

**FAKTOR DETERMINAN GIZI PADA ANEMIA REMAJA PUTRI DI SMA NEGERI 2
SEMARANG**

Artikel Penelitian

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NUTRITIONAL DETERMINANT FACTORS OF ANEMIA IN ADOLESCENT GIRLS AT SMA 2 SEMARANG

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ABSTRACT

Back Ground : Adolescent girls have a high risk of anemia, because their iron needs is increasing for their growth and menstruation. Nutrients that linked with anemia are iron, protein, vitamin A, folate, vitamin B12, vitamin C, vitamin B2, vitamin B6, and zinc. Calcium, tannin, phytate and oxalate are also involved, because these nutrients are the inhibitors of iron absorption. This study was aimed to explain nutritional determinant factors of anemia in adolescent girls at SMA 2 Semarang.

Method : This was a *cross sectional* study. 65 subjects were chosen by *proportional random sampling* from all class X, XI and XII female students that eligible to inclusion criteria. The intake data was taken by *semi quantitative food frequency*. Data of hemoglobin was measured by *cyanmethemoglobin*. Multivariate analysis was analyzed by multiple linear regression.

Result : Up to 43,1% of subjects were categorized as anemia. Mean intake of protein, vitamin A, folate, vitamin B12, vitamin C, riboflavin, vitamin B6, iron, zinc, calcium, tannin, phytate and oxalate were 72,03±17,43; 1572,62±614,16; 171,78±72,77; 4,81±2,75; 99,47±118,34; 1,40±2,73; 1,82±3,49; 10,22±2,76; 8,55±2,57; 301,10±85,78; 75,38±74,16; 199,80±142,98; 137,24±74,63. Protein, folate, vitamin B12, vitamin C, iron, calcium and tannin intake had a significant correlation with anemia ($p = 0,001$).

Conclusion : Nutritional determinant factors of anemia in adolescent girls at SMA 2 Semarang were protein, folate, vitamin B12, vitamin C, iron, calcium and tannin intake.

Keyword : Anemia, adolescent girls, hemoglobin, iron, protein, vitamin B12, vitamin C, tannin.

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ABSTRAK

Latar belakang: Remaja putri berisiko tinggi menderita anemia, karena pada masa ini terjadi peningkatan kebutuhan zat besi akibat pertumbuhan dan adanya menstruasi. Zat gizi yang bersangkutan dengan kejadian anemia adalah zat besi, protein, vitamin A, folat, vitamin B12, vitamin C, vitamin B2, vitamin B6, dan seng. Selain itu kalsium, tanin, fitat dan oksalat juga terlibat, karena zat-zat ini merupakan penghambat absorpsi besi. Tujuan penelitian ini untuk menjelaskan faktor determinan gizi pada anemia remaja putri di SMA Negeri 2 Semarang.

Metode : Desain penelitian *cross sectional*. Jumlah subjek 65 dipilih secara *propotional random sampling* dari seluruh kelas X, XI dan XII yang memenuhi kriteria inklusi. Data asupan diperoleh dengan *semi quantitative food frequency*. Data hemoglobin diukur dengan *cyanmethemoglobin*. Analisis multivariat digunakan regresi linier ganda.

Hasil : Sebanyak 43,1% subjek termasuk dalam kategori anemia. Rerata asupan protein, vitamin A, folat, vitamin B12, vitamin C, vitamin B2, vitamin B6, zat besi, seng, kalsium, tanin, fitat dan oksalat adalah $72,03 \pm 17,43$; $1572,62 \pm 614,16$; $171,78 \pm 72,77$; $4,81 \pm 2,75$; $99,47 \pm 118,34$; $1,40 \pm 2,73$; $1,82 \pm 3,49$; $10,22 \pm 2,76$; $8,55 \pm 2,57$; $301,10 \pm 85,78$; $75,38 \pm 74,16$; $199,80 \pm 142,98$; $137,24 \pm 74,63$. Zat gizi yang berhubungan determinan dengan kejadian anemia adalah asupan protein, folat, vitamin B12, vitamin C, besi, kalsium dan tanin ($p = 0,001$).

Kesimpulan : Faktor determinan gizi pada anemia remaja putri di SMA Negeri 2 Semarang adalah asupan protein, folat, vitamin B12, vitamin C, zat besi, kalsium dan tanin.

Kata kunci : Anemia, remaja putri, hemoglobin, zat besi, protein, vitamin B12, vitamin C, tanin

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