

Supplementary Table 1. Descriptive characteristics of the Finnish DILGOM participants by gender at baseline in 2007 and follow-up in 2014¹

Variables	All men	Men who attended baseline and follow-up phases		All women	Women who attended baseline and follow-up phases	
	Year 2007	Year 2007	Year 2014	Year 2007	Year 2007	Year 2014
Number of participants ²	2152-2325	1450-1687	1450-1687	2529-2699	1786-2048	1786-2048
Age (yrs)	53.4 ± 13.3 ³	53.8 ± 12.9	60.8 ± 12.9	51.9 ± 13.6	52.4 ± 13.1	59.4 ± 13.1
Education (yrs)	12.2 ± 4.0	12.3 ± 4.0	–	12.9 ± 4.0	13.0 ± 4.0	–
Restrained eating	2.3 ± 0.5	2.3 ± 0.5 ⁴	2.3 ± 0.6 ⁴	2.5 ± 0.5	2.5 ± 0.5 ⁴	2.5 ± 0.5 ⁴
Change 2007-2014	–	–	0.0 ± 0.5	–	–	0.0 ± 0.5
Weight (kg)	83.9 ± 14.0	83.3 ± 13.4 ⁴	83.9 ± 13.8 ⁴	70.9 ± 14.2	70.2 ± 13.6 ⁴	71.1 ± 14.1 ⁴
Change 2007-2014	–	–	0.6 ± 6.0	–	–	0.9 ± 5.9
BMI (kg/m ²)	27.2 ± 4.2	27.0 ± 4.0 ⁴	27.0 ± 4.0 ⁴	26.8 ± 5.4	26.6 ± 5.2 ⁴	26.8 ± 5.2 ⁴
Change 2007-2014	–	–	0.0 ± 2.0	–	–	0.2 ± 2.3
Overweight, BMI ≥ 25 kg/m ² (%)	68.6	67.5 ⁴	68.2 ⁴	57.1	56.4 ⁴	57.5 ⁴
Obesity, BMI ≥ 30 kg/m ² (%)	19.7	18.0 ⁴	18.1 ⁴	23.4	21.5 ⁴	22.6 ⁴
WC (cm)	96.7 ± 12.0	95.8 ± 11.1 ⁴	98.1 ± 11.1 ⁴	86.9 ± 13.5	86.3 ± 13.0 ⁴	88.3 ± 13.4 ⁴
Change 2007-2014	–	–	2.3 ± 6.4	–	–	2.1 ± 7.5
Annual weight change (kg) from age 20 years to baseline	0.5 ± 0.5	0.4 ± 0.5	–	0.5 ± 0.5	0.5 ± 0.5	–
97-loci PRS	91.8 ± 6.2	91.6 ± 6.2	–	91.7 ± 6.2	91.7 ± 6.1	–
Weighted 97-loci PRS	2.3 ± 0.2	2.3 ± 0.2	–	2.3 ± 0.2	2.3 ± 0.2	–
Leisure time PA ≥ 4 times/week (%)	27.9	28.6	–	28.6	28.7	–
Current smokers (%)	20.9	17.6	–	14.6	13.0	–

¹ BMI, body mass index; DILGOM, DIetary, Lifestyle and Genetic determinants of Obesity and Metabolic syndrome; PA, physical activity; PRS, polygenic risk score; WC, waist circumference. ² Numbers are ranges as missing information varied between the study variables. ³ Mean ± SD (all such values). ⁴ Calculated for participants with information on the respective variable from both study phases.

Supplementary Table 2. Age-adjusted Pearson's correlation coefficients between the main study variables in the Finnish DILGOM participants¹

	1	2	3	4	5	6	7	8	9	10
1. Restrained eating 2007	1.00									
2. Restrained eating 2014	0.56 ^a	1.00								
3. BMI 2007	0.09 ^a	0.12 ^a	1.00							
4. BMI 2014	0.08 ^a	0.10 ^a	0.90 ^a	1.00						
5. WC 2007	0.00	0.03	0.86 ^a	0.78 ^a	1.00					
6. WC 2014	-0.01	0.02	0.73 ^a	0.82 ^a	0.86 ^a	1.00				
7. Weighted PRS	0.07 ^a	0.06 ^b	0.17 ^a	0.15 ^a	0.15 ^a	0.13 ^a	1.00			
8. BMI change 2007-2014	0.01	-0.04 ^c	-0.19 ^a	0.26 ^a	-0.16 ^a	0.21 ^a	-0.03 ^c	1.00		
9. WC change 2007-2014	-0.01	-0.03	-0.17 ^a	0.14 ^a	-0.19 ^a	0.34 ^a	-0.03	0.69 ^a	1.00	
10. Weight change from age 20 years to baseline	0.04 ^c	0.05 ^b	0.67 ^a	0.59 ^a	0.61 ^a	0.49 ^a	0.08 ^a	-0.17 ^a	-0.15 ^a	1.00

¹BMI, body mass index; DILGOM, Dietary, Lifestyle and Genetic determinants of Obesity and Metabolic syndrome; PRS, polygenic risk score; WC, waist circumference. ^aP<0.001, ^bP<0.01, ^cP<0.05.

Supplementary Table 3. Baseline characteristics of the Finnish DILGOM participants by attendance to the follow-up phase¹

	Participants who attended baseline and follow-up phases	Participants who attended only baseline phase	P-value ^{1,2}
	n=3735	n=1289	
Age (yrs)	53.0 ± 13.0 ³	51.4 ± 14.8	<0.001
Men (%)	45.2	49.5	0.007
Education (yrs)	12.7 ± 4.0	12.4 ± 4.0	0.055
BMI (kg/m ²)	26.8 ± 4.7	27.6 ± 5.3	<0.001
WC (cm)	90.8 ± 13.3	93.3 ± 14.7	<0.001
Restrained eating	2.4 ± 0.5	2.4 ± 0.5	0.310
Weighted PRS	2.3 ± 0.2	2.3 ± 0.2	0.110

¹ ANOVA (equal variances), Welch test (unequal variances) or Chi-Square test (gender) was used to test differences between the two groups. BMI, body mass index; DILGOM, Dietary, Lifestyle and Genetic determinants of Obesity and Metabolic syndrome; PRS, polygenic risk score; WC, waist circumference. ² Levene's test indicated that education, restrained eating and weighted PRS had equal variances across the two groups (P=0.122-0.778), while age, BMI and WC had unequal variances across the groups (all P<0.001). ³ Mean ± SD (all such values).