

# The Impact of "Sweet Victory" Gum on Sugar Consumption in Type 1 Diabetes Patients: A Double-Blind Randomized Clinical Trial

## INTRODUCTION

Type 1 Diabetes Mellitus (T1DM) is a chronic autoimmune disorder characterized by the destruction of insulin-producing beta cells in the pancreas, leading to lifelong insulin dependence.

Effective management of blood glucose levels in T1DM requires stringent dietary control, with a focus on reducing the consumption of high-sugar foods to minimize glycemic fluctuations.

This study presents the findings of a double-blind, randomized clinical trial aimed at evaluating the effects of "Sweet Victory" gum (SVG) on sugar consumption and glycemic control in T1DM patients.

## STUDY DESIGN

This pilot trial was conducted under the leadership of Dr. Roy Eldor, Director of the Metabolic Syndrome Unit at Tel Aviv Sourasky Medical Center.

The investigational product, "Sweet Victory" gum, contains *Gymnema sylvestre*, a plant known for its ability to reduce sugar absorption and alter taste perception.

The gum was developed by GYNI SG LTD, a food supplement company.

The study was designed as a double-blind, placebo-controlled trial involving individuals with T1DM. Ethical approval for the study was obtained from the IRB (Hospital Institutional Review Board- The Helsinki Committee ) approving human clinical research. A total of 22 patients with T1DM were enrolled in the trial, all of whom were using continuous glucose monitoring (CGM) devices for precise measurement of glycemic parameters.

Participants were randomized in a 2:1 ratio into either the SVG group or a placebo group.

They were instructed to chew the gum for at least two minutes before consuming sugary foods, up to three times daily, over a two-week period. Data on glycemic control, including Time in Range (TIR) and the Glucose Management Indicator (GMI), as well as self-reported sweet food consumption, were collected at baseline and at the conclusion of the trial.

## RESULTS

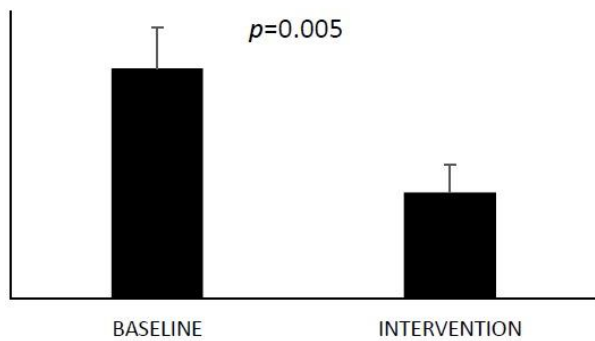
### 1. *Glycemic Control*

- **Baseline Differences**: There were no significant differences in baseline glycemic parameters between the SVG and placebo groups.
- **Time in Range (TIR, 70–180 mg/dL)**: No significant changes in TIR were observed in the SVG group, whereas a slight increase was noted in the placebo group.
- **Glucose Management Indicator (GMI)**: Both groups showed no statistically significant changes in GMI from baseline to the study's conclusion.

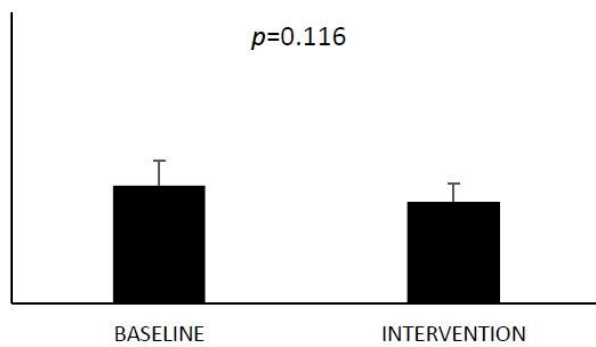
### 2. *Sweet Food Consumption*

- **Taste Perception**: A higher proportion of participants in the SVG group reported altered taste perception of sweet foods, with many describing them as less palatable or tasteless.
- **Control Over Consumption**: Participants in the SVG group reported feeling more control over their food choices and demonstrated a marked reduction in sweet food consumption.
- **Daily Sweet Food Intake**: A significant decrease in the daily consumption of sweet foods was observed in the SVG group compared to the placebo group.

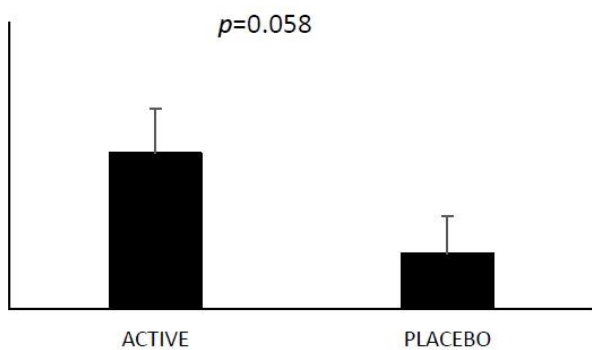
**REDUCTION IN NUMBER OF SWEETS  
CONSUMED ACTIVE**



**REDUCTION IN NUMBER OF SWEETS  
CONSUMED PLACEBO**



**REDUCTION IN NUMBER OF SWEETS  
CONSUMED (CHANGE FROM BASELINE)**



## CONCLUSION

The administration of "Sweet Victory" gum was associated with a reduction in sweet food consumption in patients with T1DM, primarily through its impact on taste perception. Although no significant changes in glycemic control parameters were observed, the gum enabled participants to better manage their sugar intake, providing a potential behavioral intervention for dietary control in T1DM.

These findings highlight the potential role of SVG as an adjunctive tool in T1DM management, particularly in reducing sugar consumption. While further studies are required to assess the long-term impact on glycemic control, this trial demonstrates the promise of innovative dietary interventions, such as "Sweet Victory" gum, in improving dietary management and enhancing the quality of life for individuals living with T1DM.