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The Nutritional Composition of Human Milk and Dietary Status of Nursing Mothers in Kuantan, Pahang

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ABSTRACT

Objectives/Research Problem: Human milk composition is associated with maternal dietary intake. In addition, prophetic foods consumption among nursing mothers is also an interesting aspect to be explored. Thus, the aims of this study are: i) to analyse the nutritional composition of human milk and dietary status, and ii) to assess the knowledge, attitude and practice (KAP) of prophetic food consumption, among Malay mothers during exclusive breastfeeding period.

Materials and Method: Thirty subjects are intended to be recruited from Kuantan areas. Inclusion criteria include Malay mothers aged 18 to 40 years old, with singleton pregnancy at ≥ 32 weeks, deliver full term baby (at least 37 weeks of gestation) and plans to exclusively breastfeed. Questionnaire is used to obtain information on socioeconomic background, anthropometric measurement, smoking, and physical activity status. Dietary intake is assessed by multiple-pass dietary recall method. Both food frequency questionnaire (FFQ) and in-depth interviews are used to assess the KAP on prophetic food during lactation. Samples of human milk (20-30ml) are also collected from the mothers during the study period.

Results and Discussion: Ten mothers (aged 25-38 years) have been recruited. About 50% of them are overweight and obese. About 40% of them reported doing some physical activity during pregnancy. Mean energy intake during late pregnancy (1486 kcal/day) is 34% below EER (IOM, 2002). Similar findings are observed with other essential nutrients such as protein, vitamin C and calcium. A total of 11 human milk samples have been collected and the nutritional composition will be analysed. About 30% of the mothers took dates (kurma) during lactation period for the purpose of improving milk production.

Conclusion: The preliminary results demonstrated maternal total energy and nutrients intakes during pregnancy are below the requirement. In addition, prophetic foods (particularly dates) are consumed by nursing mothers to improve their milk production.

KEYWORDS: Human Milk, Dietary Status, Exclusive Breastfeeding, Malay, Prophetic Foods

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