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MMMM . . . I'm Lovin' It! Unless It's On The Floor

The purpose of my project was to find out how much bacteria is gathered on a single piece of food after being dropped on different surfaces for five seconds. In order to test this, I cut up a food item from the five food groups (ham, cheese, bread, cucumber, and banana) into nine symmetrical pieces. Once this process was done I dropped each of the types of food onto different surfaces (carpet, tile, and counter top) for five seconds. From there I put the food in a broth tube. The tubes were incubated for 24 hours and 1 mL of each broth tube was plated and spread on an agar plate. All 45 plates were incubated for 24 hours. The plates were counted using a colony counter and recorded. The data shows that the food type picking up the most bacteria was the carbohydrate. Second was the protein, followed by the dairy and then fruit. The food with the least amount of bacteria was the vegetable. The surface that the most bacteria were found on was the countertop. For example with the bread, there were 1988.5 colonies of bacteria. The carpet was the next highest surface. For the ham, there were 1946.8 colonies of bacteria. The surface with the least amount of bacteria was the tile. For the banana there were 774.7 colonies of bacteria colonies. Overall, the researcher believes it is not safe to eat any food type that has been dropped onto any of the surfaces tested.