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Project Title
Dirty Mouth? Clean It Up!

Abstract

Objectives/Goals
I hypothesized that the cinnamon gum would reduce the most microbes. My problem was which flavor of gum reduced the most bacteria, though both flavors have an even chance to reduce the most bacteria. The peppermint gum has peppermint oil in it that has a numbing affect, and the cinnamon gum has cinnamon oil in it that helps prevent bad breath. I planned to solve this by having people chew two different flavors of gum and measure how much bacteria it reduces. I will also need to get a control so I can figure out which flavor reduces the most bacteria.

Methods/Materials
I tested my question by taking samples of bacteria. My independent variable was the sample before they chewed the gum. My dependent variable was the samples from the cinnamon and peppermint gum. My method for testing was to swab their mouth before and after they chewed the gum. Then I put the sample on the agar plates and looped them, taped them shut, and put them in the incubator for the bacteria to grow. The next day I would count the bacteria.

Results
My findings proved my hypothesis wrong. Peppermint gum reduced the most bacteria. The average bacterium reduced by cinnamon gum was 79.1. The average bacterium reduced by peppermint gum was 86.5. 549.4 was the average control people had. As you can see both flavors of gum reduced about the same amount of bacteria. Also neither one reduced much of the bacteria, but they reduced some bacteria.

Conclusions/Discussion
I have learned many things from this project. For example, I learned a lot about bacteria and how to grow them. I had to grow them to see if my hypothesis, which was cinnamon would reduce the most, was correct or incorrect. My problem was which flavor of gum would reduce the most bacteria. My independent variable was the type of gum I had and my dependant variables was the amount of bacteria each type grew.
In the end I proved my hypothesis incorrect. The average bacterium reduced by cinnamon gum was 79.1. The average bacterium reduced by peppermint gum was 86.5. As you can see peppermint gum reduced 7.4 more bacteria than cinnamon gum.

Summary Statement

My project is about finding out which flavor of gum, peppermint or cinnamon, can reduce the most bacteria in your mouth.

Help Received

Mother helped type up report and decorate board, Mrs. Marcarelli helped get materials I needed and supervised my project.