Effect of physical exercise on weight loss and physical function following bariatric surgery: a meta-analysis of randomised controlled trials.

Bariatric surgery can lead to significant weight loss and help improve many obesity-related conditions, including type 2 diabetes and high blood pressure. Lifestyle interventions such as exercise are known to support weight loss efforts and improve physical and mental health. Consequently, one would think that the same trend applies to bariatric surgery patients. However, studies so far have reported discrepancies when investigating the effects of physical exercise post-treatment. The meta-analysis fills the void by compiling evidence from randomised controlled trials to determine whether exercise after surgery can further support patients.

After searching 5 databases for studies that assigned adults to an exercise training group or a no-exercise group after surgery, 80 were found that met inclusion criteria. These were published between 2011-2018, and conducted worldwide (England, USA, Iran, Denmark).

Participants that engaged in exercise lost 1.94kg more, compared with those that had surgery alone. This value is higher than studies previously reporting figures and consistent with several other systematic reviews. Physical exercise contributes to more weight loss after bariatric surgery, suggesting that it can be an adjunct therapy for bariatric surgery patients, especially in cases of suboptimal weight loss. The intervention groups had increased walking distance, improvements to blood pressure, and resting heart rate which also suggest enhanced cardiovascular fitness and functional capacity.

Engaging in physical activity after metabolic surgery aids weight loss and maintenance efforts and should be prescribed as long-term treatment/follow-up for patients. Future studies should investigate the benefits of exercise on physical function, the most effective types, including the minimal amount required for good health.