

Table S-3: Change of anthropometric and blood parameters in the intervention and control group, including subgroup analyses.

	INTERVENTION						CONTROL					
	initial value at baseline	Change after					initial value at baseline	Change after				
		10 weeks	6 months	12 months	18 months	24 months		10 weeks	6 months	12 months	18 months	24 months
<b>ANTHROPOMETRICS</b>												
<b>weight (kg), mean ± SD, n=</b>	90	80	64	62	50	51	52	36	36	33	26	26
	84.7 ± 18.8	-1.5 ± 1.9 ***§	-1.4 ± 3.4 **§	-2.3 ± 3.3 **§	-2.2 ± 3.8 **§	-1.9 ± 4.0 *	79.5 ± 18.5	-0.3 ± 1.7	-0.5 ± 2.0	-0.5 ± 2.6	-0.3 ± 2.7	-0.8 ± 5.1
<i>according to sex</i>												
men, n=	21	17	17	17	13	15	21	15	18	18	12	11
	97.3 ± 19.1	-2.7 ± 2.6 *§#	-2.6 ± 4.5 *	-3.0 ± 3.9 *	-2.6 ± 4.5 *	-2.6 ± 4.5	89.5 ± 20.5	-0.2 ± 1.8	-0.9 ± 2.3	-0.7 ± 2.7	-0.8 ± 2.9	-1.0 ± 5.4
women, n=	69	63	47	45	37	36	30	21	18	15	14	15
	80.9 ± 17.6 §	-1.2 ± 1.5 **§	-0.9 ± 2.8 *	-2.1 ± 3.0 **§	-0.9 ± 2.8 *§	-0.9 ± 2.8 *	72.6 ± 13.3	-0.3 ± 1.7	-0.2 ± 1.6	-0.2 ± 2.4	0.0 ± 2.5	-0.7 ± 5.1
<i>according to "came with family"</i>												
yes, n=	26	22	21	19	14	16	15	9	10	10	7	3
	88.8 ± 21.4	-1.1 ± 1.5 *§	-0.7 ± 2.7	-1.6 ± 3.1	-0.6 ± 3.8	-0.5 ± 3.9	77.6 ± 19.5	0.3 ± 1.3	0.1 ± 1.6	0.2 ± 1.9	0.4 ± 1.7	0.2 ± 1.7
no, n=	64	58	43	43	36	35	36	27	26	23	19	23
	83.1 ± 17.6	-1.7 ± 2.0 **§	-1.6 ± 3.6 **§	-2.6 ± 3.3 **§^	-2.8 ± 3.7 **§	-2.5 ± 3.9 *	80.3 ± 18.2	-0.5 ± 1.8	-0.7 ± 2.1	-0.8 ± 2.8	-0.6 ± 3.0	-0.9 ± 5.4
<i>According to education</i>												
LSS, n=	21	17	12	12	8	9	13	10	12	10	10	10
	87.6 ± 21.9	-1.7 ± 2.3 *	-2.0 ± 4.0	-2.4 ± 3.2 *	-2.2 ± 4.1	-1.1 ± 5.7	81.2 ± 24.7	-0.6 ± 2.3	-1.1 ± 2.2	-1.7 ± 3.7	-1.3 ± 3.4	-2.2 ± 5.8
HSS, n=	29	25	22	21	21	18	17	11	12	11	8	8
	83.1 ± 18.5	-1.3 ± 1.2 **§	-1.3 ± 2.9 *	-1.2 ± 2.2 *	-0.9 ± 3.4	-1.0 ± 3.3	77.2 ± 13.4	0.0 ± 1.1	-0.6 ± 1.8	0.0 ± 1.1	0.1 ± 1.8	1.5 ± 4.4
HS, n=	21	20	18	16	12	14	5	4	3	3	2	2
	82.3 ± 19.6	-1.3 ± 1.9	-0.2 ± 2.9	-1.9 ± 3.4	-1.9 ± 3.3	-1.1 ± 2.2	76.2 ± 3.4	-0.7 ± 3.3	0.2 ± 3.0	-0.9 ± 2.7	0.9 ± 3.0	0.5 ± 2.9

	INTERVENTION						CONTROL					
	initial value at baseline	Change after					initial value at baseline	Change after				
		10 weeks	6 months	12 months	18 months	24 months		10 weeks	6 months	12 months	18 months	24 months
no UD (comb.), n=	71	62	52	49	41	41	35	25	27	24	20	20
	84.2 ± 19.7	-1.4 ± 1.8 **§	-1.1 ± 3.2 *	-1.7 ± 2.9 **	-1.4 ± 3.5 *	-1.0 ± 3.6	78.6 ± 17.5	-0.3 ± 2.0	-0.8 ± 2.1	-0.8 ± 2.7	-0.5 ± 2.8	-0.5 ± 5.2
UD, n=	19	18	12	13	9	10	14	11	9	9	6	6
	86.7 ± 15.2	-1.9 ± 2.2 **§	-2.6 ± 3.9 **	-4.6 ± 3.7 **§	-5.7 ± 3.5 **§	-5.3 ± 3.8 **§	78.3 ± 16.9	-0.1 ± 0.9	0.2 ± 1.4	0.4 ± 2.0	0.2 ± 2.4	-2.0 ± 5.1
<i>according to BMI (kg/m<sup>2</sup>) at baseline</i>												
