

## ABSTRACT

SOFIE AULA NURHIDAYATI, 2023, Effect of Broiler Chicken Liver and Broccoli Formulation on Nutrient Content, and Organoleptic Quality of Tempeh Nuggets for Adolescent Girls with Anemia, THESIS, Politeknik Kesehatan Kemenkes Malang, Supervisors Maryam Razak, S.Tp., M.Si and Ir. Astutik Pudjirahaju, M.Si.

*Data from the world health organization (WHO) 2019 reports that the global prevalence of anemia in women aged 15-49 years is 29,9%. In 2022 the prevalence of anemia based on data from the WHO will increase by 31,2%. Most of the incidence of anemia in Indonesia occurred due to iron deficiency as a result of the limited intake of iron food sources, especially animal food. The purpose of this study was to analyze the effect of broiler chicken liver and broccoli formulations on the nutrient levels and organoleptic quality of tempeh nuggets for anemic adolescent girls. This type of experimental research was designed in a Completely Randomized Design (CRD) using 4 levels of treatment with replication 3 times with the formulation of tempeh: broiler chicken liver: broccoli. The research was conducted in May 2023. The results showed a significant effect ( $p < 0.05$ ) on moisture content (35.18-38.65%), ash content (1.21-1.65%), protein content (21.02-26.52%), fat content (15.04-18.42%), carbohydrate content (16.80-27.53%), energy value (320.87-339.10 kcal), iron content (2.22-4.82 mg/100g) and vitamin C content (0.026-2.113 mg/100g). The results showed significant differences ( $p < 0.05$ ) in organoleptic quality on the parameters of color, aroma, taste. However, there was no significant difference in texture ( $p > 0.05$ ). The P3 treatment level was the best treatment level with the proportion (tempeh 20%: chicken liver 40%: green broccoli 40%).*

**Keywords:** *broccoli, broiler chicken liver, nuggets, adolescent girls with anemia, tempeh*