



# Working in Partnership

## Consultancy project supports Good Housekeeping Institute

### Overview

This project evaluated the antimicrobial activity of two air fresheners for the Good Housekeeping Institute. Bath Spa University's microbiology experts undertook a laboratory evaluation of the domestic products and provided the Good Housekeeping Institute with a full technical report.

This project came about as a direct result of a student placement at the Good Housekeeping Institute (GHKI). The placement line manager was impressed with the skills of the student from Bath Spa University and was keen to learn about our research and consultancy services.

### About the Project

The Good Housekeeping Research Institute (GHRI) was founded in 1900 to improve the lives of consumers and their families through education and product evaluation. It is the product evaluation laboratory of the magazine, dedicated to evaluating and testing everything from moisturizers to bed sheets to cell phones. The GHRI also has a test kitchen, which creates, tastes, and triple-tests the thousands of recipes appearing in the magazine. The editorial test kitchens also assess food nutrition claims and create low-cost, family-friendly meal solutions.

Before Good Housekeeping accepts any advertisement from a company, GHRI reviews its products. Only those that pass the rigorous evaluation are allowed to buy advertising space in the magazine and become eligible for the Good Housekeeping Seal, which involves an even more rigorous evaluation. The Seal has been reassuring consumers about their product-purchasing decisions for almost 100 years, and is one of the most recognized consumer emblems in the market today.

The Institute conducts more than 2,000 evaluations each year and salutes the most innovative problem-solving products with Good Housekeeping's annual Good Buy Awards.

### Benefits

As a result of this project Bath Spa University's relationship with the Good Housekeeping Institute has been strengthened and the Institute continues to use our research and consultancy services - drawing on the expertise of our specialists.

As the Good Housekeeping Institute does not have specialist facilities for the testing of such products, this project enabled it to have the products tested in a high quality environment using robust methods.

### Fast Facts

- University specialist facilities and experts became an additional resource for the Institute
- This project is just one example of the several projects that Bath Spa University has conducted for the Good Housekeeping Institute.
- Microbiology experts undertook a laboratory evaluation of domestic products.

## Outcomes

The purpose of this trial was to test the two products against the claims made on the product label regarding their antibacterial properties. Two samples of the sprays were received from the Good Housekeeping Institute. The usage instructions for these products stated that they are not intended for cleaning and should be applied to a pre-cleaned surface only.

For the purposes of the test, the sprays were applied to the test surfaces according to the instructions on the product. This required the sprays to be well shaken before application and then the surfaces sprayed until visibly wet. The product was then allowed to remain on the surface for fifteen minutes. On hard surfaces, a short burst of spray for approximately one second left the surface visibly wet so this was the application method used. For soft surfaces, a spray of one to two seconds was used to achieve a visibly wet surface.

The sprays were stored at ambient temperature and tested at the same time.

The following five microorganisms were tested for:

- *Pseudomonas aeruginosa*
- *Escherichia coli*
- *Staphylococcus aureus*
- *Salmonella* Enterica
- *Penicillium spp*

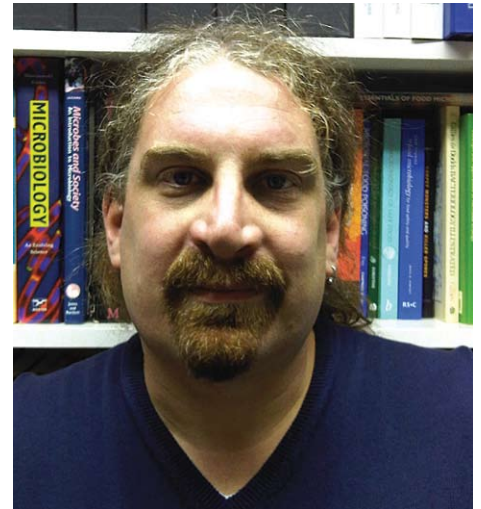
The following five surfaces were tested:

- Laminate work surface
- Glass
- Stainless steel
- 100% cotton
- Upholstery fabric (wool blend)

The two sprays that were tested were found to possess antimicrobial action on the five test surfaces against the five microbes when used according to manufacturer's instructions. On hard surfaces a reduction in viability of  $>10^5$  cfu/ml was achieved. On soft surfaces a reduction of least  $10^4$  cfu/ml was achieved.



Microbial streak plate



Iain Haysom

## Perspective

“Working with a “live” project was very exciting and meant I was able to apply the academic rigour - that we instil in our students - to industry. At Bath Spa University our motto is ‘to educate and train for professional life’. Projects such as these enhance our teaching and the learning of our students. We strongly believe in delivering courses which are informed by research and scholarship in a student centred environment.”

**Iain Haysom**, Course Leader Diet and Health and Senior Lecturer in Microbiology & Food Safety