

# Introduction to Brewing Beer

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Brewing beer is easy, brewing great beer is hard!

Brewing is 90% cleaning

## Equipment you need

- A big pot (30L) with a faucet
- A filter bag or false bottom (to filter grains from the wort)
- A big stirring spoon or paddle
- A digital thermometer
- Kitchen scales (accurate to 1g)
- A grain mill
- A measuring jug
- A hydrometer (for measuring the wort gravity)
- A bathfull of ice or an immersion cooler
- A big 20L bucket or empty mineral water bottle
- A tube for siphoning
- Some muslin bags or tea filter bags
- Sanitising solution (e.g. Iodophor)
- A couple of plastic buckets (15L)
- An airlock
- A stopwatch, timer, or clock
- Empty glass bottles (brown bottles are better)
- Bottle caps
- Bottle capper

## Ingredients you need

- Base malts (Pale 2-row malted barley)
- Flavour malts (optional)
- Hops
- Brewers' yeast
- Clarifying agent (e.g. Irish moss)
- Sugar
- Water

## Basic Steps

- Measure out and mill your grain
- Clean and sanitise a cup or beaker and fill with boiling water, place in the

refrigerator

- Measure out water and fill pot
- Heat mash water to strike temperature (~72°)
- Mash grains at ~67° for 1 hour
- Meanwhile, heat sparge water to ~80°
- Sparge (wash sugars) from the grain bed by (slowly!) sprinkling the hot water over the grain bed
- Filter grains from wort (carefully!)
- Heat wort to 100°
- Thoroughly clean and sanitise everything that will touch the wort from now on
- Boil wort for 1 hour and at various intervals add hops and (optionally) clarifying agent
- Take the cup of water from the refrigerator (now at ~30°) and pitch the yeast
- Cool the wort as quickly as possible
- Extract some wort to place in the hydrometer and measure your original gravity
- Place wort in fermentor, seal, and shake vigorously to oxygenate the wort
- Add the yeast starter to the wort, seal and place the airlock
- Keep the fermentor somewhere cool (~18°) and dark for ~10 days
- Clean and sanitise bottles
- Prepare a clean and sanitised sugar solution
- Extract some wort to place in the hydrometer and measure your final gravity
- Add sugar solution to the beer
- Carefully siphon beer into bottles and cap bottles
- Store bottles for at least 2 weeks in a cool dark place (can store up to 6 months)
- Drink!

## Further Information

The Brewing Bible - John Palmer's '*How to Brew*' (available for free online)

<http://www.howtobrew.com/intro.html>

Recipes & tools: <http://www.brewersfriend.com/>