**A Brief Overview of the Experiment and our Hypothesis**

    Overview: The main purpose of our experiment was do come up with viable results involving evolution, or change in species over time. We decided to use e. coli bacteria in conjunction with neosporin in tryptic soy agar plates. As neosporin comes into contact with the growing population, the weak bacteria should die faster than the stronger and more resistant bacteria, leaving the stronger bacteria to reproduce and develop a population more resistant to neosporin than the original population.  After bacterial colonies were established, we divided up our petri dishes, using some as controls and some to be used with the neosporin. We dabbed neosporin onto the edges of the bacterial colonies in the experimental plates, then let all the plates sit for two days. After the two days, we took the bacterial populations from the experimental plates and moved the bacteria to a fresh plate. We continued this procedure four cycles through with each initial population.

    Hypothesis: Coming in to the experiment, we were relatively sure that the bacteria would at least get somewhat more resistant over the generations. So, the main focus of our hypothesis regards how strong or resistant to the neosporin the bacterial will get after the 4th generation. We predicted that it would become mildly more tolerant, enough to be quite noticeable, yet not blatantly noticeable. Neosporin is composed of three strong antibiotics, Polymyxin B Sulfate 5,000 units, Bacitracin Zinc 400 units and Neomycin 3.5mg. This trio makes for a powerful affect on unwelcome bacteria. Thus, it seemed very unlikely that the bacteria could grow to thrive in close contact with the neosporin. Neosporin undoubtedly strikes at structures that bacteria won't have much of a chance at all to deal with if put in close contact. Our biggest trepidation going into the experiment was that the bacteria wouldn't be able to cope with the neosporin, & nearly all touching it would die. This would leave only a tiny part of the population more concentrated with resistant bacteria, thus making it difficult to reach definite conclusions.

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