

Which Brand of Disinfectant Is the Most Resistant to Bacterial Growth?

Lewis, John (School: Patrician Academy)

Disinfectants are used everywhere in hospitals and especially in the home. This project wanted to determine which brand of disinfectant was the most resistant to bacterial growth. First, raw hamburger meat and raw chicken were rubbed on six divided cutting boards and left out for eight hours untouched. After the eight hours elapsed, each board was treated with a different disinfectant (Brands #1-5 and a control of distilled water). Then the bacteria were cultured onto thirty-six Petri dishes, and the bacterial growth was tracked for five days in charts and graphs. The hypothesis was that Brand #2 would be the most resistant to bacterial growth in the home. Compared to all other brands, Brand #2 did do the best in yielding the bacterial growth in the chicken experiments. However, Brand #4 was the best overall by allowing only one bacterial colony between the chicken and the hamburger experiments. In conclusion, the hypothesis was not supported; however, the project did show that disinfectants could limit bacterial growth in the home.