings:** use eggs with the British Lion mark and bake a custard pudding until the custard is set all the way through with no liquid egg. Cool leftovers within 1 to 2 hours, keep them covered in the fridge, eat within 2 days and reheat until steaming hot, only once.

Hot ovens, trays and steam: use dry oven gloves, pull the shelf out rather than reaching in, and put hot trays and tins on a heatproof surface. If you put a tray of boiling water in the oven for steam, pour it carefully with the oven door open a little and your face well back: the steam is far hotter than the water.

Allergens: this contains wheat, egg, milk and (in the butter and cream) more milk.

LEVEL 2 · SALAD

Panzanella

25 minutes, plus 30 minutes' standing | 4 portions | using stale bread to soak up a dressing

A Tuscan bread and tomato salad. The stale bread soaks up the tomato juice and dressing. Use really ripe tomatoes.

INGREDIENTS (4 PORTIONS)

300 g	stale bread (ciabatta or crusty white), torn into chunks
500 g	ripe tomatoes, chopped
½	cucumber, chopped
½	small red onion, thinly sliced
1 handful	basil leaves, torn
4 tbsp	extra-virgin olive oil
2 tbsp	red wine vinegar
1 pinch	salt and black pepper

1. Put the chopped tomatoes in a large bowl with a pinch of salt and leave for 10 minutes so they release their juice.
2. Add the bread, cucumber, onion and basil. Whisk the oil, vinegar and pepper together and pour over.
3. Toss gently and leave for **20 to 30 minutes**, so the bread softens and soaks up the juices.
4. Taste for salt and vinegar, and serve the same day.

> FRESH VEGETABLES
>
> **Salads with raw vegetables:** wash tomatoes, cucumber and herbs, and eat a panzanella within about a day, kept in the fridge: the bread soaks up the juices and the salad gets soggy rather than unsafe, but raw prepared vegetables shouldn't stand out for hours.

Experiments

EXPERIMENT

Freezer, fridge or bread bin

Keeping a loaf.

1. Cut a white loaf in three. Store one piece in the bread bin, one in the fridge and one sliced in the freezer. After 3 days, toast a slice from each.

Look for: The fridge slice is the driest and the freezer slice the freshest. The bread bin slice is in between. This is the staling effect in action.

EXPERIMENT

Refreshing

Stale loaf revival.

1. Dampen the crust of a 3-day-old loaf, bake it at 180°C (160°C fan) for 10 minutes and taste. Compare it with an untouched piece.

Look for: The refreshed loaf has a crisp crust and softer crumb. Leave it for a few hours and it goes stale again.

EXPERIMENT

Crumb size

Fine or coarse crumbs.

1. Fry a piece of fish or an egg-coated slice of vegetable in fine breadcrumbs and in coarse breadcrumbs. Compare crunch and colour.

Look for: Coarse crumbs give a chunky crunch and take longer to colour. Fine crumbs give a finer, more even coating.

EXPERIMENT

Fresh or stale for pudding

Which bread soaks best.

1. Soak a slice of fresh bread and a slice of 3-day-old bread in the same amount of custard for 10 minutes.

Look for: Fresh bread goes mushy and falls apart. Stale bread soaks up the custard and holds its shape.

Tasting notes

WHAT I TRIED	METHOD OR AMOUNT	WHAT I SAW	WHAT I THOUGHT	WILL I DO IT AGAIN?
Croutons				
Breadcrumbs				
Bread and butter pudding				
Panzanella				
Freezer, fridge or bin				
Refreshing				
Crumb size				
Fresh or stale				

Troubleshooting

PROBLEM	LIKELY CAUSE	WHAT TO DO
Croutons chewy or burnt	Uneven cubes or too hot	Cut evenly; bake at 180°C (160°C fan) and turn
Breadcrumbs go soft or mouldy	Not fully dried or stored damp	Dry thoroughly; store in an airtight jar; freeze fresh crumbs

PROBLEM	LIKELY CAUSE	WHAT TO DO
Pudding soggy and wet	Bread too fresh or under-baked	Use stale bread; bake until just set
Pudding split or scrambled	Custard too hot or over-baked	Cool the milk slightly; use a water bath
Panzanella soggy	Too much dressing or left too long	Use less dressing; serve within an hour or so
Frozen bread freezer-burnt	Poor wrapping	Press the air out; use within 3 months

EGGS, HEAT AND LEFTOVERS

Egg puddings: use eggs with the British Lion mark and bake a custard pudding until the custard is set all the way through with no liquid egg. Cool leftovers within 1 to 2 hours, keep them covered in the fridge, eat within 2 days and reheat until steaming hot, only once.

