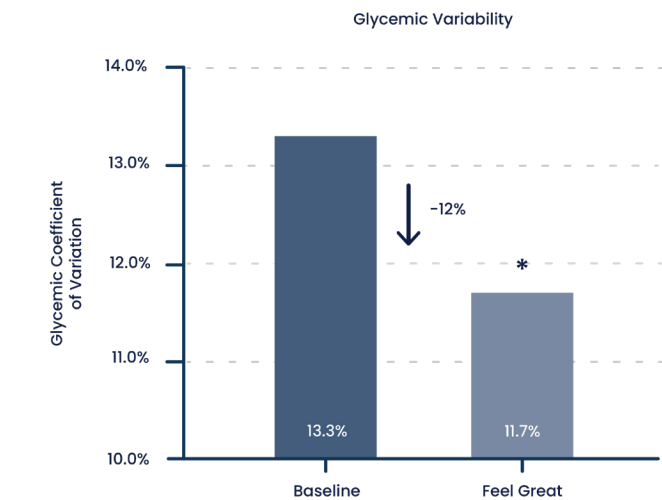




Feel Great, a dietary supplement and intermittent fasting program, improves glycemic variability in adults

In this study, we used continuous glucose monitoring (CGM) devices to measure real-time glucose levels in free-living participants with and without Feel Great, Unicity’s dietary program consisting of Unimate, Balance, and 16:8 intermittent fasting. Feel Great significantly reduced daily glycemic variability by 12% relative to a habitual diet. Extreme glycemic variability can negatively impact metabolic health, cardiovascular function, and quality of life. Thus, Feel Great offers a convenient and straightforward approach to improving glycemic variability and overall metabolic health outcomes.



Background

The prevalence of cardiometabolic disorders, characterized by insulin resistance and poor glycemic control, is a global health concern. Glycemic variability (GV) reflects the frequency and magnitude of fluctuations in glucose over a set period of time. While GV is a natural part of the glucose response to food intake, hormone signaling, and the body’s circadian rhythm, large and frequent oscillations in blood glucose can contribute to the development of metabolic complications¹. Greater GV can be more damaging than persistently high glucose, so it is critical to consider GV in addition to average glucose when evaluating glycemic control and metabolic health².

Methods

Thirteen subjects with fasting glucose ≤ 125 mg/dL were enrolled in the study (men = 7, women = 6). Study participants wore a continuous glucose monitoring (CGM) sensor to measure real-time interstitial glucose. This sub-chronic study consisted of a 4-day Baseline (no Feel Great) and a 4-day Feel Great intervention period, and each period consisted of at least two weekdays and one weekend day. During the Feel Great arm, participants consumed two servings of Unimate and one serving of Balance daily. One serving of Unimate was taken in the morning while fasting, and the second was taken at any other time during the day. Balance was taken immediately before a meal (lunch or dinner). In addition, during Feel Great, participants fasted for a minimum of 14 hours and a maximum of 18 hours daily. The primary outcome was the change in GV, represented by glucose coefficient of variation (CV), from Baseline to Feel Great.

13 participants	Fasting glucose ≤ 125 mg/dL	4 days
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Results

Glycemic Variability (GV)

GV was significantly lower during Feel Great (11.7%) compared to Baseline (13.3%) (Figure 1). Lower GV suggests better glycemic control and is associated with better overall health outcomes.

Figure 1

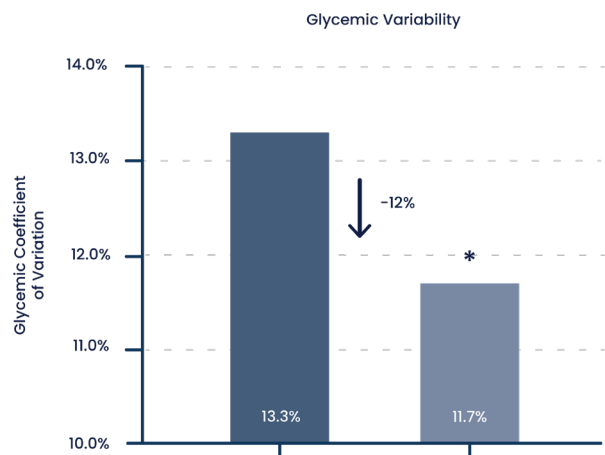


Figure 1. Mean glycemic variability during Baseline vs. Feel Great (13.3% vs. 11.7%). *P = 0.017, paired t-test, two-tailed (n = 11).

