

($P < 0.01$). The total ($P < 0.01$), animal ($P < 0.01$), and plant ($P = 0.01$) protein intakes were significantly reduced, but its energy fraction was significantly increased ($P < 0.01$). The plant protein intake was strongly negatively correlated with serum triglycerides ($r = -0.99$, $P = 0.02$) at the beginning of the program and total body fat mass ($r = -0.99$, $P = 0.02$) after its completion. There was no correlation between animal protein intake with any of the considered parameters.

CONCLUSION: The study results suggest that change of the dietary protein source toward plant origin can improve body composition and cardiometabolic risk profile in obese young adults.

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EP-077 | A comparison of weight loss and metabolic improvements between gastric banding and gastric banded plication among the obese

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INTRODUCTION: Obesity is a pandemic health problem. Bariatric surgery is the only efficient method for long-term effective weight loss in severe obesity. Laparoscopic adjustable gastric banding (LAGB) has been widely applied for weight loss. However, a novel technique, laparoscopic adjustable gastric banded plication (LAGBP), has been proposed as an alternative to LAGB. Surgeons are generally considered that LAGBP should have a relatively advantage on weight loss than that derived from LAGB.

METHODS: A total of 340 obese patients (290 LAGB and 50 LAGBP) with a body mass index (BMI) of ≥ 35 kg/m² and aged 20–55 years were recruited and observed for 24–36 months postoperatively.

RESULTS: Both surgical procedures resulted in significant weight loss, amelioration of poor glucose metabolism, and decreased serum triglyceride levels. However, trend analysis showed no significant differences between the postoperative effects of LAGB and LAGBP (P for trend = 0.21 for BMI reduction, 0.13 for total body fat percentage reduction, 0.25–0.29 for glucose metabolism amelioration, and 0.10–0.29 for blood pressure improvement). The improvements of serum total cholesterol level and HDL-C level was observed after only LAGB and only LAGBP, respectively, at the 24 months postoperatively. The Framingham Coronary Heart Disease Risk Score (FCHDR) also showed significant decrement undergone LAGB and LAGBP.

CONCLUSION: Both LAGB and LAGBP demonstrated comparable efficacy in reducing body weight and improving metabolic parameters in a 24–36 months follow-up. LAGB showed the ability to reduce systolic blood pressure, whereas LAGBP exhibited triglyceride lowering effects. A longer enough observational period is needed in the future.

EP-078 | Which adiposity status is linked with the growing depression epidemic?

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INTRODUCTION: Depression and obesity are global epidemics. Malta is a well-reported highly prevalent European country for obesity making this population ideal to study the bidirectional relationship between obesity and depression. The aim of the study was to explore the socio-demographic characteristics of a population-based depression subgroup in accordance with different body adiposity statuses.

METHOD: Data were gathered from a national representative cross-section health examination survey. A weighing factor was applied to try to compensate for the non-responders and limit selection bias. The final study population represented approximately 1% of the adult population by locality and sex. The study population was categorised into whether they gave a self-reported depression diagnosis or not as part the validated questionnaire that was used during this survey. Each subgroup was further evaluated with regards to the examined body mass index (BMI) status, i.e., normal, overweight and obese BMI and their socio-demographic characteristics. Multivariate logistic regression analyses were performed to identify the independent socio-demographic factors and adiposity states associated with depression.

RESULTS: A total adjusted population of 3,947 adults were investigated (male $n = 1,988$). The depression prevalence was of 10.44% (CI95%: 9.52–11.43) with a female predominance. The majority of these female had an overweight or an obese profile. The commonest socio-demographic factors of the depression subgroup were education up till secondary school, living in the Northern Harbour area, employed and following a none smoking and none alcohol lifestyle habit. Only the overweight status was statistically associated with depression (OR: 1.35; CI95%: 1.03–1.78; $p = 0.03$) along with low education level (OR: 0.55; CI95%: 0.37–0.82; $p \leq 0.01$), unemployment (OR: 2.56; CI95%: 1.38–4.74; $p \leq 0.01$), retirement (OR: 1.88; CI95%: 1.32–2.68; $p \leq 0.01$), smokers (OR: 0.73; CI95%: 0.57–0.93; $p = 0.01$) and females (OR: 1.55; CI95%: 1.43–0.71; $p \leq 0.01$).

CONCLUSION: It appears that the overweight status rather than the obesity status is the driver for the depression. Furthermore, stressful social determinants such as low education, unemployment, retirement and the female sex appear to have an important role in this health concern. This puts forward the suggestion for primary care