USING WATER FASTING TO REDUCE BMI IN PEOPLE WITH OBESITY AND TYPE 2 DIABETES

Ovidiu TAFUNI

Nicolae Testemitanu State University of Medicine and Pharmacy, Republic of Moldova

Corresponding author: Ovidiu Tafuni, e-mail: ovidiu.tafuni@usmf.md

Keywords: *water diet, BMI, obesity, type 2 diabetes.*

Introduction. Currently, obesity as the 21st century's major disease has affected almost every country worldwide, so it can be called a pandemic. Most studies show that it is a consequence of modern lifestyle (S. Moossavi 2018, Wolfgang Kopp 2019, Irina V. Leskova *2019).* Obesity influences morbidity in many diseases, including type 2 diabetes. According to some scientists, one of the remedies used in fighting against obesity and its complications is the water diet, which is quite effective (Elizabeth A. Dennis 2012, Jodi D. Stookey 2012, John C. Peters 2015).

Material and methods. The study was performed at the University Clinic of Primary Health Care of Nicolae Testemitanu State University of Medicine and Pharmacy, based on the addressability of patients diagnosed with obesity and diabetes mellitus, during 2020. The research is a cross-sectional descriptive study, which included the interviewing method based on the questionnaire regarding the water diet and publications retrieved from specialized sources. This present study used bibliographical, observational, description, statistical, nutritional methods etc. Based on the patient's informed consent, 104 females were included within the study, who were diagnosed with obesity associated with type 2 diabetes, aged between 50 and 59 years, which served as criteria for study inclusion.

Results. The body mass index (BMI) was initially evaluated, the values showing that out of 104 participants, 76 (73.08%) cases had BMI ≥30 kg/m^2, 20 (19,23%) BMI ≥35 kg/m^2 and BMI ≥40 kg/m^2 was determined in 8 (7.69%) people. The subjects selected in the study followed the water diet for 16 weeks. It consists of 4 types of water used between the main meals, according to a certain scheme, but with a 25% reduction in the calories used before starting the water diet. While following the diet, 24 (23.07%) persons did not lose body weight, however, in the post-experimental questionnaire, it was determined that they did not comply to the water and the low-calorie diet. 80 (76.93%) people who followed the water and diet regimen after a prior training decreased their body weight from 3 kg to 12 kg over 16 weeks. People who lost between 2-7.9 kg did not strictly follow the diet but had a hereditary predisposition to obesity and type 2 diabetes and according to the questionnaire, suffered from sleep disorders, as well. In other people where such disorders were not registered, the success rate of the water diet, accompanied by the low-calorie diet, reduced the body weight of the respondents from 8 kg to 16 kg. In 24 (23.07%) persons no changes in BMI were confirmed, since they did not accept the water drinking regimens and hypocaoric diet, which was actually the reason why a person had the same BMI ≥ 40. Other study participants lowered BMI over 16 weeks, in total 80 (76.93%) people.

Conclusions. Based on the positive evolution of the subjects participating in the study, it was found that water diet may reduce the body mass index (BMI) and obesity associated with type 2 diabetes, respectively, as well as decrease the calories by 25% over 16 weeks.