NW: < 25 kg/m <sup>2</sup> , n=	23	20	18	17	14	14	23	17	18	17	14	12
	66.3 ± 7.7	-0.9 ± 1.1 **§	-0.5 ± 2.1	-1.7 ± 1.8 **§	-1.6 ± 1.5 **§	-1.1 ± 2.0	66.9 ± 8.8	0.1 ± 1.1	-0.8 ± 1.4	-0.3 ± 1.6	0.3 ± 1.6	0.1 ± 2.3
OW/ OB (comb.), n=	67	60	46	45	36	37	28	19	18	16	12	14
	91.1 ± 17.2 ^	-1.8 ± 2.0 **§^	-1.7 ± 3.7 *^	-2.6 ± 3.7 **	-2.5 ± 4.4 *	-2.2 ± 4.5 *	89.9 ± 17.9 ^	-0.6 ± 2.1	-1.0 ± 2.3	-0.7 ± 3.4	-1.0 ± 3.5	-1.6 ± 6.6
OW: ≥ 25 kg/m <sup>2</sup> , n=	31	29	25	24	23	23	18	12	12	10	8	8
	79.5 ± 8.7	-2.1 ± 2.3 **	-2.6 ± 3.7 **^	-3.7 ± 3.5 **§	-3.3 ± 4.3 *	-3.3 ± 4.7 *	81.0 ± 6.8	-1.0 ± 1.9	-0.3 ± 1.4	-0.8 ± 2.8	-1.0 ± 3.0	-1.5 ± 3.0
OB I: 30-34.9 kg/m <sup>2</sup> , n=	22	20	14	13	10	10	7	5	4	4	3	4
	93.9 ± 10.2	-1.4 ± 1.9 *	-0.5 ± 3.3	-0.7 ± 2.1	-0.8 ± 3.6	-0.4 ± 3.7	95.1 ± 9.7	0.9 ± 2.1	-2.2 ± 2.8	1.3 ± 2.1	1.1 ± 2.8	4.3 ± 5.0 °
OB II: 35-39.9 kg/m <sup>2</sup> , n=	11	8	4	5	1	1	1	1	1	1	0	1
	106.5 ± 12.9	-1.5 ± 0.8 *	-1.5 ± 1.0	-1.6 ± 4.0	0.3	-0.7	112.0	-0.3	1.7	1.1	-	-11.7
OB III: BMI > 40 kg/m <sup>2</sup> , n=	3	3	3	3	2	3	2	1	1	1	1	1
	134.0 ± 21.2	-2.2 ± 2.5	-4.0 ± 4.1	-3.0 ± 7.1	-1.9 ± 9.7	0.2 ± 4.6	140.4 ± 10.8	-3.6	-6.5	-9.0	-7.7	-15.5
<b>BMI (kg/m<sup>2</sup>), mean ± SD</b>	28.7 ± 5.4 §	-0.5 ± 0.6 **§§	-0.4 ± 1.1 **§	-0.8 ± 1.1 **§	0.7 ± 1.3 **§	-0.6 ± 1.3 *	27.0 ± 6.5	-0.1 ± 0.6	-0.2 ± 0.7	-0.2 ± 0.9	-0.1 ± 1.0	-0.4 ± 1.8
<b>WC (cm), mean ± SD</b>	90	78	64	62	49	51	52	36	36	33	26	26
	98.4 ± 13.6	0.3 ± 4.7 §	-0.3 ± 5.5	-1.4 ± 5.5	-2.3 ± 5.6 *	-2.6 ± 5.3 *	98.2 ± 17.1	-1.7 ± 3.9 *	-2.0 ± 3.6 *	-0.9 ± 3.5	-1.7 ± 3.1 *	-3.9 ± 4.8 **
<i>according to sex</i>												

	INTERVENTION						CONTROL					
	initial value at baseline	Change after					initial value at baseline	Change after				
		10 weeks	6 months	12 months	18 months	24 months		10 weeks	6 months	12 months	18 months	24 months
men, n=	21	16	17	17	12	15	21	15	18	18	12	11
	105.0 ± 13.0	-0.5 ± 4.9	1.0 ± 6.0 §	-0.4 ± 5.0	-1.0 ± 5.5	-1.1 ± 6.1	108.1 ± 16.8	-1.4 ± 2.7	-1.3 ± 2.3	-0.3 ± 3.6	-2.6 ± 3.0	-1.8 ± 2.8
women, n=	68	62	47	45	37	36	30	21	18	15	14	15
	96.4 ± 13.3	0.5 ± 4.7	-0.8 ± 5.4	-1.8 ± 5.6 *	-2.5 ± 5.6 *	-3.2 ± 4.8 *	91.3 ± 13.9	-1.9 ± 4.6	-2.7 ± 4.5 *	-0.3 ± 3.6	-1.1 ± 3.2	-5.4 ± 5.4 *‡
<i>according to risk at baseline (men)</i>												
low (> 102 cm), n=	10	9	9	8	7	8	8	7	7	7	4	3
	94.7 ± 4.6	-0.8 ± 5.1	-0.4 ± 5.0	-1.7 ± 4.3	-2.4 ± 5.1	-2.4 ± 5.8	94.1 ± 5.0	0.1 ± 2.7	-1.4 ± 2.8	-1.2 ± 4.0	-0.5 ± 3.1	-1.7 ± 1.8
elevated (≥ 102 cm), n=	11	7	8	9	5	7	13	8	11	11	8	8
	114.4 ± 10.7	-0.2 ± 5.0	2.6 ± 7.0 §	0.8 ± 5.7	1.0 ± 5.8	0.3 ± 6.5	116.7 ± 15.6	-2.7 ± 2.0 *	-1.1 ± 2.0 *	-1.6 ± 3.2	-3.6 ± 2.6 *	-1.8 ± 3.2
<i>according to risk at baseline (women)</i>												
