

# GroPlex™ Significantly Increases Insulin Response

## ABSTRACT

In this study, Glanbia Nutritionals looked at the ability of a GroPlex-based peptide product to stimulate insulin release in a group of healthy human subjects. Research has shown that insulin is an important activator of amino transport into skeletal muscle as it signals the cells for uptake. The GroPlex-based product was able to double insulin levels from base line in a rapid fashion. Insulin levels were significantly higher in as little as 15 minutes. GroPlex's ability to raise insulin may make it a good non-carbohydrate option to take with other bioactives like creatine, which are dependent on insulin for transport into muscle.

## METHODOLOGY

Test subjects (n=7) were healthy males screened and selected for a randomized, placebo-controlled, crossover study. After a period of fasting, each subject consumed a GroPlex-based product or a placebo. The study design was balanced so that each participant consumed both samples, but on separate testing days. Subjects were randomly chosen to consume the peptide product or the control for their first sample. Blood insulin levels were measured at different intervals over 6 hours and compared between the two treatments. At the time of testing, a cannula was inserted into the subject's superficial arm vein. A fasting blood sample was taken prior to the participant consuming the test or placebo beverage. After consumption of the beverage, a timer was started and blood samples were taken through the cannula at 15, 30, 60, 90, 120, 240 and 360 minutes. All samples were tested for insulin.

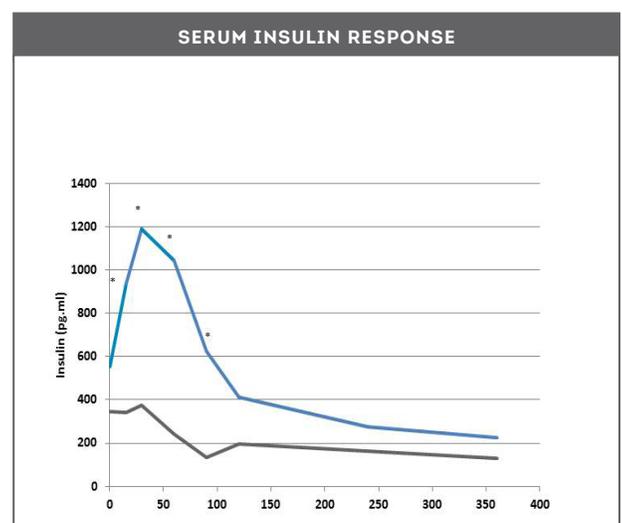
## RESULTS

The GroPlex peptide doubled serum insulin levels when compared to its base line and even greater when compared to the placebo in as quickly as only 15 minutes after consumption. AUC analyses indicated a significant difference between the peptide and placebo at 15, 30, 45, and 90 minutes post-ingestion.

## CONCLUSION

Consumption of GroPlex significantly increases insulin response in subjects, which may make it a good non-carbohydrate option to take with other bioactives like creatine.

— GROPLEX-BASED PRODUCT  
 — PLACEBO



Serum insulin response to ingestion of GroPlex or placebo. There was a significant treatment x time interaction effect for insulin. (\*P < 0.01 indicates significant difference between corresponding time points).

**Just add Glanbia.**