The **MYSTERY** of Individual Blood Sugar Responses



What do you think would happen if 800 people were given the same meals daily for a week? Do you think their blood sugar responses would be similar?

In fact, a rather large study of 800 people between the ages of 18 and 70 and who were not diagnosed with type II diabetes, were given the same meals daily for a week. They showed very different blood glucose responses after eating the same standardized meals. Each participant was connected to a glucose monitor that measured fluid glucose in the body every five minutes for seven days. Fifty four percent of the subjects were overweight and 22 percent were obese.

The results showed high interpersonal variability in the aftermeal glucose responses to identical meals. In other words, if you and your friend went to the same restaurant and all foods were proportionately weighed to be exactly the same, you and your friend's blood glucose levels after several hours could be quite different.



WHY DO BLOOD SUGAR RESPONSES VARY SO MUCH?

How glucose is metabolized varies from person to person. Here are some reasons for the differences:

- Physical activity can alter metabolism. Someone who exercises
 regularly will have more muscle mass than someone who is
 sedentary. The larger muscle mass will absorb and store more
 sugar in the cells to be ready for more exercise. The more active
 person tends to have a higher metabolism and burn more calories.
- Physical traits vary with individuals. This relates to overall body size, hip and waist circumference, height, body mass index (ratio of muscle to fat of the individual), and bone structure—people may have large, medium or smaller frames. Just as in prize fighting and wrestling, the competitors are matched in size and weight—a heavyweight champion does not compete with a lightweight champion so they are more fairly matched.
- Gut microbiome varies between persons. In this 800-person study, a stool test was performed and analyzed for types of gut microbes. The findings showed a correlation between certain types of gut microbiota and the ability to metabolize sugar.
- Genetics affects interpersonal differences in after meal sugar levels.
- People with low insulin sensitivity, also referred to as insulin resistance, will require larger amounts of insulin, either from their own pancreas or from injections in order to keep blood glucose stable.
- Production of hormones from the pancreas and the glandular system may affect after meal sugar levels in individuals.
- Lifestyle behaviors affect metabolism. These might include activity levels, type of work (sedentary or standing), amount of stress, and how much water individuals drink.
- Overweight and obesity are also factors that affect blood glucose levels. If a person is overweight, their storage and assimilation of sugar and fat is going to be different from someone who is leaner.



We have to make an effort to keep our weight and blood sugar normalized.

YOUR BLOOD SUGAR LEVEL IS MORE UNIQUE THAN YOU REALIZE

In the U.S. alone, 37 percent of the adult population is showing elevated blood glucose levels. Unfortunately, if this situation is not brought under control, up to 70 percent of these people will develop type II diabetes. If you have your blood glucose tested and you begin to fall in the medium to high "normal range", it is time to take action. If one can get this situation under control with diet, exercise, a good supplement regimen and proper weight management, much of these harmful effects can be avoided. When we become older, our lifestyles change, circulating levels of particular hormones change, and we have to make an effort to keep our weight and blood sugar levels normalized.





Add DIGESTIVE*** to your diet. It is a well-studied and formulated probiotic and prebiotic to help maximize beneficial microbiota in your gut. Beneficial microbes are now showing possible support to an additional level of metabolism for the human system. In addition, the full range of enzymes in DIGESTIVE*** are formulated to work on proteins, fats and carbohydrates during the digestive process. As we age, glands such

as the pancreas, which secretes insulin and digestive enzymes, may not be as effective in their production of these important factors.

Laminine supplementation may help support the maintenance of normal blood sugar levels.

Take two or more Laminine capsules daily, one in the morning and one in the evening. Although results are inconclusive, a small study showed that subjects taking two Laminine capsules daily for 180 days kept their blood sugar levels in the normal range. Laminine supplementation may help support the maintenance of normal blood sugar levels.² The full range of essential and non-essential amino acids in Laminine supports



muscle mass, hormone production and cell membrane structures—important for cell-to-cell signaling and communication.



These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

REFERENCES

- 1. Zeevi et al., Personalized Nutrition by Prediction of Glycemic Responses. Cell 163, 1079-1094 November 19, 2015.
- 2. Dr. Andujar, Physicians' Desk Reference, Jan. 2016: 2220-2222.