Salads with raw vegetables: wash tomatoes, cucumber and herbs, and eat a panzanella within about a day, kept in the fridge: the bread soaks up the juices and the salad gets soggy rather than unsafe, but raw prepared vegetables shouldn't stand out for hours.

Hot ovens, trays and steam: use dry oven gloves, pull the shelf out rather than reaching in, and put hot trays and tins on a heatproof surface. If you put a tray of boiling water in the oven for steam, pour it carefully with the oven door open a little and your face well back: the steam is far hotter than the water.

Allergens: bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

CHECKPOINT: CAN YOU DO THIS NOW?

☐ I know how to store bread and why not to use the fridge.

☐ I can slice and freeze bread, and toast from frozen.

☐ I can make croutons and breadcrumbs.

☐ I can make a baked custard pudding and a panzanella.

☐ I throw away mouldy bread whole.

NEXT CHAPTER

Cooking Skills: Bread 1, chapter 8 is A Baker's Day: planning a bake day, fixing faults and writing your own loaf.

Cooking Skills: Bread 1

Chapter 8 · A Baker's Day

SKILL GOAL

Run a bake day, read a loaf to find what went wrong, and write your own recipe.

Shopping list for this chapter

The basics

Over seven chapters you have learned what bread is, how to knead and prove, how to shape and bake, flatbreads, wet doughs and overnight bread, fillings and glazes, and using bread up. Now put it together: **plan a bake day, diagnose a failure and write your own loaf.**

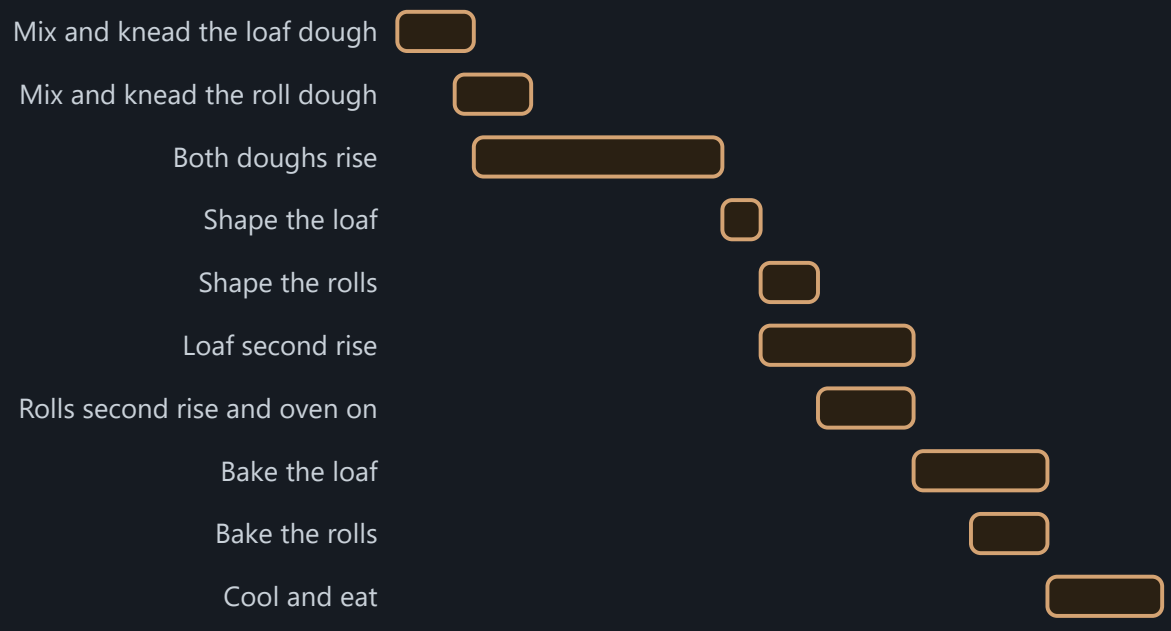


Figure 9. A bake-day plan for a loaf and eight rolls. The two doughs overlap so the oven is used efficiently.

Planning a bake day

- **Work backwards** from when you want to eat.
- **Start the slowest dough first.**
- **Overlap the rises:** knead one dough while another rises.
- **Make a plan on paper** and tick off each step.
- **Preheat in time:** the oven needs 20 to 30 minutes, and a pot or tray longer.
- **Plan for leftovers:** freeze what you won't eat in 2 days.

