

Supplementary Data

**Supplementary Table S1:** Lipid profile in high-dose group of overweight/obese participants with BMI  $\leq$  29.9 (n = 10)

	<b>Before</b>	<b>After</b>	<b><i>p</i> value<sup>a</sup></b>
<b>TC, mmol/L</b>	4.78	4.92	0.19
<b>TG, mmol/L</b>	1.23	1.20	0.41
<b>HDL, mmol/L</b>	1.21	1.30	0.051
<b>LDL, mmol/L</b>	3.01	3.07	0.28

<sup>a</sup>Within-group differences in the parameters before and after intervention were compared using paired t-test (parametric)

**Supplementary Table S2:** Lipid profile in high-dose group of overweight/obese participants with BMI  $\geq$  30.0 (n = 22)

	<b>Before</b>	<b>After</b>	<b><i>p</i> value<sup>a</sup></b>
<b>TC, mmol/L</b>	5.21	5.19	0.44
<b>TG, mmol/L</b>	1.41	1.23	0.006
<b>HDL, mmol/L</b>	1.28	1.43	< 0.001
<b>LDL, mmol/L</b>	3.33	3.19	0.11

<sup>a</sup>Within-group differences in the parameters before and after intervention were compared using paired t-test (parametric)

**Supplementary Table S3:** Lipid profile in high-dose group of overweight/obese participants with age < 40 yrs (n = 13)

	<b>Before</b>	<b>After</b>	<b><i>p</i> value<sup>a</sup></b>
<b>TC, mmol/L</b>	4.72	4.81	0.23
<b>TG, mmol/L</b>	1.24	1.03	0.011
<b>HDL, mmol/L</b>	1.14	1.26	0.005
<b>LDL, mmol/L</b>	3.08	3.07	0.49

<sup>a</sup>Within-group differences in the parameters before and after intervention were compared using paired t-test (parametric)

**Supplementary Table S4:** Lipid profile in high-dose group of overweight/obese participants with age > 40 yrs (n = 19)

	<b>Before</b>	<b>After</b>	<b><i>p</i> value<sup>a</sup></b>
<b>TC, mmol/L</b>	5.32	5.32	0.48
<b>TG, mmol/L</b>	1.43	1.36	0.22
<b>HDL, mmol/L</b>	1.34	1.47	0.001
<b>LDL, mmol/L</b>	3.33	3.21	0.102

<sup>a</sup>Within-group differences in the parameters before and after intervention were compared using paired t-test (parametric)

**Supplementary Table S5:** Lipid profile in high-dose group of overweight/obese participants with age < 40 yrs, BMI  $\leq$  29.9 (n = 7)

	<b>Before</b>	<b>After</b>	<b><i>p</i> value<sup>a</sup></b>
<b>TC, mmol/L</b>	4.67	4.78	0.22
<b>TG, mmol/L</b>	1.04	0.92	0.025
<b>HDL, mmol/L</b>	1.24	1.32	0.11
<b>LDL, mmol/L</b>	2.94	3.03	0.25

<sup>a</sup>Within-group differences in the parameters before and after intervention were compared using paired t-test (parametric)

**Supplementary Table S6:** Lipid profile in high-dose group of overweight/obese participants with age < 40 yrs, BMI  $\geq$  30.0 (n = 6)

	<b>Before</b>	<b>After</b>	<b><i>p</i> value<sup>a</sup></b>
<b>TC, mmol/L</b>	4.79	4.84	0.39
<b>TG, mmol/L</b>	1.47	1.16	0.054
<b>HDL, mmol/L</b>	1.03	1.196	0.006
<b>LDL, mmol/L</b>	3.23	3.12	0.36

<sup>a</sup>Within-group differences in the parameters before and after intervention were compared using paired t-test (parametric)

**Supplementary Table S7:** Lipid profile in high-dose group of overweight/obese participants with age > 40 yrs, BMI  $\leq$  29.9 (n = 6)

	<b>Before</b>	<b>After</b>	<b><i>p</i> value<sup>a</sup></b>
<b>TC, mmol/L</b>	5.37	5.53	0.27
<b>TG, mmol/L</b>	1.51	1.57	0.41
<b>HDL, mmol/L</b>	1.22	1.30	0.08
<b>LDL, mmol/L</b>	3.47	3.46	0.49

<sup>a</sup>Within-group differences in the parameters before and after intervention were compared using paired t-test (parametric)

**Supplementary Table S8:** Lipid profile in high-dose group of overweight/obese participants with age > 40 yrs, BMI  $\geq$  30.0 (n = 13)

	<b>Before</b>	<b>After</b>	<b><i>p</i> value<sup>a</sup></b>
<b>TC, mmol/L</b>	5.30	5.22	0.26
<b>TG, mmol/L</b>	1.39	1.26	0.028
<b>HDL, mmol/L</b>	1.39	1.55	0.005
<b>LDL, mmol/L</b>	3.28	3.09	0.082

<sup>a</sup>Within-group differences in the parameters before and after intervention were compared using paired t-test (parametric)