low (> 88 cm), n=	19	18	15	15	12	12	12	7	7	6	6	6
	80.5 ± 4.7	0.4 ± 3.6	-1.3 ± 5.1	-0.3 ± 4.4	-0.8 ± 3.6	-2.8 ± 3.3 *	78.1 ± 6.3	-1.8 ± 2.9	-0.6 ± 3.3	1.4 ± 2.6	-0.1 ± 2.6	-2.9 ± 3.6
elevated (≥ 88cm), n=	49	44	32	30	25	24	18	14	11	9	8	9
	102.5 ± 10.0	0.5 ± 5.1	-0.6 ± 5.6	-2.6 ± 6.1 *	-3.4 ± 6.3 *	-3.4 ± 5.5 *	100.1 ± 9.9	-2.0 ± 5.4	-4.0 ± 4.8 *	-1.5 ± 3.9	-1.9 ± 3.5	-7.1 ± 6.1 *
<b>BLOOD PARAMETERS</b>												
<b>lipids</b>												
TC (mg/dl), mean ± SD, n=	81	81	61	57	49	51	51	38	36	34	29	26
	195.6 ± 33.4	-9.3 ± 22.1 ***§§	-4.1 ± 44.9 *§	-6.3 ± 20.0 *§	-3.4 1.7 ± 4	1.7 ± 24.6	192.7 ± 46.2	12.5 ± 35.8 **	6.6 ± 26.9	6.7 ± 23.8	6.7 ± 23.8	4.4 ± 29.2
<i>according to sex</i>												
men, n=	17	15	14	14	12	15	21	16	17	18	12	11
	181.9 ± 33.1	-10.8 ± 17.8 §	-12.6 ± 15.4 §	-5.8 ± 21.6 §	0.2 ± 15.6	1.2 ± 19.9	188.5 ± 31.3	5.3 ± 19.0	7.1 ± 24.3	9.7 ± 21.8	-3.4 ± 23.0	17.2 ± 35.0
women, n=	64	61	43	41	37	36	30	22	18	15	15	14
	199.3 ± 32.7	-9.0 ± 23.2	-1.3 ± 50.8	-6.5 ± 19.6	-4.5 ± 19.8	1.9 ± 26.6	195.6 ± 54.7	17.6 ± 44.0	6.1 ± 29.8	3.1 ± 26.4	8.8 ± 21.5	-5.6 ± 19.6

	INTERVENTION						CONTROL					
	initial value at baseline	Change after					initial value at baseline	Change after				
		10 weeks	6 months	12 months	18 months	24 months		10 weeks	6 months	12 months	18 months	24 months
§												
<i>according to risk at baseline</i>												
low (< 200 mg/dl), n=	42	39	30	28	25	29	28	21	20	20	15	13
	170.2 ± 19.3	-4.2 ± 15.9 §	2.4 ± 54.3 §	-4.1 ± 20.3 §	-3.2 ± 20.8	3.2 ± 27.1	159.4 ± 31.3	23.1 ± 39.3	13.0 ± 31.2 *	11.6 ± 25.9	3.3 ± 25.6 *	11.6 ± 34.4
elevated (≥ 200 mg/dl), n=	39	37	27	27	24	22	23	17	15	13	12	12
	223.0 ± 21.4 §§	-14.7 ± 26.3 *§	-11.3 ± 30.8	-8.5 ± 19.7 *	-3.5 ± 16.9	-0.4 ± 21.3	233.1 ± 23.4 s	-0.8 ± 26.5	-1.9 ± 17.2	-0.8 ± 18.8	3.4 ± 19.3	-3.3 ± 20.9
<b>LDL-C (mg/dl), mean ± SD, n=</b>	79	81	61	57	49	51	51	38	36	34	28	
	125.5 ± 35.6	-6.0 ± 21.3 *§§	-8.1 ± 22.3 *§	-4.7 ± 18.5 *§	0.9 ± 16.1 §	-0.3 ± 22.7	127.0 ± 41.5	12.4 ± 29.0 *	5.1 ± 22.5	6.3 ± 20.0	7.7 ± 22.1 *	4.3 ± 30.5
<i>according to sex</i>												
men, n=	17	15	14	14	12	15	21	16	17	18	12	11
	122.7 ± 37.0 #	-7.8 ± 15.9 §	-10.2 ± 10.8 *§	-2.6 ± 19.3 §	2.8 ± 17.5	-0.3 ± 17.5	124.1 ± 33.0	10.9 ± 18.0 *	7.8 ± 22.1	10.0 ± 20.4 *	0.1 ± 25.3	18.9 ± 35.7
women, n=	62	61	43	41	37	36	30	22	18	15	15	14
	126.2 ± 35.4	-5.5 ± 22.5 §	-7.4 ± 25.0 *	-5.4 ± 18.4 *	-2.1 ± 15.7 §	-0.3 ± 24.8	129.1 ± 47.0	13.5 ± 35.3	2.7 ± 23.3	1.8 ± 19.4 #	13.9 ± 17.8 *	-7.1 ± 20.4
<i>according to risk at baseline</i>												
low (< 130 mg/dl), n=	43	42	32	29	28	30	26	19	17	18	13	12
	99.7 ± 22.2	-1.9 ± 13.5 §§	-5.8 ± 23.5 *§	-3.6 ± 17.8 §	-2.6 ± 17.1 §	0.7 ± 23.4	94.2 ± 22.6	24.5 ± 31.8 *	15.2 ± 23.8 *	13.7 ± 19.4 *	10.4 ± 22.7	15.4 ± 38.2
