

# Changes in ghrelin concentrations one year after resective and non-resective gastric bypass: Associations with weight loss and energy and macronutrient intakes

Carrasco, Fernando

Rojas, Pamela

Csendes, Attila

Codoceo, Juana

Inostroza, Jorge

Basfi-fer, Karen

Papapietro, Karin

Watkins, Guillermo

Rojas, Jorge

Ruz, Manuel

**Objective:** Ghrelin is a potent stimulator of appetite and synthesized in the stomach. Its role in weight loss after gastric bypass (GBP) is still controversial. The aim of this study was to evaluate the relation between weight loss and food intake and between weight loss and changes in serum ghrelin concentrations 1 y after GBP with resection of the bypassed stomach (R-GBP) and without resection (NR-GBP). **Methods:** Of 50 women ( $37.6 \pm 10.2$  y old, body mass index  $43.8 \pm 4.8$  kg/m<sup>2</sup>) with GBP, 26 had R-GBP and 24 had NR-GBP. Body weight, body composition (dual energy x-ray absorptiometry), food intake, and serum ghrelin at baseline and 12 mo after GBP were measured. **Results:** The percentage of excess weight loss was  $68.9 \pm 12.8\%$  at 12 mo after GBP. At 12 mo, the decrease of serum ghrelin was greater in the R-GBP group ( $-25.3 \pm 22.5\%$ ) compared with the NR-GBP group ( $+11.2 \pm 50.9\%$ ,  $P < 0.005$ ). After adjustment by the baseline excess of body weight, there was a greater percentage of excess wei