Deadly Deterioration: What's Really in Your Drink?

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Styrofoam may be thought of as a convenient product to make cups, however, what most people do not know is that they are actually consuming part of their cup. After noticing our teacher's drink had obvious holes forming in her cup after drinking a limeade, we decided to take a deeper look into what was actually causing this deterioration. To test this, we took styrofoam cups from a popular fast food restaurant and put the proportionate amound of lemons or limes in each cup that the restaurant would put. Soda and water were also tested, but water was used as a control. After just one hour, holes in the cups with lemons and limes began to form. This styrofoam is now part of the drink. The World Health Organization has recently named styrofoam as a probable carcinogen. To prevent this harmful substance from leaking into drinks, we believed soybean oil would produce a protective coat on the cup. When a soybean coating surrounded the interior of the cup, no holes formed after one hour. After twenty-four hours, only a few holes formed, and not every cup had holes. Soybean oil is a cheap, tasteless, and odorless protectant that may prevent a toxic buildup of styrene within humans.