

Max Popkin
Yuck, Bacteria on Dishes!

For my experiment, I tested whether a natural- based dish soap (Seventh Generation Free and Clear dish soap) would kill MM294 strain Escherichia coli bacteria more effectively than chemical based dish soap (Palmolive Ultra Original dish soap). I did this experiment because I wanted to see if all of the chemicals inside the chemical-based dish soap were necessary to kill bacteria. My hypothesis was: If I clean the dishes with the chemical-based dish soap, then there will be fewer bacteria on the plates than if I clean the plates with the natural dish soap or water. I tested the soap experiment on three different plates each with different surfaces. I tested a foam plate, a glass plate, and a tin plate. When I did the experiment, I would take a cotton swab (unfortunately, I did not use sterile cotton swabs, I used sealed QTips), dip it in distilled water, and first swab the plate with nothing on it. Then I would swab a Petri dish. Due to the lack of Petri Dishes, I was forced to divide each dish in half. After swabbing I would apply E. coli to the plate, wash it under cold water for 30 seconds with the Palmolive, the Seventh Generation, or just water. After all of the tests on each plate I came to the conclusion that there was the most bacteria on the foam plates and that the Palmolive soap killed the bacteria the best.