moderate (130-159 mg/dl), n=	23	21	14	15	12	13	14	10	10	8	8	6
	144.4 ± 7.0	-7.4 ± 18.9	-4.2 ± 16.1	0.7 ± 14.5	0.0 ± 14.4	0.5 ± 17.0	146.7 ± 9.2	5.3 ± 12.8	0.3 ± 15.4	-0.5 ± 21.2	0.9 ± 24.2	4.7 ± 10.8
elevated (160-189 mg/dl), n=	11	11	9	9	8	7	9	7	7	7	6	6
	169.6 ± 7.0	-7.2 ± 25.3	-14.4 ± 21.1* *	-12.7 ± 24.0 e	3.3 ± 16.8	-5.3 ± 34.4	168.6 ± 7.4	0.6 ± 17.7	-5.7 ± 14.3	-5.1 ± 13.2	11.2 ± 19.6	-9.5 ± 8.2
strongly elevated (≥ 190 mg/dl), n=	2	2	2	2	1	1	2	2	1	0	0	1
	220.5 ± 6.4	-71.5 ± 60.1	-43.5 ± 24.8	-25.5 ± 3.5 e	5.0	-3.0	229.5 ± 40.3	-26.0 ± 48.1	-41.0	-	-	-48.0

	INTERVENTION						CONTROL					
	initial value at baseline	Change after					initial value at baseline	Change after				
		10 weeks	6 months	12 months	18 months	24 months		10 weeks	6 months	12 months	18 months	24 months
<i>according to risk at baseline</i>												
low (< 130 mg/dl), n=	43	42	32	29	28	30	26	19	17	18	13	12
	99.7 ± 22.2	-1.9 ± 13.5 §§	-5.8 ± 23.5 *§	-3.6 ± 17.8 §	-2.6 ± 17.1 §	0.7 ± 23.4	94.2 ± 22.6	24.5 ± 31.8 *€	15.2 ± 23.8 *	13.7 ± 19.4 *€	10.4 ± 22.7	15.4 ± 38.2
moderate/ high (comb.; >130 mg/dl), n=	36	29	23	25	23	22	25	27	24	21	19	17
	156.28 ± 20.75 <sup>ss</sup>	-11.1 ± 27.5 *	-11.0 ± 20.9 *	-6.0 ± 19.4	-1.5 ± 14.7	-1.6 ± 22.3	161.20 ± 25.76 <sup>s</sup>	0.3 ± 20.2	-4.3 ± 17.0	-2.7 ± 17.4	5.3 ± 22.2	-5.9 ± 16.9
<b>HDL-C (mg/dl), mean ± SD, n=</b>	<b>80</b>						<b>51</b>					
	64.6 ± 19.1 §	-2.2 ± 7.1 *§§	-3.0 ± 10.7 §	1.6 ± 6.2	3.4 ± 10.1 *	1.8 ± 8.6	56.5 ± 18.1	5.2 ± 10.7 *	1.7 ± 8.9	4.1 ± 9.9 *	0.7 ± 8.9	-0.4 ± 10.0
<i>according to sex</i>												
men, n=	17						21					
	50.8 ± 14.7 #	-2.1 ± 6.4	-4.3 ± 9.2 *	1.5 ± 4.8	2.6 ± 3.8 *	0.7 ± 6.2	50.7 ± 18.4 #	2.1 ± 5.8	-0.4 ± 7.0	3.3 ± 8.5	0.3 ± 8.6	-1.7 ± 8.4
women, n=	63						30					
	68.3 ± 18.6	-2.2 ± 7.3 *§	-2.6 ± 11.2	1.7 ± 6.7	3.6 ± 11.4 *	2.2 ± 9.5	60.6 ± 17.1	7.5 ± 12.9 *	3.7 ± 10.2	5.0 ± 11.6	1.1 ± 9.5	0.6 ± 11.3
<i>according to risk at baseline (men)</i>												
low (> 40), n=	15	14	13	13	11	14	14	11	13	13	7	6
	53.1 ± 14.1	-2.4 ± 6.5	-4.9 ± 9.2 *	1.3 ± 4.9	2.4 ± 4.0	0.7 ± 6.4 §	59.9 ± 15.2	-0.4 ± 4.1	-1.5 ± 7.6	1.9 ± 9.4	-4.0 ± 8.2	-7.3 ± 7.3 *
elevated (≤ 40), n=	2	1	1	1	1	1	7	5	4	5	5	5
	33.5 ± 0.7 s	3.0	4.0	4.0	5.0	1.0	32.3 ± 5.7 ss	7.6 ± 5.4 *s	3.0 ± 3.2	7.0 ± 4.8 *	6.2 ± 5.2	5.0 ± 2.8 *s
<i>according to risk at baseline (women)</i>												
low (> 45), n=	60	59	42	40	36	35	24	17	15	13	13	12
	69.7 ± 17.8	-2.2 ± 7.4 §	-2.6 ± 11.4	1.8 ± 6.8	3.6 ± 11.6 *	2.3 ± 9.6	66.7 ± 13.0	3.4 ± 9.8	0.7 ± 5.8	4.3 ± 12.1	-0.9 ± 8.6	-2.6 ± 6.0

	INTERVENTION						CONTROL					
	initial value at baseline	Change after					initial value at baseline	Change after				
