

## **Abstract**

*Introduction:* Bariatric metabolic surgery is recognized as a very effective treatment for obesity, performed when the preceding conventional treatment failed or when significant obesity-related complications occurred. Diploma thesis is focused on a current practice of dietitians providing nutritional care in weight-loss surgery (WLS), as they play an important role in a multidisciplinary medical team by performing a clinical nutritional evaluation, education and long-term nutritional follow-up.

*Objective:* The aim of the thesis is to present eating habits in patients of the 3<sup>rd</sup> Medical Department of the 1<sup>st</sup> Faculty of Medicine Charles University and General Faculty Hospital in Prague, in 6 and 12 months after the surgery and to evaluate its accordance to existing nutritional strategies and evidence-base guidelines.

*Methods:* A cross-sectional observational study is focused on nutritional assessment and therapy in management of obesity in 13 patients 6 months post-WLS (M6: 31 % female, 69 % male; mean age  $49 \pm 8,56$  years; mean body weight  $119,3 \pm 16,64$  kg; mean BMI  $39,7 \pm 6,05$  kg/m<sup>2</sup>) and in 17 patients 12 months post-WLS (Y1: 71 % female, 29 % male; age  $53 \pm 8,01$  years; body weight  $114,9 \pm 31,72$  kg; BMI  $39,3 \pm 6,75$  kg/m<sup>2</sup>) together with a control group without surgery (age  $47 \pm 15$  years; body weight  $133,1 \pm 49,4$  kg; BMI  $44,5 \pm 14,9$  kg/m<sup>2</sup>). Results from analysis of a 3-day food record have been put in a comparison with general practice guidelines following the studies and outcomes from recent clinical trials. Outcomes from a control group analysis were compared with updated recommendations DACH. Data were analysed using a one-sample t-test.

*Results:* There was an inadequate intake of protein and fiber, observed in patients in all of the groups. Lower intake of these nutrients is common in post-WLS patients and in obese population as well. However, it's important to take account of a food quality and overall composition of meals, which tends to be suboptimal in many cases. In Czech Republic, there's a need to establish nationally recognized standards or guidelines specific to bariatric care, which can be helpful in an identification of nutritional assessment and screening practices for bariatric patients, for the purpose of improvement of nutritional intervention.

**Key words:** bariatric metabolic surgery, obesity, eating habits, nutritional therapy