



DO REPRODUCTIVE-AGE WOMEN INCREASE THEIR PHYSICAL ACTIVITY LEVELS DURING THE FIRST FOUR WEEKS OF THE DIABETES PREVENTION PROGRAM?

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ABSTRACT

Purpose: The purpose of this thesis was to determine if reproductive-age women enrolled in the Diabetes Prevention Program (DPP) increased their physical activity levels in the first four weeks of the lifestyle change program and to examine the relationship between physical activity levels and lifestyle factors common to reproductive-age women.

Background: Higher pre-pregnancy physical activity levels are correlated with better outcomes for both mother and child during and after pregnancy. Participation in the DPP can increase physical activity levels, but the lifestyle change program is underutilized by reproductive-age women.

Methods: The participants were overweight and obese reproductive-age women enrolled in the DPP. Participants completed a survey about lifestyle characteristics at baseline. Fitbit step data were used to calculate minutes of physical activity. Baseline physical activity data (week one) were compared to week four physical activity data.

Results: On average, participants increased their physical activity minutes by 12.25 minutes (SD 42.01) between week one and week four of the DPP. Among the 53% of participants who increased their physical activity, the increase was 40.95 (SD 36.36) minutes per day. Participants with better self-reported mental health were 2.1 times as likely to increase their physical activity minutes. There were statistically insignificant differences in physical activity minutes between participants with children and those without children and between participants with above average stress and those with below average stress.

Conclusions: Overall, participants had a small increase in physical activity minutes during the first four weeks of the DPP, but this increase was not statistically significant. Participants with better self-reported mental health were more likely to increase their physical activity minutes. This indicates mental health of participants could affect physical activity levels, something future lifestyle change programs should consider. Because previous literature shows that early success in the DPP can predict long-term success, future research should focus on promoting early engagement and success within lifestyle change programs.