

Jennifer Jones

Junior Division Microbiology

Transfer of Bacteria from a Person to a Bottle of Water

I cannot stand it when I take a sip of a bottle of water after it has been sitting out for awhile and it tastes “think” or my brother sneezes and then drinks from my water bottle. What is in there now? I bet there is bacteria in there that someone transferred when they took a drink from it. I want to know if I test four different people, will each of their bacteria from their mouths also show up on the bottle and in the water of that bottle. In order to find out my answer to the problem I tested lips, rim and water from my four participants. I put samples from four participants on each petri dish so I could compare them. I also did the test three times using the exact same swab/samples so that I could confirm my results. I secured the petri dishes once specimens were placed in them and never opened the dishes again for safety. I was correct. Every test showed the presence of bacteria with each subject and in each area tested. The bacteria appear to be the same that transferred. I was actually surprised that there was not one area or subject that didn't transfer bacteria. I now know never to drink after anyone else or let them drink from my bottle.