

Concentration of Zinc Micronutrients in Breast Milk Based on Determinant of Mother and Baby in Kassi-Kassi Health Center

Authors : Andi Tenri Ayu Rahman, Citrakesumasari, Devintha Virani

Abstract : Breast milk is the complex biological fluid mix of macronutrient and micronutrient that are considered as perfect food for babies. Zinc has a role in various biological functions and physical growth. This research aims to know the average zinc (Zn) micronutrients content of breast milk by determinants of infant (birth weight) and mother (nutritional status and food intake) and description of the pattern of mothers breastfeeding. The type of research used is observational analytic with cross-sectional study design. The population was 41 mothers in Kassi-Kassi health center within one month. Sample research is mothers who gave birth at term and breastfed her baby. Sampling was done with random sampling technique involving 37 people. Samples of breast milk were analyzed in the laboratory by using the method of Atomic Absorption Spectrofotometry (AAS). This research find that from the samples (n=37) the average contents of zinc in the breast milk is $0,88 \pm 0,54$ mg/L with the highest value on the group of low birth weight babies ($1,13 \pm 0,67$ mg/L), mothers who had normal nutritional status ($0,981 \pm 0,514$ mg/L) and intake low zinc ($0,94 \pm 0,54$ mg/L). Regarding breastfeeding pattern, 67,6% of the samples had had breastfeeding experience and 81,1% of breastfed more than eight times a day. In summary, the highest average value of the zinc content of breast milk was in the group of low birth weight babies, mother with normal nutritional status, and mothers having relatively low intake pattern.

Keywords : zinc, breastmilk, mother, baby

Conference Title : ICFSN 2018 : International Conference on Food Science and Nutrition

Conference Location : Paris, France

Conference Dates : August 27-28, 2018