		10 weeks	6 months	12 months	18 months	24 months		10 weeks	6 months	12 months	18 months	24 months
elevated ( $\leq 45$ ), n=	3 39.0 $\pm$ 4.6 s	2 -2.5 $\pm$ 2.1 s	1 -2.0 s	1 -1.0	1 4.0	1 0.0	6 36.0 $\pm$ 4.6 s	5 21.4 $\pm$ 13.4 *	3 18.7 $\pm$ 15.8	2 9.5 $\pm$ 9.2	2 13.5 $\pm$ 5.0	2 19.5 $\pm$ 20.5
<b>TG (mg/dl), mean <math>\pm</math> SD, n=</b>	80 121.2 $\pm$ 69.1	76 -15.0 $\pm$ 40.6 *	57 -2.6 $\pm$ 71.3	55 -18.1 $\pm$ 33.3 **	49 -11.8 $\pm$ 38.0 *	51 -14.7 $\pm$ 52.6 *	51 125.0 $\pm$ 75.6	38 -21.1 $\pm$ 57.2 *	35 -17.8 $\pm$ 40.3 *	33 -16.5 $\pm$ 46.4	27 -13.9 $\pm$ 48.1	25 -24.5 $\pm$ 67.9
<i>according to sex</i>												
men, n=	17 120.7 $\pm$ 74.7	15 -11.5 $\pm$ 34.1	14 -11.2 $\pm$ 40.8	14 -19.0 $\pm$ 39.4	12 -9.8 $\pm$ 28.1	15 0.1 $\pm$ 61.9	21 157.5 $\pm$ 95.8 #	16 -35.9 $\pm$ 72.8 *	17 -20.7 $\pm$ 42.6	18 -15.6 $\pm$ 55.1	12 -15.7 $\pm$ 48.9	11 -33.9 $\pm$ 93.7
women, n=	63 121.5 $\pm$ 68.2	61 -15.9 $\pm$ 42.2 *	43 0.2 $\pm$ 78.9	41 -17.8 $\pm$ 31.5 *	37 -12.4 $\pm$ 41.0	36 -20.8 $\pm$ 47.9 *	30 102.2 $\pm$ 47.1	22 -10.4 $\pm$ 41.2	18 -15.1 $\pm$ 39.1	15 -17.5 $\pm$ 35.1	15 -12.4 $\pm$ 49.1	14 -17.1 $\pm$ 40.4
<i>according to risk at baseline</i>												
low ( $< 150$ mg/dl), n=	63 92.0 $\pm$ 28.8	60 -3.2 $\pm$ 22.9	45 0.5 $\pm$ 29.4	45 -9.0 $\pm$ 23.1 *	40 0.4 $\pm$ 26.9	42 -0.2 $\pm$ 38.8	40 94.7 $\pm$ 29.9	31 -4.3 $\pm$ 27.1	29 -5.1 $\pm$ 27.3	26 1.0 $\pm$ 28.0	22 3.7 $\pm$ 29.9	20 -0.1 $\pm$ 23.9
elevated ( $\geq 150$ mg/dl), n=	17 229.4 $\pm$ 69.0 ss	16 -59.4 $\pm$ 59.3 *ss	12 -13.9 $\pm$ 149.1 *s	10 -59.2 $\pm$ 41.8 *s	9 -65.6 $\pm$ 33.5 *ss	9 -82.1 $\pm$ 58.2 *ss	11 235.1 $\pm$ 89.9 ss	7 -95.7 $\pm$ 92.5 *s	6 -79.2 $\pm$ 37.5 *s	7 -81.4 $\pm$ 44.5 *ss	5 -91.2 $\pm$ 34.1 *s	5 -122.2 $\pm$ 100.3 *#
<b>diabetic parameters</b>												
<b>FG (mg/dl), mean <math>\pm</math> SD, n=</b>	81 94.8 $\pm$ 14.9 s	-0.1 $\pm$ 8.7 §§	3.8 $\pm$ 13.1 *§§§	7.1 $\pm$ 9.8 ***§§§	7.1 $\pm$ 9.6 ***§§§	8.0 $\pm$ 10.2 **§	51 97.0 $\pm$ 26.0	-7.3 $\pm$ 19.2 *	-5.8 $\pm$ 17.2 *	-5.7 $\pm$ 13.9 *	-4.2 $\pm$ 18.8 *	-2.2 $\pm$ 18.3
<i>according to sex</i>												
men, n=	17 95.4 $\pm$ 13.0 s	15 2.1 $\pm$ 9.8 §§	14 1.1 $\pm$ 10.4 s	14 6.5 $\pm$ 9.2 **§	12 6.7 $\pm$ 6.7 **§	15 10.2 $\pm$ 10.0 s *	21 109.2 $\pm$ 25.8	16 -14.8 $\pm$ 13.9 *	17 -10.6 $\pm$ 15.9 *	18 -7.1 $\pm$ 16.2 *	12 -9.3 $\pm$ 19.8	11 -6.4 $\pm$ 24.7
women, n=	64	61	43	41	37	36	30	22	18	15	15	14

	INTERVENTION						CONTROL					
	initial value at baseline	Change after					initial value at baseline	Change after				
		10 weeks	6 months	12 months	18 months	24 months		10 weeks	6 months	12 months	18 months	24 months
