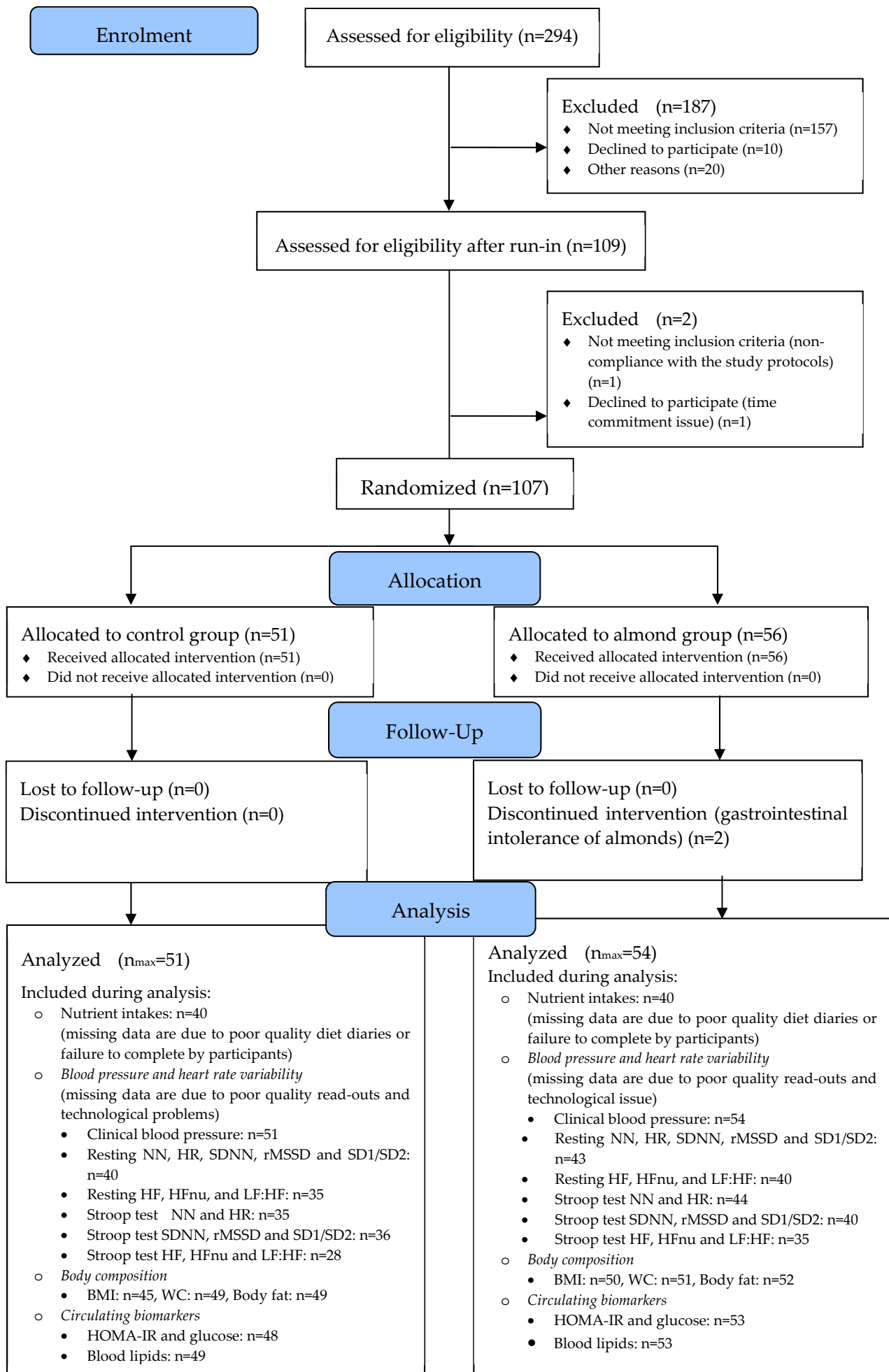

Supplementary Materials

Supplemental Table S1. Nutritional composition of almonds and control snacks per 400 kcal isocaloric portions. Values given as 20% of the estimated average requirement for energy (2000 kcal) for adult women.

