

**S2 Table. Associations between the FSAm-NPS DI and risk for cancers of the female reproductive system, by menopausal status, from multivariable Cox proportional hazards models, EPIC cohort, 1992–2014.** DI, Dietary Index; EPIC, European Prospective Investigation into Cancer and Nutrition; FSAm-NPS, Nutrient Profiling System of the British Food Standards Agency.

	FSAm-NPS DI							P-trend
	Per 2-point increment	P-trend	Q1	Q2	Q3	Q4	Q5	
<b>FSAm-NPS DI range (women)</b>			-4.3-4.1	4.1-5.3	5.3-6.4	6.4-7.7	7.7-18.9	
<b>Breast cancer</b>								
Pre-menopause (cases/person-years)	2512/1,603,876		431/315,711	519/320,503	479/326,589	551/317,639	532/323,433	
Unadjusted model - HR (95% CI) <sup>a</sup>	1.00 (0.95-1.04)	0.8	1.00 (ref)	1.11 (0.97-1.26)	0.97 (0.85-1.11)	1.08 (0.94-1.24)	1.00 (0.87-1.15)	0.8
Multi-adjusted model - HR (95% CI) <sup>b</sup>	1.00 (0.95-1.04)	0.9	1.00 (ref)	1.11 (0.97-1.27)	0.97 (0.85-1.11)	1.08 (0.94-1.24)	1.01 (0.87-1.17)	0.9
Post-menopause (cases/person-years)	9551/3,058,411		1662/645,226	1784/615,086	1924/603,814	2077/603,535	2104/590,900	
Unadjusted model - HR (95% CI)	1.03 (1.01-1.06)	0.003	1.00 (ref)	1.03(0.97-1.11)	1.06 (0.99-1.13)	1.09 (1.02-1.17)	1.10 (1.03-1.18)	0.004
Multi-adjusted model - HR (95% CI)	1.03 (1.00-1.05)	0.03	1.00 (ref)	1.02 (0.96-1.10)	1.04 (0.98-1.12)	1.07 (1.00-1.15)	1.08 (1.00-1.16)	0.03
<b>Endometrial cancer<sup>c</sup></b>								
Pre-menopause (cases/person-years)	223/1,604,473		59/315,807	45/320,608	47/326,700	43/317,772	29/323,586	
Unadjusted model - HR (95% CI)	0.95 (0.82-1.10)	0.5	1.00 (ref)	0.82 (0.55-1.21)	0.93 (0.63-1.39)	0.99 (0.65-1.52)	0.74 (0.46-1.21)	0.5
Multi-adjusted model - HR (95% CI)	0.95 (0.82-1.10)	0.5	1.00 (ref)	0.82 (0.55-1.23)	0.95 (0.63-1.42)	1.01 (0.66-1.56)	0.74 (0.44-1.22)	0.5
Post-menopause (cases/person-years)	1540/2,928,017		342/611,425	332/586,962	297/578,807	318/580,247	251/570,576	
Unadjusted model - HR (95% CI)	0.96 (0.91-1.01)	0.09	1.00 (ref)	1.03 (0.89-1.21)	0.94 (0.80-1.10)	1.03 (0.88-1.22)	0.86 (0.72-1.03)	0.2
Multi-adjusted model - HR (95% CI)	0.98 (0.93-1.04)	0.5	1.00 (ref)	1.05 (0.90-1.23)	0.98 (0.83-1.16)	1.10 (0.93-1.30)	0.94 (0.78-1.13)	0.8
<b>Cervical cancer<sup>c</sup></b>								
Pre-menopause (cases/person-years)	119/1,604,492		27/315,808	22/320,608	30/326,704	29/317,785	11/323,587	
Unadjusted model - HR (95% CI)	0.92 (0.76-1.11)	0.4	1.00 (ref)	0.78 (0.44-1.38)	1.10 (0.64-1.89)	1.15 (0.65-2.01)	0.46 (0.22-0.96)	0.3
Multi-adjusted model - HR (95% CI)	0.94 (0.77-1.15)	0.5	1.00 (ref)	0.80 (0.45-1.42)	1.12 (0.65-1.93)	1.19 (0.67-2.12)	0.48 (0.22-1.04)	0.4
Post-menopause (cases/person-years)	186/2,928,139		39/611,449	49/586,985	32/578,835	31/580,273	35/570,597	
Unadjusted model - HR (95% CI)	1.12 (0.97-1.30)	0.1	1.00 (ref)	1.50 (0.98-2.30)	1.07 (0.66-1.74)	1.18 (0.71-1.95)	1.52 (0.92-2.50)	0.3
Multi-adjusted model - HR (95% CI)	1.11 (0.95-1.30)	0.2	1.00 (ref)	1.52 (0.99-2.34)	1.06 (0.65-1.73)	1.17 (0.70-1.95)	1.46 (0.86-2.46)	0.4
<b>Ovary cancer<sup>c</sup></b>								
Pre-menopause (cases/person-years)	214/1,604,460		36/315,807	40/320,604	51/326,687	39/317,779	48/323,583	
Unadjusted model - HR (95% CI)	1.16 (1.01-1.33)	0.04	1.00 (ref)	1.05 (0.67-1.66)	1.39 (0.90-2.16)	1.20 (0.74-1.92)	1.57 (0.98-2.51)	0.06
Multi-adjusted model - HR (95% CI)	1.12 (0.96-1.29)	0.1	1.00 (ref)	1.05 (0.66-1.65)	1.36 (0.87-2.12)	1.14 (0.70-1.85)	1.41 (0.86-2.30)	0.2
Post-menopause (cases/person-years)	1,059/2,928,035		232/611,421	195/586,968	213/578,810	214/580,255	205/570,582	
Unadjusted model - HR (95% CI)	1.02 (0.96-1.08)	0.6	1.00 (ref)	0.90 (0.74-1.10)	1.01 (0.83-1.22)	1.03 (0.84-1.25)	1.00 (0.81-1.23)	0.6
Multi-adjusted model - HR (95% CI)	1.03 (0.96-1.10)	0.4	1.00 (ref)	0.91 (0.75-1.11)	1.03 (0.84-1.25)	1.05 (0.86-1.29)	1.03 (0.83-1.28)	0.4

<sup>a</sup> Unadjusted models were stratified for centre and age at recruitment (1-y intervals, time-scale)

<sup>b</sup> Multi-adjusted models were stratified for centre and age at recruitment (1-y intervals, time-scale) and adjusted for BMI (continuous), height (continuous), baseline alcohol intake (g/d), physical activity (Cambridge index: active, moderately active, moderately inactive, inactive, missing), smoking status and intensity of smoking (current, 1-15 cigarettes/d; current, 16-25 cigarettes/d; current, 26+ cigarettes/d; current, pipe/cigar/occasional; current/former, missing; former, quit 11-20y; former, quit 20+y; former, quit ≤10y; never; unknown), family history of breast cancer [breast cancer], educational level (longer education (incl. University degree), secondary school, primary school completed, not specified), baseline energy intake (kcal/d), interaction term between BMI and menopausal status, menopausal status (premenopausal, perimenopausal, postmenopausal, surgical), ever use of oral contraception (yes, no, missing), ever use of hormonal treatment for menopause (yes, no, missing), age at menarche (≤12y, 13-14y, ≥15y, missing), age at first full-term pregnancy (nulliparous, ≤21y, 22-30y, >30y, missing) and age at menopause (<50y, ≥50y).

<sup>c</sup> Women who declared a surgical menopause at baseline were excluded.