Multivariate analysis showed that sarcopenia was independently associated with age (adjusted odds ratio [OR], 1.08; 95% confidence interval [CI], 1.02-1.15, \( p=0.014 \)), impaired cognitive function (adjusted OR, 1.98; 95% CI: 1.01-3.88, \( p=0.048 \)) and depressed mood condition (adjusted OR, 2.94; 95% CI: 1.41-6.12, \( p=0.004 \)).

**Conclusions:** Older age, impaired cognitive function and depressed mood condition are three independent factors associated with sarcopenia in veterans home residents. Further outcome study is needed to explore the influence of sarcopenia.

**THE RELATIONSHIP BETWEEN SERUM GAMMA GLUTAMYL TRANSFERASE AND METABOLIC SYNDROME IN THE ELDER TAIWANESE**

探討社區老人的γ-GT 與代謝症候群的相關性

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**Introduction:** To investigate the associations between serum gamma glutamyl transferase (GGT) levels and prevalence of metabolic syndrome among elderly Taiwanese.

**Methods:** There were 6,091 adult participants recruited in a health examination center in Taiwan from 2006 to 2008. Among those, 569 subjects aged over 65 were selected. Anthropometric index and laboratory data were collected. Serum GGT levels were divided into tertile as GGT1 below 17.5 U/L, GGT2 between 17.5 to 26.5 U/L and GGT over 26.5 U/L. Metabolic syndrome was defined by the AHA/NHLBI criteria. The relationships between GGT and metabolic syndrome were studied by multiple linear and logistic regression analyses.

**Results:** There were 319 subjects corresponding to the definition of MetS. After adjustment for age, sex, social habit (cigarette smoking, alcohol consumption, and exercise), Body mass index (BMI), Alanine Aminotransferase (ALT) and estimated glomerular filtration ratio (eGFR), the ORs (95% CI) of having MetS among GGT1 and GGT2 group were 2.10 (1.22-3.61), and 1.68 (1.01-2.79) compared with GGT1 group. This association was more prominent among subjects with male gender. We also found that the four components of MetS (mean arterial pressure, waist circumference, fasting plasma glucose and
triglycerides) were positive correlated to elevated serum GGT levels after
adjustment of age and gender.

Conclusions: Elevated serum GGT levels was associated with the
prevalence of MetS and its components in the elderly Taiwanese.