



"I Can't Keep It In...!"

The Mentos and Diet Coke Devotion

Bible Verse

Then they called them in again and commanded them not to speak or teach at all in the name of Jesus. But Peter and John replied, "Which is right in God's eyes: to listen to you, or to him? You be the judges! As for us, we cannot help speaking about what we have seen and heard." Acts 4:18-20

Main Spiritual Point

"I've been freed from sin, I can't hold it in! I've got to share, all over, everywhere."

Science Concept

The thing that makes carbonated beverages fizz, bubble and have that distinctive sensation is invisible carbon dioxide, which is pumped into bottles at the bottling factory using lots of pressure. Shaking a bottle or can of soda causes some of the gas to come out of the solution and the bubbles cling to the inside walls of the container and pressure builds. When you open the container, the bubbles quickly rise to the top, pushing the liquid out of the way and liquid sprays everywhere.

Mentos candy has thousands and thousands of tiny pits, divots and texture all over its surface. These tiny pits are called nucleation points - perfect places for carbon dioxide bubbles to form. As soon as the Mentos hit the soda, bubbles form all over the surface of the candy. Couple this with the fact that the Mentos candies are heavy and sink to the bottom of the bottle and you've got a double-whammy. When you drop 6-8 Mentos into a soda, the carbon dioxide in the solution rapidly escapes, causing lots of gas to be released. When all this gas is released, it literally pushes all of the liquid up and out of the bottle in an incredible soda blast.

You will need:

- Diet Coke
- Mentos
- Soda geyser device (purchased)
- Rolled paper, tape, toothpick (if you want to make your own device)

Difficulty & Duration:

Easy: 10 minutes

Tips For Success:

- Do NOT use refrigerated soda bottles for this demonstration. Soda bottles that have sat outside in the sun will work a little bit better. Use caution when opening warmer bottles of soda.
- Homemade version - Make a tube by rolling up and taping pieces of paper the diameter of the Mentos. Place a toothpick through the paper to hold Mentos up. When you pull out the toothpick, the Mentos can drop into the mouth of soda bottle.
- Purchased version - The soda geyser device has a restricted opening at the top, forcing the soda to shoot higher in the air. Recommend purchasing this device.
- Invest in the soda geyser car. Super fun! While most kids have seen the Mentos and Diet Coke reaction, very few groups have seen the car.
- Seltzer water can be used in place of Diet Coke if you desire to have an indoor experience that will not leave a sticky residue everywhere! Definitely test this method to see how effective it is for your setting.

The Mentos & Diet Coke Devotion: What to Say to Kids

1. A crippled man who begged for money every day was healed through the power of the Holy Spirit. The people at the temple were astonished and wanted to hear more. Peter told them of Jesus dying on the cross for the forgiveness of sins. He told them to repent and turn to God, so that their sins could be wiped out. Tons of people did!

2. However, the exact same leaders that had arrested, whipped, beat and crucified Jesus now were coming after Peter and John. Read Acts 4:1-4.

3. The next morning, they wanted Peter and John to stop telling people about this Jesus. No more talking about Jesus. Peter and John knew they meant business. Those bad leaders could punish Peter and John or even kill them, because remember, they had the master Jesus crucified.

4. Why might Peter and John do what these bad leaders said? Why might Peter and John actually stop telling others about Jesus? What could the leaders do to Peter and John? Why might they have been scared of these powerful but bad leaders and stopped telling the message of forgiveness through Jesus?

5. Have you ever had some news that you just could not keep to yourself?

6. Here is a simple bottle of Diet Coke. Now the thing that fizzes and bubbles in soda is invisible carbon dioxide that is hidden inside the soda. Shaking a bottle or can of soda causes the bubbles to quickly rise to the top, pushing the liquid out of the way and the liquid sprays everywhere.

7. Here I have Mentos candy. Take a look up close at the Mentos. Mentos may look smooth on the outside, but if you zoom in, its surface is covered in thousands and thousands of tiny pits and divots. The surface is actually pretty rough. These tiny pits are called nucleation points - perfect places for carbon dioxide bubbles to come out of the liquid. As soon as the Mentos hit the soda, bubbles form all over the surface of the candy. And when it does, look out!

8. Read Acts 4:12-21. You see, the bad and sinful leaders told Peter to keep the message of Jesus to himself.

9. They commanded them not to speak or teach at all in the name of Jesus. Read Acts 4:18-20.

10. It is now time to drop in the Mentos into the Diet Coke. Just like the bubbles that won't be able to be kept inside the bottle, Peter could not keep the message of Jesus inside. (Do the experiment.)

11. You see, the Good News of Jesus is just too good to keep a secret! We have got to get it out! An amazing miracle had taken place. People were amazed and getting saved from their sins. But some people did not like that message and they did not want it to be told any more.

12. And how about you? Has the message of Jesus and His salvation come into your heart? If it has, He wants us to tell the story! He wants us to tell others, just like Peter and John were doing.

13. Have you ever told another person the story of Jesus dying on the cross to pay for sins? Do you know someone who may need to hear this message? Could you tell them? Will you tell them this message of Jesus? Peter did! You can too!