

Table 1 Characteristics (mean \pm SD [min, max]) of the men and women studied. The D.E.S.I.R. Study.

	Men (n=2 235)	Women (n=2 137)
Age (years)	46.4 \pm 9.9 [30.0, 65.0]	46.8 \pm 9.9 [30.0, 65.0]
Waist circumference (cm)	89.1 \pm 9.3 [64.0, 128.0]	76.5 \pm 10.4 [57.0, 125.0]
BMI (kg/m ²)	25.2 \pm 3.3 [16.7, 45.4]	23.8 \pm 4.1 [15.4, 53.6]
Fasting plasma glucose (mmol/l)	5.5 \pm 0.8 [2.7, 16.7]	5.1 \pm 0.6 [2.6, 9.2]
Insulin (pmol/l)	41 \pm 28 [3, 488]	37 \pm 21 [5, 213]
Triglycerides (mmol/l)	1.35 \pm 1.35 [0.22, 35.28]	0.95 \pm 0.53 [0.15, 4.75]
HDL-cholesterol (mmol/l)	1.49 \pm 0.38 [0.08, 3.62]	1.78 \pm 0.41 [0.65, 4.03]
Treated for lipids (7%)	(n=168)	(n=134)
Triglycerides (mmol/l)	1.46 \pm 0.85 [0.22, 5.96]	1.03 \pm 0.60 [0.36, 4.02]
HDL-cholesterol (mmol/l)	1.44 \pm 0.34 [0.80, 2.69]	1.86 \pm 0.45 [0.78, 4.03]
Untreated for lipids	(n=2067)	(n=2003)
Triglycerides (mmol/l)	1.34 \pm 1.39 [0.22, 35.28]	0.94 \pm 0.52 [0.15, 4.75]
HDL-cholesterol (mmol/l)	1.50 \pm 0.39 [0.08, 3.62]	1.78 \pm 0.41 [0.65, 3.67]
Systolic blood pressure (mmHg)	132.5 \pm 14.9 [80.0, 210.0]	126.2 \pm 15.7 [80.0, 210.0]
Diastolic blood pressure (mmHg)	81.5 \pm 9.8 [50.0, 130.0]	77.1 \pm 9.3 [50.0, 120.0]
Treated for hypertension (10%)	(n=201)	(n=250)
Systolic blood pressure (mmHg)	144.2 \pm 16.6 [110.0, 205.0]	138.5 \pm 17.8 [90.0, 200.0]
Diastolic blood pressure (mmHg)	87.4 \pm 10.4 [60.0, 130.0]	82.2 \pm 9.6 [55.0, 111.0]
Untreated for hypertension	(n=2034)	(n=1887)
Systolic blood pressure (mmHg)	131.4 \pm 14.2 [80.0, 210.0]	124.6 \pm 14.6 [80.0, 210.0]
Diastolic blood pressure (mmHg)	80.9 \pm 9.6 [50.0, 130.0]	76.4 \pm 9.0 [50.0, 120.0]
Total energy intake (kcal/day)	2 543 \pm 400 [1457, 4416]	1 754 \pm 225 [1204, 2587]
Calcium intake (mg/day)	1 109 \pm 217 [731, 1826]	980 \pm 167 [688, 1527]
Dietary calcium density (μ g.kcal ⁻¹ .day)	563.7 \pm 99.1 [305.9, 1002.2]	661.0 \pm 102.8 [386.4, 1026.7]
Alcohol consumption (g/day)	27.9 \pm 23.5 [0.0, 204.5]	6.3 \pm 8.4 [0.0, 56.0]
Current smokers (%)	28.9	15.8
Physical activity (%)		
- low	25.7	25.8
- moderate	52.8	54.7
- high	21.5	19.5

Table 2 The mean variations in insulin resistance syndrome parameters from one quartile to the next of the dietary calcium density. The D.E.S.I.R. Study

MEN	Age adjusted		+ smoking, alcohol intake, physical activity adjusted		+ lipid intake, BMI adjusted	
		p value		p value		p value
Waist (cm)	0.081	0.63	0.241	0.14	-0.202	0.02
BMI (kg/m ²)	0.132	0.03	0.169	0.01		
Glucose (mmol/l)	-0.003	0.21	-0.001	0.58	-0.004	0.11
Insulin (pmol/l) *	0.015	0.15	0.016	0.11	-0.005	0.61
Triglycerides (mmol/l) *	-0.017	0.10	-0.004	0.68	-0.015	0.12
HDL-cholesterol (mmol/l)	-0.004	0.18	-0.002	0.40	-0.000	0.90
Systolic blood pressure (mmHg)	-0.192	0.48	-0.004	0.99	-0.160	0.55
Diastolic blood pressure (mmHg)	-0.448	0.01	-0.358	0.05	-0.435	0.02

WOMEN	Age adjusted		+ smoking, alcohol intake, physical activity adjusted		+ . lipid intake, BMI adjusted	
		p value		p value		p value
Waist (cm)	-0.191	0.31	-0.082	0.66	-0.190	0.05
BMI (kg/m ²)	0.033	0.66	0.050	0.51		
Glucose (mmol/l)	-0.001	0.79	0.001	0.73	-0.001	0.56
Insulin (pmol/l) *	-0.023	0.02	-0.024	0.01	-0.028	0.001
Triglycerides (mmol/l) *	-0.018	0.06	-0.012	0.21	-0.005	0.56
HDL-cholesterol (mmol/l)	0.006	0.04	0.007	0.02	0.005	0.11
Systolic blood pressure (mmHg)	-0.959	0.001	-0.872	0.002	-0.936	0.001
Diastolic blood pressure (mmHg)	-0.493	0.004	-0.456	0.01	-0.510	0.003

* log-transformed