

Evaluation of the SickKids Team Obesity Management Program (STOMP): BMI Outcomes at 6 and 12 Months

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The SickKids Team Obesity Management Program (STOMP) is an intensive lifestyle program for adolescents 12-17 years with complex severe obesity. A subset of patients undergo bariatric surgery.

We compared baseline, 6 and 12 month BMI measures amongst participants in the program.

The mean initial BMI was $44.2 \pm 7.9 \text{ kg/m}^2$ in all STOMP participants ($n=52$). After 6 months in the program, the mean change in BMI for non-bariatric participants was $-0.4 \pm 2.1 \text{ kg/m}^2$ (weight loss of $-0.5 \pm 6.3 \text{ kg}$) and after 12 months, was $+0.1 \pm 3.3 \text{ kg/m}^2$ (weight gain of $+1.9 \pm 9.2 \text{ kg}$) ($n=29$). Subdividing the participants who had a decrease in BMI vs an increase, there were 26 non-bariatric patients with mean decrease in BMI of $-1.7 \pm 2 \text{ kg/m}^2$ (weight loss of $-5.1 \pm 6.1 \text{ kg}$) and 26 with a mean increase in BMI of $+1 \pm 1.2 \text{ kg/m}^2$ (weight gain of $+3.4 \pm 2.8 \text{ kg}$). At 12 months, 12 participants had a mean decrease in BMI of $-2.8 \pm 2.9 \text{ kg/m}^2$ (weight loss of $-7.9 \pm 7.8 \text{ kg}$) and 17 patients had a mean increase in BMI of $+2.1 \pm 1.7 \text{ kg/m}^2$ (weight gain of $7 \pm 4.6 \text{ kg}$).

Mean initial BMI for participants undergoing bariatric surgery was $50.2 \pm 7.9 \text{ kg/m}^2$ ($n=8$). At 6 ($n=8$) and 12 months ($n=4$) post-bariatric surgery, the mean change in BMI was $-10.3 \pm 3.4 \text{ kg/m}^2$ and $-11.2 \pm 3.6 \text{ kg/m}^2$, respectively (average weight loss of $-29.8 \pm 11.6 \text{ kg}$ and $-33.6 \pm 15 \text{ kg}$).

Participation in STOMP was effective in reducing BMI in approximately half of participants. Further research is needed to determine factors related to BMI outcomes in the program. Outcomes for adolescents undergoing bariatric surgery are similar to those reported in adult series.