

**FACULTY OF SCIENCES HEALTHY
SILIWANGI UNIVERSITY
TASIKMALAYA
NUTRITION STUDY PROGRAM
2023**

ABSTRACT

BELINDA AYUNISTIA

***THE RELATIONSHIP BETWEEN NUTRITIONAL KNOWLEDGE, PROTEIN
AND IRON INTAKE WITH HEMOGLOBIN LEVELS IN ADOLESCENT GIRLS***

Anemia is a condition where the hemoglobin level in the blood drops below the normal level for a particular age and gender. The normal hemoglobin level in adolescent girls is 12 g/dL. The main causes of anemia involve lack of protein and iron intake, irregular diet and sleep, genetic factors such as hemoglobinopathies, parasitic infections, and length of menstruation. The purpose of this study was to analyze the relationship between nutritional knowledge, protein and iron intake with hemoglobin levels of adolescent girls at SMA Negeri 1 Cikalong, Cikalong District, Tasikmalaya Regency. This study is a quantitative study using a cross sectional approach. The population in this study were all class X students of SMAN 1 Cikalong which amounted to 123 people, with a subject size of 103 students using proportional random sampling technique. The research instruments used were digital hemoglobin meter to measure hemoglobin levels in the blood, 2x24 hour food recall form to measure protein and iron intake, and knowledge questionnaire to measure sample knowledge about nutrition. Bivariate analysis used the Spearman Rank test. The results showed that there was a relationship between nutritional knowledge and hemoglobin levels ($p=0.019$), there was a relationship between protein intake and hemoglobin levels ($p=0.025$), and there was a relationship between iron intake and hemoglobin levels ($p=0.002$) in adolescent girls at SMA Negeri 1 Cikalong. It is expected that respondents pay more attention to food intake and knowledge about nutrition can find information through both print and electronic media about balanced nutrition eating patterns and applied in daily life.

Keywords: *adolescent, nutrition knowledge, protein intake, iron intake, hemoglobin, anemia*