

CONSORTIUM OF MICROBIOTA IN PROBIOTIC YOGURT IN INHIBITING THE GROWTH OF SALMONELLA TYPHII WHICH CAUSES TYPHUS

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Abstract

Yogurt is usually made by using two types of lactic acid bacteria (LAB), *Lactobacillus bulgaricus* and *Streptococcus thermophilus* as starters, but the bacteria are not surviving in a very high acid condition. To develop probiotics in yogurt, the addition of lactic acid bacteria (LAB) with probiotic such as *Lactobacillus acidophilus* and *Bifidobacterium* are needed. Yogurt is expected to improve human health, specifically gut health. This study aims to study the effect of probiotic yogurt with a consortium of many microbiotas to inhibit the growth of *Salmonella typhii* which causes typhus. The literature research method used Google Scholar and PubMed from 2005 to 2022 which obtained 40 journals. Based on observations, it was shown that lactic acid in bacterial isolates was able to inhibit the growth of *Salmonella typhii* due to the formation of an inhibition zone. Therefore, yogurt has an important ability to inhibit the growth of *Salmonella typhii*, besides that *Salmonella typhi* is the most sensitive bacteria to probiotic fermented milk.

Key words: Yoghurt probiotic, consortium microbiota, *Salmonella typhi*, inhibit zone