DIY Ginger Beer: A Traditional Beverage, a Hip New Drink

Rachel Armistead of The Sweet Farm
The Six Elements of DIY Ginger Beer

equipment
water
sweetener
fermentation
flavor
culture
Element One: Equipment

PINT MASON JAR
CLEAN CLOTH/RUBBER BAND
CUTTING BOARD/KNIFE
GRATER
LARGE BOWL w/ LIP FOR POURING
2 QUART OR 1 GALLON JAR/PITCHER
FINE MESH STRAINER
SMALL-NECK FUNNEL
LONG-HANDED SPOON
SWING-TOP BOTTLES; PLASTIC BOTTLES
Better tasting water will result in better tasting ginger beer, but whatever water you use, be sure it is non-chlorinated. The following are (usually) not chlorinated:

- Well water
- Spring water
- Distilled/filtered water (bottled, Brita, Pur, Berkey)

Unfortunately, more municipalities are moving from chlorine to chloramines, which are harder to remove, to sanitize their water. Your local brew store likely carries products that remove chloramines, if you are concerned about them.
**Element Three: Sweetener**

<table>
<thead>
<tr>
<th>PREDICTABLE SWEETENERS</th>
<th>EXPERIMENTAL SWEETENERS</th>
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</thead>
<tbody>
<tr>
<td>Raw Cane Sugar</td>
<td>Maple Syrup</td>
</tr>
<tr>
<td>Turbinado Sugar</td>
<td>Honey</td>
</tr>
<tr>
<td>Demerara</td>
<td>Agave</td>
</tr>
<tr>
<td>White sugar</td>
<td>Malt Extract</td>
</tr>
<tr>
<td>Molasses</td>
<td>Brown Rice Syrup</td>
</tr>
<tr>
<td></td>
<td>Fruit Juices</td>
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</tbody>
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Remember, you must use a caloric sugar source when making/feeding your culture; and must use at least a portion of caloric sugar source in your ginger beer batches.
## Element Four: Culture

<table>
<thead>
<tr>
<th>GINGER BUG</th>
<th>GINGER BEER PLANT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy to make at home</td>
<td>Must purchase or obtain</td>
</tr>
<tr>
<td>Can produce unpredictable flavors</td>
<td>When healthy, produces predictable flavors</td>
</tr>
<tr>
<td>Grows rapidly; can make large batches easily</td>
<td>Grows slowly</td>
</tr>
<tr>
<td>Generally tolerates periods of being “ignored”</td>
<td>Requires regular maintenance to keep culture healthy</td>
</tr>
<tr>
<td>Don’t need to worry too much about flavor “contamination”</td>
<td>Need to keep culture isolated from other solids</td>
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How to Make a Ginger Bug

YOU WILL NEED:
• 1 cup of water
• 2 tablespoons (approximate) of sugar
• 2 tablespoons (approximate) of organic grated ginger

Mix the ingredients together in a jar and cover with a clean cloth, securing with a rubber band. Leave on your counter or on top of your fridge, and feed it 2 tablespoons of sugar and 2 tablespoons of grated ginger every 2 days. Add small amounts of water as needed to keep the mixture fluid. After several days, you should see bubbles on the surface of the mixture, and bubbles rising to the top when you agitate the jar. This means the culture is established and ready to use.
When is My Ginger Bug Ready?

- Bubbles
- Yeasty, sour smell
- Ginger pieces moving around
Basic Ginger Beer Recipe
(for use with Ginger Bug)

In a gallon jar, combine:

- 1 ½ cups cane sugar
- 2-4 oz grated ginger root*
- 1 lemon (halve and squeeze)
- 1 cup Ginger Bug

Fill rest of jar with water, cover with clean cloth, secure with rubber band.

Now you’re ready for fermentation!
Element Five: Fermentation

- Two stages of fermentation: Primary and Secondary
- Each stage is about 24-48 hours long
- Primary stage creates biological activity
- Secondary stage creates carbonation
Primary Fermentation

- Basically a large Ginger Bug
- Open (non-metal) vessel covered with cloth
- Keep warm (70-75 degrees) and out of sun
  - Top of fridge is an ideal location
- Look for signs of activity
  - bubbles on top
  - movement of ginger up and down in vessel
- Alcohol production begins quickly, once active
- Add any fresh herbs, fruits, or spices here
Secondary Fermentation

• Culture is strained out before carbonating
  - Reserve grated ginger and feed as a Ginger Bug
• Airtight (non-metal) vessel
  - 1-liter plastic bottles are HIGHLY recommended
  - Swing-top glass bottles
  - NO CRIMP TOP BOTTLES (like those used for beer)
• Keep at same temp as Primary Fermentation
• Add any juices, concentrates or flavors here
• Leave 1 ½ inch of headspace at top of bottles
• Check pressure in bottles often
  - Squeeze plastic bottles to gauge pressure in batch
• Once pressurized, cool in fridge before opening
<table>
<thead>
<tr>
<th>WHAT</th>
<th>WHEN</th>
<th>HOW MUCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh Herbs</td>
<td>Primary Fermentation</td>
<td>1-3 sprigs, depending on strength of flavor desired</td>
</tr>
<tr>
<td>Fresh Fruit</td>
<td>Primary Fermentation</td>
<td>1-2 cups, chopped</td>
</tr>
<tr>
<td>Juice or Fruit</td>
<td>Secondary Fermentation</td>
<td>1:3 (juice to ginger beer) ratio, or follow directions on concentrate bottle</td>
</tr>
<tr>
<td>Concentrate</td>
<td></td>
<td></td>
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<tr>
<td>Spices/Peppers</td>
<td>Primary Fermentation</td>
<td>A few pieces, or ½-1 teaspoon</td>
</tr>
<tr>
<td>Herbal Tea</td>
<td>Use instead of Water</td>
<td>1 gallon</td>
</tr>
<tr>
<td>Sugar as Flavor</td>
<td>Secondary Fermentation</td>
<td>¼ to ½ cup, depending on strength of flavor desired</td>
</tr>
<tr>
<td>Less Sugar</td>
<td>Primary Fermentation</td>
<td>Omit or replace up to half</td>
</tr>
</tbody>
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Cultural Issues
(when using GBP instead of Ginger Bug)
Using and Maintaining a GBP Culture

• Beware of imposters! Find reputable sources: yemoos.com and gingerbeerplant.net are the best we’ve found.
  – Follow directions to “revive” and grow culture.
• GBP likes to be in acidic solution, so feed with white or raw sugar with a little lemon juice.
  – 2 cups water, 2 tbsp sugar, 1 tsp lemon juice
  – Refresh weekly, if not using for ginger beer.
• Beware of dark sugars! They can cause problems!
  – Over mineralization; thickening of ginger beer
• Performs best with no ginger solids present
  – Modify Basic Recipe to use with GBP
Basic Ginger Beer Recipe (modified for use with GBP)

In a 2-qt saucepan, combine:
- 1 quart water
- 2-4 oz grated ginger root

Bring to a boil, cover, then let simmer for 1 hour. Strain tea into gallon jar.

Stir in:
- 1 ½ cups cane sugar
- 2 tbsp lemon juice
- ~2.5 quarts cold water

Add ½ cup GBP to cooled solution, cover with cloth, secure with rubber band.
Enjoy!