

## **EFFECT OF CALCIUM LACTATE AND STARTER ON SOYA CHEESE (TOFU) CHEMICAL CHARACTERISTICS**

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### **INTRODUCTION**

Soya cheese (Tofu) is one of the best soya protein products. This product relatively low in calories for people who are sensitive to lactose, cholesterol and saturated fatty acids in cheese and meat. It can be a great alternative for milk and milk products. In this study, the effects of vinegar, calcium lactate and starter as in the as a coagulant on chemical properties were investigated.

### **MATERIALS AND METHODS:**

In this study, starter, soya cheese, and calcium lactate coagulate were used as formulation coagulant. Soya milk is pasteurized at 100 °. Coagulant components were added to the soy milk and mixed. After clots forming, clots were cut and pressed. Chemical characteristics of produced cheese (tofu) such as cheese yield production, ash, dry matter, protein, fat, acidity were measured.

### **RESULTS:**

The cheese (tofu) yield production, the amount of protein, ash, and dry matter in produced cheese (tofu) sample with vinegar ( $7.63\pm 0.06$ ,  $12.53\pm 0.23$ ,  $21.63\pm 0.49$ ,  $3.87\pm 0.035$ ) calcium lactate ( $8.76\pm 0.141$ ,  $12.16\pm 0.37$ ,  $23.96\pm 1.45$ ,  $4.62\pm 0.082$ ) and lactate calcium/starter ( $5.64\pm 0.103$ ,  $10.7\pm 0.79$ ,  $20.44\pm 0.11$ ,  $4.58\pm 0.11$ ) were significantly different ( $p<0.05$ ).

### **CONCLUSION:**

The type and concentration of coagulant and starter and their interactions can also have important impacts on chemicals characteristics and yield of tofu. Results showed that the ratio of vinegar coagulant proportion to lactate calcium and starter coagulant cause to increase protein and fat and adding calcium lactate coagulant to starter proportion other coagulants caused to efficiency.

**Key words:** soya cheese, calcium lactate, starter, vinegar, chemical characteristics.



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