

## **The effect of Mediterranean-style and Standard Hypolipemic Diet on lipid profile in obese patients: a 6-month Randomized Controlled Trial- Preliminary Results**

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### INTRODUCTION

Nowadays, numerous evidence are showing beneficial effects of Mediterranean diet on cardiovascular disease and its components. However, there are still some ambiguities and a need for more randomized studies with stronger evidence is needed. Our aim was to explore the effect of Mediterranean diet and Standard hypolipemic diet on lipid profile in obese patients in a randomized controlled study.

### METHODOLOGY

One hundred and one subjects with a body mass index (BMI) above 30 kg/m<sup>2</sup> were recruited from the outpatient Clinic of Department of endocrinology, diabetes and metabolism disorders at the Dubrava University Hospital in the period from November 2008 to June 2011, and were randomly assigned to either a Mediterranean diet (MD) or Standard hypolipemic diet (SHD). All subjects received education on their diet during one-week stay in Daily hospital. To determine the lipid profiles their blood samples were obtained from the antecubital vein at baseline and after 7 days, 1, 3, and 6 months. Obtained data were entered into SPSS version 20.0 (SPSS Inc, Chicago, III) and analyzed.

### RESULTS AND DISCUSSION

The significant increase in the HDL cholesterol value of 8.59% (P=0.001) was induced by the MD group, whereas slight (1,45%), though insignificant increase was observed by the SHD group. Cholesterol and triglycerides showed a tendency of declining throughout the first 3-month period; however, on the last visit a discrete, unexpected increase was noted. LDL demonstrated similar behaviour; increasing and decreasing throughout the whole 6-month period.

## CONCLUSIONS

MD showed higher beneficial influence on HDL cholesterol than SHD what supported previous study results. Positive effect on other lipid profile markers was noticed only in the first three months, while their subsequent tendency to increase should be further explored.

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2. Martinez-Gonzalez MA. The SUN cohort study (Seguimiento University of Navarra). *Journal of Public Health Nutrition*. 2006;9(1A):127-31.

## **The influence of Mediterranean diet and Standard Hypolipemic Diet on weight reduction in obese patients- our experience**

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### INTRODUCTION

High adherence to the traditional Mediterranean dietary pattern is associated with a lower prevalence of obesity in Mediterranean population (1, 2). There are some differences in Mediterranean dietary patterns among different Mediterranean countries. However, we have no evidence of Croatian (Dalmatian) Mediterranean diet (MD) influence on weight reduction in obese patients. Our aim was to explore the effect of MD on weight reduction in obese patients.

### METHODOLOGY

Patients at the outpatient Clinic of Department of endocrinology, diabetes and metabolism disorders at the Dubrava University Hospital were randomly assigned to either MD or Standard hypolipemic diet (SHD). Both groups received counselling and education from two dietitians, two clinical pharmacists and two endocrinologist during the initial week at the Daily hospital. Weight, height and waist circumference were obtained at the baseline (day 1), after 7 days, 1, 3 and 6 months of the dietary program. Data were entered into SPSS version 14.0 ( SPSS Inc, Chicago, III) and analyzed.

### RESULTS AND DISCUSSION

After 6 months of diet intervention, both groups had a significant decrease in body weight, body mass index (BMI) and waist circumference. Mean decrease in body weight, BMI and waist circumference for the MD group was: 14,1 kg ( $p < 0.001$ ), 12,9 kg/m<sup>3</sup> ( $p < 0.001$ ) and 10,8 cm ( $p < 0.001$ ), respectively, while for SHD group these values were: 10,4 kg ( $p < 0.001$ ), 7,9 kg/m<sup>3</sup> ( $p < 0.001$ ) and 7,8 cm ( $p < 0.001$ ), respectively. Out of those who completed the 6-month program, 51 participants accomplished a target decrease of 5-10% of the initial body weight. Weight gain, withdrawals and inconsiderable weight loss was observed in 26 patients pertaining to MD group and 24 patients pertaining to SHD group. On the other hand, within the first week in the Daily hospital, in controlled conditions, all participants with an exception of one lost between 1-7 kg.

## CONCLUSIONS

Both diets showed beneficial effect on weight reduction with no significant difference between them. Higher beneficial effect in the first week emphasizes the importance of controlled conditions and the impact of group support.

### References:

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2. McManus K, Antinoro L, Sacks F. A randomized controlled trial of a moderate-fat low-energy diet compared with a low-fat, low-energy diet for weight loss in overweight adults. *International Journal of Obesity & Related Metabolic Disorders*. 2001;25(10):1503-11.