

~~**Conclusion:** Our findings suggest an important association between reported frequency of alcoholic beverages consumption with BMI and waist circumference in adult Portuguese population.~~

~~T2:PO.71~~

~~Social and nutritional factors related to childhood obesity in developed countries~~

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~~**Aim:** The aim of this research is to perform a longitudinal study to identify the main social and nutritional factors associated with obesity in childhood.~~

~~**Methods:** Analyses were performed using a representative sample (n=2,100) of children born in the province of Quebec (population of 7 million individuals, more than 70,000 birth per year) in Canada in 1998. Collected nutrition data includes breastfeeding, a food frequency questionnaire and a 24-hour recall interview. Height and weight were measured regularly. Social factors examined in the study include parental education and employment status, family income, family type, ethnic origin, geographical living area, and family food insecurity. Behavioural factors such as breakfast skipping, television viewing and physical activity were also included in the study.~~

~~**Results:** The main factors associated with childhood obesity included, breakfast skipping, television viewing, and poverty. Living in a food insecure family increased the odds of being obese, independently of family income. These factors influenced diet quality and generated weight problems, particularly through the over-consumption of energy and carbohydrates.~~

~~**Conclusion:** In Canada, where plenty of food is available, children from the poorest families and especially the ones living in a food insecure family, are the most likely to be obese.~~

~~T2:PO.72~~

~~Overall vs abdominal obesity: difference in prevalence, geographic distribution and associated socio-economic factors among Tunisian women.~~

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~~**Introduction:** In a context of high and rising prevalences of obesity, this study aimed at assessing prevalence, geographic distribution and associated socio-economic factors of overall vs abdominal fat accumulation.~~

~~**Methods:** Cross-sectional study (2005), national stratified clustered random sample of 35-70y women. Body Mass Index=weight/height²≥30kg/m² defined overall obesity and Waist Circumference≥88 cm abdominal obesity.~~

~~**Results:** Nationally (n=2964), the prevalence of overall obesity was 37.0(1.3)% while that of abdominal obesity nearly double 60.4(1.4)%. At the subject level, agreement between the two types of obesity were similar for urban vs rural (within subject ICC 0.43 vs. 0.49) but markedly different according to the 24 administrative divisions (ICC from 0.05 to 0.79). For prevalences, the urban vs rural contrast (n=2564) was similar for overall +20.5[15.2-25.7]% and abdominal +17.8[11.6-24.0]% obesity and also once adjusted for subject level socio-economic factors, respectively +9.4[3.7-15.0]% and +8.9[2.6-15.2]%. On the contrary heterogeneity between the 24 divisions was much lesser for overall (4.9% of total variance) than for abdominal obesity (11.2%) and adjustment did explain a significant part of that heterogeneity for overall (adjusted variance 2.7%), but not for abdominal obesity (10.1%).~~

~~**Conclusion:** Marked differences in prevalence, spatial distribution and associated socio-economic factors of overall and abdominal obesity were observed; as they have specific physiological significations and predictive values for risks of NCDs, in addition to methodological issues (relevance~~

of BMI vs WC cut-points), all hypotheses related to past malnutrition, genetic or lifestyle factors, must be appraised to explain those differences to address this obesity epidemic in an effective way.

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~~T2:PO.73~~

~~Relationship between cardiorespiratory fitness and cardiovascular diseases risk factors in Portuguese youth~~

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~~**Introduction:** Cardiorespiratory fitness (CRF) is being considered one of the most important health markers and predictor of morbidity and mortality for cardiovascular diseases (CVD). The aim of the present study was to compare the frequency of CVD risk factors in fit and unfit subjects and to analyze the relationship between CRF and CVD risk factors in this sample.~~

~~**Methods:** A total of 413 subjects were assessed in Porto and Braga districts. CRF was evaluated by Shuttle run Test. CVD risk factors (blood pressure, TC/HDL and LDL cholesterol, glucose, triglycerides, body mass index - BMI, sum of skinfolds and waist circumference - WC) were evaluated according to international protocols. An age- and sex-specific score was computed for each of the variables and a metabolic risk score with all variables, except obesity indicators, was computed as the mean of the standardized outcomes scores to analyze its clustering.~~

~~**Results:** Unfit boys have statistically significant higher values of WC (p=.011), sum of skinfold (p=.001) and triglycerides (p=.041) than fit boys. In girls, only the sum of skinfolds (p=.045) presented higher values for unfit subjects when comparing to those ones. CRF was inversely associated with WC ($\beta=-3.201$ p=.002 / $\beta=-.240$ p=.001), BMI ($\beta=-.185$ p=.020 / $\beta=-.152$ p=.038) and sum of skinfold ($\beta=-.403$ p=.000 / $\beta=-3.616$ p=.000) in boys and girls respectively, and triglycerides ($\beta=-2.054$ p=.042) only in boys.~~

~~**Conclusion:** Data showed that unfit subjects tend to present higher values of risk factors than fit ones. CRF presented relationship with CVD risk factors in both genders~~

~~T2:PO.74~~

~~Prevalence and risk factors of metabolic syndrome in Brazilian and Italian obese adolescents: a comparison study~~

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~~**Introduction:** MS prevalence between different populations in obese adolescents is scanty to date. Aims were to compare the MS prevalence and related risk factors in Brazilian and Italian obese adolescents.~~

~~**Methods:** 509 adolescents (110 Brazilian, 399 Italian), aged 15-19 years. Anthropometric characteristics, triglycerides (TG), total, LDL, HDL~~