



ALL-GRAIN BREWING, STEP BY STEP

Your first all-grain brew day, start to finish. Work top to bottom, tick each step as you go, and keep everything clean. If you can ferment it, we can help you make it better.

BEGINNER-FRIENDLY

4 STAGES • 15 STEPS

BREW DAY ≈ 5–6 HOURS

THEN 1–2 WEEKS FERMENTING

WHAT YOU'LL NEED

Systems differ — use whatever you've got. Broadly:

- ✓ A pot big enough for a full boil
- ✓ Something to mash in (tun, cooler or grain bag)
- ✓ A heat source
- ✓ Thermometer
- ✓ Hydrometer or refractometer
- ✓ Long spoon or paddle
- ✓ A way to chill (wort chiller or ice bath)
- ✓ Fermenter with airlock
- ✓ Cleaner + sanitiser
- ✓ Your recipe: crushed grain, hops & yeast

✓ BEFORE YOU START — CLEAN, THEN SANITISE

Wash every piece of equipment until it's visibly clean, then **sanitise everything that will touch your wort after the boil** — chiller, fermenter, spoon, hydrometer, your hands. Cleaning removes dirt; sanitising kills the bugs that spoil beer. The critical moment is **after flame-out**, so keep that gear freshly sanitised. Have your recipe, grains, hops and yeast laid out before you heat any water.

STAGE 1 MASH

Turn grain into sweet wort • ~75 min

- ☐ **Heat your strike water**
Warm your mash water to the **strike temperature** on your recipe. This is a few degrees *above* your target mash temp — often around 72 °C — so it settles to the mash temp (usually ~65 °C) once the cool grain goes in.
- ☐ **Mash in**
Stir the crushed grain into the water and make sure every bit is wet — break up any dough balls. Check the temperature has settled to your recipe's mash temp.
- ☐ **Hold the mash ~60 min**
Keep it at temperature for the time on your recipe. This is where starches convert to fermentable sugar. If the recipe calls for a **mash out**, raise the mash to ~75 °C at the end.

STAGE 2 SPARGE & LAUTER

Rinse out the sugars • ~30 min

- ☐ **Heat your sparge water**
While the mash is resting, warm your sparge water to ~75 °C so it's ready to go.
- ☐ **Lauter & sparge slowly**
Lift the grain out (or open the tap and recirculate), then rinse it slowly with the sparge water to wash out the remaining sugars. Take your time. Discard the spent grain however you like — it's great for compost or baking.
- ☐ **You now have wort**
The sweet liquid you've collected is called **wort** — this is what you'll boil.
- ☐ **Take a pre-boil gravity reading**
Measure and record the gravity now with a hydrometer or refractometer. It tells you how well your mash performed before the boil concentrates it.

- 8 ☐ **Bring the wort to a boil**
Heat until you reach a rolling boil. Early on you'll see a surge of foam — the **hot break** — as proteins clump together. Watch closely here so it doesn't boil over.
- 9 ☐ **Start your boil timer**
Once the hot break settles into a steady rolling boil, start timing (usually 60 min). Your hop times are counted back from the *end* of the boil.
- 10 ☐ **Add hops on schedule**
Add each hop at the time left on the clock. "**60 min**" means add it with 60 minutes of boiling left (the start); "**10 min**" means add it with 10 minutes left. Later additions give more aroma, less bitterness.
- 11 ☐ **Hopstand / whirlpool (if the recipe calls for it)**
After flame-out, cool to ~80 °C, add the whirlpool hops and let them steep for a set time. This builds big aroma without adding harsh bitterness.

STAGE 4 CHILL, PITCH & FERMENT

Hand it over to the yeast

- 12 ☐ **Chill as fast as you can**
Cool the wort quickly down to your yeast's **pitching temperature** — usually ~20 °C for ales. Fast chilling improves clarity and lowers the risk of infection.
- 13 ☐ **Aerate the wort**
Pour or splash the cooled wort vigorously (or use an aeration stone) to mix in oxygen. Yeast needs oxygen up front to get a healthy start.
- 14 ☐ **Pitch your yeast**
Add the yeast to the cooled, aerated wort. Rehydrate dry yeast first only if the packet asks you to.
- 15 ☐ **Seal & ferment**
Close the fermenter, fit an airlock and hold it at the recipe's fermentation temperature. You should see activity within 12–24 hours. Now let the yeast do the work.

BREW-DAY GLOSSARY The words on this sheet, in plain English

NEW TO THIS?

STRIKE TEMP — the temperature you heat your mash water to — a little above the target mash temp.

MASH OUT — raising the mash to ~75 °C to stop conversion and loosen the grain bed.

LAUTER — separating the sweet liquid from the grain before you sparge.

GRAVITY — how much sugar is dissolved in the wort, read with a hydrometer.

HOPSTAND / WHIRLPOOL — steeping hops after the boil for aroma without much bitterness.

MASH — steeping crushed grain in hot water to convert its starch into fermentable sugar.

SPARGE — rinsing the grain with hot water to collect the sugars left behind.

WORT — the sweet, unfermented liquid — beer before the yeast goes in.

HOT BREAK — the foamy surge early in the boil as proteins coagulate.

PITCH — adding the yeast to your cooled, aerated wort.

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A general beginner's guide — always follow the specific temperatures, times and hop schedule printed on your recipe.