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"How Clean is Your Mouth" (The Effects of Mouthwash on Bacteria)

The purpose of the experiment was to find out which one of four different mouthwashes, Act, Cool Mint Listerine, Scope, and Equate Mouthwash. In order to do this I broke down the ingredients in all four mouthwashes. The hypothesis is to prove that Listerine Mouthwash will be the most effective at killing bacteria because it contains an antiseptic. This hypothesis is based on the fact that Listerine Mouthwash contains 3 ingredients for fighting germs and an antiseptic and the other mouthwashes do not. The materials used in the procedure included four different types of mouthwash (Act, Cool Mint Listerine, Scope, and Equate), 20 sterile swabs (used for collecting oral bacteria), 20 Petri dishes with agar, 4 syringes, 16 sensitivity squares, a measuring tape and pencil. To test the mouthwashes, four sensitivity squares were soaked with each mouthwash and placed in the center of the bacteria on the Petri dishes. The fifth bacteria culture for each tester was left alone to be used as a control. Observations were made and recorded each day. Measurements were taken of each killing zone to determine the diameter of the circle around the mouthwash squares. In conclusion, after finishing the experiment, I found that the hypothesis was correct. The Listerine mouthwash had the fastest results for killing bacteria. The other mouthwashes took longer to kill the bacteria, but they eventually reached similar results.