

## **ABSTRACT**

The serious threat of rice supply in many parts of the world and high demand for more nutritious rice have driven the efforts on the production of rice analogues from other food sources. This research was aimed to study the effect of dough composition and drying time on the nutrition and physical characteristics of rice analogues from breadfruit flour with carrot and mung beans flours as nutrient fortificants. To achieve that aim, variations in the composition of breadfruit flour with the addition of carrots and mung beans flours during extrusion and drying time in rice analogues manufacturing were investigated. As quality indicators of the rice analogues, the nutrition contents, which include moisture, ash, protein, lipid, dietary fiber, carbohydrate and amylose contents were analyzed. In addition, the physical properties of the rice analogues which consist of hardness and gelatinization temperature were also determined. Based on those quality criteria, the best rice analogues could be obtained upon the extrusion of flour composite dough comprising breadfruit flour 80% w/w, mung bean flour 10% w/w and carrot flour 10% w/w, and followed by oven drying at 70°C for 7 hours. The consumption of such product is a highly promising especially for people residing in dry rural areas and those with high needs in protein and vitamin A.