with stable coronary disease (documented by coronary angiography, n = 7); and healthy controls (n = 7), matched by age and sex. B1 cells were characterized by CD20+CD27+CD43+CD70 – and B2 cells were identified by CD19+CD23+;both by flow-cytometry. Results: B2 cells were more prevalent among CAD subjects (AMI and stable CHD; n = 14) than controls (p = 0.05). In addition, negative correlation was observed among B1 cells and age (p = 0.05). Conclusion: Preliminary data suggest that there is a subtype of lymphocytes in humans (B1) that are negatively correlated with age. An imbalance between B1 and B2 cells emerges as important aspect of immune responses and possible new target for the prevention or treatment of atherosclerosis.



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# A40900

# Dietary modifications and reducing cardiovascular risk in obese patients

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Introduction: Obesity is characterized by systemic inflammation, and risk factor for high blood pressure and elevated serum triglycerides and cholesterol, potential causes of atherosclerotic plaques. Therefore, the feed reeducation it is necessary to healthy weight loss and reduced cardiovascular risk factors. Methods: 40 obese patients were followed  $(BMI > 30 \text{ kg/m}^2)$  with other risk factors such as hypertension, dyslipidemia and/or resistance to insulin, for 6 months, with proposed multidisciplinary care, reduced calorie diet, guidance on physical activity and emotional health. The results are stored to build a database using the Excel ® 2010 and SPSS 16.0. for comparison between pre- and post-test was used for statistical inference using the paired t test. The minimum level of significance was set at p < 0.05. Result: The report of habitual food intake pre and post monitoring revealed a significant decrease in food consumption that offers cardiovascular risk, such as sausages, processed and canned for example. These dietary changes were expressed as a reduction in sodium consumption for 3321.99 mg 1472.95 mg (p = 0.000) and saturated fats 9.88% to 6.13% (p = 0.000). An increase in the consumption of cardioprotective foods such as fruits, vegetables and whole grains such as oats and flaxseed was also observed, reflecting a dietary fiber increase of 13.37 g to 24.97 g (p = 0.000). An average weight reduction of 5.9% and a waist circumference reduction of 5.2% (p = 0.000) have been observed. Conclusion: The methodology used in nutritional education was effective in encouraging dietary changes and adoption of healthy living habits, positively impacting the reduction of cardiovascular risk.

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## A40901

### Clinical case study: Effectiveness of a multidisciplinary program in metabolic disorders reduction

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Introduction: Obesity is characterized by excess of body fat, able to harm the health of the individuals, favoring the onset of diseases such as cardiovascular diseases. Actions used at stimulating lifestyle change, has proven effective tools for weight reduction with consequent reduction of risk factors. Objective: The Obesity Zero Program aims to promote weight loss and waist circumference, greater than or equal to 10%, of obese patients treated at the nutrition clinic of a Cardiology Institute of the State of São Paulo. Report: female patient, 44, housewife, completed elementary school, married, a native of Goiania, coming from Embu, SP. Referred to the nutrition clinic for treatment of obesity, hypertension and dyslipidemia. Clinical history: the first visit to the nutrition clinic was in December 2012. The patient was diagnosed with severe obesity, according to the weight 121.9 kg, BMI of 45.48 kg/m<sup>2</sup> and abdominal circumference of 125 cm, high blood pressure systemic and dyslipidemia, making use of antihypertensive, diuretic and anticoagulant, with biochemical changes in total cholesterol (201 mg/dL) and LDL-C (132 mg/dL). She received low-calorie, diet low in saturated fat and sodium, high in fiber and monounsaturated fats, and was referred to a multidisciplinary group for nutritional education and change in lifestyle, consisting of 12 biweekly meetings for six months, starting in March 2013. Results: At the end of follow-up, the patient was down 31.2 kg, which represented 25.5% of initial weight, reduced waist circumference of 14 cm, lower cholesterol levels Total (174 mg/dL) and LDL-C (112 mg/dL), also reported an improvement in their physical and mental performance and their self-esteem. Conclusion: The proposed weight-loss program was effective and provided great benefits to the health of the patient, proved to be effective in reducing weight and improvement in lipid profile, assisting in the treatment of metabolic disorders and contributing to the prevention of cardiovascular disease.

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# A40929

# Association between neck circumference and subclinical atherosclerosis — Longitudinal Study of Adult Health (ELSA-Brasil)

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Background: Fat in the neck has been hypothesized as a locally acting fat depot that could contribute to vascular damage through a paracrine effect. We aimed to analyze the association between neck circumference (NC) and subclinical atherosclerosis measures by coronary artery calcium (CAC) and carotid intima-media thickness (IMT) in the ELSA-Brasil. Methods: In cross-sectional and sex-specific analysis 2308 women ( $50,6 \pm 8,4$  yrs) and 1924 men ( $50,6 \pm 8,4$  yrs) with high quality images acquired on IMT and CAC, free from previous coronary heart disease at baseline of ELSA-Brasil were included. Binary logistic models were built using diverse cut-off points for CAC score (0 vs >0, <100 vs ≥100, <400 vs ≥400) and IMT (<75th percentile vs ≥75 th; <90th percentile vs ≥90 th) as dependent variables for 1-sd increase in NC. Subsequent adjustments