KONSUMSI PANGAN, BIOAVAILIBILITAS ZAT BESI DAN STATUS ANEMIA SISWI DI KABUPATEN BOGOR

(Food Consumption, Iron Bioavailibility and Anemia Status of School Girls in Bogor District)

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ABSTRAK

Penelitian ini bertujuan mengetahui hubungan konsumsi pangan, bioavailibilitas dan status anemia pada siswi remaja. Studi *cross sectional* dilakukan di SMK Pelita Ciampea Kabupaten Bogor. Data dikumpulkan dari 74 orang siswi remaja yang meliputi konsumsi pangan dengan *recall* 2x24 jam dan kadar hemoglobin. Estimasi bioavailabilitas besi dihitung dari konsumsi pangan menggunakan metode Du *et al.* (1999). Rata-rata konsumsi daging dan buah berturut-turut 68 g/hari dan 73 g/hari. Asupan protein, besi, dan vitamin C berturut-turut 38,3 g, 10,8 mg dan 25 mg; dengan tingkat kecukupan gizi berturut-turut 76,6%, 41,7% dan 33,4%, Estimasi bioavailabilitas zat besi 1,09 mg atau 10,04% dan termasuk dalam kategori sedang. Biovalibilitas zat besi (mg) berhubungan nyata dengan konsumsi daging sapi dan ayam (r=0,381) dan asupan vitamin C (r=0,340) (p<0,05). Prevalensi anemia siswi sebesar 10,8%, dan kadar hemoglobin berhubungan nyata dengan asupan vitamin C (r=0,002) dan vitamin A (r=0,022) (p<0,05).

Kata kunci: Anemia, konsumsi pangan, bioavailabilitas besi, siswi remaja.

ABSTRACT

The research objective was to analyze the profile of food consumption, iron bioavailability and anemia status of school girls in High School. The cross sectional study was conducted at SMK Pelita in Bogor District. The baseline data was collected from 74 school girls including 2x24 hours food record and hemoglobin (Hb). Du *et al.* (1999) method was applied to estimate the iron bioavailability from food consumption. The meat and fruits consumption is 68 g/day and 73 g/day respectively. Most of the subjects (83.2%) consume less food compared to the Indonesian Dietary Guidelines. The mean protein, iron and vitamin C intakes are 38.3 g, 10.8 mg, and 25 mg respectively. Compared to the Indonesian's RDA these intakes are low i.e. 76.6%, 41.7%, and 33.4% respectively. The mean iron bioavailability is 1.09 mg or 10.04%, and it's categorized as moderate. Iron bioavailability (mg) is significantly associated with the meat and chicken consumption (r=0.381) and vitamin C intake (r=0.340) (p<0.05). The anemia prevalence is 10.8%, and haemoglobin concentration is significantly related to the intake of vitamin C (r=0.002) and vitamin A (r=0.022) (p<0.05).

Keywords: Anemia, food consumption, iron bioavailability, schoolgirls.