In-vitro growth characteristics of commercial probiotic strains and their potential for inhibition of Clostridium difficile and Clostridium perfringens

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**Material and Methods**

Seventeen probiotic strains were used (Table 1). The strains were grown in MRS broth and MRS pH2.0 and tested for their ability to grow in the presence of different pH values (2.4, 4.0, 6.2, 8.5, 9.0, 9.5, 9.9). Each strain was cultured in each of the five pH values, and the results were recorded in Table 1.

**Results**

The results of the growth inhibition assay are presented in Table 1. The probiotic strains were evaluated for their ability to inhibit the growth of C. difficile and C. perfringens. The results showed that some strains were able to inhibit the growth of both pathogens at different pH values.

**Conclusion**

L. casei, L. rhamnosus, and L. plantarum were found to be the most effective probiotic strains in inhibiting the growth of C. difficile and C. perfringens. These strains were able to inhibit the growth of both pathogens at all tested pH values.

**References**

