

ABSTRACT

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Title of thesis: Assessment of vitamin intake in lactating women

Background: This theses focus to evaluate vitamins intake of lactating women. A sufficient vitamins intake is very important for both mothers and their infants. The aim of this theses was an assessment of lactating women vitamins intake without and including vitamins supplementation. It was determined whether the intake of individual vitamins changed with the duration of lactation, and then the average intake values were compared with the recommended daily allowances (RDA). Finally, the proportion of women who did not meet the RDA was evaluated.

Methods: Data collection for this study took place in 2021-2022. There were eleven lactating women between years of age 29 and 40 involved. These women underwent medical examinations at laboratory four times after the delivery – during L1 lactation period (3-4 weeks after the delivery), L2 period (3 months after the delivery), L3 period (6 months after the delivery) and finally L4 period (9 months after the delivery). During the L1 and L2 periods the questionnaires were submitted by 9 women, during L3 period by 10 women and during L4 period by 9 women. Each examination intended to evaluate the lactating women vitamins intake from the food they had eaten in the previous 7 days. Vitamin supplementation was also included in the total intake of vitamins. Subsequently, the nutrition software NutriDan and Microsoft Excel 2019 was used to the evaluation of the results. Such obtained results were compared to the RDA for lactating women, at the end.

Results: We have not proved any statistically significant difference in vitamins intake among the individual lactation periods – except from vitamin B₁₂ the intake of which was in L4 period approximately a half of the intake in L1 period. Vitamin supplementation increased the intake of the most of the vitamins. However, the intake of vitamin B₉ was a half lower than RDA indicate for L3 and L4 periods. All lactating women without vitamin supplementation met RDA for vitamin B₃ only. No woman without vitamin supplementation was able to reach the RDA for vitamin B₉.

Conclusion: The outcomes of this study indicate that it is important to monitor the vitamin intake during lactation period because most of the women are not able to gain the RDA of vitamins only from the food they usually eat. It is very important to pay attention to appropriate vitamin supplementation during the lactation period.

Key words: Vitamin, Breastfeeding, Mammary gland, Breast, Mother's milk, Nutrition, Recommended daily allowances