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Do Household Soaps And Hand Sanitizers Really Work

I did my experiment to find out if anti-bacterial soap and hand sanitizers really kill bacteria. Bacteria can be found on common things such as remote controls, computer keyboards, doorknobs, and toilets. Each year many people get sick from common bacteria and germs. With the help of adult supervisors at the local hospital lab, I grew bacteria samples in agar dishes, then applied two drops of a disinfectant to see if it would keep the bacteria from growing in that area. I expected the bacteria would grow all over the dishes except where the soaps were. My control would be free from the disinfectants. I didn't grow enough bacteria to draw a definite conclusion. So I did another experiment. With the help of the Lincoln Community Lab, we grew Staph samples on blood agar plates, and then applied the disinfectants on top of the Staph to see if they would keep the Staph from re-growing in that spot. I hypothesized the hand sanitizer would work best because its active ingredient was 62% Ethyl Alcohol. The soaps active ingredient was Triclosan and they both had less than 1% active ingredients. The results of the first experiment showed an absence of bacteria in the area of the disinfectant drops, but in the second experiment the Top Care soap was the only one that kept the Staph from growing on top of it. Based on the second experiment I conclude the Top Care soap was effective against the bacteria.