

ABSTRACT

The thesis deals with the issue of nutrition in lactating women. The main objective of this work is to conduct a comprehensive analysis of the nutritional intake of Czech women during lactation, focusing on the intake of selected minerals, specifically sodium, potassium, calcium, magnesium, and phosphorus. Subsequently, the obtained results will be compared with the recommended daily intake of these macroelements.

The results are based on the nutritional intake of six monitored women, from whom values were provided for all lactation periods L1 to L4 during the period from February 2022 to February 2023. For a larger dataset, the values of two additional women were included in the research, from whom values were obtained for periods L1 to L3. Further details of this limitation are provided in the relevant chapter 7.1.7. Limitation of the study. Women recorded their diets in questionnaire form, always a week before visiting the physiological laboratory of Professor PharmDr. Miloslav Hronek Ph.D. In the questionnaire, they recorded meals, foods, fluids, and their intake amounts. The gathered information was further processed using the NutriDan program and statistically evaluated in the Microsoft Excel program.

A key finding of the study is an excessive intake of sodium, approximately 1000 mg of sodium more per day than the recommended norms. A slight excess intake was also observed for phosphorus. Conversely, the intake of calcium and magnesium was found to be at or just below the lower limit of recommended values. Potassium intake corresponded to recommended values. There were no statistically significant differences in mineral intake between individual days of the week. However, when comparing mineral intake during different lactation phases, statistical significance was found for magnesium and phosphorus. The intake of both minerals decreased after period L1. Phosphorus values remained constant, while magnesium levels increased again after period L2.

Lactating women in the Czech Republic should adhere to a healthy, varied, and balanced diet to ensure the intake of necessary nutrients, including minerals. Excessive consumption of highly processed foods, which are either low or high in minerals (in the form of kitchen salt or phosphate salts), is not desirable, and therefore, it is necessary to monitor the amount of these foods consumed.

Keywords: lactation, nutrition, minerals, macroelements, recommended daily intake