	94.7 ± 15.5	-0.6 ± 8.4 §	4.6 ± 13.9 §	7.3 ± 10.1 ****	7.2 ± 10.5 ****	7.0 ± 10.2 **§	88.5 ± 22.9 #	-1.8 ± 20.9	-1.2 ± 17.5	-4.1 ± 11.0 *	-0.1 ± 17.6	1.0 ± 11.1
<i>according to risk at baseline</i>												
no diabetes (< 100 mg/dl), n=	61	58	45	44	40	42	26	19	15	13	11	11
	88.4 ± 6.7	0.7 ± 8.8	3.0 ± 10.9 *	7.9 ± 8.4 **§ μ	8.6 ± 7.4 **§	7.8 ± 7.3 **	81.4 ± 19.8	-0.4 ± 22.6	2.3 ± 17.8	2.1 ± 11.1	5.6 ± 18.7	5.7 ± 10.0
pre-diabetes (100-125 mg/dl), n=	17	15	10	10	7	7	23	17	18	18	14	12
	109.0 ± 6.6	-1.7 ± 6.8 §	-1.1 ± 10.3	-0.1 ± 6.7 §	2.6 ± 9.4	5.3 ± 12.5	107.4 ± 6.0	-10.9 ± 6.3 **	-7.8 ± 6.3 *	-7.7 ± 6.0 **	-6.4 ± 6.5 **	-4.6 ± 5.2 *
diabetes (≥ 126 mg/dl), n=	3	3	2	1	2	2	2	2	2	2	2	2
	145.7 ± 18.5	-8.0 ± 13.0	44.0 ± 0.0 μ	42.0	-7.5 ± 33.2	21.0 ± 41.0	181.5 ± 6.4	-42.0 ± 17.0 +	-48.0 ± 18.4 +	-38.5 ± 33.2 +	-42.5 ± 33.2 +	-32.0 ± 65.1 +
<b>HbA1c (%)</b> , mean ± SD, n=	80						51					
	5.4 ± 0.6 §	0.1 ± 0.2 ****	0.2 ± 0.2 ****	0.2 ± 0.3 ****	0.1 ± 0.4 *	0.2 ± 0.3 **	5.6 ± 0.5	-0.2 ± 0.2 **	-0.2 ± 0.2 **	-0.2 ± 0.2 *	0.0 ± 0.2	0.0 ± 0.4
<i>according to sex</i>												
men, n=	17	15	14	14	12	14	21	16	17	18	12	11
	5.3 ± 0.4 §	0.1 ± 0.1 §	0.2 ± 0.1 **§	0.2 ± 0.2 **§	0.1 ± 0.1 *	0.2 ± 0.2 *	5.7 ± 0.6	-0.2 ± 0.2 *	-0.2 ± 0.2 *	-0.2 ± 0.2 *	-0.1 ± 0.3	0.0 ± 0.6
women, n=	63	61	43	41	37	36	30	21	18	15	15	14
	5.4 ± 0.6	0.1 ± 0.2 ****	0.2 ± 0.2 ****	0.3 ± 0.4 ****	0.0 ± 0.4 *	0.2 ± 0.3 §	5.4 ± 0.3 #	0.1 ± 0.2 *	-0.2 ± 0.1 *	-0.1 ± 0.2	0.1 ± 0.2	-0.0 ± 0.1
<i>according to risk at baseline</i>												
no diabetes (< 5.7 %), n=	66	63	47	45	43	42	34	23	22	20	17	15
	5.2 ± 0.2 §	0.1 ± 0.2 ****	0.2 ± 0.2 ****	0.2 ± 0.2 ****	0.1 ± 0.2 **	0.2 ± 0.2 **	5.3 ± 0.3	-0.1 ± 0.2 *	-0.2 ± 0.1 **	-0.1 ± 0.2	0.1 ± 0.1 *	0.1 ± 0.3
pre-diabetes (5.7 - 6.4 %), n=	11	10	7	8	4	6	15	12	11	11	8	8
	5.9 ± 0.2	0.0 ± 0.1 §	0.1 ± 0.2 §	0.2 ± 0.2 §	0.2 ± 0.1 §+	0.3 ± 0.4	5.9 ± 0.2	-0.2 ± 0.2	-0.2 ± 0.2	-0.2 ± 0.2 +	-0.1 ± 0.2	-0.4 ± 0.3
diabetes (≥ 6.5 %), n=	3	3	3	2	2	2	2	2 *	2 *	2 *	2	2
	7.6 ± 1.2	-0.2 ± 0.2	0.4 ± 0.4	0.9 ± 1.3	-1.4 ± 0.9	0.5 ± 1.3	7.2 ± 0.1	-0.1 ± 0.1	-0.4 ± 0.3	-0.6 ± 0.6	-0.4 ± 0.6	-0.7 ± 1.2

	INTERVENTION						CONTROL					
	initial value at baseline	Change after					initial value at baseline	Change after				
		10 weeks	6 months	12 months	18 months	24 months		10 weeks	6 months	12 months	18 months	24 months
<b>FI (μU/ml), mean ± SD, n=</b>	76						51					
	10.0 ± 6.2	-0.7 ± 4.0	-0.7 ± 4.5 §	1.8 ± 3.6 *	1.6 ± 4.2 *	1.3 ± 4.2	11.0 ± 8.3	-0.4 ± 4.8	1.2 ± 7.9	0.7 ± 4.4	-0.9 ± 4.7	-1.1 ± 5.2
<i>according to sex</i>												
men, n=	16	14	14	13	12	14	21	16	17	18	12	11
	9.7 ± 5.7	-0.8 ± 2.4	-1.1 ± 2.9	0.5 ± 3.2	0.4 ± 2.9	2.4 ± 3.6 *	14.6 ± 10.8	-1.0 ± 6.3	-0.5 ± 4.6	0.3 ± 5.3	-1.7 ± 6.0	-2.4 ± 7.0
