

## Abstract

The thesis focused on milk and its alternatives, i.e. plant-based drinks. The theoretical part summarized the nutritional value of milk and its consumption in the world and the Czech Republic. As a source of fats, proteins, minerals, and vitamins, milk is of nutritional value. Furthermore, the importance of milk in human nutrition for different age groups was discussed. Related dietary recommendations and reasons limiting milk consumption were introduced. This included health reasons such as lactose intolerance, cow milk protein allergy or the rarely occurring galactosemia, as well as ethical or environmental reasons. Last but not least, alternatives to milk, i.e. plant-based drinks, were presented. These drinks are based on extracts of legumes, cereals, nuts and/or seeds diluted with water and often supplemented with other additives.

The practical part aimed to assess the dietary habits of the general public and nutritionally educated people regarding the consumption of milk and plant-based drinks, including their awareness of the importance of this food in human nutrition. Data were collected using a questionnaire survey. In addition, the nutritional values of selected plant-based drinks were also compared with cow's milk.

Within the sample studied, milk was observed to be a frequent part of the diet (85-90% of respondents). Dairy products were even more frequent part of the diet (97-100% of respondents), predominantly semi/hard and fresh cheeses, but also fermented milk products and curds. About half of the respondents includes plant-based drinks in the diet. More than a third of respondents consume both milk and plant-based drinks. However, compared to milk, the consumption of plant-based drinks is often only occasional, and the consumed amount is four times lower than in case of milk. Within the most preferred plant-based drinks were observed coconut, soy, oat and rice drinks. Based on the survey, it was assumed that the education in nutrition has an impact on daily milk consumption, higher amount of consumed milk per week and awareness related to the milk as a source of nutritional substances such as protein, minerals, and vitamin D. In addition, people educated in nutrition were also more likely to believe that milk cannot be substituted by plant-based drinks and should not be included in children's diets. A comparison of the nutritional components of selected groups of plant-based drinks and milk had shown that their nutritional composition is different and that they are not able to substitute milk from a nutritional point of view.

Both, milk, and plant-based drinks play a certain role in the nutrition. Plant-based drinks can diversify the diet. Some plant-based drinks are of lower energy intake or lower fat and saturated fat content compared to milk. Plant-based drinks go along with the lifestyle of consumers, for others they are of value thanks to the environmental and ethical reasons. However, the consumers should be aware of the nutritional value of the product and respect the balanced and diverse diet.

**Key words:** milk, dairy products, lactose, nutrition, milk alternatives, plant-based drinks, nutrition value