Exploding Marshmallows!

Does your child ask questions about the magical mystery microwave? Now you can show her how and why it works, while demonstrating just how strangely foods can behave while inside the crazy cooker.

What You Need:

- Marshmallows
- Plate
- Microwave oven
- Bar of soap (optional)

What You Do:

1. Make sure you supervise your child doing this experiment and explain that he always need permission if he wants to use appliances in unusual ways.
2. Have your child place a marshmallow on a plate in a microwave. Turn the microwave on for 30 seconds. Watch what happens.
3. Change the time you microwave the marshmallow and see what happens. Be careful: the marshmallow will be very hot when done.
4. Repeat this experiment with a bar of soap. The microwave will smell like soap after you finish. But not forever.

What's Going On?

Microwaves have a unique property that makes them useful for cooking – the ability to excite water molecules. Microwaves cause water molecules in food to spin. As the molecules spin faster, they heat up. The hot water molecules then cause the food to heat up. When things heat up, they expand. As the marshmallow heats up, the tiny bubbles of moist air trapped inside grow, and the marshmallow gets big – very big. Now that your child knows this, ask him these questions: What did you see on the surface of the marshmallow after it was heated? Why do you think it only reached a certain size? Soon he'll be guessing how all the appliances work!

Recommended Books:

Smash It! Crash It! Launch It!

Rain Newcomb, Bobb...

Buy from amazon.com

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