women, n=	60	59	42	39	36	34	30	22	18	15	15	14
	10.1 ± 6.3	-0.6 ± 4.4	-0.5 ± 4.9	2.2 ± 3.7 *	2.0 ± 4.5 *	0.8 ± 4.3	8.5 ± 4.7 #	0.0 ± 3.3	2.9 ± 10.0	1.3 ± 3.1	-0.3 ± 3.4	-0.0 ± 3.1
<b>HOMA-IR, mean ± SD, n=</b>	76						51					
	2.4 ± 1.7	-0.2 ± 1.2	0.0 ± 1.4	0.6 ± 1.1 **	0.6 ± 1.2 *§	0.5 ± 1.2 *§	2.8 ± 2.9	-0.5 ± 1.8	-0.1 ± 2.3	-0.1 ± 1.7	-0.6 ± 2.2	-0.5 ± 2.5
<i>according to sex</i>												
men, n=	16	14	14	13	12	14	21	16	17	18	12	11
	2.4 ± 1.7 §	-0.2 ± 0.7	-0.3 ± 0.7	0.2 ± 0.7	0.3 ± 0.9	0.9 ± 1.2 §	4.1 ± 4.0	-1.0 ± 2.4	-0.7 ± 2.4	-0.4 ± 2.2	-1.1 ± 3.1	-1.3 ± 3.5
women, n=	60	59	42	39	36	34	30	22	18	15	15	14
	2.5 ± 1.7	-0.1 ± 1.3	0.1 ± 1.6	0.7 ± 1.1 **	0.7 ± 1.3 *§	0.3 ± 1.1	2.0 ± 1.3 #	-0.1 ± 1.0	0.6 ± 2.0	0.3 ± 1.0	-0.1 ± 1.0	0.1 ± 1.1
<i>according to risk at baseline</i>												
normal insulin sensitivity (< 2.5), n=	49	49	38	36	35	33	29	20	18	16	14	11
	1.4 ± 0.6	0.0 ± 0.7	0.0 ± 0.9	0.6 ± 0.9 *	0.6 ± 1.1 *	0.6 ± 0.9 *§	1.4 ± 0.6	0.1 ± 0.9	0.2 ± 0.8	0.3 ± 0.9	0.1 ± 0.9	-0.2 ± 0.7
impaired insulin sensitivity (≥ 2.5), n=	27	24	18	16	13	15	22	18	17	17	13	14
	4.3 ± 1.6 ss	-0.4 ± 1.9 s	0.0 ± 2.2	0.7 ± 1.3	0.5 ± 1.5	0.4 ± 1.6	4.8 ± 3.6 ss	-1.1 ± 2.3 s	-0.4 ± 3.2 *	0.5 ± 2.2	-1.3 ± 3.0	-0.8 ± 3.3
<b>VITAL PARAMETERS</b>												
<b>SBP (mmHg), mean ± SD, n=</b>	89						51					



	INTERVENTION						CONTROL					
	initial value at baseline	Change after					initial value at baseline	Change after				
		10 weeks	6 months	12 months	18 months	24 months		10 weeks	6 months	12 months	18 months	24 months
	135.9 ± 19.7	-6.5 ± 13.3 **	-2.4 ± 13.5	-7.6 ± 14.0 **§	-6.1 ± 16.0 *	-6.0 ± 17.5 *	130.8 ± 19.9	-3.0 ± 14.8	0.9 ± 16.1	0.0 ± 16.1	8.7 ± 18.0 *	-1.3 ± 16.7
<i>according to sex</i>												
men, n=	21	17	17	17	13	15	21	15	18	18	12	11
	137.8 ± 20.3	-4.6 ± 14.4	-2.3 ± 10.3	-8.1 ± 14.4 *	-6.2 ± 14.9	-1.5 ± 16.5	142.2 ± 17.9	-3.3 ± 17.1	0.0 ± 18.6	1.3 ± 17.0	-14.8 ± 22.4	-0.7 ± 16.6
women, n=	68	64	47	45	37	36	30	21	18	15	14	15
	135.3 ± 19.7	-7.0 ± 13.1 **§	-2.4 ± 14.6	-7.5 ± 14.0 *	-6.1 ± 16.6 *	-7.9 ± 17.7	122.9 ± 17.3 #	-2.8 ± 13.4	1.7 ± 13.5	-1.5 ± 15.3	-3.5 ± 15.3	-1.7 ± 17.3
<i>according to risk at baseline</i>												
normal (< 120 mmHg), n=	19	17	16	13	14	12	15	8	8	5	5	5
	110.9 ± 8.3	4.1 ± 11.9	6.4 ± 12.1 *	7.8 ± 11.8	3.9 ± 14.1	10.0 ± 15.2	108.1 ± 6.9	6.9 ± 16.4	10.9 ± 13.0 *	14.8 ± 14.6	6.8 ± 11.9	14.5 ± 18.8
elevated (≥ 120 – 129 mmHg), n=	70	64	48	49	36	39	36	28	28	28	21	20
	142.7 ± 16.1 §§	-9.3 ± 12.3 **§	-5.3 ± 12.8 *§	-11.8 ± 11.4 **§§§	-10.0 ± 15.1 *§	-11.0 ± 15.1 **§§§	140.3 ± 15.2 §§	-5.8 ± 13.3 *	-2.0 ± 15.9	-2.6 ± 15.0 §	-12.4 ± 17.3 *§	-6.1 ± 13.0 §
<b>DBP (mmHg), mean ± SD, n=</b>	89	81	64	62	50	51	51	36	36	33	26	26