Your skills table

SKILL	CHAPTER	BEST FOR	MY TOP TIP
Ingredients and weighing	Bread 1, chapter 1	Every loaf	Weigh flour and water
Kneading and proving	Bread 1, chapter 2	Yeast loaves	Windowpane test and the poke test
Shaping and baking	Bread 1, chapter 3	Loaves, sticks, plaits, rolls	Shape tight; score; steam; tap the base
Flatbreads	Bread 1, chapter 4	Quick breads, wraps and dipping	Very hot pan, even rolling, keep soft
No-knead and overnight	Bread 1, chapter 5	Little effort, big flavour	Wet hands, time and a hot pot
Rolls, buns and fillings	Bread 1, chapter 6	Parties, lunches and soup	Weigh pieces; fold fillings in late
Using up bread	Bread 1, chapter 7	Reducing waste	Freeze slices; don't use the fridge

Fill in your own tips below.

WHAT I TRIED	METHOD OR AMOUNT	WHAT I SAW	WHAT I THOUGHT	WILL I DO IT AGAIN?
My easiest loaf				
My best crust				
My best crumb				

WHAT I TRIED	METHOD OR AMOUNT	WHAT I SAW	WHAT I THOUGHT	WILL I DO IT AGAIN?
My favourite flatbread				
My best roll				
My best way to use stale bread				

Try it

LEVEL 1 · START HERE

A bake-day plan: a loaf and eight rolls

About 3 hours 20 minutes | 1 loaf and 8 rolls | running two doughs at once

A bake day is mostly about order. Start the slow dough first, overlap the rising times and keep the oven busy. Write the plan down and tick it off.

INGREDIENTS (12 PORTIONS)

1 batch	white tin loaf dough (Cooking Skills: Bread 1, chapter 1): 500 g flour, 7 g yeast, 10 g salt, 320 ml water, 1 tbsp oil
1 batch	soft roll dough (Cooking Skills: Bread 1, chapter 6), scaled to 8 rolls
1	egg for glazing
1 tbsp	extra flour for dusting

1. **0:00** Mix and knead the loaf dough (20 minutes). Put it to prove.
2. **0:15** Mix and knead the roll dough (20 minutes). Put it to prove. Both doughs now rise for about an hour.
3. **1:25** Shape the loaf into its tin. Then **1:35** shape the rolls onto a tray. Let both prove for 30 to 40 minutes.
4. **1:50** Heat the oven to 220°C (200°C fan). Glaze the rolls.
5. **2:15** Bake the loaf for about 35 minutes. Add the rolls at **2:30** (they bake in 15 to 18 minutes at the same temperature; keep an eye on them).
6. **2:50** Cool on racks for 30 minutes before slicing.

FLOUR, HEAT AND ALLERGENS

Raw flour: flour is a raw ingredient and can carry bacteria such as E. coli, which are killed only by baking or cooking. Don't taste raw dough, don't let children eat or play with it, and wash your hands, bowls and surfaces after handling flour and dough.

Hot ovens, trays and steam: use dry oven gloves, pull the shelf out rather than reaching in, and put hot trays and tins on a heatproof surface. If you put a tray of boiling water in the oven for steam, pour it carefully with the oven door open a little and your face well back: the steam is far hotter than the water.

Allergens: bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and

other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

LEVEL 2 · DIAGNOSE

A fault-finding clinic

1 hour | no portions (a learning exercise) | reading a loaf to find out what went wrong

Every baker produces bad loaves. The skill is working out why. Take a loaf that didn't work and use the questions below.

INGREDIENTS (1 PORTION)

3	loaves or batches from earlier chapters that went wrong (or deliberately make them wrong)
1	notebook and pen

1. **Look at the outside:** pale crust (cool oven, no steam, too little time), burnt base (tray too low), burst side (under-proved or not scored), flat spread loaf (over-proved or too wet).
2. **Cut it open:** dense, heavy crumb (under-proved, too little yeast or too little water), big holes under the crust (not knocked back or shaped tightly), gummy streaks (cut too soon or under-baked), crumbly (too much flour or over-baked).
3. **Taste it:** bland (not enough salt, or too fast a rise), too salty (salt measured wrongly), yeasty or boozy smell (over-proved), sour (a long rise, which may be what you want).
4. **Check the notes:** what did you weigh, how long was the rise, how hot was the oven? Change one thing and bake it again.

ONE CHANGE AT A TIME

If you change flour, water, rising time and oven temperature at once, you won't know which one worked. Change one thing, write it down and compare.

