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## **ABSTRACT**

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## THE RELATIONSHIP BETWEEN IRON INTAKE AND ANEMIA STATUS WITH THE INCIDENCE OF STUNTING

(Observational Study on Toddlers Aged 24-59 Months in Karanganyar Village Kawalu District Tasikmalaya City in 2023)

Stunting is a major global health concern. Direct risk factors for stunting are nutrient intake. Inadequacy of minerals (iron and calcium) and vitamins (vitamin C, A, dan D) are risk factors for stunting. Iron intake plays an important role in helping hemoglobin circulate oxygen throughout the body. Insufficient iron intake causes oxygen deficiency in body tissues and bones so that the body does not grow optimally. Lack of iron intake increases iron deficiency in the body and eventually anaemia occurs. Anaemia can lead to hypoxic conditions. These conditions inhibit the action of IGF-I, so cell proliferation is impaired and eventually the growth process is inhibited. The purpose of this study was to determine the relationship between iron intake and anaemia status with the incidence of stunting in toddlers aged 24-59 months. The research method used a cross sectional study design. The sampling technique used is proportional random sampling. The study sample amounted to 81 toddlers taken from a population of 828 toddlers in the working area of Karanganyar Village, Kawalu District, Tasikmalaya City. Data were analyzed using Spearman Rank correlation test and Pearson Correlation. The results showed a median iron intake of 3,2 mg, the incidence of stunting was -1,65 SD and anaemia status was 11,66 g/dL. Iron intake is very low compared to the recommended RDA for children aged 24-59 months. The incidence of stunting and anaemia status of the subjects were in the normal category. Statistical tests showed there was a relationship between anaemia status (p = 0,000) with the incidence of stunting, but there was no relationship between iron intake (p = 0.685) with anaemia status and iron intake (p=0.247) with the incidence of stunting. The conclusion of this study is that there is a relationship between anaemia status and the incidence of stunting in toddlers aged 24-59 months, but there is no relationship between iron intake with anaemia status and the incidence of stunting.

**Keywords:** anemia, food intake, iron, stunting, toddlers.