

MAKING ROOT BEER AT HOME

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Web Page: http://Biology.clc.uc.edu/Fankhauser/Cheese/ROOTBEER_Jn0.htm

Fermentation has been used by mankind for thousands of years for raising bread, fermenting wine and brewing beer. The products of the fermentation of sugar by baker's yeast *Saccharomyces cerevisiae* (a fungus) are ethyl alcohol and carbon dioxide. Carbon dioxide causes bread to rise and gives effervescent drinks their bubbles. This action of yeast on sugar is used to 'carbonate' beverages, as in the addition of bubbles to champagne.

We will set up a fermentation in a closed system and capture the generated carbon dioxide to carbonate root beer. You may of course adjust the quantities of sugar and/or extract to taste. (Zatarain's or Hire's are both available at Kroger's, I prefer Zatarain's, a product of New Orleans.)

EQUIPMENT

clean 2 liter plastic soft drink bottle with cap
funnel
measuring cups
measuring spoons

SUPPLIES

cane (table) sugar [sucrose]
Zatarain's Root Beer Extract
powdered baker's yeast
cold fresh water

1. Rinse out a 2 liter plastic soft drink bottle well. With a dry funnel, add in sequence:
1 level cup of sugar (if you add more, it can become clawingly sweet.)
1/4 teaspoon powdered fresh baker's yeast (Fleischmann's or other brand)
Shake to distribute the yeast grains into the sugar, swirl in bottom to make it concave to catch the extract
2. Add with funnel:
1 Tbl of root beer extract (add on top of the dry sugar)
3. Half fill the bottle with fresh cool tap water (without *too* much chlorine?), rinsing in the extract which sticks to the funnel. Swirl to dissolve the ingredients.
4. **Q.s. [fill up] to the neck of the bottle with fresh cool tap water**, leaving about an inch of head space, securely screw cap down to seal. Invert repeatedly to thoroughly dissolve.
5. Place at room temperature (RT) until the bottle feels hard (about three to four days). (Do not leave at room temperature for extended periods or you risk explosion!) Store in cool place. Move to a refrigerator overnight (ON) before opening.

NOTE: There will be a sediment of yeast at the bottom of the bottle, so that the last bit of root beer will be turbid. Decant carefully if you wish to avoid this sediment.

OR:

Try **homemade ginger ale**: in a 2 L bottle: 1 c sugar, 1/4 tsp yeast, 1 1/2 Tbl grated ginger, juice of one lemon, q.s. to 2 L with cold water, cap, let sit 24-48 hrs until hard, refrigerate. (Web page for ginger ale: http://Biology.clc.uc.edu/Fankhauser/Cheese/Ginger_Ale_Ag0.htm)