

Energy expenditure and body composition in severe and morbid obese women after gastric bypass Gasto energético y composición corporal en mujeres con obesidad severa y mórbida sometidas a bypass gástrico

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Background: The effects of gastric bypass (GBP) on resting energy expenditure (REE) are not well known. Aim: To evaluate the changes in REE and its relationship with body composition in severe and morbid obese women before and six and twelve months after GBP. Patients and methods: Twenty three women aged 37 ± 10 years, with a body mass index of 44 ± 4 kg/m², were evaluated before, six and twelve months after GBP. REE was measured in a Deltatrac indirect calorimeter and expressed as kcal/day. Fat mass (FM), and fat free mass (FFM) were determined by double beam X ray densitometry (DEXA). Results: Body weight reduction six and twelve months after GBP was 29.0 ± 4.3 and $35.8\pm 6.9\%$, respectively. The best predictor of weight reduction was initial weight ($p < 0.01$). At six and twelve months, REE decreased by 291.7 ± 260.0 and 353.8 ± 378.4 kcal/day, respectively. In the same periods REE/kg body weight increased by 3.3 and 4.8 kcal/kg respectively, compared to baseline. REE/kg FFM was unchanged. Conclus