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Cesarean Section Delivery Does Not Impact Postpartum Weight Loss and Recovery

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Inability to lose weight gained during pregnancy increases a woman's risk of becoming overweight or obese. Epidemiological studies have suggested that obesity is strongly associated with history of cesarean section (c-section) delivery. This association may be related to postpartum changes in physiological (e.g. physical activity) and behavioral (e.g. sleep) factors associated with weight loss. **PURPOSE:** To examine differences in postpartum body mass and factors related to weight loss between women who gave birth via c-section vs. vaginally. **METHODS:** Body mass was measured in 37 women (11 c-section [CD] and 26 vaginal [VD] delivery), at 3, 6, 9, and 12 months postpartum. Additionally, body composition (DXA), resting energy expenditure, physical activity, sleep quality, fatigue, depression, and body image were assessed at each time point. Self-reported pre-pregnancy weight and pregnancy weight gain were recorded and differences between CD and VD were assessed with student's t-tests. Differences between CD and VD postpartum factors were assessed using two-way ANOVA with repeated measures. **RESULTS:** There was no significant difference between CD and VD groups in pre-pregnancy BMI (26.5 5.9 kg/m² vs. 25.4 5.4 kg/m², p=0.59, CD vs VD respectively), pregnancy weight gain (16.2 5.2 kg vs. 14.4 4.8 kg, p=0.32, CD vs VD respectively), and body mass at delivery (86.3 17.8 kg vs. 83.9 13.8 kg, p=0.67, CD vs VD respectively). At 12 months postpartum, similar weight loss occurred in both groups (14.3 6.1 kg vs 13.8 5.4 kg, p=0.77, CD vs VD respectively). ANOVA analysis of the changes in physiological and behavioral factors related to weight loss over the postpartum period revealed no significant difference between CD and VD women. **CONCLUSION:** Despite longer recovery time associated with c-section delivery, weight loss in the postpartum period was not impacted and therefore it does not appear to be a risk factor for obesity.