Table S4. Associations of the GPS1 with adiposity-related traits2 in young adulthood (HUNT3)3 in different strata of physical activity at adulthood.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | |  | | |  | |  |  | | Z-scores BMI | | | | | | |  | Z-scores WC | | |  |  |
|  | | | | |  | |  | B | | | CI (95%) | P-value | |  | | |  | B | CI (95%) | P-value |  |  |
|  | |  | | |  | |  |  | | |  |  |  | |  |  | | |  |  |  |  |
| Physical activity | | < 2 days/w | | |  | |  | 0.055 | | | 0.011 to 0.098 | 0.014 |  | |  | 0.040 | | | -0.003 to 0.083 | 0.071 |  |  |
|  | | ≥ 2 days/w | | |  | |  | 0.029 | | | -0.006 to 0.064 | 0.104 |  | |  | 0.027 | | | -0.008 to 0.062 | 0.130 |  |  |
|  | |  | | |  | |  |  | | | P interaction | 0.685 |  | |  |  | | | P interaction | 0.589 |  |  |
|  |  | |  |  | |  | | |

1 The genetic predisposition score (GPS) is the sum of effect alleles from each of the nine individual SNPs

2 Sex specific z-scores of BMI and waist circumference in young adulthood.

3 Number of participants: for GPS=1634 (those missing more than 3 SNPs excluded)

The linear regression models were adjusted for age regarding BMI and additionally also for height regarding WC, assuming an additive effect

Pregnant participants were excluded.

≥2 days/w: physically activity in adulthood was doing exercise equal or more than 2 days per week until they got out of breath or sweat.