Dubious Desks: A Comprehensive Study to Identify and Resolve Microorganism Contamination on Office Desk Surfaces

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With desk jobs being among the most common in the United States, the purpose of this experiment was to determine whether indigenous microorganisms and opportunistic pathogens existed on office desks surfaces, and the ability of those microbes to transfer to the forearms of two adult subjects. The product Microban was also tested to determine if it reduces microbe contamination and transfer rates from desks to forearms over the duration of one week. Data was collected through a series of tests for ten experimental desks; the surface of each desk was swabbed first. Test one was the human subject's forearm before cleaning, test two was the human subject's forearm after cleaning, and test three was the subject's forearm after contact with the desk surface for one minute. For the control, a separate desk was cleaned and swabbed, with additional tests of the subject's forearm before and after cleaning to show the sterile wipes' effectiveness. All ten desks were contaminated with bacteria and nine of the ten desks showed a transfer of microorganisms to the human subjects' forearms. Microorganisms identified included Staphylococcus aureus, Pseudomonas, Mucor, Micrococcus luteus, Rhizopus, and Actinomycete among many others. Microban was found to significantly reduce microbe contamination on office desk surfaces and also prevented any transfer to either human subject over the duration of one week, which could be useful in preventing the spread of illness in an office setting.

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