

The Effects of Sulforaphane on Bacterial Growth

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The purpose of the experiment is to test the effects Sulforaphane has on bacterial growth. If Sulforaphane causes ring of inhibition on a bacterial plate, then Sulforaphane does have an effect on bacterial growth. I conducted this experiment because I wanted to test the idea that Sulforaphane helps suppress tumors. Three different solutions of Sulforaphane were used. A 1%, 10%, and broccoli extract were made. The broccoli extract was made by drying out the broccoli in an oven, crushed into powder, put into a beaker with hydrochloric acid and water, and spun on a magnetic spinner for 24 hours. Then the solution was drained through a funnel with mineral oil. I tested to see if these solutions would cause rings of inhibition in the bacteria that I grew (E. Coli, Bacillus Cereus, and Micrococcus Luteus). My results partially supported my hypothesis. The Sulforaphane did in fact cause rings of inhibition in the bacteria. In conclusion, Sulforaphane does suppress bacterial growth, and could possibly help suppress tumors.