

Table S3. Association of the minor (A) allele of the rs9939609 SNP in *FTO* with age- and sex-standardised BMI, waist circumference, and body fat percentage in a random effects meta-analysis of up to 19,268 children and adolescents.

| Trait | All children | | | | Inactive children | | | | Physically active children | | | |
|-----------------------------|--------------|-------------------|-----------------------|----------------|-------------------|-------------------|--------|----------------|----------------------------|-------------------|-----------------------|----------------|
| | N | beta (95% CI) | P | I ² | N | beta (95% CI) | P | I ² | N | beta (95% CI) | P | I ² |
| BMI Z-score | 19,268 | 0.10 (0.08, 0.12) | 1.3x10 ⁻²¹ | 0% | 2,594 | 0.09 (0.03, 0.15) | 0.0045 | 0% | 16,674 | 0.10 (0.08, 0.12) | 1.3x10 ⁻¹⁸ | 0% |
| Waist circumference Z-score | 8,638 | 0.11 (0.08, 0.13) | 8.0x10 ⁻¹⁶ | 0% | 1,067 | 0.12 (0.03, 0.20) | 0.0070 | 0% | 7,571 | 0.10 (0.08, 0.13) | 9.6x10 ⁻¹³ | 0% |
| Body fat percentage Z-score | 3,158 | 0.12 (0.09, 0.16) | 1.8x10 ⁻¹¹ | 0% | 306 | 0.17 (0.05, 0.30) | 0.0059 | 0% | 2,852 | 0.12 (0.06, 0.15) | 6.6x10 ⁻¹⁰ | 0% |

All models are adjusted for age and sex.

beta, difference in trait per minor allele of rs9939609 or a proxy ($r^2 > 0.8$); I², heterogeneity between studies in the association of rs9939609 with the trait