

PREVALENCE OF HEART DISEASE RISK FACTORS IN THE AZORES**Rita Ferin**¹, E. Schaefer², K. Horvath², J. Baptista¹, M.L. Pavão¹¹*DCTD/CIRN, University of the Azores, Ponta Delgada, Portugal,* ²*Lipid Metabolism Laboratory, Tufts University, Boston, MA, USA*

Background and aims: In the Azores age adjusted death rates from coronary heart disease (CHD) are two-fold higher than in mainland Portugal. We determined the prevalence of standard and emerging CHD risk factors in 206 female and 146 male Azorean subjects (mean age 41 years).

Results: With regard to body mass index (BMI) in this population 51% of the men and 36% of the women were overweight (BMI > 25 kg/m²), while 23% of the men and 33% of the women were obese (BMI > 30 kg/m²). Also 36% of the men and 13% of the women were smokers, while 51% of the men and 42% of the women were hypertensive. Only 15% were taking anti-hypertensive medication, and 11% were on lipid medications. Low density lipoprotein (LDL) cholesterol levels > 160 mg/dL were seen in 31% in men and 23% in women, while high density lipoprotein (HDL) cholesterol < 40 mg/dL was found in 21% of the men and 2% of the women. Serum apoB levels > 120 mg/dL were observed in 35% of the men and 27% of the women, while 64% of the men and 52% of the women had small dense LDL cholesterol levels > 40 mg/dL (seen in 25% of participants in the Framingham Offspring Study, mean age 58 years). Lp(a) > 30 mg/dL was noted in 36% of the men and 32% of the women. Levels of C reactive protein > 2.0 mg/L were registered in 36% of the men and 58% of the women.

Conclusion: In this middle aged asymptomatic population of Azorean subjects there was a high prevalence of being overweight, obese, hypertensive, and having elevated levels of LDL-C and apoB. Moreover more than half the subjects had elevated levels of small dense LDL cholesterol, an emerging risk factor for premature CHD.