How to Make Your Own 'Ginger Bug'

This is a starter culture that will turn fruit juice or sweetened herbal tea into a lightly fermented, naturally bubbly beverage.

Ingredients:

1 cup filtered or non-chlorinated water
1 tablespoon grated or finely chopped fresh ginger
1 tablespoon whole sugar (coconut palm rapadura or muscavado)

The sugar is food for the good bacteria which need to be present in order to make the naturally carbonated soda. The longer you let your soda ferment, the less sugar is present in the final drink. Therefore you decide how sweet you want it to be according to how long you let the probiotics work on the sugars.

Please note : Chlorine can kill the beneficial bacteria – therefore you need to use filtered or non-chlorinated water (most tap water is chlorinated).

Organically grown fresh ginger is preferable (don't peel it). If using conventionally grown ginger then peel it first. It may take up to a week to start bubbling especially if the weather is cooler. If your ferment develops mould you will unfortunately need to toss it into the compost and start again after sterilising your jar.

Combine the ingredients in a glass jar and stir to dissolve the sugar. Cover the top of the jar with cheesecloth or a dishtowel (or make in a jar with an airlock). Leave it out at room temperature.

Every day for 3 days add:

1 teaspoon grated or finely chopped fresh ginger
1 teaspoon sugar

Stir vigorously each time to dissolve the sugar.

After the three days you should start to see some bubbles or foam/froth on the surface of the liquid or fine bubbles along the inner rim. Screw on the jar's lid and transfer the ginger bug to the refrigerator. The cool temperatures of the refrigerator will slow fermentation, but not kill off the beneficial bacteria that are causing it.

Keeping Your Bug

Once bug is active you don't feed it daily. You can keep it going in the refrigerator indefinitely by occasionally feeding it a teaspoon each of grated ginger and sugar . Or it can sit on your counter and you feed every 3 days or so. If you want to use your bug to make soda it is a good idea to feed it a few times in the days leading up to when you make the soda.

A good amount to maintain as a bug is 1.5-2 cups liquid/solids. It is best to keep in in an anaerobic environment and feed with a teaspoon of sugar or ginger or blend of both, and add water as needed. If keeping it in the fridge you should let it sit out overnight to warm up, feed in morning, and then put it back to bed in the refrigerator that night.

How to Use Your Ginger Bug

1/4 cup active ginger bug
1 litre fruit juice or lightly sweetened, room temperature herbal tea

Strain the ginger bug into a large jar. Add the fruit juice or sweetened herbal tea. Stir vigorously. Cover the jar with a clean cloth or towel and leave out at room temperature for 3 days. Stir the mixture vigorously at least twice daily. Do not add any additional ingredients during this time.

By the end of the 3 days, you should start to see bubbles on the surface of the liquid. Taste. If it is too sweet for you, leave the mixture out to ferment for another day or two.

When you're happy with the degree of sweetness, transfer the soda to a thick flip-top glass bottle and secure the cap. Although during the initial fermentation you wanted the liquid exposed to air to allow gases to escape, now you want those gases to build up and create the effervescence you're after.

Leave the freshly bottled soda at room temperature for 24 hours, then transfer it to the refrigerator to chill before serving.

Notes:
If you are using herbal tea rather than fruit juice, it is important to add sugar or raw honey. Remember that the sugar is for the probiotic bacteria, not you!

Stir the batch well, from the bottom, before you bottle so you have equal distribution of all microflora. Leave 1.5-2" headspace.

Keep a close eye on your naturally fermented soda once it is bottled and capped. If left out longer than 24 hours, or if the room temperature is very hot or the ginger bug super active, too much pressure could build up from the trapped gasses. That could result in a messy explosion! A safe zone is recommended. It is a good idea to place your sealed bottles in an esky or similar – this will contain all contents if the bottle ruptures while conditioning.

Transfer the soda to the refrigerator as soon as it is sufficiently bubbly.

Allow at least 48-hours chilling time. Pop in freezer for 10-15 minutes just before opening, this immediate shift in even colder temp 'further locks' in the CO_2, and actually will help prevent volcanic eruptions upon opening.