

# **pint.com.au Tutorial 1 – Yeast Preparation.**

Please note: this is a first draft. I will put a more refined version up shortly.

It is always a good idea to make a yeast starter to ensure that you have healthy yeast and therefore a healthy fermentation. Brewers use different yeast depending on the type of beer they wish to make, the cost they are prepared to pay for the yeast and the experience level they have. I will therefore start with the simple rehydration of dried yeast and then move onto the more complex culturing yeast from a bottle conditioned beer.

## **Rehydrating Dried Yeast**

### Equipment Needed

- Sanitized Jar
- Thermometer
- Kettle or saucepan
- Cling Wrap or Foil
- Warm Water
- Dried Yeast (often comes with malt extract cans under the lid but also can be purchased separately). It is always a good idea to check the used by date on the yeast, if it is past it's used by date do not use it.

### Method

- Pre-boil some water for around 10 minutes to kill any bacteria or other spoilage organisms in the water and then allow to cool to around 35°C (use a thermometer as water that is too hot will kill the yeast).
- Sanitize a jar using your favourite sterilizing agent following the instructions on the packet.
- Pour the water into the jar and sprinkle the dried yeast on top (do not stir)
- Cover the jar with cling wrap or foil and allow to sit for 15 minutes. In this time you should notice a creamy layer form on top as the yeast rehydrates and comes to life. You will also notice that a lot of the yeast cells will sink to the bottom.
- After 15 minutes to half an hour pitch the yeast into your wort (wort is beer before it is fermented). It is best if you swirl the jar a bit before pitching to resuspend the yeast that has sunk to the bottom.

## Making a starter from liquid yeast

### Equipment Needed



- Measuring Cup (1/2 cup size)
- Measuring Spoon (1/4 teaspoon)
- Bottle conditioned beer or liquid yeast pack
- Yeast Nutirent
- 1 litre Erlenmeyer flask (If you do not have one of these don't worry, I will mention an alternative later in this article)
- Rubber bung with a hole and airlock
- Dried Malt Extract
- Funnel
- Foil
- Sterilizer

### Methods

- Measure out 1/2 a cup of dried malt extract and 1/4 of a teaspoon of yeast nutrient (if you have some) and place it into the Erlenmeyer flask using the funnel.
- Fill the flask up to 500ml with water.
- Place the flask on your stove and boil for around 10 mins to kill any spoilage organisms that may be present (Note: these flasks are made out of heat resistant glass designed to withstand direct heating, DO NOT attempt this with a normal household jar or it will break)



- Turn the stove off and cover the top with foil.



- Fill your sink up with cold water to the same level the starter solution comes up in the jar and then place the jar into the sink to cool it down.



- Once cool (below 30 °C, cool to touch) take the flask out of the sink
- If you are using the yeast out of a bottle conditioned beer open the beer and carefully pour the beer into a glass (you can drink this when you are done) leaving the sediment in the bottle. Swirl the bottle to resuspend the sediment and then pour it into the flask with the cooled solution. For better results use more than one bottle of beer.



bit hard to see the yeast left in the bottle but it is there.



- If you are using a liquid yeast pack, open the pack and pour the contents into the flask (note: if you are using a smack pack you should smack the pack 24 hours prior to this step)
- Place the airlock into your rubber stopper and put them into the top of the flask.
- Swirl the flask vigorously to aerate it for a couple of minutes.
- Place the flask in an area with a similar temperature that you are going to ferment your beer at (ie. 20 °C for ale yeasts).
- Within 24 hours you should notice a creamy layer starting to form around the top of the solution, if you are using a liquid yeast pack it should happen a lot faster than this.



- Within 48 hours (or maybe even sooner) the airlock should be pumping out carbon dioxide and you know your yeast is up and running. If you are using yeast from a bottle conditioned beer and you have no activity by now the yeast in the bottle must have been dead, it is always a good idea to check the brewed date on the bottle to try and get one that is fresh.



- Once the airlock has stopped bubbling your yeast is ready to pitch. It is best to pitch it within 3 days or it will begin to die and lose its activity.
- To pitch the yeast pour off most of the liquid and then swirl the jar to resuspend the yeast that is sitting on the bottom. Once it is resuspended pour it into your fermentation barrel with your wort.
- There should be enough yeast to pitch into a standard 20 litre batch. If you are making a larger batch you will need to adjust the size of your starter accordingly.

#### A note about sanitation.

It is not essential to sanitize items that come into contact with the solution before it is boiled. However, items such as the rubber stopper and airlock should be sanitized as spoilage organisms on these items are not killed by boiling. It is also a good idea to sanitize the outside of the beer bottle or liquid yeast pack before opening it.

#### What do I do if I don't have an Erlenmeyer flask.

Don't worry, you can use a saucepan to boil your malt extract solution. When it has boiled for 10 minutes put the lid on and place it in the sink until the solution is cool. Once cool pour the solution into a sanitized jar (eg mayonnaise jar). You will need a larger rubber stopper to use as a lid but you should be able to get one of these from your local homebrew shop.