

Supplementary Table S1. Anthropometric, biochemical and metabolic profiles before and after a weight loss intervention for men achieving the pre-designated study goal of BMI < 25

		A→A (n=30)	B→A (n=30)	B→B (n=7)	p-value
Weight (kg)	Baseline	83.1 ± 7.6	83.8 ± 8.7	80.0 ± 8.2	NS
	End	74.2 ± 6.5	74.3 ± 7.6	71.8 ± 6.9	NS
	% Change	-10.7 ± 2.3	-11.3 ± 1.7	-10.2 ± 3.0	NS
BMI (kg/m <sup>2</sup> )	Baseline	26.5 ± 1.0	26.9 ± 1.0	26.5 ± 0.9	NS
	End	23.7 ± 0.7	23.8 ± 0.8	23.8 ± 0.7	NS
	% Change	-10.7 ± 2.3	-11.3 ± 1.7	-10.1 ± 3.0	NS
Waist (cm)	Baseline	94.1 ± 6.2	95.9 ± 6.0	93.6 ± 4.8	NS
	End	86.3 ± 5.26	85.9 ± 6.07	86.6 ± 3.27	NS
	% Change	-8.2 ± 3.6 <sup>a</sup>	-10.4 ± 3.5 <sup>a</sup>	-7.4 ± 3.2 <sup>a</sup>	0.03
% Body fat	Baseline	24.0 ± 3.6	24.2 ± 3.8	24.3 ± 1.3	NS
	End	19.8 ± 4.24	19.6 ± 3.37	21.6 ± 2.45	NS
	% Change	-18.0 ± 8.1 <sup>a,b</sup>	-19.2 ± 6.4 <sup>b</sup>	-11.2 ± 8.0 <sup>a</sup>	<0.05
Trunk fat as % total fat	Baseline	51.4 ± 4.8	52.5 ± 4.0	54.9 ± 3.3	NS
	End	47.4 ± 5.75 <sup>a</sup>	47.7 ± 4.28 <sup>a,b</sup>	52.5 ± 2.72 <sup>b</sup>	<0.05
	% Change	-7.7 ± 6.6	-9.0 ± 6.6	-4.2 ± 4.8	NS
Fat (kg)	Baseline	20.0 ± 3.8	20.3 ± 3.8	19.5 ± 2.2	NS
	End	14.7 ± 3.7	14.6 ± 3.1	15.4 ± 1.5	NS
	% Change	-26.8 ± 7.6 <sup>a,b</sup>	-28.3 ± 6.4 <sup>a</sup>	-20.1 ± 8.7 <sup>b</sup>	0.033
Fat-Free Mass (kg)	Baseline	63.7 ± 6.1	64.0 ± 7.3	60.9 ± 6.2	NS
	End	60.3 ± 5.6	60.5 ± 6.4	56.8 ± 6.5	NS
	%Change	-5.3 ± 2.8	-5.3 ± 2.5	-6.9 ± 2.5	NS
TC (mg/dl)	Baseline	191 ± 34	205 ± 35	194 ± 24	NS
	End	186 ± 26	194 ± 30	194 ± 43	NS
	% Change	-1.3 ± 12.7	-4.6 ± 11.6	0.25 ± 14.8	NS

