

Physico-Chemical and Sensory Properties of Liquid Type Yogurt  
with *Lactobacillus casei* 911LC based on Fermenting Time

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This study was investigated to find the physico-chemical and sensory attribute of liquid type yogurt with *Lactobacillus casei* 911LC during fermenting at 37°C for 72hrs. The pH of the sample decreased rapidly during 32hrs and almost stopped thereafter. The titratable acidity of the sample increased conversely during 32hrs and sharply till 40hrs and slowly thereafter. The growth of the lactic acid bacteria was sharply increased with  $7.0 \times 10^7$  cfu/ml until 40hrs of the fermenting period and reached to the stationary phase for a while. The hydrolysis of casein was not occurred during the whole periods of the fermentation, but whey protein was rapidly hydrolyzed at the periods of 12hrs and it was not done further. In sensory analysis, yogurt flavor developed until 30hrs, but bitterness was not significant differences among bitterness scores in all periods. The production of bitter amino acids was proportionally related to the sensory score of bitterness. In conclusion, the range of optimum fermenting time of the yogurt using *Lactobacillus casei* 911LC may be 40 to 44hrs.