

# *A Hoppy Days Guide to Yeast Starters*

Pitching sufficient yeast is essential for a shortened lag time and ensuring healthy fermentation. Liquid yeast is extremely perishable, and a higher pitch rate is often required, particularly in the case of high alcohol beers (OG 1.050 and up) and lagers. Thankfully, with just a few quick steps in the kitchen, we're able to easily propagate our yeast strains, ensuring we have a strong army ready for fermentation.

Yeast starters are essentially a small volume of wort (usually 1 to 5L), or a mini batch of beer (OG 1.036 to 1.040), prepared for inoculation by our chosen yeast for the purposes of ensuring yeast vitality and growing cell numbers. By aerating this starter wort (by stirring or intermittent shaking) we are able to propagate this yeast very quickly. We prepare yeast starters in advance of primary fermentation, which usually means planning these a few days in advance.

## **NECESSARY EQUIPMENT**

- Dry Malt Extract (DME)
- Borosilicate Erlenmeyer Flask
- Liquid Yeast

## **RECOMMENDED EQUIPMENT**

- Kitchen Scales
- Funnel
- Magnetic Stirplate
- Stir Bar
- Fermcap (Antifoam)

## **PREPARATION (approx. 1hr)**

1. Dissolve DME in water at a rate of 100g per litre of water. If using an Erlenmeyer Flask, place the flask onto kitchen scale and add DME directly into the flask (using a funnel if required). Once you've measured the DME, add the necessary water. If you don't have a gas stove, prepare your starter wort in a saucepan before transferring to flask.
2. Shake or stir to dissolve and bring to the boil. The Erlenmeyer Flask can be brought to a boil directly over a gas stovetop. Use a few drops of Fermcap to avoid excessive foaming. Leave to boil for 5 – 10 minutes.
3. Cover with a sanitised cloth and chill rapidly in a sink of ice water until desired fermentation temperature is reached.

## **STANDARD METHOD (3-4 days)**

1. Sanitise stir bar and add to starter.
2. Cover top of starter vessel with sanitised plastic wrap, a small sheet of aluminium foil, and a loose fitting rubber band.
3. Place onto a magnetic stirplate, starting at a slow speed, and increase until you see a whirlpool form on the surface.
4. Leave for 3 to 4 days, then chill starter in a fridge.
5. Remove from fridge to raise to fermentation temperature. Carefully decant most of the beer top of starter.
6. Agitate the yeast solution and pitch directly into your wort.

## **VITALITY STARTER (6-12hrs)**

The purpose of a vitality starter is to ensure the yeast is healthy and active when pitched. Vitality starters are quicker to prepare than traditional yeast starters, and are best used with fresh, recently cultivated strains.

1. Prepare starter wort using the preparation method above.
2. Sanitise stir bar and prepare magnetic stirplate as above.
3. Allow starter to stir for 6 – 12 hours, and pitch the entire starter wort when it appears milky and opaque.

## **THE "JAMES BOND" METHOD (Shaken, Not Stirred) (6-12hrs)**

1. Add cooled starter wort to a container four times its volume (ie. 1L starter in a 4L bottle).
2. Seal and shake aggressively for a full minute to aerate the wort.
3. Fit with an airlock (or foil and plastic wrap as above) and allow starter to stir for 6 – 12 hours, or shake intermittently, and pitch the entire starter wort when it appears milky or has formed a thick krausen (foam) on top.

## **STORAGE**

Yeast can be stored in a sanitised Reagent bottle after preparation. Discard the starter beer and save the yeast slurry only. We recommend you use the stored yeast slurry within two weeks.

