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What Duration of Ultraviolet Light Kills Bacteria?

Ultraviolet light rays have been known to kill bacteria but do they really kill bacteria? Do ultraviolet light rays kill e-coli and how much time does it take to kill the bacteria? This project looks at e-coli exposed to different durations of ultraviolet light emitted from a germicidal lamp. The e-coli was put in agar plates and exposed to fifteen, sixty, and three hundred seconds of ultraviolet light. The hypothesis was that e-coli with the highest exposure time to ultraviolet light would be killed. The experimental results supported the hypothesis by showing that e-coli with the longest time exposure to ultraviolet light was killed. The experiment also showed that the e-coli exposed to fifteen and sixty seconds of ultraviolet light did not die.