

## **THE EFFECT OF GIVING BEET JUICE ON INCREASING HEMOGLOBIN LEVELS IN ADOLESCENT WOMEN WITH ANEMIA**

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### **ABSTRACT.**

**Background;** Anemia occurs when the hemoglobin level is less than normal or the level of red blood cells in the blood decreases. The beetroot betacyanin pigment is known as trimethyl glycine and is widely used as a radical scavenger, protection against disorders caused by oxidative stress (antioxidant), producing cells including red blood cells. So beetroot juice can be used as a non-pharmacological alternative in preventing anemia. **Objective;** This study aims to determine the effect of giving beetroot juice on increasing hemoglobin levels in young women with anemia at Darul Ihsan Muhammadiyah Sragen Middle School. **Method;** The type of research used is quantitative research methods. The research design used was experimental with a one group pretest – posttest design approach. The sampling technique used simple random sampling, namely 21 anemic teenage girls at Darul Ihsan Muhammadiyah Sragen Middle School. Bivariate analysis used the Wilcoxon Signed Rank Test using SPSS 26 for windows processing. **Results;** The research showed that the average hemoglobin level before treatment was 11.414 g/dL and the average hemoglobin level after treatment was 11.757 g/dL or an average increase of 0.343 gdL. The result was  $p = 0.001$  ( $Pvalue < 0.05$ )  $p$ -value. **Conclusion;** There is an effect of giving beetroot juice on increasing hemoglobin levels in adolescent girls suffering from anemia at Darul Ihsan Muhammadiyah Sragen Middle School.

**Keywords:** Anemia, Beets, Hemoglobin, Young Women