

Mentos and Diet Coke!

Have you ever noticed that when you put a straw in soda pop, the straw gets a lot of bubbles on it? Why does that happen? And will it happen if you put other stuff in soda pop?

What you'll need

- Goggles
- Colorless soda like Sprite or 7-Up
- Glass cup
- Straw
- Pipe Cleaner
- Mentos



Be safe

Put on your goggles. Be sure that a teacher, parent, or other adult is working with you. Wash your hands after the experiment.

Here's what to do

1. Very slowly and carefully, open a new bottle of colorless soda.
2. Tilt the cup and slowly pour the soda down the inside of the cup to make as few bubbles as possible.



3. Place a straw in the soda and look at the straw from the side.



What to expect

A lot of bubbles will be on the straw.

4. Take the straw out of the soda and put a pipe cleaner in. Look from the side to see if bubbles also form on the pipe cleaner.

What to expect

Bubbles will form very quickly and completely cover the pipe cleaner.

5. Now take the pipe cleaner out and place a Mento in the soda. Watch the Mento from the side to see what happens.



What to expect

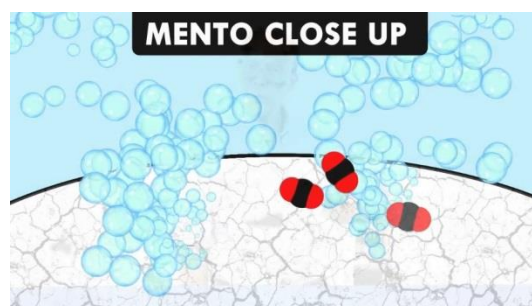
Bubbles will form on the Mento and flow upward in a stream of bubbles to the surface of the soda pop.

What's happening in there?

Why do the bubbles form on the different things you put in the soda?

The bubbles are made of a gas called carbon dioxide. The soda company puts carbon dioxide in the soda to make the soda fizzy.

Also, the things you put in the soda aren't really as smooth as they look with just your eyes. If you could look at the straw, pipe cleaner, and Mento



with a super-strong microscope you would see that they have tiny dents, scratches, and bumps on them.

The carbon dioxide molecules collect on these places and form bubbles which rise to the surface.

What else could you try?

There is a pretty cool thing you can do with a bottle of soda pop and a packet of Mentos. Let's try it!

What you'll need

- Diet Coke (1.25 liter bottle)
- Package of Mentos
- Construction paper
- Scissors
- Masking tape
- Stiff card (like a playing card)

Here's what to do

Make a tube for the Mentos.

1. Cut a piece of paper so that it is as wide as a roll of Mentos.
2. Wrap the paper around the pack of Mentos to make a tube. Use masking tape to tape the tube closed. Remove the pack of Mentos from the tube.
3. Close off one end of the tube by cutting a little circle or square of paper and taping it to one end of the tube.
4. Open the pack of Mentos and place all of them in the tube.



Make a Mentos-and-soda fountain!

5. Slowly and carefully open a new bottle of diet Coke.
6. Place it on a flat area outside where it is OK to get wet with soda.
7. Put the open end of your tube of Mentos on the card and place it directly over the opening of the soda bottle.
8. When you are ready, remove the card and let all the Mentos drop into the soda at once and quickly move out of the way.



What to expect

Bubbles and soda will quickly shoot out of the bottle in a high fountain.

The carbon dioxide molecules attach to the surfaces of the Mentos like they did in the cup of soda. All those Mentos in a lot of soda make a lot of bubbles that rise to the surface and push the soda out in a big woosh!

