

To Make a Turmeric/Ginger Bug Starter for Lacto-fermented Sodas:

Prepared by Kungund Benehonig

What you need:

- Fresh unpeeled turmeric or ginger root, organic is ideal but not required
 - non-chlorinated water
 - pure evaporated cane sugar
 - knife
 - cutting board
 - measuring cup and Tablespoon
 - clean mason jar (I used a quart jar) and matching ring
 - coffee filter
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- Thoroughly clean all work surfaces and tools with warm soapy water.
 - Add 3 Tbsp. thinly sliced root to jar. Do not peel before slicing. (3 Tbsp = 1.5oz = 42 g)
 - Add ½ c. non-chlorinated water and 2 tablespoons of sugar. Mix until sugar dissolves.
 - Cover with a clean coffee filter secured with a metal jar ring or rubber band. Keep at room temperature, away from direct sunlight.
 - Every day, add another Tablespoon of thinly sliced root (1 TBSP = .5oz = 14 g) and 1/4c. water mixed with 1Tbsp sugar. After a few days the mixture should bubble slightly when agitated. At this point, the bug is ready for use in soda!
 - Your Bug should now be covered with a lid (not the coffee filter) and stored in the refrigerator and fed every 2 weeks. For every 1/2 cup of liquid, feed ½ cup water + 2 Tbsp sugar. To manage this, pour off liquid leaving 1/2 cup in the jar, then feed. Fed every other week, the refrigerated bug can last indefinitely.
 - Once a month, add 1 Tbsp. fresh sliced root.

Follow these instructions if you are adopting a bug from me.

You can:

- Refrigerate until you have the supplies and the time to make soda, remembering to feed it every two weeks. Revive a refrigerated bug by feeding it and keeping it at room temperature for 12-24 hours prior to using it for soda. Be kind and patient with your new microbes! In addition to regular feeding, once a month add 1 Tbsp. fresh sliced root.

OR

- Feed it and give it 12 hours before following the “To Make Soda” Instructions. For every 1/2 cup of starter liquid, feed ½ cup water + 2 Tbsp sugar. To manage this, pour off liquid leaving 1/2 cup in the jar, then feed. Fed twice a month, the refrigerated bug can last indefinitely. Be kind and patient with your new microbes. They may need time to adjust to your home, water, and sugar. In addition to regular feeding, once a month add 1 Tbsp. fresh sliced root.

To Make Soda:

- Strain ½ cup of the bug starter. Add to a clean 32 oz. glass bottle with a secure flip top closure. Continue filling the bottle with a preservative-free juice of your choice, leaving 1.5 inches of air space. Wipe the rim of the bottle clean, secure the closure, and allow to ferment at room temperature away from direct sunlight.
- Diligently check development by releasing and securing the closure twice daily. The soda will take anywhere from 3-5 days to develop. Soda is done when the closure is opened and escaping gases make a sharp hissing sound. Bubbles of carbonation should also rise quickly from the bottom and continue to rise while the container is open, but the liquid should not overflow. Refrigerate immediately. A very slight hiss and slow, sparse bubbles indicate that the soda is nearing completion but still needs time.

Notes:

- I don't recommend keeping your Bug on the counter long term. Sometimes you'll forget to feed and it will spoil.
- Revive a refrigerated bug by feeding it and keeping it at room temperature for 12-24 hours prior to using it for soda.
- A 32 oz bottle of soda requires ½ cup of starter liquid. A 16 oz bottle requires ¼ cup. Plan accordingly when you feed your bug so that you have enough to make soda, leaving at least ½ cup reserved in the jar to feed and replenish.
- Always open sodas with caution and observe intently! It's good practice to open fermenting sodas in a clean sink with a clear plastic bag over top to contain the mess in case of an eruptive brew. Always point to bottle in a safe direction away from faces and breakables!
- You may choose to store your developing sodas in a tote with a lid. Even carefully tended vessels can explode!
- Ambient temperature effects development time. If bottles are fermented in the garage or a warm space, they need to be checked more often than twice a day and will likely develop very quickly.
- I started my Turmeric Bug on September 11, 2018. The first time I used the culture to successfully create soda was October 10-13, 2018.
- The Turmeric Bug is the first that I've created from the start. I quickly referenced various internet recipes by searching "how to make a turmeric bug" then proceeded by borrowing from the various recipes to create my own. Some recipes say to grate the turmeric, others use peeled, diced root. I thought I could provide more surface area with thin slices than cubes. Grated root will create a thick mass that can be pushed up to the surface of the liquid by fermentation gases, potentially creating an environment for mold or other unwanted bacteria/yeast invaders to colonize.
- If you have questions or success stories, please share with me! krakekind@gmail.com