

T E S I S

**PENGARUH SUPLEMENTASI PIL BESI + ASAM FOLAT +
RIBOFLAVIN TERHADAP PENINGKATAN KADAR
HEMOGLOBIN PADA REMAJA WANITA
DENGAN ANEMIA GIZI SEDANG**

PENELITIAN EKSPERIMENTAL



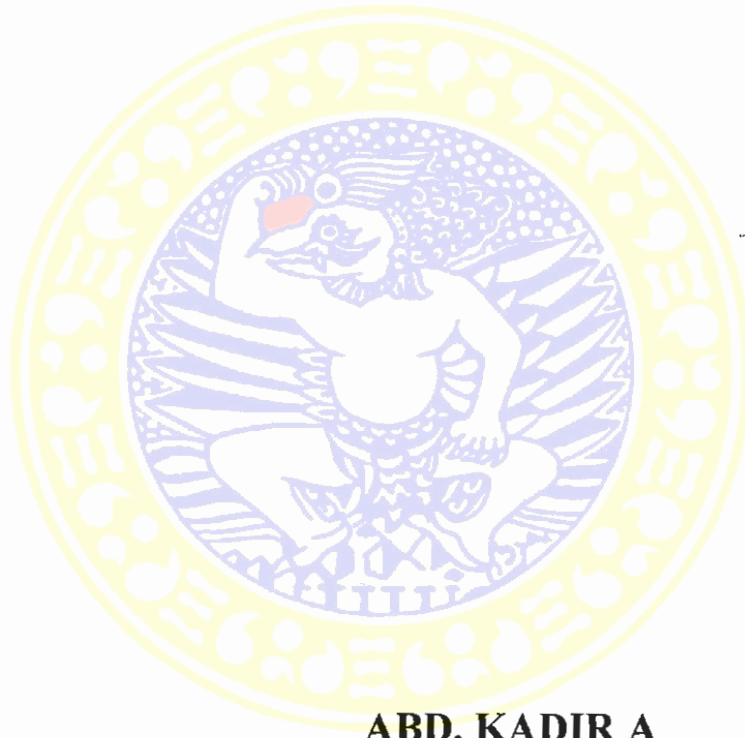
ABD. KADIR A)

**PROGRAM PASCASARJANA
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TESIS

Untuk memperoleh Gelar Magister
dalam Program Studi Ilmu Kesehatan Masyarakat
minat Studi Gizi Kesehatan Masyarakat
pada Program Pascasarjana Universitas Airlangga

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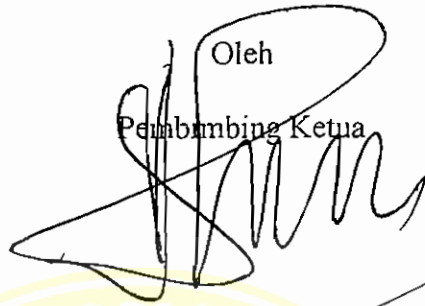
**PROGRAM PASCASARJANA
UNIVERSITAS AIR LANGGA
SURABAYA**

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Lembar pengesahan

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A B S T R A C T

The improvement of health is necessary for human resources development, especially the youth. It includes the prevention of nutritional anemia that influencing the decrease of physical and body immunity. This research objected to investigate Hb quantity after supplemented by Fe and folic acid + Riboflavin, on senior high school students. Sixty students of SMU IV Watompone were selected as research samples. Each group contains 15 students.

First group was given Fe (60 mg) + Folic acid (0.25 mg) + Riboflavin (5 mg). Second group was intervened by Fe (60 mg) + Asam Float (0.25 mg), while the third group supplemented by Fe (60 mg). The group fourth, on the other hand, played as placebo group. The groups were intervened twice a week for two months (8 weeks). All groups were given single dose of mebendazole (500 mg). Hb contain were measured using Cyanmethemoglobin method.

The pre measurement of Hb contain before the intervention showed that two students have Hb < 8 g/dl (0.6%), 67 students have Hb between 8-19 g/dl (20.9%), 129 students have Hb 10.1-11.9 g/dl (40.2%) and 123 students have Hb \geq 12 g/dl (38.3%). The data above concludes that prevalence rate of nutritional anemia of students of SMUN IV Watampone on 2001 is 61.7%. Furthermore, the t-test for Hb of groups before intervention showed no significant difference, that is $p > 0.05$. Mean of Hb contain indicated that group 1 (Fe + asam foliate + Riboflavin) = 9.3 ± 0.3 g/dl, Group 2 (Fe + Folic acid) = 9.2 ± 0.4 g/dl, Group 3 (Fe) = 9.2 ± 0.2 g/dl, and Group 4 (placebo) 9.4 ± 0.3 g/dl. The similarity of Hb contain imply that these groups are homogen.

Two months after the intervention, the Hb contain of group was measured applying a similar method with pre measurement. The analysis summarized that there were three groups that significantly increase on Hb, except the placebo group. The mean of Hb contain are group 1 became 11.8 ± 0.79 g/dl (increase 2.5 g/dl); group 2 became 11.02 ± 0.7 g/dl (increase 1.7 g/dl), group 3 became 10.5 ± 0.5 g/dl (increase 1.3 g/dl), while group 4 (placebo) became 9.7 ± 0.6 g/dl (increase of 0.3 g/dl)

The data analysis above, finally concluded that supplementation of Fe (60 mg) + Folic acid (0.25 mg) + Riboflavin (5 mg) twice a week in two months effects the increase of Hb of the samples. It is necessary, therefore, to promote a program in supplementing the youth with Fe, foliate acid and Riboflavin in the future for the sake of health improvement.

Key words : Fe, Folic Acid, Riboflavin, Supplementation, Hb