**Supplementary Table 1.** Interactions between anthropometry, biochemical markers and dietary intake according to the SNP *PLIN1* 11482G>A genotype

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Marker** | **Genotype** | **Model 1** | **Marker** | **Genotype** | **Model 1** |
| ***P i*nteraction** | ***P i*nteraction** |
| **Carbohydrate (g)** |
| Weight | GG | 0·143 | Insulin | GG | 0·758 |
| GA/AA | GA/AA |
| BMI | GG | 0·191 | HOMA-IR | GG | 0·826 |
| GA/AA | GA/AA |
| TG | GG | 0·149 | HOMA-beta | GG | 0·907 |
| GA/AA | GA/AA |
| Glucose | GG | 0·665 | HbA1c | GG | 0·946 |
| GA/AA | GA/AA |
| **Carbohydrate (%)** |
| Weight | GG | 0·355 | Glucose | GG | 0·159 |
| GA/AA | GA/AA |
| WC | GG | 0·116 | HOMA-beta | GG | 0·565 |
| GA/AA | GA/AA |
| BMI | GG | 0·306 | HbA1c | GG | 0·718 |
| GA/AA | GA/AA |
| TG | GG | 0·948 |  |  |  |
| GA/AA |  |
| **Protein (g)** |
| Weight | GG | 0·514 | HOMA-beta | GG | 0·759 |
| GA/AA | GA/AA |
| WC | GG | 0·977 | HbA1c | GG | 0·627 |
| GA/AA | GA/AA |
| BMI | GG | 0·835 | Non-HDL-C | GG | 0·685 |
| GA/AA | GA/AA |
| TG | GG | 0·835 | HDL-C | GG | 0·178 |
| GA/AA | GA/AA |
| Glucose  | GG | 0·185 | LDL-C | GG | 0·703 |
| GA/AA | GA/AA |
| Insulin | GG | 0·122 | VLDL-C | GG | 0·828 |
| GA/AA | GA/AA |
| HOMA-IR | GG | 0·100 | TC | GG | 0·983 |
| GA/AA | GA/AA |
| **Protein (%)** |
| TG | GG | 0·531 | Non-HDL-C | GG | 0·954 |
| GA/AA | GA/AA |
| Glucose | GG | 0·305 | HDL-C | GG | 0·303 |
| GA/AA | GA/AA |
| Insulin | GG | 0·211 | LDL-C | GG | 0·926 |
| GA/AA | GA/AA |
| HOMA-IR | GG | 0·090 | VLDL-C | GG | 0·530 |
| GA/AA | GA/AA |
| HOMA-beta | GG | 0·544 | TC | GG | 0·726 |
| GA/AA | GA/AA |
| HbA1c | GG | 0·378 |  |  |  |
| GA/AA |  |  |  |
| **Lipid (g)** |
| Weight | GG | 0·799 | HDL-C | GG | 0·140 |
| GA/AA | GA/AA |
| WC | GG | 0·560 | LDL-C | GG | 0·774 |
| GA/AA | GA/AA |
| BMI | GG | 0·896 | VLDL-C | GG | 0·229 |
| GA/AA | GA/AA |
| Non-HDL-C | GG | 0·993 | TC | GG | 0·677 |
| GA/AA | GA/AA |
| **Lipid (%)** |
| Weight | GG | 0·976 | HDL-C | GG | 0·194 |
| GA/AA | GA/AA |
| WC | GG | 0·378 | VLDL-C | GG | 0·396 |
| GA/AA | GA/AA |
| BMI | GG | 0·576 |  |  |  |
| GA/AA |  |  |  |
| **Dietary fibre (g)** |
| Non-HDL-C | GG | 0·557 | TG | GG | 0·383 |
| GA/AA | GA/AA |
| HDL-C | GG | 0·613 | Glucose | GG | 0·266 |
| GA/AA | GA/AA |
| LDL-C | GG | 0·403 | Insulin | GG | 0·824 |
| GA/AA | GA/AA |
| VLDL-C | GG | 0·401 | HOMA-IR | GG | 0·846 |
| GA/AA | GA/AA |
| TC | GG | 0·691 | HOMA-beta | GG | 0·968 |
| GA/AA | GA/AA |

Model 1: Simple linear regression between the SNP:intake variable interaction.

BMI, body mass index; TG, triacylglycerols; HOMA-IR, Homeostatic Model Assessment of Insulin Resistance; HOMA-beta, Homeostasis Model Assessment of Beta-Cell Function; HbA1c, glycated haemoglobin; WC, waist circumference; Non-HDL-C, non-high-density lipoprotein cholesterol; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; VLDL-C, very low-density lipoprotein cholesterol; TC, total cholesterol.