

Appropriate formula and process for the production of cooked sausage from mechanically deboned chicken meat were studied. Mixed spices were varied at 5.5, 10.5 and 15.5% of meat weight. The added quantity of fat to increase tenderness of the product was varied at 0, 5, 10 and 15% of meat weight. Amounts of binders (12, 16 and 20% of meat weight) and ice (0, 25, 30 and 35% of meat weight) were studied. Three types of binders used were dry egg white powder, isolated soy protein (ISP) and gluten.

The best quality product for each binder was selected for further study on determination of appropriate processing conditions including : chopping time (3, 5 and 7 min.) and mixing time (5, 10 and 15 min.). Criteria used to select the best quality product from each experiment was cooking loss, cutting force, color and sensory evaluation. Storage stability of the selected sample was studied at vacuum or atmospheric pressure, in Nylon/PE bags at 35-37°C, 4°C and -18°C.

The results showed that the most acceptable product contained 10.5% of mixed spice. The most appropriate quantity of fat was 5% for the products containing dry egg white powder or gluten and 10% for the product with ISP. The most suitable quantity of binders and ice were dry egg white powder : ice 16 : 25, ISP : ice 16 : 25 and gluten : ice 20 : 25. The optimum processing conditions found were 3 min. chopping and 10 min. mixing for product using dry egg white as binder and 5 min. chopping and 10 min. mixing for the product with ISP or gluten. Product with dry egg white as binder can be stored at 34-37°C for 3 days at atmospheric pressure or 5 days at vacuum pressure, at 4°C for 7 days at atmospheric pressure and 10 days at vacuum pressure and at -18°C for 3 months for atmospheric or vacuum pressure.

ภาควิชา เทคโนโลยีทางอาหาร

สาขาวิชา เทคโนโลยีการอาหาร

ปีการศึกษา 2536

ลายมือชื่อผู้พิมพ์

ลายมือชื่ออาจารย์ที่ปรึกษา

ลายมือชื่ออาจารย์ที่ปรึกษาร่วม