

CANDLENUT OIL SUPPLEMENT PRODUCT DEVELOPMENT

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ABSTRACT**CANDLENUT OIL PRODUCT DEVELOPMENT**

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Stunting is a public health concern in Indonesia that is caused by malnutrition and lack of support in fatty acid consumption. Candlenut oil fortified with algae-DHA oil comes as a promising solution due to its high omega fatty acid content, presents a promising alternative source to fish oil that is mostly imported in Indonesia. The development of the mixed oil requires physicochemical parameters, nutritional quality parameters and also safety parameters. This research aimed to develop and evaluate a product of candlenut oil mixed with algae DHA oil as a new oil base fatty acid supplementation at industrial scale and comparing the price acceptability with commercially available similar products. The oil showed the content consist of lipid, high content of omega profile and absence of chemical contaminants in the observation. The oil product passed the toxicity analysis conducted in animals. The evaluation based on sensory showed a favorable substantial consumer preference and overall the developed oil is promising in terms of price and competitive with commercially similar supplements.

Keywords: Candlenut Oil, Algae DHA Oil, Fatty acid content

DEDICATION

I dedicate this thesis work for my beloved late mother and my beloved country :
Indonesia



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