

ABSTRACT TITLE

Personalized Nutrition and Lifestyle Interventions for Enhanced Glycemic Control and Weight Reduction in Individuals with Diabetes Weighing Over 100 Kilograms

AUTHORS

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BACKGROUND AND AIM

The increasing global prevalence of both obesity and diabetes poses significant challenges to public health. Research underscores the critical role of weight reduction in achieving improved glycemic control. This study focuses on individuals weighing over 100 kilograms, aiming to advance diabetes management within this specific population.

METHODS

The Sugarfit Diabetes Reversal and Management Program (SDRMP) is an innovative personalized intervention that integrates technology-enabled medical guidance with a dedicated team of diabetes experts overseen by physicians. It tailors nutrition plans, gradually enhances physical fitness, and supports behavior modification. This retrospective study evaluates participants enrolled in the SDRMP over the previous year, all of whom weigh over 100 kilograms. Their progress is tracked over six months, with assessments including HbA1c, Fasting Blood Sugar (FBS), and weight loss.

RESULTS

Among the 246 study participants, 213 were male, and 32 were female, with an average age of 43.57 ± 9.75 years. Baseline measurements revealed an average HbA1c level of $8.67 \pm 1.82\%$, an FBS of 168.46 ± 60.85 mg/dL, and an average weight of 112.52 ± 16.14 kgs. Remarkably, significant reductions in all three parameters were observed within three months, with values decreasing to $7.44 \pm 1.45\%$, 136.62 ± 46.56 mg/dL, and 105.29 ± 11.85 kgs, respectively. These improvements continued over six months, further lowering measurements to $7.31 \pm 1.44\%$, 132.37 ± 45.60 mg/dL, and 104.33 ± 12.36 kgs.

CONCLUSION

Acknowledging the multifaceted nature of diabetes management, this study underscores the importance of personalized nutrition and lifestyle interventions tailored to the specific needs of individuals weighing over 100 kilograms. These initial findings highlight the potential for substantial advancements in diabetes care within this distinctive demographic.