

## ABSTRACT

**REFINA KURNIAWATI.** 2023. Development of Moringa Leaves (*Moringa oleifera*) as Substitution Material for Cakalang Fish Ekado on Nutritional Quality and Organoleptic Quality for Anemia Adolescent Girls. Undergraduate Study Program of Applied Nutrition and Dietetics, Health Polytechnic Ministry of Health Malang. Advisor : **I Komang Suwita, S.ST., MP and Ir. Astutik Pudjirahaju M.Sc.**

The purpose of this study was to determine the effect of developing moringa leaves as a substitute for cakalang fish ekado on nutritional quality and organoleptic quality for anemic adolescents. This type of research was a laboratory experimental study with a completely randomized design (CRD) 4 treatment levels with 3 replications for each treatment level. The statistical analysis used for water, ash, protein, fat, carbohydrates, Fe and vitamin C content was One Way Anova with a 95% confidence level, for energy value using the Atwater method, and for organoleptic quality was Kruskal Wallis with a 95% confidence level. The results showed that the addition of moringa leaves as a substitute for cakalang fish ekado had a significant effect on moisture content, ash content, protein content, fat content, energy value, Fe content, and vitamin C content, but had an effect which was not significant on carbohydrate content. The addition of moringa leaves as a substitute for skipjack cakalang fish ekado had no significant effect on color, texture, and taste, but had a significant effect on aroma. Substitution of moringa leaves for skipjack tuna at treatment level P2 with the proportion of 80% skipjack tuna and 20% moringa leaves was the best treatment level for young female anemia.

**Keywords:** adolescent, anemia, skipjack tuna, moringa leaves, ekado.