

Sunsick: Finding the Right Formula

Barnes, Addison (School: Hughes Springs High School)

More than two people die from skin cancer every hour, and most melanomas are caused by the sun. Many people ignore the necessity of sunscreen in their everyday lives, opting to only use it in the summer or on sunny days. However, sunscreen is meant to be worn every day to prevent the effects of harmful UV rays that can cause skin cancers. The Sunsick experiment tested three different brands for longevity and effectiveness by using UV stickers that mimic skin. The stickers, along with equal amounts of sunscreen, were placed on a leg that was exposed to the sun while UV rays were at their highest for the week. After some time, all three sunscreens wore off. The progression of each sticker was measured by using other unused stickers as a basis for comparison since unused stickers are the same opacity as a sticker with sunscreen that had worn off. The first had worn off in fifty-six minutes, the second had worn off in seventy-three minutes, and the last one had worn off in eighty-seven minutes. The results of this experiment concluded that the hypothesis was correct, meaning that the mineral and organic sunscreen (Brand A) outlasted both the chemical (Brand C) and non-organic (Brand B) sunscreens. Brand A sunscreen was the most effective, Brand B was the second most effective, and Brand C sunscreen was the least effective formula.