Using Seaweed in order to Protect Skin Cells from UV Rays

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The purpose of this project was to discover whether or not seaweed is able to protect skin cells from UV radiation. Thousands of people each day are diagnosed with skin cancer. The current solution to this is sunscreen; however, chemicals from sunscreen can travel into the bloodstream and can be inhaled into lungs. Seaweed, on the other hand, is natural, and better for the skin. The hypothesis was that using seaweed would protect skin cells from damaging UV rays because of the mycosporine amino acids, which absorb sunlight, found within it. For the procedure, three UV beads were placed into a bowl of 56 grams of blended seaweed, 56 grams of sunscreen, and a bowl with nothing for the control group. These bowls were placed outside for three hours at 3:30 pm, and brought back after the time was up. The color of each bead was checked, and if the bead changed color, it was exposed to UV radiation. This means that whatever mixture it was in did not fully protect it. After the experiment, it was discovered that seaweed underperformed sunscreen at protecting the UV beads from UV radiation. Seaweed had an average of 1.4 beads change color, while sunscreen had an average of 0.6. However, seaweed did do better than the control group, as the control group had an average of 3 beads change color. While sunscreen was the best at protecting skin from UV rays, seaweed is still a valid option for those who are worried about the chemicals in sunscreen, as seaweed has shown to be better than nothing at all.

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