

Choose one of the following recipes to follow, or find one of your own.

Lemonade

You will need:

3 lemons
1 L water
4 tbsp sugar
2 tsp bicarbonate soda
plastic cups
plastic spoons
ice cubes
lemon squeezer
jug

What to do:

1. Squeeze lemons and add 1 L of water.
2. Add sugar and sodium bicarbonate.
3. Stir, add some ice cubes and serve in plastic cups.

Ginger beer

You will need:

1 L boiling water
50 g ginger root
1 lemon
140 g sugar
4 g cream of tartar
¼ tsp bread yeast
bowl
plastic bottles
fine grater

What to do:

1. Peel and grate ginger, then grate lemon peel and squeeze lemon for juice. Place ginger, lemon zest and juice in bowl and stir.
2. Add sugar and cream of tartar.
3. Pour boiling water over mixture and stir.
4. Cover bowl and leave to cool to 25-30 °C.
5. Add yeast and stir well.
6. Cover bowl again with clean cloth and leave in warm place for 24 hours.
7. Skim off yeast, leaving sediment in bowl. Strain into clean PLASTIC bottles, leaving air gap at top.
8. Allow ginger beer to ferment for another 48 hours ONLY then place into refrigerator. Drink within six days (your ginger beer contains no preservative to prevent bacteria growing, so drinking after six days may make you sick.)

Safety notes

- Use caution when pouring hot water.
- Use caution when grating ginger.

Questions

1. Carbon dioxide is an important ingredient in soft drink. How is it added to these drinks?

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2. What separation technique is used to keep ginger and lemon bits out of the ginger beer?

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3. How could you make the lemonade more concentrated?

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Adding the fizz

Your teacher will take you through a method of getting fizz into your soft drink.

4. Does carbon dioxide dissolve into the solvent?

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