

# Posters

## 1. Variability of Acute Response to Equicaloric Test Meals Varying in Glycemic Index and Glycemic Load on Postprandial Glycemia in Healthy Adults (Andreea Zurbau)

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**Objective:** The importance of the interrelation of the quality (glycemic index [GI]) and the quantity (glycemic load [GL]) of carbohydrate in the context of a mixed meal on blood glucose is still debated. This study therefore investigated all 4 permutations of high and low GI and GL meals on postprandial glycemia [PPG].

**Methods:** A total of 17 healthy subjects completed all test meals (8 males, 9 females; age  $27 \pm 12$  y; body mass index  $22.2 \pm 2.8$  kg/m<sup>2</sup>). Subjects consumed 4 different test meals: LowGI-LowCHO (GI=28, GL=14), LowGI-HighCHO (GI=28, GL=42), HighGI-LowCHO (GI=85, GL=14) and HighGI-HighGL (GI=85, GL=42), with a carbohydrate content of 17, 94, 50 and 50g respectively. Energy was balanced by adding fat and protein. Capillary blood samples were collected at fasting and 15, 30, 45, 60, 90, 120, 190, and 240 minutes post-consumption.

**Results:** The incremental area under the blood glucose curve (iAUC) after the HighGI-HighCHO and LowGI-HighCHO meals were significantly higher than the LowGI-LowCHO and HighGI-LowCHO meals for 2h post consumption ( $p < 0.05$ ). The 2 to 4h iAUC was significantly higher following the LowGI-HighCHO meal compared to the HighGI-HighCHO and HighGI-LowCHO meals.

**Conclusions:** Postprandial glucose levels at 15, 30 and 45min were the lowest after the low GI, low GL test meal. Despite almost doubling the carbohydrate in the LowGI-HighCHO meals compared to the HighGI-HighCHO meal, there was no difference in iAUC. This preliminary analysis demonstrates that changing the GI and GL of meals result in different PPG profiles which were not necessarily predicted by carbohydrate content.

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## 2. Study on Immediate and Long-term Effects on Incretin Release Induced by Artificial Sweeteners (ILIAS) – Results and Outlook from the SEGATROM Study (Andreas Pfeiffer)

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