The Good Gut: The Effect of Lactobacillus and E. Coli on Pathogenic Bacteria Population Growth

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This study is related to what effects combining different bacterias that grow at different rates affect each other. This is important because many people suffer from pathogenic bacteria entering their body from water borne diseases. By conducting this experiment, scientists can find where and when pathogenic bacteria can grow. The objective of this study was to see if Lactobacillus and E. coli affects each other's population growth. This was researched by the combining and swapping of both the Lactobacillus and E. coli with two agars, MaCconkey and MRS agar. Lactobacillus and E. Coli were grown separately, and once they have been growing for 6 days, I have found that both bacteria have grown correctly. I furthered this experiment by exchanging and mixing both bacteria with the MRS Agar and MacConkey Agar. I took my first culture count just two days after mixing in the agars. Based on results collected, I may have to modify my experiment to get better results regarding ways to prevent E. coli from taking over the Lactobacillus.

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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 participants ☐ potentially hazardous biological agents
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2. This abstract describes only procedures performed by me/us, reflects my/our own independent research, and represents one year's work only.
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3. I/We worked or used equipment in a regulated research institution or industrial setting.
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