

## **ABSTRACT**

The menstrual cycle is a physiological process typical for the reproductive age in women. Its regular occurrence, along with the potential presence of related difficulties, can significantly affect a woman's quality of life. Research suggests that dietary composition – particularly the intake of specific micro- and macronutrients – may play a role in the prevention and alleviation of menstrual symptoms.

The aim of this thesis was to analyse the relationship between dietary habits and the occurrence of menstrual difficulties in women of reproductive age. The thesis consists of a theoretical and a practical part. The theoretical part focuses on the role of key nutrients in the menstrual cycle and their main dietary sources. The practical part evaluates the intake of selected nutrients based on four-day dietary records and compares objective analysis with women's subjective assessment of their eating habits.

The study involved 26 respondents who filled out an anonymous questionnaire and provided a detailed dietary log. Three hypotheses were evaluated concerning the relationship between menstrual difficulties and the intake of protein, saturated fatty acids, and n-3 fatty acids. The hypothesis regarding insufficient protein intake and high intake of saturated fats were not confirmed. In contrast, the hypothesis suggesting that a low intake of n-3 fatty acids may be associated with increased menstrual pain was confirmed.

Based on the findings, it is recommended to increase awareness among women about dietary strategies that can support menstrual health. This could be achieved, for example, through the distribution of informational leaflets in gynaecological clinics, providing accessible and reliable guidance for supporting a healthy menstrual cycle through nutritional adjustments.

**Key words:** menstrual cycle, dysmenorrhea, diet, nutrients