STATISTICAL ANALYSIS OF RESULTS IN PATIENTS APPLYING THE SUSTAINABLE DIET INDICATORS

Gordana Markovik[1*], Vesna Knights[1], Daniela Nikolovska Nedelkovska[1], Dragan Damjanovski[1]

[1]Faculty of Technology and Technical Sciences - Veles, University St Kliment Ohridski - Bitola, Dimitar Vlahov bb, 1400 Veles, Republic of Macedonia

[*]**e-mail: gordana-goca@hotmail.com**

Abstract

The influence of the functional food and food supplements is of great importance not only to understanding the patients' needs, but also to improve the health and to fairly consider having a better and healthier lifestyle. Research on patient satisfaction regarding their physical appearance is very significant both for understanding their needs, as well as for objective consideration of their health by health professionals. It is an essential tool for health care improvement. Monitoring patients' health should be the focus of attention of all health professionals and nutritionists and shall become an imperative and indicator for further evaluation.

The research was conducted on a simple random sampling of 56 patients in the Dietetics and Nutrition Counseling Company "PROTEKTAL" in Skopje. They were monitored under strict medical supervision aimed at treatment of obesity. For this purpose, they were put on a very low calorie diet with a minimum input of 800 - 900 cal. daily, in small but frequent meals. This type of functional food is the protein food that contains bioactive peptides and proteins that meet the daily needs of intake of various foods rich in vitamins and minerals. For the statistical analysis of descriptive statistics and correlations, Statistica for Windows 7 and SPSS 17.0 were used. The comparison between the phases of male and female patients was performed with Student-test.

It was notable that after the first and second phase of the diet, the values of all parameters were significantly reduced. After the eight-month diet (for some patients even slightly longer), i.e., after all five phases of the diet, all parameters were back to normal and some were even lower than the reference values. The body mass (BM) among male decreased by an average of 34.7% and average decrease of 40.1% among female subjects; body mass index (BMI) decreased by 51.3%, while in the female population 43.4%. In male subject, the chest circumference decreased by an average of 27.2%, and 30.9% by female population, while the waist circumference decreased by an average of 27.8%, and 30.3% among female subject. In male subjects, the high transaminase values (ALT) taken at the beginning of treatment decreased by an average of 40.7%, and in female subjects, by 29%. An average decrease in hepatic enzymes (AST) by 32.8% in male subjects and 32.3% in female subjects. The lipid status (HDL) values were reduced by an average of 18.5% in male patients and 23.5% in female subjects, while the total cholesterol values decreased by 25.2% on average in male subject, while in female subject it was by 24.9%. The triglycerides were reduced by 35.2% on average in the male group, and 29.1% in female subjects; Glucose was reduced by an average of 20.1% in male patients and 29.1% in female patients.

The results from t-test confirmed significant difference from the male/female results between the phases and before diet and after using the protein low calorie diet.

Key words: *Bioactive proteins and peptides, Obesity, Patients, Medical care, Balanced diet, Nutrition.*