

Glycemic Response of Glucerna® Shake Using a Meal Tolerance Test in Subjects With Type 2 Diabetes¹

Study Purpose

A clinical study was performed comparing:

- Ensure®
- Glucerna Shake

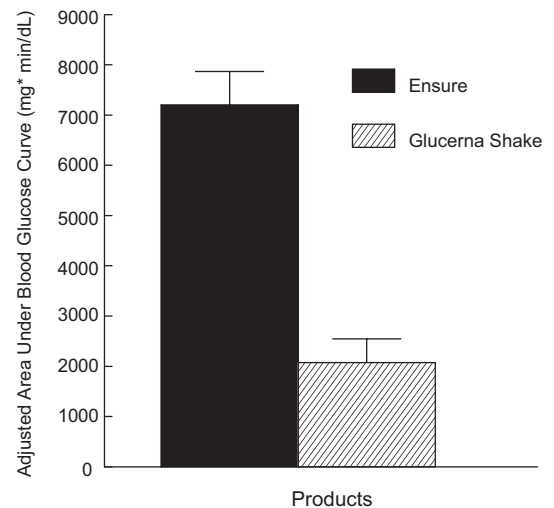
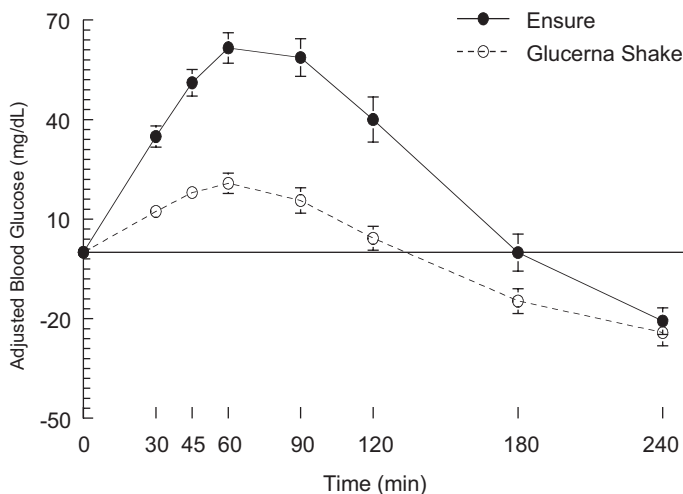
The study was a randomized, double-blind, single-center oral meal tolerance test (MTT) to compare the glucose responses of nutritional products in people with type 2 diabetes.

Study Design

The study was a three-way crossover (the third arm was an experimental nutritional formula that is not included in this summary). Thirty-five subjects between the ages of 18 and 75 yrs were enrolled. Subjects had diagnosed type 2 diabetes and were taking oral antihyperglycemic medications; none, however, used insulin to manage blood glucose. Antihyperglycemic medications were withheld during the morning of each MTT to minimize any confounding effects due to variability in pharmacotherapy. Each subject consumed all study products, thereby serving as his/her own control. The MTT was conducted in subjects who fasted (no food other than water allowed) overnight; subjects consumed a single 8-fl-oz nutritional beverage, and blood samples for postprandial glucose analysis were taken at defined intervals up to 240 minutes postmeal.

Results

Data were analyzed on 27 subjects who consumed all products and completed all MTTs. The graphs below show the adjusted mean change in blood glucose over time and area-under-the-curve blood glucose values of study subjects during the MTT (average \pm SEM).



Adjusted peak glucose was 64% lower for Glucerna Shake than for Ensure ($P < 0.001$). Adjusted area-under-the-curve blood glucose over the study period was 71% lower ($P < 0.001$).

Conclusions

Glucerna Shake, containing a unique blend of slowly digested carbohydrates, produced a lower postprandial rise in blood glucose in subjects with type 2 diabetes compared to a leading standard nutritional beverage.

¹Study BK02. Glycemic Response During a Meal Tolerance Test of a Standard Nutritional Product and Two Diabetes-Specific Products in Subjects With Type 2 Diabetes. Ross Products Division, Abbott Laboratories, February, 2007.

Glucerna products are for use under medical supervision as part of a diabetes management plan.