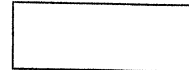


56th State Science & Engineering Fair of Florida
OFFICIAL ABSTRACT and CERTIFICATION



Beating the Burn: Does SPF Affect the Level of UV Protection?

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The purpose of my experiment was to determine if the higher the sun protection factor (SPF) on sunscreen affected the level of ultra-violet radiation (UV) protection. I painted the plywood boards black, measured out six sections (one for the title and the rest for the trials) and labeled them. I put UV beads in thirty Ziploc bags and applied the SPF 8 sunscreen to the outside of five bags and repeated that for the remaining SPF levels (SPF 15, SPF 30, SPF 50, and SPF 100). I attached five bags of each of the SPF levels to each board with the corresponding label. As my control, I attached five bags with UV beads on the inside, but with no sunscreen on the outside to the board labeled "Control". I set up everything on a local beach. I used UV outdoor gauges inside the bags to get a UV index level by comparing the beads in the gauges to the UV index color guide inside the gauge. I recorded the readings at 0, 30, and 60 minutes. At the 30 minute mark, SPF 15, 30, and 50 averaged about the same UV index level. However, the UV index level for SPF 100 was consistently the lowest. I concluded that SPF 100 offered the best protection from UV radiation because it had the lowest UV index levels.

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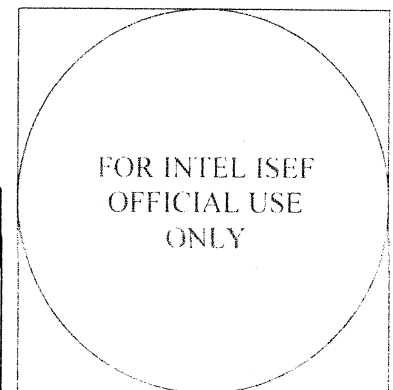
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1. As a part of this research project, the student directly handled, manipulated, or interacted with (check ALL that apply): human subjects potentially hazardous biological agents
 vertebrate animals microorganisms rDNA tissue
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3. I/We worked or used equipment in a regulated research institute or industrial setting. Yes No
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Finalist or Team Leader Signature

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This embossed seal attests that this project is in compliance with all federal and state laws and regulations and that all appropriate reviews and approvals have been obtained including the final clearance by the SSEF/FFFS Scientific Review Committee.