



Scientists test peanut cleaning agents in schools

Scientists in the USA have provided some reassuring messages after investigating the presence of peanut allergen in the school environment and how effective different cleaning agents were in removing it.

After cleaning, they measured levels of the major peanut allergen (known as Ara h 1) in the air, on cafeteria tables, and on other surfaces in six schools and pre-schools. They found Ara h 1 present on one out of 13 water fountains, but none on desks (22) or cafeteria tables (36).

To start with, the scientists simulated real-life peanut exposure by having 19 non-allergic volunteers eat peanuts and peanut butter in a cafeteria setting. No Ara h 1 was detected in the air.

The researchers also looked at cleaning methods for removing Ara h 1 from surfaces. They found that common household cleaning agents and sanitizing wipes removed peanut allergen from tabletops. However, dishwashing liquid left traces of the allergen on four out of 12 tables.

To test the effectiveness of cleaning methods for removing Ara h 1 from hands, scientists applied one teaspoon of peanut butter to the hands of volunteers who were not allergic to peanut. The volunteers then removed the peanut butter from their hands using different cleaning methods.

Of 12 hands that were cleaned using only water, three hands still had detectable levels of peanut allergen on them after cleaning.

Twelve hands were cleaned using antibacterial hand sanitizer. Six hands still had detectable levels of peanut allergen.

Other cleaning methods proved to be more effective. None of the hands cleaned using antibacterial wipes (12) or flushable wipes (10) had detectable levels of Ara h 1 on them after cleaning.

When liquid soap was used to clean peanut butter from 12 hands, none of the hands was found to have peanut allergen on them. Bar soap was equally effective.

The researchers conclude that Ara h 1 is easily cleaned from hands and surfaces and does not appear to be widespread in American pre-schools and schools. Airborne peanut allergen was not detected.

The study can give no absolute guarantees that peanut allergen will never be present on hands or surfaces or in the air in schools, but it does give reassurance to parents who fear that the risks of a reaction are high in schools.

People in the UK must bear in mind that the cleaning agents used were manufactured in the USA. But those found in this country should not be appreciably different.

Source: The Food Allergy and Anaphylaxis Network. The above study, entitled "The distribution of peanut allergen in the environment", was published in the Journal of Allergy and Clinical Immunology (Vol. 113, No. 5).