

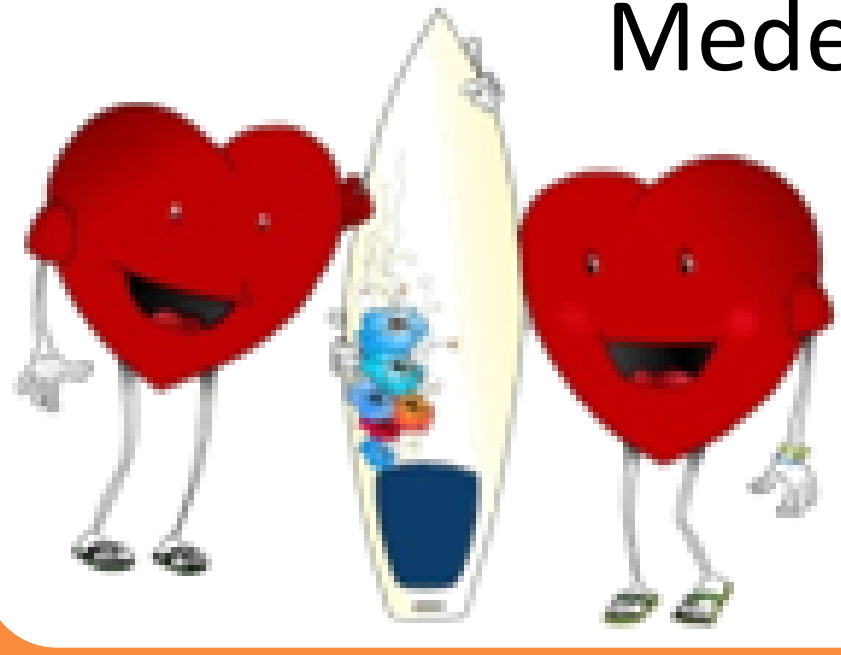
LIFESTYLE HABITS AND CARDIOVASCULAR RISK FACTORS IN A YOUNG POPULATION

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BACKGROUND

Although CVD is mostly present in adult life, atherosclerosis starts in childhood. Health promotion and cardiovascular prevention strategies can generate health gains and, if implemented in childhood, those gains will be superior. In pathologies with multifactorial etiology like CVD, the preventive approach should be addressed to risk factors, specially the modifiable related to unhealthy lifestyle habits. The aims of this work are: to characterize the lifestyle habits and determine the cardiovascular risk factors of a young population, and to co-relate these factors.

METHODS

Cross-sectional study in a young population (between 15-18 years old) in 8 schools (public/private), of the Lisbon region using a convenience sample of 854 students (460 female and 394 male).

MEASURING INSTRUMENTS

» Data collection was performed through physical evaluation (BMI, blood pressure), capillary blood sample collection after 12h fasting for biochemical characterization (glucose, total cholesterol, triglycerides) and self-fulfilling questionnaire on lifestyle habits (number of meals/day, computer habits/day, TV habits/day, physical activity/week). A clinical family history (family history of premature CVD) was fulfilled by the parents who also signed an informed consent declaration authorizing their children to participate in this study.

DATA ANALYSIS:

