Cool Candy

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Purpose

The purpose of this project is to see if evaporation can keep the candy from melting.

Research and facts

Did you know that your body has a built-in cooler? It might not be what you think! Sweat is made when you are hot, but its purpose is actually to cool your body while the water in it evaporates from your skin. In this science fair project, you'll use the energy produced when water evaporates to cool down chocolate-covered candy so it doesn't melt. You've probably noticed that when you're outside on a hot summer day, your body starts to sweat. But did you know that sweat, is actually your body's way of cooling down just like candy.

hypothesis

If we put a wet paper towel around the chocolate, then the chocolate will melt slower because the evaporation will slow down the process of it melting.

Materials and equipment

- Paper towel (6 sheets)
- Scissors
- Small bowl of room-temperature water
- Chocolate candies in wrappers or small chocolate candy bars in wrappers (6) *Note:* Teardrop-shaped chocolates are not recommended.
- Tape
- Ruler
- Drinking glass
- Hair dryer
- Timer
- Lab notebook

Procedures

1. Cut your paper towel sheet into strips that are about 3 inches wide.

2. Take one paper towel strip and wet it by dripping water on it. It should feel wet, but not dripping.

3. Keeping the candies in their wrappers, tightly wrap one of the candies in the wet paper towel strip and *tightly* wrap another candy in a dry paper towel strip. The dry paper towel strip might have a tendency to unwrap. Keep it in place with a small piece of tape.

4. Place the two candies side-by-side on a heat proof surface. Place a glass upside down on the edges of the paper strips to keep the candy in place.

5. in An upside-down glass holds the candies that are wrapped in paper towel strips in place.

Procedures 2

6. Hold your hair dryer so the air will blow down over the candies. The hair dryer should be 8 inches above the candy,

7. Using your timer, blow hot air (with the hair dryer on high) for 5 minutes.

8. After 5 minutes, stop the hair dryer. Observe how the paper towel strips have changed. Remove the paper towel strips and open the wrappers.

9. In your lab notebook, record your observations about what happened to the candy wrapped in the wet paper towel versus the candy wrapped in the dry paper towel. A table like Table 1 can help organize your observations.

Independent variable

One of the paper towel is going to be wet and have water in it the other one is going to be dry .

Dependent variable

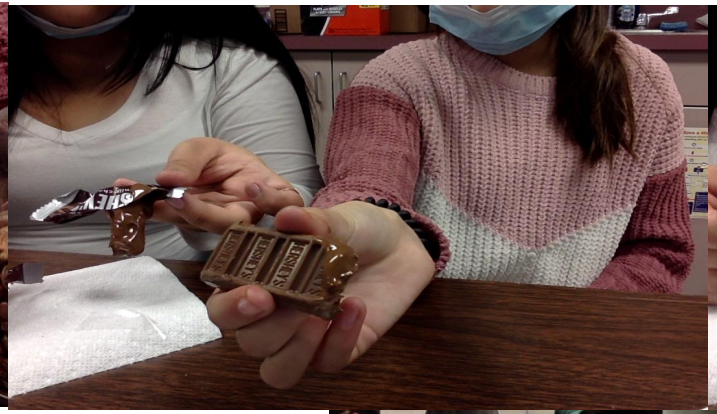
We are measuring how much chocolate has melted after being exposed to heat.

Data

	Candy wrapped in dry paper towel	Candy wrapped in wet paper towel
First trial	The chocolate melted more on edges and soft in center	The chocolate was solid in center and top right corner melted.
Second trial	The chocolate melted all the way around there was a small piece in center that was not.	The chocolate melted a little in the corner nowhere else
Third trial	The chocolate melted in the all the edges and a in the middle.	The chocolate melted on the top corner the rest of the chocolate was solid.

Pictures

All photos taken by the researcher



Results

We were right the wet paper towel with the chocolate melt slower because of the evaporation, and the dry one melted really quick.

Conclusion

Finally when something is wet it melts slower because of the evaporation, the water from the paper towel evaporates into the candy and slows down the process of the chocolate melting.