

## **Development of vegetarian nugget using unripe jackfruit**

### **ABSTRACT**

Jackfruit (*Artocarpus heterophyllus*) is well known as a good source of carbohydrate and dietary fibre. Unripe jackfruit has fibrous texture that is very similar to meat, which makes it a suitable meat alternative. High consumption of less nutrient dense foods has increased the prevalence of non-communicable diseases. This research was carried out to investigate the effect of the addition of unripe jackfruit in vegetarian nugget on sensory properties and nutritional content. This was compared with the commercial vegetarian nugget as the control. A total of 4 formulations were produced followed by determination of the best formulation through sensory evaluation using the 9-point hedonic test. The F4 formulation with 25% unripe jackfruit and 75% of konjac-tofu was chosen as the best formulation as this formula achieved higher mean scores for all attributes (Appearance= $7.28 \pm 1.578$ , Aroma= $6.48 \pm 1.502$ , Taste= $6.14 \pm 1.852$ , Texture= $6.52 \pm 1.717$ , Overall acceptance= $6.72 \pm 1.485$ ) compared to other formulations. Proximate analysis showed that it contains carbohydrate ( $30.90\% \pm 0.32$ ), crude protein ( $9.54\% \pm 0.22$ ), crude fat ( $4.94\% \pm 0.23$ ), crude fibre ( $2.60\% \pm 0.23$ ), ash ( $2.21\% \pm 0.03$ ), moisture content ( $49.81\% \pm 0.48$ ), and energy content of 206.22 kcal. The unripe jackfruit nugget was developed as a new and healthy convenience food product which could be an alternative for the vegetarian consumer.