TG (mg/dl)	Baseline	115 ± 59 <sup>a</sup>	171 ± 53 <sup>b</sup>	245 ± 83 <sup>b</sup>	<0.0001
	End	80 ± 29 <sup>a</sup>	105 ± 30 <sup>b</sup>	133 ± 45 <sup>b</sup>	0.0003
	% Change	-22 ± 28.8	-36 ± 17.5	-42 ± 27.8	NS
LDL-C (mg/dl)	Baseline	123 ± 30	134 ± 31	112 ± 28	NS
	End	119 ± 24	126 ± 25	128 ± 35	NS
	% Change	-0.5 ± 21.1 <sup>a,b</sup>	-3.6 ± 15.1 <sup>a</sup>	18.8 ± 40.3 <sup>b</sup>	NS
HDL-C (mg/dl)	Baseline	45 ± 6 <sup>a</sup>	37 ± 8 <sup>b</sup>	33 ± 6 <sup>b</sup>	<.0001
	End	51 ± 9 <sup>a</sup>	47 ± 9 <sup>a,b</sup>	40 ± 9 <sup>b</sup>	0.011
	% Change	13.9 ± 13.6 <sup>a</sup>	26.5 ± 16.2 <sup>b</sup>	22.4 ± 20.1 <sup>a,b</sup>	0.009
LDL particle size (Å)	Baseline	265.8 ± 7.0 <sup>a</sup>	254.6 ± 6.3 <sup>b</sup>	247.7 ± 2.2 <sup>c</sup>	<.0001
	End	269.7 ± 5.3 <sup>a</sup>	265.5 ± 5.0 <sup>b</sup>	250.8 ± 2.9 <sup>c</sup>	0.0001
	% Change	1.5 ± 2.6 <sup>a</sup>	4.3 ± 2.5 <sup>b</sup>	1.3 ± 1.5 <sup>a</sup>	<0.0001
Glucose (mg/dl)	Baseline	95 ± 6	95 ± 6	96 ± 7	NS
	End	91 ± 5	91 ± 6	91 ± 3	NS
	% Change	-3.8 ± 6.5	-3.9 ± 5.0	-4.9 ± 6.0	NS
Insulin (μU/ml)	Baseline	7.20 ± 5.16	8.56 ± 5.47	9.21 ± 4.22	NS
	End	5.3 ± 1.7	5.8 ± 2.5	6.4 ± 3.7	NS
	% Change	-12.2 ± 32.5	-21.9 ± 41.1	-25.7 ± 30.3	NS
HOMA-IR	Baseline	1.70 ± 1.35	1.99 ± 1.28	2.16 ± 0.97	NS
	End	1.2 ± 0.4	1.3 ± 0.6	1.4 ± 0.8	NS
	% Change	-14.9 ± 33.3	-24.8 ± 39.6	-29.2 ± 29.4	NS
REE (kcal/day)	Baseline	1621 ± 235	1657 ± 290	1592 ± 195	NS
	End	1518 ± 226	1492 ± 210*	1502 ± 208	NS
	% Change	-5.5 ± 14.2	-8.5 ± 14.8	-5.6 ± 6.6	NS
REE/FFM (kcal/day/kg)	Baseline	25.5 ± 3.4	25.8 ± 3.0	26.1 ± 2.2	NS
	End	25.3 ± 3.7	24.7 ± 2.9	26.5 ± 2.0	NS
	% Change	-0.24 ± 14.0	-3.3 ± 15.3	1.5 ± 6.7	NS

RQ	Baseline	0.84 ± 0.05	0.83 ± 0.04	0.83 ± 0.03	NS
	End	0.82 ± 0.040 <sup>a</sup>	0.85 ± 0.049 <sup>b</sup>	0.83 ± 0.044 <sup>a,b</sup>	NS
	% Change	-1.8 ± 5.8 <sup>a</sup>	2.6 ± 5.8 <sup>b</sup>	0.4 ± 5.3 <sup>a,b</sup>	0.02
% energy lipid	Baseline	55.7 ± 16.3	58.8 ± 12.5	59.5 ± 9.8	NS
	End	61.4 ± 13.6	51.8 ± 16.6	58.5 ± 14.9	NS
	% Change	17.5 ± 40.5 <sup>a</sup>	-10.1 ± 34.0 <sup>b</sup>	-0.63 ± 23.6 <sup>a,b</sup>	0.017
% energy CHO	Baseline	44.3 ± 16.3	41.2 ± 12.5	40.5 ± 9.8	NS
	End	38.6 ± 13.6	48.3 ± 16.6	41.5 ± 14.9	NS
	% Change	1.4 ± 5.8	25.4 ± 47.8	5.4 ± 42.1	NS
Energy from lipid oxidation	Baseline	0.61 ± 0.20	0.65 ± 0.16	0.63 ± 0.08	NS
	End	0.63 ± 0.19	0.52 ± 0.20	0.57 ± 0.12	NS
	% Change	11.7 ± 45 <sup>a</sup>	-20.1 ± 27.8 <sup>b</sup>	-7.7 ± 20.2 <sup>a,b</sup>	0.005
Energy from CHO oxidation	Baseline	0.52 ± 0.20	0.50 ± 0.18	0.47 ± 0.16	NS
	End	0.42 ± 0.16	0.51 ± 0.18	0.46 ± 0.21	NS
	% Change	-5.4 ± 5.1	18.3 ± -0.37	-0.37 ± 43.9	NS

Values given are means ± standard deviations. Statistical comparisons were performed by ANOVA and post-hoc Tukey's test. Statistical analysis of triglyceride data was performed with log-transformed data. Values not sharing the same letter (a, b or c) are significantly different. \* An asterisk signifies p<0.05 relative to baseline. To convert cholesterol and triglyceride concentrations to SI units (mmol/L), multiply by 0.0259 and 0.0113, respectively. BMI: body mass index; HDL-C: high density lipoprotein cholesterol; LDL-C: low density lipoprotein cholesterol; TC: total cholesterol; TG: triacylglycerol; HOMA-IR: homeostasis model assessment of insulin resistance; RQ: respiratory quotient; REE: resting energy expenditure; FFM: fat free mass; NS: not significant.