

**PENGARUH PEMBERIAN JUS JAMBU BIJI MERAH (*Psidium Guajava.L*) TERHADAP KADAR HEMOGLOBIN DAN FERRITIN SERUM PENDERITA ANEMIA REMAJA PUTRI**

**TESIS**



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# **Pengaruh Pemberian Jus Jambu Biji Merah (*Psidium Guajava.L*) Terhadap Kadar Hemoglobin Dan Ferritin Serum Penderita Anemia Remaja Putri**

## **Tesis**

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## **ABSTRAK**

Anemia adalah hemoglobin atau protein pembawa oksigen didalam sel darah merah dibawah kategori normal. Mengkonsumsi makanan yang tinggi zat besi dan makanan yang dapat membantu proses penyerapannya diharapkan dapat meningkatkan kadar hemoglobin dan ferritin serum remaja. Tujuan penelitian untuk mengetahui pengaruh pemberian jus jambu biji merah (*psidium guajava. L*) terhadap kadar hemoglobin dan ferritin serum penderita anemia remaja putri.

Penelitian ini dilaksanakan di Panti Asuhan Tri Murni Kota Padang Panjang. Desain penelitian *quasi eksperiment*, sampel 34 orang remaja anemia dengan metode *simple random sampling*. Subjek dibagi menjadi 2 kelompok, kelompok kontrol dan perlakuan. Kelompok perlakuan diberikan 100 gr jambu biji merah yang diolah menjadi jus selama 7 hari. Analisis data menggunakan uji statistik *t-dependent* dengan derajat kemaknaan  $\alpha=0,05$ .

Rata-rata kadar Hb *petest* 10,26 gr% (kontrol) dan 10,50 gr% (intervensi), rata-rata kadar ferritin serum 33,63  $\mu\text{g}/\text{L}$  (kontrol) dan 36,63  $\mu\text{g}/\text{L}$  (intervensi). Rata-rata kadar Hb *postest* 10,98 gr% (kontrol) dan 12,48 gr% (intervensi), rata-rata kadar ferritin serum 40,35  $\mu\text{g}/\text{L}$  (kontrol) dan 57,40  $\mu\text{g}/\text{L}$  (intervensi). Selisih rata-rata kadar hemoglobin dan ferritin serum sebelum dan sesudah diberikan jus jambu biji merah yaitu 0,72 gr% dan 6,72  $\mu\text{g}/\text{L}$  (kontrol) dan 1,98 gr% dan 20,76  $\mu\text{g}/\text{L}$  (intervensi) . Hasil uji statistik didapatkan ada pengaruh pemberian jus jambu biji merah terhadap kadar hemoglobin dan ferritin serum penderita anemia remaja putri dimana nilai *p value* = <0,001.

Kesimpulan penelitian ini adalah pemberian jus jambu biji merah dapat meningkatkan kadar hemoglobin dan ferritin serum penderita anemia remaja putri. Dianjurkan setiap hari mengkonsumsi makanan yang tinggi zat besi dengan jus jambu biji merah secara teratur.

**Kata Kunci : Anemia, Hemoglobin, Ferritin Serum, Jambu Biji Merah, Remaja Putri**

# **The Effect of Red Guava (*Psidium Guajava.L*) Juice on Hemoglobin and Serum Ferritin among Adolescent Girls with Anemia**

## **Thesis**

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## **ABSTRACT**

Anemia is hemoglobin or defined when the oxygen-carrying protein in red blood cells under the normal category. Consuming foods contain high iron and foods that can help the process of iron absorption is expected to increase the levels of hemoglobin and serum ferritin among adolescent girls. The aim of this research is to determine the effect of red guava (*Psidium guajava. L*) juice on levels of hemoglobin and serum ferritin among adolescent girls with anemia.

This research was conducted at the Orphanage Tri Murni Padang Panjang. The study design was quasy experiment. Simple random sampling method was used to select 34 adolescent girls with anemia. Subjects were divided into 2 groups, control and treatment. The treatment group was given 100 grams of guava which was processed into juice for 7 days. T-dependent test statistic with significance level  $\alpha = 0.05$  was used to analyzed the data.

The result showed that the average hemoglobin of pre-test is 10,26 gr% (control) and 10,50 gr% (intervention), the average serum ferritin is 33,63  $\mu\text{g/L}$  (control) and 36,63  $\mu\text{g/L}$  (intervention). The average hemoglobin of post-test is 10,98 gr% (control) and 12,48 gr% (intervention), the average serum ferritin 40,35  $\mu\text{g/L}$  (control) and 57,40  $\mu\text{g/L}$  (intervention). There are significant differences in average levels of hemoglobin and serum ferritin before and after treatment as follows 0,72 gr% and 6,72  $\mu\text{g/L}$  (control) and 1,98 gr% and 20,76  $\mu\text{g/L}$  (intervention). The result shown that there is an effect of treatment on levels of hemoglobin and serum ferritin among adolescent girls with anemia ( $p$  value = <0.001).

The conclusion of this study is giving red guava juice can increase the levels of hemoglobin and serum ferritin among adolescent girls with anemia. Daily consume foods contain high iron such as red guava juice regularly is recommended.

**Keywords:** Anemia, Hemoglobin, Serum Ferritin, Red Guava, Adolescent Girls