

# The Repercussions of Probiotic Supplementation of Escherichia coli Growth

Cardenas, Jazmine (School: West High School)

The purpose of this experiment was to determine whether there would be a significant effect on the growth of E. Coli after it was cultured in probiotic supplemented agar medium. The results of the experiment would help determine if probiotic supplements could be used to prevent food poisoning and intestinal infections when exposed to E. Coli contaminated aliments and water. The experimentation involved inoculating five groups of eight agar plates labeled from A-H each with E. Coli. Each group had a different percentage of probiotic supplement in the medium which included 0%, 1%, 4%, 8%, and 12%. Group 0, was the control group. After a series of 5 days, the data collected was inputted into computer programs that would analyze and calculate the results. The experimentation proved that there was a significant effect on the bacterial growth. In conclusion, through the experimentation, it was discovered that probiotics could be a possible form of prevention treatment for food poisoning and intestinal infections caused by E. Coli contaminated aliments and water.