

Taylor Goble
Oh My Gosh, My Teeth

My project is based on the question, which acidic beverage decays tooth enamel the most. I used ceramic tile in the place of teeth for my experiment. My hypothesis was that the orange juice would decay the ceramic tile, used in the place of a tooth, the most out of the eight drink samples tested. First, I placed eight pieces of ceramic tile into eight separate bowls. Next, I measured out 8 oz. of each chosen beverage. My beverages were: coffee, Coke, tomato juice, orange juice, milk, tea, red Gatorade, and water. I then poured one beverage over each tile. After that, I labeled each sample bowl. Finally, I placed all eight sample bowls in the refrigerator. I then observed the samples at various times. I noted visual changes and documented such observations each time. I made the final observation and conclusion after the samples had been submerged for 24 hours. My data proved that orange juice and tomato juice have high levels of acid in them and decay teeth the most out of the eight drinks I tested. Red Gatorade, Coke, tea, and coffee have little acidic nutrients in them and do not decay teeth as much as the natural drinks such as the orange juice and tomato juice. On the other hand, milk and water do very little to decay teeth over long periods of time. My project concluded that the higher the acidity of a beverage results in more acid erosion of tooth enamel. This shows the importance of good brushing habits after eating and drinking. My test also shows the importance of not drinking too much fruit or vegetable juice in a healthy diet regimen.