



Making a Yeast Starter

Making a yeast starter is an easy way to improve your beer. Whether you are brewing with extract or all-grain, a yeast starter will increase the number of yeast cells you are adding to your beer and enable you to add them at the peak of their fermenting ability.

Ideally the amount of yeast will correlate to the volume and starting gravity of the beer to which you are adding it. For more information on how big of a starter you should make and how many packets of yeast to start with, we recommend checking out the **Mr. Malty yeast calculator at www.mrmalty.com/calc/calc.html** (it should be noted, however, that these are the top end amounts of yeast and starter volumes you should use and you can probably get away with using less).

Making a starter is essentially like making a small batch of beer. This small batch should be easy for the yeast to ferment while providing them with extra nutrients, so your starter should be made at a low gravity (around 1.035-1.040), without hops (while hops do have antibacterial properties they can all slow or diminish yeast growth), and with a yeast nutrient. An Erlenmeyer flask is a nice piece of equipment to have when making a starter since the starter can be boiled directly in it (which also sanitizes the container) and then cooled in the flask as well.

Equipment and Ingredients Needed:



Yeast



Small fermentor (an Erlenmeyer flask or a half-gallon jug or growler)



Dry Malt Extract (DME)



Aluminum foil



Foam Control (not needed but recommended)



Boil kettle/Pot



Yeast Nutrient



Stir-plate (optional)

Basic Instructions for Making a Yeast Starter

1. Dissolve ~3.5oz of dry malt extract per quart of water. This will require a lot of shaking/stirring and may require you to heat the water as well.
2. Boil the water/DME mixture for 15-20 minutes. This mixture will foam quite a bit, so make sure it doesn't boil over. This is especially problematic when boiling in an Erlenmeyer flask, and we recommend using an anti-foaming agent, such as foam control.
3. After boiling, cool the mixture down in a sink full of ice water. If boiling in an Erlenmeyer flask, the flask may be put directly in the ice bath. If boiling in a pot put the covered pot in the ice bath.
4. Sanitize the container (a growler is a good option) you are planning to use to ferment your starter. After the starter has cooled transfer it to the sanitized container.
5. Once cooled below 80 degrees Fahrenheit you should add your yeast to the starter.
6. Starters need oxygen to get the best yeast growth, so you shouldn't use an airlock on a starter. Cover the top with sanitized aluminum foil.
7. Vigorously shake/aerate the starter. You can do this by shaking the fermentor every time you walk by it or by using a stir-plate, if you have one.
8. As mentioned above, the purpose of a yeast starter is to grow yeast, and because of this, you don't want to allow the yeast to begin the fermentation process, which occurs *after* the growth process. So, ideally, you will allow the yeast starter to go for **18 - 24 hours**, the length of the yeast's growth cycle.
9. After 18 - 24 hours, either pitch it into the wort or crash-cool it to drop the yeast to the bottom and refrigerate until brewday.
10. A quick note on temperature: It is best to keep your starter at room temperature during the growth cycle. This allows for the quickest fermentation and fastest growth. When making a lager yeast starter, however, you should then chill the starter and decant the spent starter that is on top of yeast before pitching into your brew.