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How To Grow Sugar Crystals - Make Your Own Rock Candy

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It's easy to grow your own sugar crystals! Sugar crystals are also known as rock candy since the crystallized sucrose (table sugar) resembles rock crystals and because you can eat your finished product. You can grow beautiful clear sugar crystals with sugar and water or you can add food coloring to get colored crystals. It's simple, safe, and fun. Boiling water is required to dissolve the sugar, so adult supervision is recommended for this project.



Rock candy is made from crystals of sugar.

Laura A., Creative Commons

Difficulty: Easy

Time Required: a few days to a week

Here's How:

1. Gather your materials.
2. You may wish to grow a [seed crystal](#), a small crystal to weight your string and provide a surface for larger crystals to grow onto. A seed crystal is not necessary as long as you are using a rough string or yarn.
3. Tie the string to a pencil or butter knife. If you have made a seed crystal, tie it to the bottom of the string. Set the pencil or knife across the top of the glass jar and make sure that the string will hang into the jar without touching its sides or bottom. However, you want the string to hang nearly to the bottom. Adjust the length of the string, if necessary.
4. Boil the water. If you boil your water in the microwave, be very careful removing it to avoid getting splashed!
5. Stir in the sugar, a teaspoonful at a time. Keep adding sugar until it starts to accumulate at the bottom of the container and won't dissolve even with more stirring. This means your sugar solution is saturated. If you don't use a saturated solution, then your crystals won't grow quickly. On the other hand, if you add too much sugar, new crystals will grow on the undissolved sugar and not on your string.
6. If you want colored crystals, stir in a few drops of food coloring.
7. Pour your solution into the clear glass jar. If you have undissolved sugar at the bottom of your container, avoid getting it in the jar.
8. Place the pencil over the jar and allow the string to dangle into the liquid.
9. Set the jar somewhere where it can remain undisturbed. If you like, you can set a coffee filter or paper towel over the jar to prevent dust from falling into the jar.

10. Check on your crystals after a day. You should be able to see the beginnings of crystal growth on the string or seed crystal.
11. Let the crystals grow until they have reached the desired size or have stopped growing. At this point, you can pull out the string and allow the crystal to dry. You can eat them or keep them. Have fun!
12. If you are having trouble growing sugar crystals, you may want to try some [special techniques](#). A [video tutorial](#) showing how to make rock candy is available, too.

Tips:

1. Crystals will form on a cotton or wool string or yarn, but not on a nylon line. If you use a nylon line, tie a seed crystal to it to stimulate crystal growth.
2. If you are making the crystals to eat, please don't use a fishing weight to hold your string down. The lead from the weight will end up in the water -- it's toxic. Paper clips are a better choice, but still not great.

What You Need:

- 1 cup water
- 3 cups table sugar (sucrose)
- clean glass jar
- pencil or butter knife
- string
- pan or bowl for boiling water and making solution
- spoon or stirring rod

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