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**Background** Elevated blood pressure and excess weight are established major risk factors for cardiovascular disease (CVD). Previous studies have suggested that hypertension is a greater cardiovascular hazard among obese compared with lean individuals, but the epidemiological evidence is conflicting.
**Methods and Results** The interaction between systolic blood pressure (SBP) and BMI on fatal or non-fatal coronary heart disease (CHD), ischaemic stroke and hemorrhagic stroke was examined using pooled data from the Asia Pacific Cohort Studies Collaboration. Participants of the study were 419 448 men and women aged >30 years at baseline. BMI was categorised into five groups (12.0–18.4, 18.5–22.9, 23.0–24.9, 25.0–29.9 and 30.0–60.0 kg/m$^2$). Cox proportional hazard models, stratified by sex and study, were used to estimate HRs adjusting for age and smoking status, and the interaction between SBP and BMI was assessed by likelihood ratio test. During 2 619 241 person-years of follow-up, there were 10 877 CVD events (59% in Asia, 34% women, 71% fatal). For all forms of CVD except haemorrhagic stroke, there was evidence of an antagonistic interaction between SBP and BMI such that the risks of subsequent CHD (p=0.01), ischaemic stroke (p=0.03) and CVD (p=0.001) associated with increases in SBP were higher in normal-weight individuals compared with obese individuals.
**Conclusion** Increased SBP is an important determinant of subsequent cardiovascular risk irrespective of body size and, in relative terms, lean individuals were shown to have a poorer prognosis for CHD and ischaemic stroke.

## P2-310 GAMMA-GLUTAMYLTRANSFERASE AS A BIOMARKER FOR OXIDATIVE STRESS, METABOLIC SYNDROME, AND ALCOHOL CONSUMPTION AND ITS ASSOCIATION WITH CANCER INCIDENCE

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**Background** Alcohol consumption, metabolic factors and oxidative stress have consistently been linked to cancer development. Gamma-glutamyltransferase (GGT) is a biomarker for adverse alcohol consumption and oxidative stress. It is highly related to metabolic factors such as hyperglycaemia, dislipidaemia and obesity. We therefore hypothesise that GGT is associated with cancer incidence at different sites.
**Methods** First visit measurements in 94 628 adult women and 80 224 men screened for metabolic risk factors as part of the Vorarlberg Health Monitoring & Promotion Programme (VHM&PP). During a median follow-up of 13 years, a total of 5136 incident cancers were diagnosed in men and 4665 in women. Sex-specific Cox proportional hazards models, adjusted for age, body-mass index and smoking were performed to estimate HRs and 95% CI per quintiles of GGT.
**Results** In males, there were associations (highest vs lowest quintiles) of GGT with liver cancer (HR=16.50, 4.00–68.19), cancers of the lip, oral cavity, pharynx and larynx (HR=3.80, 2.33–6.20), oesophageal cancer (HR=2.39, 1.01–5.72), pancreatic cancer (HR=2.13, 1.01–4.56), lung cancer (HR=2.04, 1.55–2.70), bladder cancer (HR=1.76, 1.11–2.77), kidney cancer (HR=1.61, 0.92–2.82, p for trend=0.009) and colorectal cancer (HR=1.36, 1.01–1.83). In females, the association was most pronounced in cervical cancer (HR=3.77, 1.94–7.32), followed by lung cancer (HR=1.63, 1.02–2.60), endometrial cancer (HR=1.42, 0.98–2.05, p for trend=0.013) and breast cancer (HR=1.19, 1.02–1.39).
**Conclusions** GGT is a highly promising marker for risk stratification in cancer prevention.

## P2-311 CONSISTENCY BETWEEN THE MEASUREMENTS OF CHRONIC MORBIDITY IN A HEALTH INTERVIEW SURVEY AND A POPULATION CENSUS

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**Introduction** The mode of data collection may affect the outcome of a health indicator. This study aimed to examine the consistency between answers to an identical question on chronic morbidity obtained through a face-to-face interview in a health interview survey (HIS) and a self-administered questionnaire from a population census.
**Methods** During the last quarter of 2001, 2710 people aged 15 years and older participated both to a census and a HIS in Belgium. An individual linkage was performed between the two data sources by using the National Population Registry ID number. Consistency of answers to the question on chronic morbidity was assessed by the κ-statistic.
**Results** The prevalence of chronic morbidity was 29.4% (HIS) and 26.6% (census). Consistency was relatively poor, with a κ-statistic of 0.56 (95% CI 0.52 to 0.60). The κ-statistic did not differ by gender, but was substantially lower among persons aged 75 years and older (0.44; 95% CI 0.41 to 0.48) than among younger individuals (0.55; 95% CI 0.51 to 0.59). The κ-statistic was also lower for non-Belgians (0.43; 95% CI 0.40 to 0.47) than for Belgians (0.57; 95% CI 0.54 to 0.61). Consistency differed further among educational groups, although no real educational gradient was observed.
**Conclusion** There was no satisfactory correlation between self-reported chronic morbidity data in the HIS and the population census. The consistency also differed across population subgroups. The mode of data collection appears to impact the estimates. Estimates and sociodemographic determinants of self-reported chronic morbidity should be interpreted cautiously.

## P2-312 ASPIRIN USE IN CARDIOVASCULAR DISEASE PREVENTION: A POPULATION-BASED STUDY

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**Objective** To estimate the prevalence of aspirin use in primary and secondary prevention of cardiovascular disease.
**Methods** Population-based cross-sectional study was carried out in Pelotas, Southern Brazil, between Jan and May/2010, with people aged ≥20 years old. This study had two outcomes: aspirin use in primary prevention (people ≥40 years old, with at least two risk factors: Hypertension, Diabetes Mellitus and/or hyperlipidaemia) and aspirin use in secondary prevention (previous history of stroke and/or angina/myocardial infarction). The outcomes were analysed