

SCIENCE DAILY: YOUR SOURCE FOR THE LATEST RESEARCH NEWS

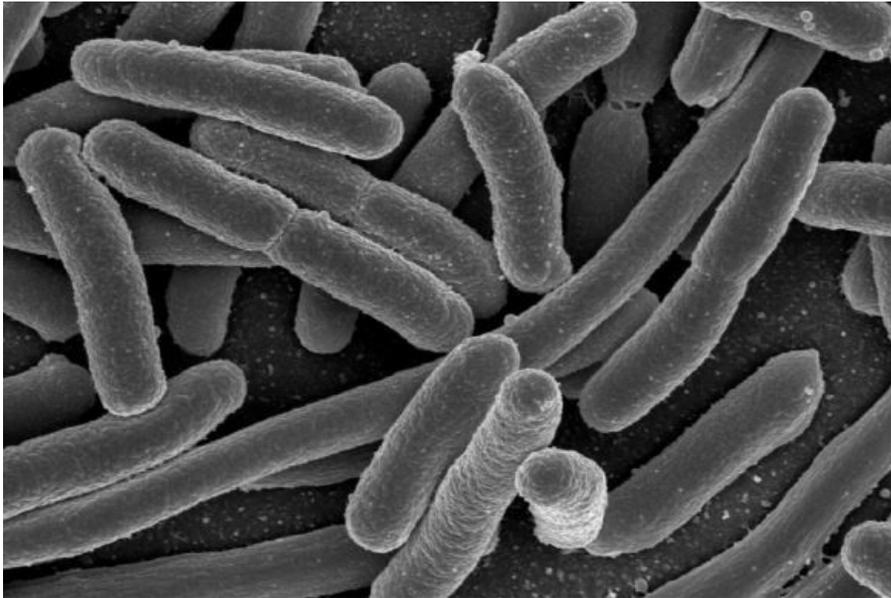
Dropped your toast? Five-second food rule exists, new research suggests

Date:

March 10, 2014

Source:

Aston University



Escherichia coli (E. coli).

Credit: Image courtesy of Aston University

Food picked up just a few seconds after being dropped is less likely to contain bacteria than if it is left for longer periods of time, according to the findings of research carried out at Aston University's School of Life and Health Sciences.

The findings suggest there may be some scientific basis to the '5 second rule' -- the urban myth about it being fine to eat food that has only had contact with the floor for five seconds or less. Although people have long followed the 5 second rule, until now it was unclear whether it actually helped.

The study, undertaken by final year Biology students and led by Anthony Hilton, Professor of Microbiology at Aston University, monitored the transfer of the common bacteria *Escherichia coli* (E. coli) and *Staphylococcus aureus* from a variety of indoor floor types (carpet, laminate and tiled surfaces) to toast, pasta, biscuit and a sticky sweet when contact was made from 3 to 30 seconds.

The results showed that:

- Time is a significant factor in the transfer of bacteria from a floor surface to a piece of food; and
- The type of flooring the food has been dropped on has an effect, with bacteria least likely to transfer from carpeted surfaces and most likely to transfer from laminate or tiled surfaces to moist foods making contact for more than 5 seconds.

Professor Hilton said: "Consuming food dropped on the floor still carries an infection risk as it very much depends on which bacteria are present on the floor at the time; however the findings of this study will

bring some light relief to those who have been employing the five-second rule for years, despite a general consensus that it is purely a myth. We have found evidence that transfer from indoor flooring surfaces is incredibly poor with carpet actually posing the lowest risk of bacterial transfer onto dropped food. The Aston team also carried out a survey of the number of people who employ the five-second rule. The survey showed that:

- 87% of people surveyed said they would eat food dropped on the floor, or already have done so
- 55% of those that would, or have, eaten food dropped in the floor are women
- 81% of the women who would eat food from the floor would follow the 5 second rule

Professor Hilton added: "Our study showed surprisingly that a large majority of people are happy to consume dropped food, with women the most likely to do so. But they are also more likely to follow the 5 second rule, which our research has shown to be much more than an old wives tail."

Story Source:

The above story is based on [materials](#) provided by [Aston University](#). *Note: Materials may be edited for content and length.*

null

Cite This Page:

- [MLA](#)
- [APA](#)
- [Chicago](#)

Aston University. "Dropped your toast? Five-second food rule exists, new research suggests." ScienceDaily. ScienceDaily, 10 March 2014. <www.sciencedaily.com/releases/2014/03/140310102212.htm>.