

**CHARACTERISTICS OF PROBIOTIC DRINKS FROM SOYBEAN MILK  
(SOYGURT) WITH INOCULUM OF  
*Lactococcus lactis* subsp. *lactis* NBRC 12007**

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**ABSTRACT**

Soygurt is one type of functional food derived from fermentation of soybean milk by probiotic bacteria. The success of fermentation process is affected by starter concentration addition. The aim of the research was to evaluate the effect of starter concentration of *Lactococcus lactis* subsp. *lactis* NBRC 12007 on the characteristics of soygurt. The experiment used a completely random design with *Lactococcus lactis* subsp. *lactis* NBRC 12007 concentration 1%, 2%, and 3% as a treatment were used in this research. A control is done for soybean milk without *Lactococcus lactis* subsp. *lactis* NBRC 12007 addition. Data obtained were treated by the Analysis of Variance followed by Tukey's Honestly Significant Difference (Tukey's HSD) at the level of 5%. The results show that the addition of various starter concentration significantly effected the sensory analysis, degree of acidity (pH), total lactic acid, total protein, and total lactic acid bacteria, but had no significant effect on the total water and total solid.

**Keyword :** *soygurt, starter, lactic acid, protein*

**KARAKTERISTIK MINUMAN PROBIOTIK DARI SUSU KACANG  
KEDELAI (SOYGURT) DENGAN INOKULUM  
*Lactococcus lactis* subsp. *lactis* NBRC 12007**

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**INTISARI**

Soygurt merupakan salah satu contoh makanan fungsional yang berasal dari hasil fermentasi sari kacang kedelai oleh bakteri probiotik. Keberhasilan proses fermentasi salah satunya dipengaruhi oleh konsentrasi starter yang ditambahkan. Tujuan dari penelitian ini untuk mengetahui pengaruh konsentrasi starter *Lactococcus lactis* subsp. *lactis* NBRC 12007 terhadap karakteristik fisik, biokimia, dan mikrobiologis soygurt. Penelitian ini dilakukan menggunakan Rancangan Acak Lengkap (RAL) dengan konsentrasi starter *Lactococcus lactis* subsp. *lactis* NBRC 12007 1%, 2%, 3% sebagai perlakuannya dan sari kacang kedelai tanpa penambahan *Lactococcus lactis* subsp. *lactis* NBRC 12007 sebagai kontrol. Data yang didapatkan diuji dengan Analisis Ragam (ANOVA), kemudian dilanjutkan Uji Tukey's HSD dengan tingkat kepercayaan 95%. Hasil penelitian menunjukkan bahwa variasi konsentrasi starter berpengaruh signifikan terhadap hasil organoleptik, nilai pH, total asam laktat, total protein, dan jumlah total BAL, namun tidak berpengaruh signifikan terhadap kadar air dan total padatan.

**Kata kunci:** *soygurt, starter, asam laktat, protein*