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ABSTRACTS

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THE EFFECT OF CONSUMPTION OF OLIVE OIL ON A GROUP OF MOROCCAN DISLIPIDEMIC DIABETICS

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Olive oil, rich in monounsaturated fatty acids is produced in Morocco and eaten by a large population. In public health, the primary hyperlipemia is rare in Morocco; so, in this study, we considerate the secondary hyperlipemia associated to nutritional imbalance in diabetic patients non insulin-dependent; no work has been made in this field. Each person of our group of 31 patients, consume every day, 20g of olive oil during 2 months; the plasmatic parameters are evaluated in days: 1st, 30th, 60th of treatment. Our results show a significantly decrease of triglycerides (28%), total cholesterol(12%), LDL cholesterol (24%) and increase of anti-atherogenic fraction HDL (23%), no variation of body mass, plasma glucose and glucose hemoglobin. We can conclude that the ingestion during 2 months of olive oil is benefic for preventing and correcting dyslipemia. Because of the antatherogenic effect of olive oil, we can advance that the risk of ischimic accident would decrease in these group of patients.

Keywords: Olive oil - Non insulin-dependent diabetes - Nutritional imbalance - Dyslipemia - Atherogenicity

EFFECTS OF BREAD REPLACEMENT WITH GLUCOMANNAN-ENRICHED BREAD IN DIETARY TREATMENT OF OBESITY TYPE 2 DIABETICS.

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The aim of this study was to evaluate the effects of glucomannan-enriched bread on body mass index and metabolic control in obese type 2 diabetic patients. 15 type 2 diabetic patients (mean±SD for chron. age 53.3±4.2 years, diabetes duration 5.1±2.5 yrs, BMI 38.9±7.2kg/m2, WH 0.85; 3 of them were on oral antidiabetic drugs and remaining was on diet only. Patients were given a 1500-1600 kcal/d diet in 3 periods. First period included bread without glucomannan (B, 2 or 3 pieces of bread in each meal, 30-45 gr carbohydrate) second period with glucomannan-enriched bread (BG, 2 or 3 pieces of bread but 3 pieces of bread enriched with glucomannan instead of 1 piece of bread, 30-45 gr carbohydrate). The last period included B again. Each diet was given for a period of 30 days. BMI, WH, fasting blood glucose (FBG), HbA1c, fasting lipid profile, ApoA1 and ApoB levels were measured at the beginning and after 4 weeks of each period. As compared with B period the BG period WH (from 0.84 to 0.82: -3.4%), BMI (from 37.9 to 36.4: -4%), cholesterol (from 232.8 to 211.2: -4.3%), LDL-cholesterol (from 168.2 to 134.6: -20 %) decreased significantly. Although in this period FBG, HbA1c, fasting triglyceride and VLDL- cholesterol levels have been also decreased, these levels did not reach significant points. After the 3. period BMI was continued to reduce significantly (from 36.4 to 35.6). Daily caloric intake also decreased (-10: -15%) due to high fiber content of BG.

In conclusion; consumption of glucomannan-enriched bread in dietary treatment of obese, type 2 diabetic patients may have beneficial effects on weight reduction and on metabolic control.

WINE DRINKERS AREleanER AND HAVE MORE ANTIOXIDANTS IN THEIR DIET THAN ABSTAINERS

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It has been suggested that the beneficial components in wine may explain the U-shaped curve between alcohol and mortality. Little attention has been, however, paid to the associations between types of alcoholic beverages, diet and BMI.

Pinmonica-92 survey (985 women and 863 men aged 25-64) was carried out in four areas in Finland using 3-day food records. Background variables, e.g. alcohol consumption during the last 12 months, were asked by a self-administered questionnaire.

The dietary differences between abstainers and alcohol consumers were more significant than between consumers of different alcoholic beverages. Among drinkers, fat intake was higher and carbohydrate intake lower than among abstainers. Those who preferred wine, however, had the highest intake of vitamin C; female wine drinkers also had the highest carotenoid intake. Despite the similar total daily energy intakes, daily energy expenditure, and physical activity index, male drinkers were leaner than abstainers. In women, the proportion of underreporters of energy intake increased with increasing alcohol consumption, and the association between alcohol and BMI was similar to that in men after the exclusion of underreporters.

Alcohol drinkers were leaner than abstainers, and wine drinkers had the healthiest diet. Alcohol consumption itself, or beneficial components in alcoholic beverages, may explain the observed association between alcohol and coronary heart disease, but the quality and quantity of alcohol consumption can also be an indicator of education and lifestyle.

BONE MINERAL CHANGES DURING WEIGHT LOSS IN OBESE WOMEN. THE INFLUENCE OF CALCIUM SUPPLEMENT.

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The relationship between body weight (BW) and bone mass (BM) is well known. It implies that a readjustment of BM will take place subsequently to alterations in BW. We do not fully understand the mechanisms behind the decrease in bone mineral when for various reasons weight is lost. We therefore examined a group of individuals before, during, and after an intentional, diet induced weight loss (WL).

Sixty-two obese women were included in the study. Dual Energy X-ray Absorptiometry (DEXA) of the lumbar spine (L2-L4), and the right proximal femur were performed at baseline, and after 1 and 3 months on a low calorie diet based upon a formula diet (NUPRO®, Orlé Mark Ltd.) containing 800 mg calcium/day. Thirty-two patients were randomized to a calcium supplement (Sandoz) 1g/d for three months. Six months later baseline DEXA were DEXA-scanned. No diet was prescribed for the last 3 months.

Results: The relation between WL, bone loss and biochemical markers of bone turnover were calculated in the two treatment groups.

In the patients without calcium supplement, there was a strong relationship between WL in the first month, and loss of BMC in the lumbar spine after 3 and 6 months, and increasing with time. (0.02 g/cm2 after 1 month, 0.08 g/cm2 after 3 months, and 1.29 g/cm2 after 6 months). These findings were not seen in the patients receiving calcium supplement.

In the femoral neck there was a similar correlation between WL and the BMC loss (1.0, 1.5, and 5.6 mg/cm2 after 1, 3 and 6 months respectively). Calcium supplementation made no difference with respect to bone changes in the femoral neck.

Conclusion: In obese women losing weight on a nutritionally sufficient formula diet, the physiological decrease in BMC of the lumbar spine, but not of the femoral neck, can be prevented by a calcium supplement of 1 g per day.