

ABSTRACT TITLE

Correlation Between Reduction of Glycated Hemoglobin (HbA1c) to Waist Circumference in People Living with Type 2 Diabetes Using Sugarfit's Diabetes Reversal Program: A Retrospective Analysis

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BACKGROUND AND AIM

Abdominal or Central obesity is observed in the majority of people with type 2 diabetes (T2D). It is a reflection of visceral fat and is the major risk factor for cardiovascular diseases (CVD). Reduction in Waist Circumference (WC) may lead to delayed progression to T2D. The objective of the study is to assess the positive correlation between reduction of WC and its impact on HbA1c for people with T2D.

MATERIALS AND METHODS

A total of 182 candidates diagnosed with T2D were selected from Sugarfit's diabetes reversal program (SDRP) in this retrospective study. The study focuses on comparing 105 user's data who saw reduction in WC to 77 users who did not see any change in WC, and correlating that with reduction in Hba1c levels which was simultaneously recorded. A link of the video recording on how to measure WC was sent to all participants. They had to measure WC both at the beginning of the study and after 90 days.

RESULTS

The findings on completion of the study showed that the Sugar.Fit approach led to significant improvements in glycemic control with an average reduction in HbA1c by 1.3%. Of which, 105 users saw an average drop in WC of 6 ± 3.7 cms and saw a drop in Hba1c of $1.59\pm 1.2\%$ while 77 users who did not see any reduction in WC saw a drop in Hba1c of $1.02\pm 1.4\%$. 105 users saw an average drop in BMI of 1.3 ± 0.9 while 77 users saw a drop of 0.8 ± 3.6

CONCLUSION

WC is one of the easiest and cost effective methods to determine total adiposity. Increase in WC is associated with increased insulin resistance which has been found to be the root cause of high mortality from CVD. Using WC as a tool and focusing on its reduction should be prioritised for T2Ds to achieve better metabolic and glycemic outcomes. Though users who did not see change in WC still saw drop in Hba1c and BMI, it was not as significant as the group who reduced WC.