ABSTRACT

RASPIANA. Biscuit Formulation with Fish Meal of King Catfish (Clarias gariepinus), Folic Acid, Vitamin A and Iron (Fe) to Improve the Women's Health During Pregnancy and Breast Feeding (Preliminary Study Used In-vivo Test to Mice (Mus mucuslus)). Supervised by RUDDY SUWANDI and BAMBANG RYANTO.

Fish meal is a source of good and complete nutrition. In form of fish meal, still could be used as a source of protein, either for food or feed utilization. Catfish is a species of freshwater fish consumed in Indonesia, it has a good taste and high nutritional content. Most of all consumed catfish in Indonesia are produced from aquaculture farm. To increase the utilization (beside being processed into several main products and its diversification), catfish could also be processed into fish meal, which used as substitutional material for wheat flour in this study. Biscuit were formulated with additional material of catfish meal (from body and head parts), folic acid, ferro sulphate and retinol A. The study was carried out through an in-vivo laboratory research using 75 mice (Mus mucuslus).

The study indicated that fish meal from the head part as much as 24.19 percent while from the body 63.15 percent. The appearance is slightly brownish for head’s fish meal and whiter for body’s fish meal. Proximate chemical tests on samples of biscuit formula shows that the levels of fat and protein have met the fish meal’s national standards, while the moisture content, ash and carbohydrates are still below the standards (SNI 01-2973-1992). Growth in weight of mice with fed biscuit samples were better than mice with control feed (F5). The F1-F4 formula larger 22.17 percent compared with formula F5. The total serum test was carried out and showed that the biscuits formula fortified with folic acid, vitamin A and iron (Fe) significantly affected on the increase of mice’s micronutrient status.

Keywords : Catfish meal, Folic Acid, Infant Health, Iron (Fe), Vitamin A.