

IS PHYSICAL ACTIVITY IMPORTANT FOR WEIGHT LOSS AFTER BARIATRIC SURGERY? A SYSTEMATIC REVIEW

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Background

Controlling energy balance is an essential tool for losing weight and maintaining weight loss. There is evidence that regular exercise can be an important factor in the development of a sustained negative energy balance condition. A systematic analysis of studies relating to physical activity in a post-surgical population will provide insight into the effectiveness of such programs in achieving weight loss.

Aim

To analyse via systematic review the effectiveness of physical activity on weight loss in patients who have undergone bariatric surgery.

Method

A systematic search of relevant medical databases for full-text original articles was performed. Databases included MEDLINE, Cochrane Database, Cochrane Clinical Trials Register, and journals included Obesity Surgery and SORD. The following outcomes were considered relevant: 1. weight loss, 2. metabolic health outcomes, and 3. quality of life.

Results

From the initial literature search, 110 papers matching the search criteria were found. These papers were screened and 13 papers matching the inclusion criteria were included. The majority were cohort studies of post-surgical patients followed postoperatively. Follow-up was often by questionnaire regarding physical activity levels. Results suggest that when combined with a controlled diet exercise increases weight loss. The volume of exercise required is at least 3-3.5 hours/ week (equating to 3500kcal or 90,000 steps/ week) of moderate activity.

Conclusion

More studies are required to determine the effectiveness of physical activity in a surgical population. The studies found suggest a positive correlation with improved weight loss. Results suggest the volume of exercise per week needs to be substantial to maintain weight loss in the longterm.