Nutrient	Almonds	Average of sweet and savory control snacks	Control snacks	
			Sweet	Savory
Energy, kcal	400	400	400	400
Protein, %E	13.4	9.8	9.8	9.8
Carbohydrate, %E	13.2	54.1	54.3	53.8
Starch, %E	-	38.7	24.5	52.9
Sugars, %E	2.3	15.1	29.7	0.4
Fibre, g	9.3	2.1	1.3	2.8
Fat, %E	73.6	36.5	35.8	37.1
SFA, g	5.6	12.8	12.6	12.8
MUFA, g	47.9	16.0	15.8	16.0
PUFA, g	16.0	5.6	5.4	5.9
Sodium, mg	<2.5	452.1	187.4	716.8
Potassium, mg	463.7	162.8	145.9	179.6
Calcium, mg	164.7	130.1	46.1	214.1
Magnesium, mg	181.7	19.0	15.4	22.6
Vitamin E, mg	14.3	1.3	1.1	1.4

Supplemental Figure S1. CONSORT Flow Diagram



Supplemental Table S2. Body composition, clinical blood pressure and circulating biomarkers of cardiometabolic risk following randomization to almond and control snacks.

	Control, n _{max} = 51 ¹		Almonds, n _{max} = 54 ¹		Main comparison between groups ³
	Baseline ²	Change	Baseline ²	Change	
BMI, kg/m ²	27.1 ± 4.4	-0.2 (-0.4, 0.0)	27.2 ± 4.5	0.1 (-0.1, 0.3)	0.2 (-0.1, 0.5)
WC, cm	93.3 ± 11.7	0.1 (-0.9, 1.2)	94.1 ± 12.2	-0.6 (-1.6, 0.5)	-0.7 (-2.2, 0.8)
Body fat, %	31.1 ± 7.7	-0.5 (-1.1, 0.0)	32.2 ± 7.7	0.3 (-0.3, 0.8)	0.8 (-0.0, 1.6)
cSBP, mmHg	127.8 ± 12.9	-5.2 (-7.9, -2.6)	127.3 ± 19.3	-6.3 (-8.9, -3.7)	-1.0 (-4.7, 2.6)
cDBP, mmHg	84.6 ± 7.9	-3.2 (-5.1, -1.3)	85.5 ± 10.6	-3.5 (-5.3, -1.6)	0.2 (-2.9, 2.4)
TC, mmol/L	5.26 ± 1.13	0.03 (-0.15, 0.20)	5.40 ± 0.93	-0.18 (-0.35, -0.02)	-0.21 (-0.45, 0.03)
TAG, mmol/L	1.17 (0.69)	-0.11 (-0.20, 0.01)	1.07 (0.73)	-0.08 (-0.17, 0.02)	0.03 (-0.11, 0.16)
Non-HDL, mmol/L	3.92 ± 1.16	0.11 (-0.04, 0.26)	4.00 ± 0.98	-0.11 (-0.25, 0.03)	-0.22 (-0.42, -0.01) ⁴
LDL, mmol/L	3.63 ± 1.16	0.15 (0.01, 0.30)	3.74 ± 0.91	-0.09 (-0.23, 0.05)	-0.25 (-0.45, -0.04) ⁴
HDL, mmol/L	1.61 ± 0.45	0.04 (-0.04, 0.11)	1.66 ± 0.51	-0.04 (-0.11, -0.03)	-0.08 (-0.18, 0.03)
TC:HDL	3.45 ± 0.91	-0.04 (-0.15, 0.07)	3.47 ± 1.01	-0.03 (-0.14, 0.07)	0.00 (-0.15, 0.16)

Values of change and main comparison of the changes between groups are presented as mean (95% CI) generated from estimated marginal means from ANCOVA.

¹Not all data were analysed due to technical problems and sample loss.

BMI: n = 45 (control) and 50 (almond).

WC: n = 49 (control) and 51 (almond).

Body fat: n = 49 (control) and 52 (almond).

TC, TAG, Non-HDL, LDL, HDL and TC:HDL: n = 49 (control) and 53 (almond).

²Median (IQR) for TAG data as they are non-normally distributed. Mean ± SD for other data that are normally distributed. Baseline biomarker values were not different between the two groups.

³ANCOVA, adjusted for baseline outcome value and baseline BMI (mean difference in change from baseline, almonds minus control); *P* < 0.05 indicating a significant difference.

⁴*p* < 0.05 indicating a significant difference for values of mean difference between two groups.

BMI, body mass index; WC, waist circumference; cSBP, clinical systolic blood pressure; cDBP, clinical diastolic blood pressure; TC, total cholesterol; TAG, triglycerides; LDL, low-density lipoprotein cholesterol; HDL, high-density lipoprotein cholesterol.