eAppendix

METHODS

Ascertainment of anthropometric variables

All cohort members were asked to report their height (cm) and body weight (kg) on the baseline questionnaire in 1986. BMI was calculated using the reported weight at baseline, divided by height at baseline squared. At this time point individuals were also asked to generally report their upper body (shirt) and lower body (trouser or skirt) clothing size from their clothing label (Dutch sizes). Clothing variables were re-coded if they were reported in American sizes (shirt size: 1 woman, 25 men; trouser size: 1 woman, 38 men). Trouser sizes in men were reported as even and odd numbers. Odd numbered trouser sizes in men are identical in waist circumference to the even number preceding it, and differ only in that they are longer. We were interested in clothing size as a proxy for waist circumference, so odd numbered sizes were recoded to the even size preceding it (i.e. a size 51 was recoded to a size 50). In some cases (n=16), women reported more than one size, for example 40 and 42. To account for this, the average size was entered (i.e. 41) during data entry. For the present analysis, we recoded odd numbered sizes in woman to the next highest even size (i.e. 41 to 42).

Biennial follow-up of the sub-cohort has allowed for the accumulation of prospective data regarding a number of factors related to body weight and lifestyle habits. At these time points, self-administered questionnaires were mailed to all sub-cohort members given they were still alive and reachable at the same address. If necessary, new addresses were obtained and individuals were contacted there. Two years after baseline (1988), self-reported waist and hip measurements were requested using such a follow-up questionnaire. The instructions were: measure while standing, do not measure over clothing (underwear may be kept on), measure the

waist at the level of the belly button, and measure the hip where it is largest. A cartoon of a body depicting the waist and hip measurement was included with the boxes to enter the measurement (cm) next to the waist and hip, respectively. We calculated the waist-hip ratio by dividing the reported waist circumference by the reported hip circumference. Six years after baseline (1992), individuals of the sub-cohort were asked again to report their current body weight (kg).

eTable1. Correlations[a] Between Self-reported Shirt Size and Self-reported Anthropometric Variables in Men and Women of Sub-cohort of the Netherlands Cohort Study on Diet and Cancer.

	Correlations with shirt size [a]	
	Men (n=1158)	**Women (n=1334)**
BMI (kg/m^2)	0.58 (0.54-0.62)	0.73 (0.70-0.75)
waist circumference (cm)	0.54 (0.50-0.58)	0.67 (0.64-0..70)
hip circumference (cm)	0.45 (0.41-0.50)	0.70 (0.68-0.73)
waist-hip ratio	0.33 (0.27-0.38)	0.30 (0.25-0.34)

[a] spearman rank correlation (95% CI)

eTable 2: Rate Ratios for Endometrial Cancer and Renal Cell Carcinoma According to Shirt Size in the Netherlands Cohort Study on Diet and Cancer After 13.3 Years Follow-up, and the Effect of BMI on this Association

Variable	Number of cases	Number of person years in sub-cohort	RR (95% CI)	RR (95 % CI) [c]
Endometrial cancer [a]				
shirt size [b]				
<40	37	4975	0.65 (0.43-0.99)	0.75 (0.46-1.21
42	78	6259	1.00	1 (Ref.)
44	70	5309	1.03 (0.72-1.48)	0.92 (0.63-1.34)
46-48	89	4120	1.75 (1.24-2.49)	1.32 (0.86-2.04)
>50	23	537	4.56 (2.45-8.49)	2.62 (1.21-5.68)
continuous	297	21200	1.36(1.23-1.51)	1.14 (0.98-1.34)
p-trend			0.00	0.02

Renal Cell

Carcinoma [d]

shirt size [e]

<40	60	6462	1.29 (0.81-2.05)	1.34 (0.83-2.16)
40	30	3977	1.00	1 (Ref.)
41	35	4544	1.03 (0.61-1.72)	1.03 (0.61-1.73)
42	32	3598	1.19 (0.70-2.01)	1.13 (0.65-1.98)
≥43	38	2999	1.67 (0.99-2.79)	1.52 (0.88-2.64)
continuous	195	21582	1.01 (0.96-1.06)	1.00 (0.95-1.05)
p-trend			0.39	0.73

[a] Analyses have been adjusted for age, age at menarche, use of oral contraceptives (ever, never), age at menopause, parity, cigarette smoking (never, past, current), and non-occupational physical activity (<30, 30-59, 60-89, and ≥90 minutes/day)

[b] Shirt size corresponds to the following standard waist circumferences: <40 = <74 cm; 40= 74 cm; 42=78 cm; 44= 82 cm; 46= 86cm; >50 = >96 cm

[c] Analyses have been additionally adjusted for BMI (kg/m^2) at baseline.

[d] Analyses adjusted for age, cigarette smoking (current smoking (yes/no), number of cigarettes/day, number of years smoking), total energy intake (kcal), and physical activity (<30, 30-59, 60-89, and ≥90 minutes/day)

[e] Shirt size corresponds to neck circumference in cm