Laboratory scale production of soy yogurt with strawberry Flavor

Mashayekh, M.¹, Taslimi, A.¹, Ardeshir, H.², Zohorian, G.¹, Abadi, A. R.³

¹- MSc. Faculty of School of Food Science and Technology, Shahid Beheshti University of Medical Sciences.
²- MSc. Student, School of Food Science and Technology, Shahid Beheshti University of Medical Sciences.
³- Assistant professor, Statistic consultant of School of Food Science and Technology, Shahid Beheshti University of Medical Sciences.

Soy bean is a rich source of protein and has nutritional and health benefits due to the presence of phytostrogen and its role on prevention of disease, such as cancer- gained much popularity among its consumers. These days variety of soy bean products produced in food industry, eg. soy milk and fermented soy milk. Sensory evaluation of soy milk and soy yogurt have indicated that there is beany flavor which is objectionable to some consumers. In this study chemical, physiochemical and sensorial tests were done on samples of soy yogurt. Nine formulas of soy yogurt were prepared. The ratio of soy milk: cow milk were 70:30, 80:20 and 90:10 and gelatin added as stabilizer by the percent of 0.2, 0.4 and 0.6 were used. To achieve a higher total solid and also to improve flavor and aroma of finished product, 2.5 percent non fat dry milk and 1.5 percent whey protein concentrate were added. Viscosity, synersis, acidity, pH and sensory test of formulas were done. Viscosity increased and synersis decreased significantly with the addition of cow milk to soy milk but overall acceptability did not show any significant difference. Sensory analysis of soy yogurt indicated that fortification with 30 percent cow milk and 0.4 percent gelatin gained higher score, when compared with other formulas. To the selected formula with highest score, 5, 10 and 15 percent strawberry flavor was added. Sensory analysis of flavored soy yogurt indicates that fortification with 15 percent strawberry has significantly higher acceptability compared with other formulas.

Key words: Soy yogurt, Fortification, Viscosity, Synersis, Sensory evaluation

*Corresponding author E-mail address: mortezamashayekh@yahoo.com