**Supplementary Data**

**Supplemental Table S1.** All foods served at the buffet-style lunch (per 100 g)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Foods** | **Energy (kJ)** | **Carbohydrate (g)** | **Protein (g)** | **Fat (g)** | **Fibre (g)** |
| Meatball | 1184 | 2.0 | 18.0 | 22.0 | <0.01 |
| Chicken nugget | 1084 | 14.8 | 16.5 | 19.4 | <0.01 |
| Pasta with tomato sauce | 1093 | 53.8 | 7.6 | 1.8 | <0.01 |
| Potatoes salad | 381 | 11.8 | 1.4 | 3.9 | 1.5 |
| Carrots salad | 380 | 6.2 | 0.9 | 6.5 | 2.4 |
| Yoghurt | 331 | 7.1 | 4.0 | 3.8 | <0.01 |
| White bread | 1154 | 50.1 | 9.4 | 3.2 | 4.3 |
| Grain bread | 870 | 38.2 | 9.5 | 1.9 | 7.2 |
| Cookie | 1897 | 59.4 | 4.8 | 22.1 | 0.7 |
| Apple | 235 | 12.4 | 0.4 | 0.6 | 1.8 |
| Mandarin | 168 | 8.3 | 0.5 | 0.2 | 1.5 |
| Banana | 331 | 18.1 | 0.6 | 0.1 | 1.7 |
| Black cherry juice | 230 | 13.5 | 0.1 | 0.0 | <0.01 |
| Peach juice | 260 | 14.9 | 0.3 | 0.0 | <0.01 |

**Supplemental Table S2.** Participants’ dietary intakes assessing by a-24-hour dietary recall before each meal test

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Energy and macronutrients** | **LGI-LII** | | **LGI-HII** | | **p**\* |
| **Mean** | **SD** | **Mean** | **SD** |
| Energy (kJ)† | 6630.9 | 433.4 | 6734.9 | 471.2 | 0.501 |
| Carbohydrate (%) | 50.53 | 9.98 | 50.73 | 10.66 | 0.945 |
| Protein (%) | 12.13 | 3.34 | 13.60 | 3.46 | 0.153 |
| Fat (%) | 37.33 | 9.63 | 35.73 | 9.81 | 0.574 |
| Fibre (g) | 18.28 | 4.91 | 16.33 | 4.87 | 0.058 |

Abbreviations: LGI-LII, low glycaemic index and low insulin index; LGI-HII, low glycaemic index and high insulin index.

\*Student’s 2-tailed t test for paired data, p>0.05.

†Values were given as geometric mean (G) and standard error (S.E).

**Supplemental Table S3.** Participants’ energy and macronutrient intakes at the *ad libitum* lunch on each test days

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Energy and macronutrients** | **LGI-LII** | | **LGI-HII** | | **p**\* |
| **Mean** | **SD** | **Mean** | **SD** |
| Energy (kJ)† | 4853.7 | 319.2 | 4882.9 | 300.3 | 0.897 |
| Carbohydrate (g)† | 163.04 | 12.54 | 165.09 | 13.19 | 0.809 |
| Protein (g) | 39.75 | 7.30 | 39.47 | 8.62 | 0.882 |
| Fat (g) | 40.57 | 10.76 | 39.81 | 7.60 | 0.690 |
| Fibre (g) | 4.77 | 2.64 | 4.83 | 2.29 | 0.926 |

Abbreviations: LGI-LII, low glycaemic index and low insulin index; LGI-HII, low glycaemic index and high insulin index.

\*Student’s 2-tailed t test for paired data, p>0.05.

†Values were given as geometric mean (G) and standard error (S.E).

**Figure Legends**

**Supplemental Figure S1.** Study protocol and timeline on test days. BS, blood samples; VAS, visual analogue scale.