ABSTRACT

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UTILIZATION OF FISH PROTEIN CONCENTRATE OF CATFISH
(\textit{Clarias graphienus}) ON INFANT FOOD FORMULATION
(xvii + 91 Pages : 14 Tables; 26 figures; 23 appendixes)

Infants (older than 6 months) need to consume high protein food, such as skim milk and Fish Protein Concentrate (FPC) apart from breast milk to fulfill their RDA. The objective of the research were to produce the best quality FPC from catfish (\textit{Clarias graphienus}) and its application in infant food. The FPC was prepared according to Suzuki (1981) and then analyzed its, bulk density (Wirakartakusumah et al., 1992), water and fat holding capacity (Beuchat, 1977), degree of lightness (Cortez-Ruiz, 2008), organoleptic (Meilgaard et al., 2007), amino acid profile (AOAC, 2005), and protein digestibility (Anderson et al (1969) in Yusanidah (1990)). The FPC was found to have 84.79\% protein content, 1.69\% fat content, and 7.48\% water content, 299.06\% water holding capacity, 1.69\% fat holding capacity, 0.42 g/ml bulk density and classified as FPC type B. The amino acid of FPC was limited in leusin, tirosin and has 98.42\% protein digestibility. The 25\% FPC substitute of infant food was found to have the best quality of organoleptic characteristic with higher protein, higher AAE score compared to commercial infant formula product, good protein digestibility (86.11\%) and was limited only in amino acid tirosin.

Keywords : FPC, infant, infant food, \textit{Clarias Graphienus}