

ABSTRACT

The purpose of this research is to determine the effect of temperature and storage time on the stability of micro nutrients (folic acid and iodine) in dry noodles breadfruit flour substitution. This study was conducted to determine the level of stability of folic acid and iodine in dried noodles substitution breadfruit flour stored at a certain time with a different temperature.

The method consisted of two phases covering the preliminary and the main study. The preliminary research include the production of dried noodles substitution breadfruit flour and then testing of the water, protein and ash content. The main research was conducted to test the stability of the nutrients folic acid and iodine in dried noodles breadfruit flour substitution with the type of packaging of polypropylene (PP) at a certain time with a different temperature. The parameters were analyzed by an analysis of the levels of folic acid by chromatography using HPLC, analysis iodine content by iodometric titration method and analysis of water content by gravimetric method. Based on the value obtained, the research calculated the estimation of the rate of degradation (k) based Arrhenius Method.

The result at the preliminary observations indicated that there are to 6.06% water content, protein content of 32.02% and ash content of 3%. The result main of the research indicated that folic acid and iodine in dried noodles breadfruit flour substitution was decreased during storage. The total sum of decrease levels of folic acid and iodine are \pm 66-86% and 33-50%. The best products based on the results of organoleptic is dry noodles substitution breadfruit flour that stored at 25°C. The decrease of constant value of folic acid and iodine that best product is 0.0219 ppm/day and 1.02×10^{-5} ppm/day, despite a decline in quality but dry noodles breadfruit flour substitution is still suitable for consumption because the levels of nutrients still fullfill the minimum level of dietary micro nutrients.

Keywords: Dried noodles, Breadfruit Flour, Folic Acid, Iodine, Storage