LEVEL 3 · CREATE

Your signature loaf

3 hours | 1 loaf | designing and writing your own recipe

Now write your own. Choose a flour mix, a hydration, a rise (same day or overnight), a shape and one flavour, then bake it and write it up.

INGREDIENTS (12 PORTIONS)

500 g	your choice of flours: strong white, wholemeal, or both, plus up to 100 g of rye or spelt
1 sachet (7 g)	sachet fast-action dried yeast
10 g	fine salt
340 ml	lukewarm water (adjust by feel)
1	up to 100 g of an extra: cheese, seeds, olives, nuts, dried fruit or herbs

1. **Choose the flour:** all white for lightness, half wholemeal for flavour, with 100 g of rye or spelt for character. Wholemeal, rye and spelt absorb more water, so add about 20 ml per 100 g swapped.
2. **Choose the rise:** same day (1 hour plus 45 minutes) or overnight in the fridge (8 to 16 hours).
3. **Choose the shape and bake:** tin, cob, plait or rolls, using the times in Cooking Skills: Bread 1, chapter 3.
4. **Add one flavour:** cheese, seeds, olives or herbs, folded in late (see chapter 6).
5. **Write it up:** ingredients by weight, the method, the time and temperature, and what you would change. That is your first original recipe.

> **ALLERGENS AND SHARING**
>
> **Allergens:** bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

Experiments

EXPERIMENT

A timed bake day

One day, two breads.

1. Write a plan for a loaf and one other bread (a flatbread or focaccia) and bake both. Note the time each step actually took.

Look for: Compare your plan with what happened. The usual mistakes are starting the second dough too late and forgetting to preheat. Fix the plan and keep it.

EXPERIMENT

Swap one flour

One change.

1. Bake your white loaf recipe twice: once as written and once with 100 g of the flour swapped for wholemeal, rye or spelt (and about 20 ml more water).

Look for: The swapped loaf is darker, denser and nuttier. Note which you prefer and how the dough felt.

EXPERIMENT

Your own recipe

Write it, bake it, improve it.

1. Bake your signature loaf. Change one thing the second time (more water, a longer rise, a different shape) and compare.

Look for: Write down the difference. This is how every baker builds a recipe.

Tasting notes

WHAT I TRIED	METHOD OR AMOUNT	WHAT I SAW	WHAT I THOUGHT	WILL I DO IT AGAIN?
Bake-day plan				
Fault-finding clinic				
Signature loaf				
Timed bake day				
Swapped flour				
Second version of my recipe				

Troubleshooting

PROBLEM	LIKELY CAUSE	WHAT TO DO
Everything ready at once or not at all	No plan	Write a timeline and work back from when you want to eat
Second dough over-proves	Left too long while waiting for the oven	Put it in the fridge to slow it, or shape and bake sooner
Oven not free	Two items need different temperatures	Bake at a compromise temperature or one after another
Can't tell what went wrong	Changed too many things	Change one thing at a time and write it down
Loaf different every time	Not weighing	Weigh flour and water; note the rise time and oven
Too much bread	Baking more than you can eat	Freeze slices; make rolls and share

BAKE-DAY SAFETY

Raw flour: flour is a raw ingredient and can carry bacteria such as E. coli, which are killed only by baking or cooking. Don't taste raw dough, don't let children eat or play with it, and wash your hands, bowls and surfaces after handling flour and dough.

Hot ovens, trays and steam: use dry oven gloves, pull the shelf out rather than reaching in, and put

hot trays and tins on a heatproof surface. If you put a tray of boiling water in the oven for steam, pour it carefully with the oven door open a little and your face well back: the steam is far hotter than the water.

Allergens: bread contains wheat (gluten). Check the recipe for milk, butter, egg, sesame and other seeds, and nuts, and label them if you share the bread. Gluten-free bread uses different flours and methods and isn't covered in this course.

Mould: if bread has mould on it, throw the whole loaf away: the spores spread through the soft crumb where you can't see them. Don't sniff it. Keep bread in a bread bin or freeze slices to avoid waste.

CHECKPOINT: CAN YOU DO THIS NOW?

- ☐ I can plan and run a bake day.
- ☐ I can look at a loaf and work out what went wrong.
- ☐ I can write down a recipe by weight.
- ☐ I change one thing at a time when I improve a recipe.
- ☐ I freeze what I won't eat.

NEXT CHAPTER

Cooking Skills: Bread 1 is complete. Cooking Skills: Bread 2 (enriched doughs, sourdough, pizza and laminated breads) is planned, and so is Cooking Skills: Pastry 1.