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Make an edible aquifer

Have you ever wondered where the water comes from that we use every day in our homes? Whether it is to quench our thirst, to take a bath or to wash our clothes, most of us in northeast and east-central Florida get our water from an aquifer. Your home might have its own well that is dug deep into the ground to reach the water. Or, you might receive your water from a local utility company that has wells to get the water and pump it to your home. An aquifer is a layer of underground rock or sand that stores and carries water. The largest and deepest aquifer in our area is the Floridan aquifer.

Here's a fun way to make an aquifer that you can eat!

You will need crushed ice, two bottles of clear soda (such as Sprite or ginger ale), chocolate ice cream, mini-chocolate chips or chocolate sprinkles, green sprinkles, straws, spoons and clear plastic cups.

1. Fill the cup halfway with ice. This represents the Floridan aquifer, the limestone layer.
2. Add clear soda. This represents the groundwater in the Floridan aquifer.
3. Add a big scoop of chocolate ice cream. This represents the clay confining layer, known as the Hawthorne Formation. This layer can be up to 300 feet thick in some places.
4. Add a few spoonfuls of mini-chocolate chips. This represents the surficial aquifer layer, which is a shallow aquifer system that is usually characterized by sandy soils.
5. Add a little more soda. This represents the groundwater in the surficial layer.
6. Add green sprinkles. This represents the vegetation on the ground, such as grasses, shrubs and trees.
7. Add a straw. This represents a well that taps into the Floridan aquifer. Drink up!



Want to make edible aquifers with your friends? Here are the approximate quantities of supplies you will need:

- o One 2-liter bottle of soda for every 20 people
- o One gallon of chocolate ice cream for every 60 people
- o One 12-oz. bag of mini-chocolate chips for every 50 people
- o One 2.25-oz. container of green dessert sprinkles for every 50 people
- o One medium bag of crushed ice
- o 8 oz. cups, one per person