Effect of maltodextrin as fat replacer on proximate composition and sensory characteristics of low fat chicken burger patty

ABSTRACT

With the rise of recent concerns on health issues, it is clear that consumers are being more cautious on fat content in food. Meat industry came up with advance technological methods to modify the meat products to suit the healthier recommendations. The production of low fat chicken burger patty using broiler meat was conducted using maltodextrin (0.25-0.75%) as fat replacer with constant of 1% salt, 0.5% onion, 0.25% mixed spices and using two different levels (90% and 92.5%) of chicken meat. This study showed that 0.25, 0.50 and 0.75% of maltodextrin used had given significant ($p<0.05$) effects on sensory but slightly on proximate composition. There were significant difference ($p<0.05$) on ash, crude fat and crude protein analysis but no significant differences ($p>0.05$) were seen in moisture analysis. The lowest fat of patty formulation was F4 (90% chicken meat and 0.25% maltodextrin). For sensory analysis, F5 (90% chicken meat and 0.5% maltodextrin) showed most sensory acceptance compared to other formulations. In conclusion, F4 (90% chicken meat with 0.25% maltodextrin) gave the lowest fat percentage with acceptable sensory characteristics in low fat chicken patty production.