

A Bacteriological Analysis of Hand Sanitization Products

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PURPOSE: To determine how a variation of hand sanitization products compare to each other, also to see the effects of evaporation on hand sanitizers. **PROCEDURE:** Kirby Bauer: 1) Selected 15 hand sanitizers and 5 hand soaps. 2) sectioned nutrient and PDA agar plates into 5 sections per plate. 3) Applied *Staphylococcus epidermidis*, *Escherichia coli*, and *Streptococcus salivarius* to the plates. 4) Sterilized the forceps. 5) Placed the sterilized disks in a product. 6) Applied each saturated disk to the corresponding number on each plate. 7) Incubated each plate for 24 hours at 37 degrees Celsius. 8) Removed each plate from the incubator. 9) Measured each inhibition zone size. Evaporation: 1) Saturated a disk in a selected hand sanitizer. 2) allow to evaporate for 5 minutes. 3) repeat Kirby Bauer method as listed above. **CONCLUSION:** I found JO was the most effective in inhibiting the bacteria *Staphylococcus epidermidis*, *Escherichia coli*, and *Streptococcus salivarius*.

Awards Won:

