



Gluten Free Beer Brewing Instructions

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Basic Brewing Procedure

1. Clean and Sterilise Equipment

Assemble all equipment and ingredients needed for your brew. All equipment will need to be cleaned and sterilised prior to use. Wash your fermenter and other equipment (spoon, airlock, tap, etc) in hot water with a brewer's detergent. Ensure that all equipment is thoroughly rinsed with clean cold water and allowed to drain well. Using a sterilising product like Brewshield or equivalent, soak all your equipment in the solution or spray with a spray bottle until everything is wet and allow to drain well - you do not need to rinse. Do not forget to run some cleaner and steriliser through your fermenter tap.

2. Brew the Beer Kit

Refer to the Recipe included in your Gluten Free Beer Kit for details on how to brew your beer. Remember to clean all your equipment before starting to brew.

3. Fill the Fermenter

After cooling your wort, pour it into the fermenter making as much foam as possible. Top up your fermenter with water to 22 litres. Your fermenter should be calibrated, allowing you to do this easily. (It helps to mark the 23 litre points in black pen before you commence brewing) Use hot and cold water to reach a temperature between 20 and 25°C, which is ideal for pitching your yeast. In summer, you may need to use fridge-cooled water to achieve this temperature. (Ensure all containers for water are cleaned and sterilised) When pouring the water into the fermenter, splash it as much as possible and stir vigorously for 5 minutes to aerate the water. Open the packet of yeast and the yeast nutrient and sprinkle evenly on top of the wort. Give the wort a gentle stir.

4. Seal the Fermenter

Insert airlock into fermenter lid. Seal the fermenter and pour water into the airlock. The airlock should be half filled preferably with cooled boiled water. When the fermenter is sealed properly, the water in the airlock should sit at two different levels.

5. Primary Fermentation

The yeast will consume the sugars and converts them into alcohol and waste gases which escape through the airlock. This is known as the primary fermentation stage. Ideally, the best temperature for fermentation of your beer kit is 18 to 25°C. Try to keep your fermenter in this temperature range for best results. If the temperature is too hot it may kill the yeast, and if it is too cold, it may put the yeast to sleep. Cool the fermenter using a wet towel and container of water. Use a heater pad to warm the fermenter in winter, if necessary. Aim for a constant temperature, if possible. Use a Brewers Choice Fridge Thermostat and an old fridge for optimum brewing conditions.

6. Wait

There is no fixed time for fermentation. The time taken will depend on how well the yeast is working. Under normal circumstances, the brew should start fermenting in about 6 - 12 hours and finish in around 7 to 10 days. Visible signs of this will be foaming on top of the wort and the airlock should start bubbling. Do not rely on the airlock as the only sign of fermentation - if the fermenter is not sealed properly, the airlock will not bubble.

7. Check Specific Gravity

Using your hydrometer, you can test the progress of your fermentation by measuring the specific gravity of your brew. Simply run some beer from the fermenter tap into a test tube and float the hydrometer in it. Look across the surface of the beer inside the tube and read the number on the hydrometer at surface level. When the brew is first put down, the hydrometer should give a specific gravity reading of approximately 1050. After your brew has been fermenting for a few days, the specific gravity will drop.

You must use your hydrometer to ensure that fermentation is completed. An average beer made with 3kg of Sorghum should ferment out to a specific gravity of approximately 1015 to 1010. Take a reading and record it, then take another reading in 24-48 hours time. If the reading is the same, fermentation is complete. If the reading is lower, fermentation is still continuing. Do not bottle until the hydrometer reading is constant over two days. Bottling before primary fermentation is completed can result in exploding bottles.

8. Add Finings

To produce a cleared beer, you will need to add finings to your beer once fermentation is complete. In a sterilised mug/jug, pour in 250ml hot water, add the sachet of finings and stir well until dissolved. Pour this mixture into your fermenter giving a very gentle stir, then re-seal your fermenter. The finings will help settle the yeast and improve the clarity of the beer. Leave the beer for another 24 hours.

9. Rack your Beer to another Fermenter

If possible, you should rack your beer to a second fermenter 24 hours after finings has been added. Place a sterilised piece of hose onto the tap of the fermenter and run it to the bottom of your settling cube (second storage vessel). Crack the seal on your fermenter and open the fermenter tap. Let the beer flow into the second container taking care not to have the beer splash, as this will oxidise your beer and produce a metallic taste. Turn off the tap as the level in the fermenter reaches the sediment. Let your second container sit for a week. Ideally the container should be stored in a fridge or otherwise somewhere cool and dark.

10. Prepare the Bottles

When your beer has finished fermenting (or after one week in a settling cube), it is time to start the bottling stage. An average brew will make approximately 28- 30 x 750ml bottle or 60 x 375ml bottles. You will need to thoroughly clean your bottles using brewer's detergent and a bottlebrush. Ensure the detergent is rinsed out well and the bottles drained. After washing and rinsing your bottles, they must be sterilised using Brewshield or other steriliser, rinsed and drained well. Any equipment being used (e.g. bottling tube, funnel, crown seals) must also be sterilised. Also sterilise the tap.

11. Secondary Carbonation / Filling

Before bottling your beer, you need to add a small amount of sugar to each bottle for secondary carbonation to occur. The yeast present in the beer will ferment the sugar and convert it into carbon dioxide, which gives the beer its carbonation. Add 1 teaspoon of sugar to each 750ml bottle and 1/2 teaspoon to each 375ml bottle. If you are using white sugar, make sure that you use a measured spoon and never increase the amount of sugar. If you do, the end result can be exploding bottles. (Adding the sugar before filling the bottles ensures no bottle is missed)

Spray steriliser into the fermenter (or settling cube) tap. Insert the bottling tube into the tap, and fill the bottles to about 50mm from the top. (A one meter piece of sterilised clear tubing can be attached between the fermenter and the bottling tube to give you more freedom)

Cap each bottle and give the bottle a good shake to help dissolve the sugar. Store your bottles out of direct sunlight, at around 20°C, for two weeks to allow secondary fermentation to complete. After two weeks, test your first beer - it may be ready to drink. Gluten free beer often takes longer to carbonate, so check it at 3 and 4 weeks if carbonation is still low. The quality of your beer will improve dramatically if left for a longer maturation period. (6-8 weeks).

Remember, if you have any questions or problems, call us. We want to help you make your brewing a success.

HAPPY BREWING!



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