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women with dyslipidemia at and after the menopause. Methods: Randomized, single-blind, placebo-controlled trial involving 59 white (50.9±7.7 years) and nonwhite (52.3±8.1 years) Brazilian women. They were randomly assigned to receive placebo (18 subjects), fish oil (22 subjects) or fish oil and vitamin E (19 subjects). Serum lipids anti-LDL-antibodies (ALDL-), alpha-tocopherol and TBARS were determined at baseline, 45 and 90 days. Results are reported as means ± SD. ANOVA was used to confirm or reject evidence found in the descriptive analysis, beyond compared by LSD method, SPSS software, version 13.0 was used ($p \leq 0.05$). Results: The ALDL- values revealed an interaction effect between sampling time and supplement ($p=0.036$) and between time of collection and ethnicity ($p=0.006$). White women presented higher baseline levels ($p<0.001$), but after supplementation there was no difference in relation to ethnicity ($p<0.215$ and $p<0.285$). Lipid peroxidation levels increased with fish oil and decreased with fish oil and vitamin E supplementation. Conclusion: Alpha-tocopherol was shown to protect the plasma from lipid oxidation in both groups. Keywords: menopause, ethnicity, fish oil, autoantibody, lipid peroxidation.

EFFECT OF VITAMIN A, E, C AND OMEGA-3 FATTY ACID SUPPLEMENTATION ON LIPID PEROXIDATION IN STREPTOZOTOCIN INDUCED DIABETIC RATS: INVESTIGATION OF HEART, LIVER AND

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Background: Diabetes is known to induce metabolic disorders leading to oxidant-antioxidant imbalance. It is also reported that the anti-inflammatory -3 fatty acids such as DHA and EPA may reduce the risk of disease development. Aim of the study: This study was designed to determine the effect of supplementation of vitamin A, E and C as well as -3 fatty acids on lipid peroxidation in streptozotocin induced diabetic rats. Methods: Sixty-four male wistar rats weighting 250g were divided into four groups as normal control, diabetic control, diabetic with vitamin A, E and C supplementation and diabetic with -3 fatty acids supplementation. After four weeks treatment the rats were anesthetized and malondialdehyde levels were measured in blood samples, liver and heart homogenate. Results: In diabetic rats malondialdehyde level in plasma, liver and heart was significantly more than control rats ($P<0.05$). Vitamin A, E and C supplementation caused a significant decrease in plasma, liver and heart malondialdehyde ($P<0.05$). A significant decrease in heart malondialdehyde ($P<0.05$) was observed in diabetic rats with -3 fatty acids supplementation. Conclusion: We concluded that supplementation with vitamin A, E and C as well as -3 fatty acids decreased lipid peroxidation in diabetic rats.

NUTRITIONAL HABITS & CARDIOVASCULAR DISEASE

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An elevated predominance of the risk factors associated to the illnesses of the circulatory system, particularly hypercholesterolemia and arterial hypertension aim for a special attention to its prevention. This way, the composition of the digested food daily can influence the sprouting of Cardiovascular Disease (CVD), which has shown association between the risk factors and the things we consume. The present study had an objective to identify the influential factors of social economics and education in the nutritional state and in the sprouting of CVD. There were 234 individuals studied over the age of 18, belonging to a population of the northeast of Portugal. Experienced and trained professionals collected anthropometry facts and carried out an interview where personal information, from personal and social level and relative facts to the normal and daily ingesta habits. The total individuals inquired 63% are of the female sex and 37%

of the male sex, 37% demonstrate excess weight and 23% Obesity. The married couples, 22% demonstrate risk factors of CVD, 25% that live with family, 5% that live alone, 23% of the individuals with a low education level and 41% of the individuals that are found inactive, present risk factors of CVD. This work reflects the lifestyles and the nutritional habits of the population in study. In conclusion we found that the social economical and educational lifestyles are associated to the presence or absence of risk factors of a cardiovascular disease, influencing the ingesta and the BMI of the individuals.

ADHERENCE TO THE SOUTHERN EUROPEAN ATLANTIC DIET AND OCCURRENCE OF NONFATAL ACUTE MYOCARDIAL INFARCTION

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Background: The Atlantic diet has been described as a characteristic diet of the Northern Portugal and Galicia, Spain. We aim to define, for the first time in the literature, an index that represents the Southern European Atlantic diet (SEAD) and to examine the association between adherence to this dietary pattern and the occurrence of nonfatal myocardial infarction (AMI). Methods: A population-based case-control study was conducted in Porto, Portugal. Cases were patients aged ≥ 18 years hospitalized with an incident AMI ($n=820$), and controls were individuals without AMI selected randomly from the resident population of the hospitals' catchment area ($n=2196$). A validated food frequency questionnaire was used in face-to-face interviews to assess dietary intake in the previous year. We developed a SEAD adherence index with nine key components: fresh fish excluding cod fish, cod fish, red meat and pork products, dairy products, legumes and vegetables, vegetable soup, potatoes, whole grain bread, and wine. A score of 1 or 0 was respectively assigned to each food consumed above or below the sex-specific median in the controls. Results: After adjustment for the main confounders, a one-point increment in the SEAD score was associated with a 10% reduced risk of AMI (odds ratio [OR] 0.90, 95% confidence interval [95% CI] 0.85, 0.96). As compared with individuals in the lower quartile of the SEAD index (lowest adherence), those in the upper quartile had a 33% lower likelihood of AMI (OR 0.67, 95% CI 0.51, 0.88; p for trend=0.003). A SEAD index calculated with reverse scoring for red meat and pork products and for potatoes led to an even stronger inverse association between the SEAD and AMI (OR for the upper vs. the lower quartile of SEAD index 0.40, 95% CI 0.30, 0.52; p for trend<0.001). Conclusions: Adherence to the SEAD was associated with lower risk of nonfatal AMI. SEAD might contribute to the low coronary mortality in Northern Portugal and Galicia.

PERFIL DO ESTADO NUTRICIONAL E RISCO CARDIOVASCULAR DE PACIENTES AMBULATORIAIS

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A transição alimentar consolidou a obesidade como um dos principais agravos nutricionais do Brasil, que em conjunto com as doenças cardiovasculares promovem influência no perfil de morbidade da população. Desta forma o objetivo deste estudo foi avaliar o estado nutricional e risco cardiovascular de pacientes ambulatoriais. Estudo transversal e analítico constituído por 263 pacientes atendidos em um ambulatório de nutrição de um hospital público de Maringá (Paraná/Brasil) entre abril/2007 e setembro/2008. Para classificar o estado nutricional foi utilizado índice de massa corporal (IMC) específico para adultos (OMS, 1995; 1997) e idosos (OPAS, 2003) e o risco cardiovascular