

## ABSTRACT

This bachelor's thesis deals with the possible beneficial effects of vitamins, minerals and dietary supplements that could positively influence the course of treatment of blood cancers. In addition to vitamins and minerals, dietary supplements for the purposes of this thesis include various food supplements that can be purchased in pharmacies, as well as foods or spices, herbs and mushrooms that can be purchased in regular grocery stores. The main objective of the study was to find out whether patients take any of these selected supplements during treatment. The secondary aim of this work was to get an idea about the patients' awareness, their choice of food supplements that they purchase and how they themselves evaluate the effect of these supplements on their health status.

The theoretical part deals with the brief characteristics of the most common haemato-oncological diseases of patients visiting the specialist departments of the General Faculty Hospital in Prague (VFN). In the theoretical part, this thesis also deals with a total of 57 different supplements (9 vitamins, 6 minerals, 15 food supplements and 27 different foods, spices, herbs and mushrooms) that could have positive effects in the treatment of these serious diseases, as reported in the scientific literature and also in the popular literature. For each of the selected supplements, available information from multiple sources was searched for associations of haemato-oncological malignancies with the active ingredient in the supplement.

The practical part contains the evaluation of the questionnaire survey conducted in the 1. IK VFN in Prague in 2023. 96 completed questionnaires were returned. The questionnaire on the first page lists all 75 initially selected supplements (vitamins, minerals, food supplements, foods, spices, herbs, mushrooms). In the paper, only those that patients indicated that they use the supplement are mentioned anymore, the number has been reduced to 57. On the other side of the questionnaire, there are questions about the patients' eating habits, their taste preferences, digestive difficulties and questions about their lifestyle compared before and after treatment to see if there was any change. In some questionnaires there is little information completed, however this is also valuable information.

The result of this work is an analysis of the completed data from 96 questionnaires. From the category of vitamins and minerals, patients take magnesium, calcium, vitamin C and vitamin D the most. Among the dietary supplements, omega 3-fatty acid, sea buckthorn, echinacea and green foods are the most popular and most used. Very significant is the finding that 45% of patients take nothing. As for the category of other foods, coffee and beetroot clearly lead. Traditional foods such as garlic, onions and honey and various spices are also highly used. However, most of these food supplements have not been encountered by patients, nor has there been significant interest in wood-boring fungi, where I see great potential for the future. From the results of the questionnaires, it can be seen that patients with haemato-oncological malignancies are very conservative when it comes to the use of supplements in their disease. According to the foreign and our studies studied, many substances have valuable potential as adjuvants in the treatment of oncological diseases. A large number of them are still being investigated, how they act and how their medicinal potential can be exploited in practice.