The Study of Vegetarian Sausage by Using Defatted Soy Flour and Mung Bean Flour

Abstract

This research was studied the product development of vegetarian sausage by using defatted soy flour and mung bean flour as protein source of mainly raw material. This study was divided into three parts. There were the study of primary formula, the properly ratio of defatted soy flour and mung bean flour as protein source and the texture improvement of product, respectively.

For the first step, the study of primary formula of vegetarian sausage was also divided into three steps by using prototype formula. First experiment studied the amount of defatted soy flour are 30%, 35% and 40%, respectively. The result showed that the 35% of defatted soy flour was gaven better quality more than other. Second experiment studied the amount of egg powder are 0%, 2% and 5%, respectively. The result showed that the 5% of egg powder was gaven better quality. The last experiment studied the amount of vegetable shortening are 15%, 17% and 20%, respectively. The result showed that the 17% of vegetable shortening was gaven better quality too. So the primary formular of vegetarian sausage contained 35% of defatted soy flour, 5% of egg powder and 17% of vegetable shortening.

For the second step, the experiment studied the variation ratio of defatted soy flour and mung bean flour are 100:0, 75:25, 50:50, 25:75 and 0:100 %, respectively. The result showed that vegetarian sausage contained only 100% of defatted soy flour gave better quality more than the others.

For the last step, the texture improvement of product used three stabilizers. Kanjac flour, carrageenan and gaur gum in two ratios each (0.5% and 1%) with eight treatments; 0.5:0.5:0.5, 0.5:0.5:1, 0.5:1:0.5, 0.5:1:1, 1:0.5:0.5, 1:0.5:1, 1:1:0.5 and 1:1:1% respectively. The result showed that 1% of konjac flour could improve the texture of vegetarian sausage. The properly ratio of carrageenan and guar gum may be improved the texture of vegetarian sausage too.