

## **Abstract**

In the theoretical part I briefly introduce the reader to the current state of given topic and describe the function of thyroid gland, how much important it is for our organism and also the possible influence of nutrition on this organ. The next chapters discuss endocrine orbitopathy. Endocrine orbitopathy is a chronic ocular disease, which is frequent in patients with Graves – Basedow disease. I focus not only on the epidemiology and causes of the disease, but also on assessing the severity and treatment of endocrine orbitopathy.

The practical part focuses on eating habits and lifestyle of patients with endocrine orbitopathy and assesses the possible effect of body composition on endocrine orbitopathy. At the same time, 4 hypotheses were established. The first hypothesis assumed that higher % body fat and higher BMI may influence the course of endocrine orbitopathy. The second, that nicotine-dependent patients with endocrine orbitopathy predominate over individuals who do not use this addictive substance. In the third hypothesis, I assumed that patients with endocrine orbitopathy would have another associated civilization diseases. And the last, the fourth hypothesis compared the effect of fish consumption on the level of selenium in the blood.

To collect data, I used questionnaires inquiring lifestyles, other associated diseases and the family history of respondents. The TANITA scale, based on bioelectric impedance, has been used to map the body composition to explain the following data: weight, BMI, muscle mass, percentage of fat and body water. For muscle mass and body fat it was possible to read out the distribution of components in the body. Furthermore, biochemical parameters from the last blood sampling were investigated.

The survey was conducted in General University Hospital, 3rd Internal Clinic for nearly six months at the turn of the year 2017 and 2018. 12 patients with different stage of endocrine orbitopathy were contacted. There was no age limit for patients. For the control group, patients were selected due to similar problems, but without diagnosis of endocrine orbitopathy. This group consisted of 10 individuals.

Results of the survey show us, that a certain relationship between body composition and endocrine orbitopathy is possible, but a larger research sample would be needed to confirm these results.