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Effectiveness Of Sanitizing Wipes

Intrigued by the declaration that sanitizing wipes "kill 99.9% of bacteria," I decided to test if these are as effective as they claim. For this project, I selected nine different surfaces within my house to test. I rolled a sterile swab over each surface three times to catch any bacteria on the surface, then quickly transferred bacteria that were on the swab into an agar petri dish. To do this, I rolled the swab on one half of the dish in two rows. After running a sanitizing wipe over the same area four times, the surface was left to dry for exactly one minute and 35 seconds. Once it was dry, I ran another swab over the surface using the same method as before. Then I rolled the swab in the other half of the petri dish utilizing the same method. I repeated all steps for each surface. The bacteria grew for four days, and I checked them daily to record what could be seen by the naked eye. After calculating the percents for each individual petri dish (by dividing the number that survived by the original amount of bacteria), it was found that sanitizing do not kill the 99.9% of bacteria they claim. The average percentage was 9.2% less than that claimed by the company, at 90.7% bacteria killed. The results of this experiment show that sanitizing wipes do not always kill all they claim.