	86.4 ± 11.5 §	-2.1 ± 7.9 *§	-1.6 ± 7.6 *§	-6.9 ± 7.9 **§§§	-6.6 ± 7.8 **	-6.5 **§	80.8 ± 8.8	0.4 ± 7.1	0.9 ± 8.7	0.5 ± 8.6	-4.2 ± 8.1 *	-1.5 ± 8.5
<i>according to sex</i>												
men, n=	21	17	17	17	13	15	21	15	18	18	12	11
	84.2 ± 11.4	-1.9 ± 8.1	-1.2 ± 8.3	-3.1 ± 10.2 #	-4.2 ± 6.9	-1.9 ± 5.4 #	82.2 ± 7.8	2.7 ± 6.6 #	2.0 ± 6.0	3.2 ± 8.1	-3.1 ± 8.0	1.7 ± 10.0 #
women, n=	68	64	47	45	37	36	30	21	18	15	14	15
	87.0 ± 11.5 §	-2.1 ± 7.9 *	-1.7 ± 7.4	-8.3 ± 6.5 **§	-7.4 ± 8.0 **	-8.4 ± 8.4 **	79.7 ± 9.5	-1.2 ± 7.2	-0.2 ± 10.8	-2.7 ± 8.2	-5.1 ± 8.4	-3.8 ± 6.5 *
<i>according to risk at baseline</i>												
normal (< 80 mmHg), n=	25	21	18	17	15	15	20	11	14	11	10	10
	73.6 ± 4.6	0.5 ± 4.3	2.0 ± 6.4	-1.7 ± 5.9 §	-3.0 ± 4.6 *	-1.1 ± 5.6	72.5 ± 5.0	3.1 ± 6.6	4.9 ± 5.1 *	5.0 ± 6.8 *	-0.1 ± 6.1	1.8 ± 4.8
elevated (≥ 80 mmHg), n=	64	60	46	45	35	36	31	25	22	22	16	16

	INTERVENTION						CONTROL					
	initial value at baseline	Change after					initial value at baseline	Change after				
		10 weeks	6 months	12 months	18 months	24 months		10 weeks	6 months	12 months	18 months	24 months
	91.3 ± 9.3 §§§	-3.0 ± 8.6 *	-3.0 ± 7.6 *§	-8.8 ± 7.7 **§§	-8.1 ± 8.4 **§	-8.8 ± 8.1 **§	86.1 ± 6.2 §§	-0.7 ± 7.2	-1.7 ± 9.6 §	1.7 ± 8.6 §	-6.8 ± 8.3 *§	-3.5 ± 9.7 §

\*\* difference to baseline: p < 0.001 (within group comparison), \* difference to baseline: p < 0.05 (within group comparison), §§ difference to control group: p < 0.001 (between group comparison), § difference to control group: p < 0.05 (between group comparison), # difference between men and women: p < 0.05, <sup>B</sup> difference to higher secondary school/ to no uni degree: p < 0.05, <sup>A</sup> difference to normal weight and obesity I: p < 0.05, <sup>o</sup> difference to obesity I and obesity III: p < 0.05, <sup>&</sup> difference to intervention group: p < 0.05, <sup>§§</sup> difference to low risk group: p < 0.001, <sup>§</sup> difference to low risk group: p < 0.05, <sup>€</sup> difference to moderate risk group: p < 0.05, <sup>u</sup> difference to pre-diabetes risk group: p < 0.05, <sup>+</sup> difference to no-diabetes risk group: p < 0.05

LSS =lower secondary school, HSS =higher secondary school, HS =high school, UD =university degree, comb. = sub groups combined, BMI = Body Mass Index, NW = normal weight ; OW = overweight , OB = obesity , WC =waist circumference, TC =total cholesterol, LDL-C =low density lipoprotein cholesterol, HDL-C =high density lipoprotein cholesterol, TG =triglycerides, FG =fasting glucose, FI =fasting insulin, HOMA-IR =Homeostasis Model Assessment-insulin resistance, SBP =systolic blood pressure, DBP =diastolic blood pressure