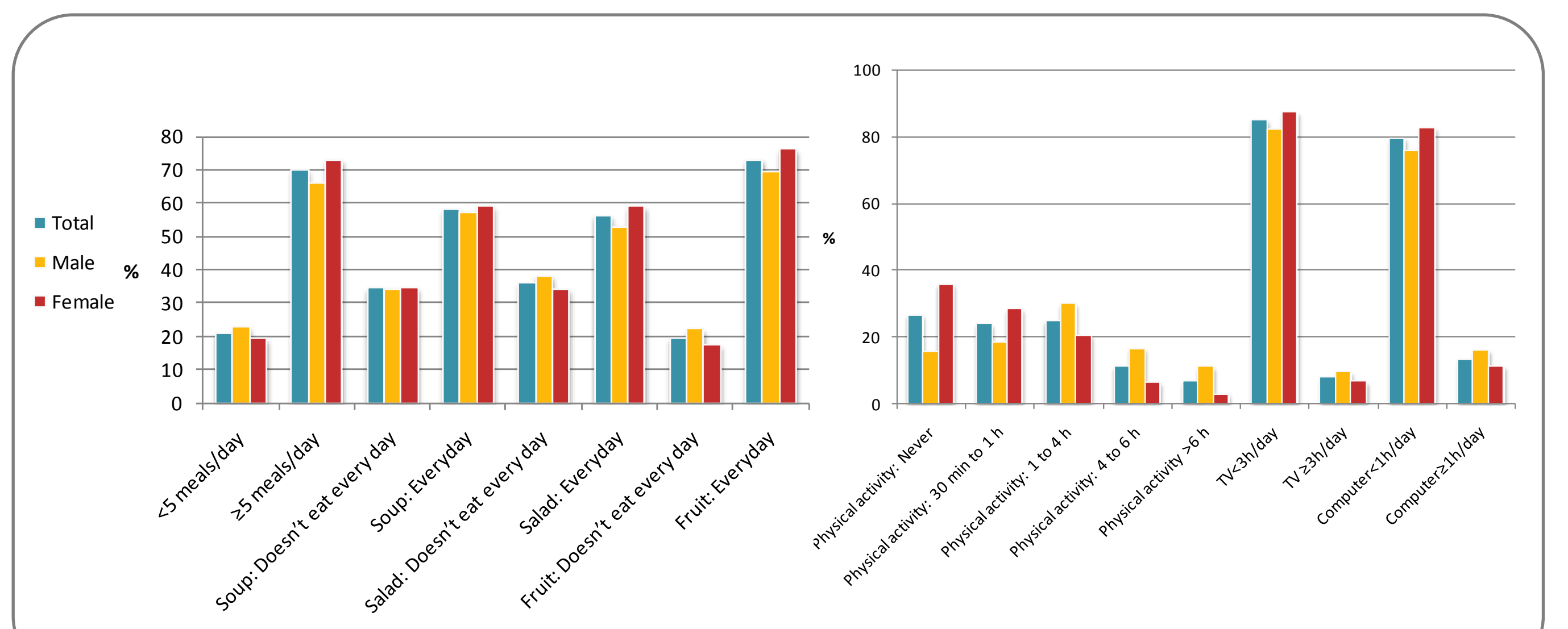
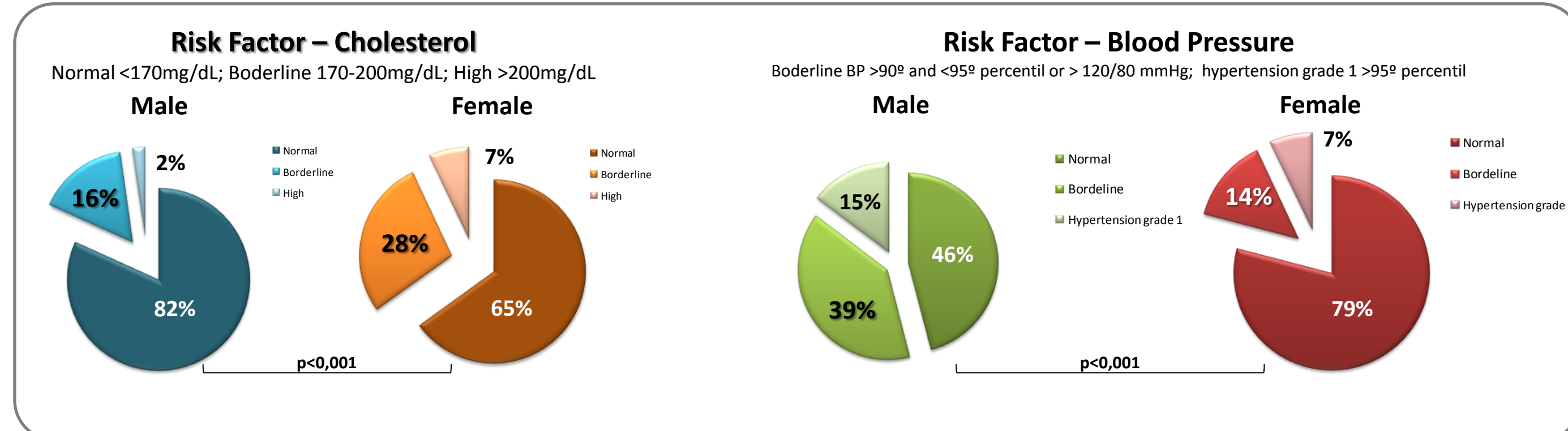
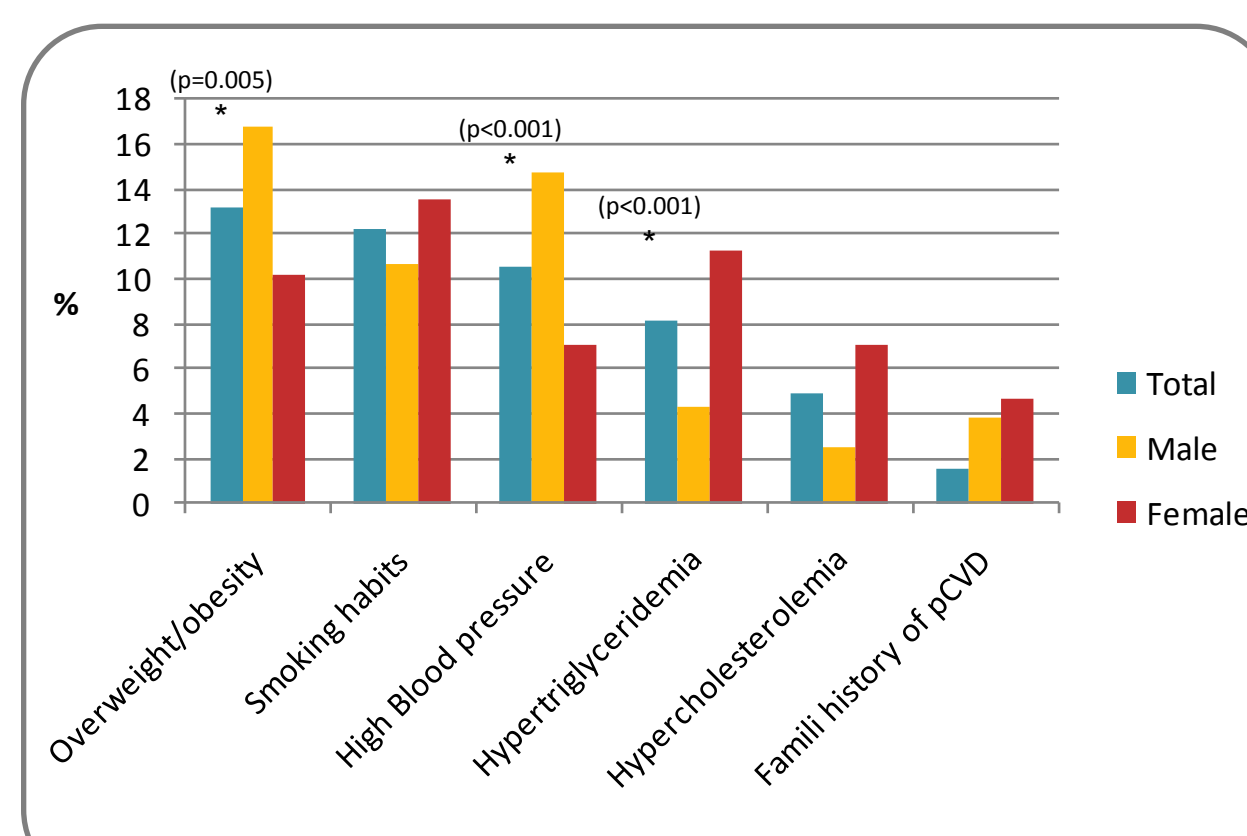
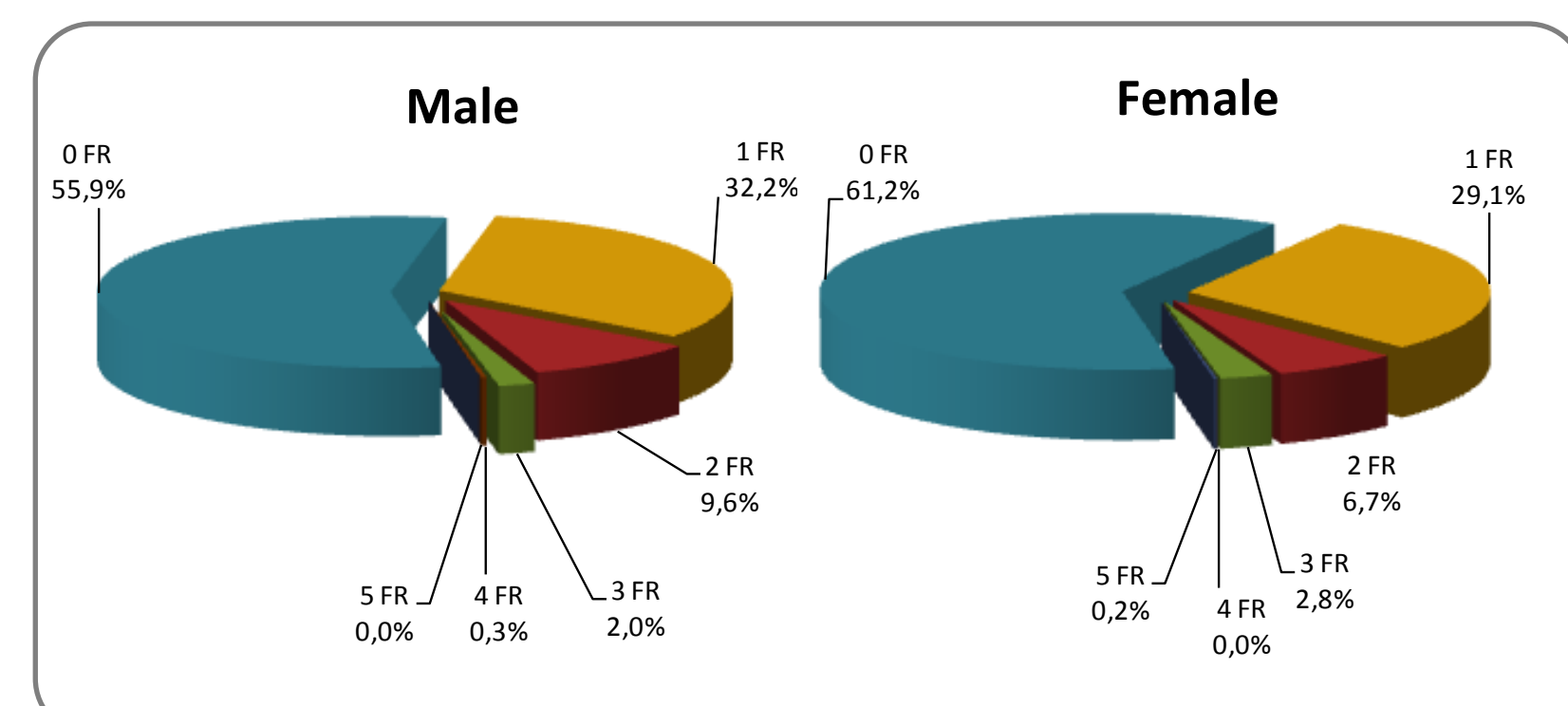
» The biological variables and healthy lifestyles were stratified according to international recommendations (European Cardiology Society, American Pediatrics Association, American Diabetes Association 2005, NCEP 1992, NHBPP 2005, OMS, Conselho Nacional de Alimentação e Nutrição (CNAN), Estudo Nacional da Rede Europeia HBSC/OMS). Statistical analysis was performed with SPSS® program v.18.0 using t-Student test, Pearson's chi-square test and Pearson correlation.