CGM Daily Glucose Pattern: Baseline vs. Feel Great

Example daily glucose patterns (4-day average) are included in Figures 2A and 2B. Following Feel Great reduces an individual's eating window from 10 or more hours to less than 8 hours. While many factors can affect glucose levels, food intake typically has the greatest impact.

Figure 2A

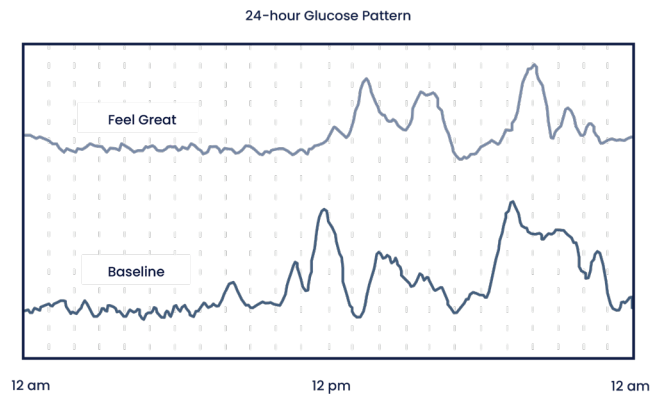


Figure 2A. Example 24-hour CGM glucose pattern, Baseline vs. Feel Great (4-day average).

Figure 2B

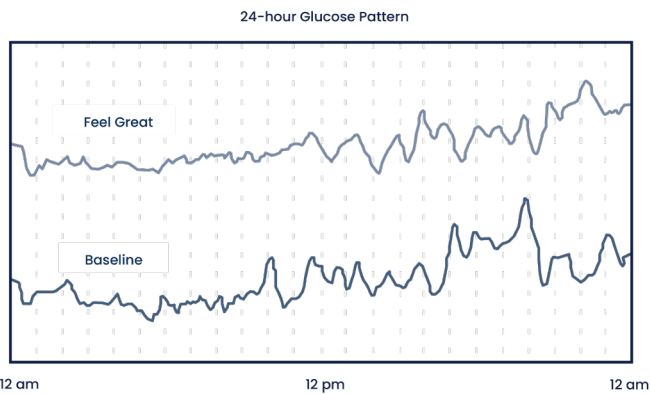


Figure 2B. Example 24-hour CGM glucose pattern, Baseline vs. Feel Great (4-day average).

Secondary Glucose Outcomes

Glucose metrics such as average daily glucose, maximum glucose, minimum glucose, and percent time in range were generally improved with Feel Great compared to Baseline (Table 1), though this was not statistically significant. Due to sample size limitations, the study was not powered to detect differences in secondary outcome measures.

Table 1. Secondary Glucose Outcomes: Baseline vs. Feel Great

	Baseline	Feel Great
Glucose (mg/dL)	109.1	107.8
Max glucose (mg/dL)	155.8	152.2
Min glucose (mg/dL)	81.3	83.4
% time hypoglycemic range (< 70mg/dL)	0.2%	0.2%
% time normoglycemic range (70 - 140mg/dL)	95.6%	96.8%
% time hyperglycemic range (>140mg/dL)	4.2%	3.0%

Program Experience

With Feel Great, participants reported improvement in physical energy, mental energy, overall well-being and mood, overall satisfaction, and overall health. In addition, 77% of participants found it easy to add Unimate and Balance to their routine, and 85% found it easy to adhere to the intermittent fasting window.

Conclusion

In this acute study, we evaluated the real-time glucose response to Feel Great. Subjects followed a self-selected, habitual diet, and incorporated the Feel Great program as directed during the study period. Within a short duration, Feel Great significantly reduced Baseline glycemic variability by 12%. Reducing glycemic variability is a therapeutic target in diabetes, and these short-term improvements with Feel Great may contribute to better health outcomes in the areas of oxidative stress, inflammation, and cardiovascular health in the long-term. Given the prevalence of metabolic disorders globally, simple dietary interventions to improve glycemic control are especially important. Here, we demonstrated that Feel Great, within days, can reduce overall glycemic variability in a group of generally healthy participants.

References

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2. Ceriello, A.; Esposito, K.; Piconi, L.; Ihnat, M. A.; Thorpe, J. E.; Testa, R.; Boemi, M.; Giugliano, D. Oscillating Glucose Is More Deleterious to Endothelial Function and Oxidative Stress Than Mean Glucose in Normal and Type 2 Diabetic Patients. *Diabetes* 2008, 57 (5), 1349–1354. <https://doi.org/10.2337/db08-0063>.