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ABSTRACT

Zinc Intake in Lactating Mothers in Jakarta

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Background: Maternal zinc deficiency may cause hindrance in breast milk ejection and low zinc content in breast milk. This may cause zinc deficiency in babies. Therefore, adequate zinc intake is crucial to maternal and baby's health. Food source of zinc are mainly protein rich foods. High intake of fiber may decrease zinc bioavailability as they usually contain phytate.

Objective: This study aimed to profile zinc, total protein, and fiber intake among lactating mother in Jakarta.

Methods: This was a cross sectional study conducted in Grogol Petamburan Public Health Center, West Jakarta and Cilincing Public Health Center, North Jakarta between February and April 2019. Consecutive sampling method was used to recruit 95 lactating mothers aged 20-35 who were nursing 1-6 months old babies. Basic characteristic data such as socioeconomic level and education level was collected during interview process. Semi questionnaire food frequency questionnaire was used to gain zinc intake data and 24 hours food recall was used to gain protein and fiber intake data.

Results: The prevalence of zinc deficiency in Jakarta was 76.8% although 56% had taken enough daily protein. 99% of the samples had low fiber intake. Around 47% of subjects have monthly income lower than regional minimum wage and 68% of the samples has middle level of education.

Conclusion: Zinc intake among maternal diet in Jakarta is below the recommendation although more than half of the samples had taken enough daily protein and very low fiber. The protein intake must furthermore be specialized into animal and vegetable protein to increase the accuracy of the data. A specialized education about the importance of zinc for maternal health and food sources of zinc must be conducted among lactating woman. The need of zinc supplementation might be considered.

Keyword: Zinc, lactating, maternal diet, socioeconomic level, education level

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