RESULTS

» 41% of the population (44.1% male and 38.8% female) presented at least one cardiovascular risk factor (fig. 1).
 » The most frequent risk factor is overweight/obesity (13.2%), followed by smoking habits (12.2%), high blood pressure (10.5%), hypertriglyceridemia (8.1%), hypercholesterolemia (4.9%) family history of pCVD (4.2%), and diabetes (1.5%) (fig. 2). A significant number of students presented border line values for hypertension (28%) and hypercholesterolaemia (22%) (fig. 3).

» In this population overweight/obesity is correlated to the following biological variables: high levels of glucose and triglycerides, high blood pressure (Pearson correlation). There is also an association between overweight/obesity with unhealthy lifestyles: <5 meals/day, >3h TV habits/day and >1h computer habits/day for both genders, and an association between high levels of glucose with unhealthy lifestyles: >3h TV habits/day and >1h computer habits/day for both genders (Data not shown).

» The majority had more than 5 meals/day (69.8%), with soup (58,3%), salad (56%) and fruit (73%) ingestion almost every day. On the other hand, 26.5% of the young students had no physical activity outside school and 23.8% had less than one hour/week. Furthermore, 56.6% of the young students use the computer/TV more than 1h per day but only 7.8% admitted watching TV more than 3h per day (fig. 4).



CONCLUSION

This study indicates that young students already have an important cardiovascular risk burden, underscoring the need for prevention and health promotion strategies early in life. Implementation and promotion of healthy lifestyles should be conducted in individuals and communities, highly since birth, at home, school and work, where education for health is essential. The difficulty is to motivate the young population to adopt healthy lifestyles, which greatly depends on the perception on its cardiovascular risk.

Project Theme

“Aprende com os 7 pecados”

