

Hand Washing Experiment

Directions: Investigate the role of proper hand-washing in eliminating cross contamination by completing the following steps.

1. Prior to washing your hands, collect scrapings from under your fingernails
2. Place these fingernail scrapings into the growing medium in a petri dish to observe. Label this dish "Sample A," then store it in a safe place identified by your teacher.
3. Review the steps you have been taught on proper hand-washing. Then wash your hands following the procedure.
4. After washing your hands, collect additional scrapings from under your fingernails.
5. Put these fingernails scrapings in a second petri dish to observe. Label this dish "Sample B," then store in the same place as "Sample A".
6. Check the petri dishes in 24 hours. Then check the petri dishes again after 48, and again after 72 hours.
7. Record the changes found in each petri dish. How do the fingernail scrapings compare? What impact did hand-washing have on Sample B?
8. Practice the hand-washing procedure several more times after you have completed the fingernails scraping experiment.