Energy and Protein Source and Their Daily Intake of Pregnant Women in Bogor Area, Indonesia

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ABSTRACT

Cross sectional study has been conducted for pre-pregnant woman, pregnant women and lactating mother in Bogor Area. This report is a part of the study and will focus on energy and protein intake of pregnant woman. Objectives of the present study were to identify energy and protein source of pregnant woman, their consumption and contribution on daily intake of energy and protein, as well as to assess their adequacy. Milk consumption and its contribution to energy and protein was also evaluated. The subjects' criteria were a second trimester of pregnant women of the 2nd (Q2), 3rd (Q3), and 4th (Q4) quintile of household's expenditures. The subjects amounted to 203 were drawn equally from the list of pregnant women at the Posyandu's around Bogor City. The result of 2x24 hours food recall revealed that among 11 food categories, beverages were the highest amount of food consumed in the three groups (1197 g/cap/day or 51%), followed by cereal and cereals products (495 g/cap/day or 21%). Overall average of food consumption was 2352 g/cap/day. The average intake of energy and protein were 1517 kcal/cap/day and 43.8 g/cap/day for Q2, 1588 kcal/cap/day and 46.8 g/cap/day for Q3 and 1797 kcal/cap/day and 54.3 g/cap/day for Q4. The highest of energy sources of three groups was cereals and cereals products contributing 746 kcal/cap/day or 45.6%, followed by snack food (264 g/cap/day or 16.2%), legume (187 g/cap/day or 11.4%) and milk and milk products (149 g/cap/day or 9.1%). The highest source of protein intake was also cereals and cereals products contributing 11.3 g/cap/day or 23.4%, followed by legume of 9.8 g/cap/day or 20.2%. The average consumption of milk and milk products was 182 g/cap/day, contributing to energy intake of 149 kcal/cap/day energy and protein intake of 6.2 g/cap/day protein. The protein intake from milk significantly increased (p<0.05) with the increased of households' expenditure i.e. 3.2 g protein/cap/day of 02, 5.5 g protein/cap/day of 03, and 9.7g protein/cap/day of 04, respectively. The dominant milk product consumed was milk powder i.e. 145 g milk/cap/day contributing to protein intake of 5.7 g protein/cap/day. The results show that energy and protein intake of pregnant women, were still below the Indonesian RDAs, i.e. 75.7% and 72.1% respectively. The prevalence of energy deficiency (<80% RDA) as well as protein deficiency (<80% RDA) decreased with the increased of households' expenditure within 02 to 04.

Key words: pregnant woman, food consumption, milk consumption, energy intake, protein intake