

# Korelasi asupan besi, hemoglobin dan feritin serum dengan indikator panjang badan untuk usia pada bayi stunting usia 6-12 bulan di Tangerang = Correlation between dietary iron intake, serum ferritin and hemoglobin with height for age Z score among stunting infant ages 6-12 months in Tangerang

Daunwati, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20340570&lokasi=lokal>

---

## Abstrak

Tujuan : Mengetahui korelasi antara asupan besi, hemoglobin dan kadar feritin serum dengan indikator panjang badan untuk usia pada bayi stunting usia 6-12 bulan.

Tempat : Pada 20 desa dan kelurahan di Kota dan Kabupaten Tangerang di wilayah binaan CARE International Indonesia.

Bahan dan cara: Pada penelitian dengan desain potong lintang ini didapatkan 31 subyek sesuai kriteria penelitian. Data yang dikumpulkan meliputi pendidikan formal ibu, status gizi berdasarkan HAZ, asupan kalori, protein dan besi dengan menggunakan FFQ semikuantitatif pemeriksaan laboratorium darah yaitu hemoglobin dan feritin serum. Uji statistik yang digunakan adalah Kolmogorov Smirnov, dan korelasi Pearson/Spearman's Rank.

Hasil : Pada penelitian ini didapatkan 51,6% pendidikan formal ibu sekolah dasar/ sederajat. Subyek merupakan kelompok stunting yang sebagian besar (80,6%) merupakan stunting sedang. Rata-rata asupan energi adalah 767,99 ± 275,42 kkal/hari dan protein 21,80 ± 1,08 g/hari. Asupan energi dan protein subyek yang rendah 74,2% dan 29% dibandingkan RDA. Rata-rata asupan besi adalah 6,06 ± 1,6 mg/hari, sebagian besar subyek (81%) dengan asupan besi kurang menurut RNI. Rata-rata kadar hemoglobin 10,04 ± 1,32 g/dL dan kadar feritin serum didapatkan median 10,93 (1,62; 90,38) pg/L. Subyek yang mengalami anemia 71%, defisiensi besi tanpa anemia 9,7% dan anemia defisiensi besi 41,9%. Pada analisis tidak didapatkan korelasi yang bermakna antara asupan besi dengan hemoglobin dan feritin serum. Pada analisis korelasi antara hemoglobin dan feritin serum dengan HAZ skor tidak didapatkan korelasi bermakna.

Kesimpulan : Tidak didapatkan korelasi yang bermakna antara asupan besi dengan hemoglobin dan feritin serum. Tidak didapatkan korelasi yang bermakna antara hemoglobin dan feritin serum dengan HAZ skor.

Objective : To know correlation between dietary iron intake, hemoglobin, serum ferritin and height for age Z score in stunting infant age 6-12 month.

Location : 20 villages and kelurahan in Tangerang City and District the area under serviced by CARE, international Indonesia (CII).

Material and Method: A cross sectional study had been carried out on 31 subjects selected. Data collected consist of respondent (mother) formal education, subject characteristic i.e HAZ, dietary intake of energy, protein and iron using semi quantitative FFQ, and laboratory examination for hemoglobin and serum ferritin. Statistical analysis was using Kolmogorov-Smirnov and Pearson/Spearman's rank correlation tests.

Result : Most of mothers' formal education was primary school (51.6%). Majority of the subjects was in moderate stunting (80,6%). Average energy and protein intake were 767.99 ± 275.42 kcal/day and 21.80 ± 1.08 g/day, respectively. Subjects with low energy and protein intake as compared to the RDA are 74.2% and

29%, respectively. Average iron intake 6.061 4.16 mg/day and 81% of the subject had iron intake less than RNI. Average hemoglobin level was 10.04±1.32 g/dl, whereas median serum ferritin was 10.93 (1.62; 9038) ug/L. Subject with anemia, iron depletion without anemia and iron deficiency anemia were 71%,9.7%, and 41.9%, respectively. There was no significant correlation between iron intake and hemoglobin. There was negative correlation between iron intake and serum ferritin ( $p>0.05$ ). No significant correlation was found between hemoglobin and serum ferritin with HAZ score.

Conclusion: There were no significant correlations between iron intake with hemoglobin, and serum ferritin. There were no significant correlations between hemoglobin and serum ferritin with HAZ score unstinting infant 6-12 month.