

Change in physical activity and its association with psychosocial health and quality of life following bariatric surgery

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In the present study, we examined whether bariatric surgery improves the level of physical activity (PA), and whether the change in PA is associated with post-operative psychosocial health and quality of life. A set of self-report questionnaires, administered as part of routine clinical care at the Toronto Western Hospital, was completed by patients preoperatively and at 1-year follow-up. The following self-report measures were included: International Physical Activity Questionnaire (IPAQ), Body Shape Questionnaire (BSQ), Medical Outcomes Social Support Scale (MOS), Rosenberg Self-Esteem Scale (RSES), and Medical Outcomes Short Survey Form (SF-36). In addition, weight and height were measured at baseline and at the 1-year follow-up to calculate change in BMI and % total weight loss (%TWL).

A total of 154 patients completed the questionnaires at baseline and at the 1-year follow-up. 83.7% (n=129) were female, and 85.1% (n=131) underwent Roux-en-Y gastric bypass procedure. On average, patients reported a significant increase in the amount of time spent on walking (p=0.0003), moderate exercise (p=0.0001), and vigorous exercise (p<0.0001) at the 1-year follow-up. At the follow-up, patients with increased PA also reported significantly improved BSQ (p=0.03) and better SF-36 mental component summary score (p=0.002) than those who had reduced or unchanged level of PA. There was no correlation between the level of PA at 1-year follow-up and %TWL or change in BMI. Given that the increased level of PA was associated with lower concerns with body shape and higher mental quality of life, our findings indicate the importance of promoting PA following bariatric surgery.

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