

Supplementary Table S1. Baseline characteristics according to quartiles of total polyphenol intake in the EPIC study.

Baseline characteristics	Quartiles of total polyphenol intake							
	Quartile 1		Quartile 2		Quartile 3		Quartile 4	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
N	77,283		77,282		77,282		77,282	
Cut-off polyphenol intake (mg/d)	<910		910–1,260		1,261–1,918		>1,918	
Age at recruitment (years)	49.5	9.0	50.0	9.6	51.1	10.1	51.5	9.8
BMI (kg/m ²)	25.3	4.6	24.8	4.3	24.6	4.2	24.4	4.1
Alcohol intake (g/d)	4.3	7.3	7.3	10.1	9.8	12.3	12.3	15.3
Total energy intake (kcal/d)	1,688	463	1,878	491	1,998	515	2,184	566
Number of full term pregnancies	2.0	1.3	1.9	1.2	1.9	1.2	1.9	1.2
Age at first menstrual period (years)	13.1	1.5	13.1	1.5	13.1	1.5	13.0	1.6
Age at menopause (years)	48.9	4.6	49.0	4.6	49.0	4.8	49.0	4.9
Duration of oral contraceptive (years)	6.5	6.8	7.9	7.5	8.5	7.5	8.2	7.4
Baseline characteristics	N	%	N	%	N	%	N	%
Smoking status								
Never	44,454	57.5	41,717	54.0	42,380	54.8	40,744	54.8
Former	16,063	20.8	17,514	22.7	18,773	24.3	19,997	23.4
Current	14,922	19.3	16,645	21.5	14,565	18.9	14,446	19.6
Not specified	1,844	2.4	1,406	1.8	1,564	2.0	2,095	2.2
Physical activity								
Inactive	19,125	24.8	15,843	20.5	13,827	17.9	13,174	17.1
Moderately inactive	24,698	32.0	26,925	34.8	27,307	35.3	26,920	34.8
Moderately active	23,366	30.2	21,580	27.9	20,521	26.6	21,227	27.5
Active	8,365	10.8	11,428	14.8	14,126	18.3	15,012	19.4
Not specified	1,729	2.2	1,506	2.0	1,501	1.9	949	1.2
Educational level								
None	6,800	8.8	2,387	3.1	957	1.2	374	0.5
Primary school completed	21,978	28.4	20,348	26.3	15,528	20.1	12,438	16.1
Technical/professional school	16,422	21.3	17,655	22.8	17,968	23.3	17,139	22.2
Secondary school	17,823	23.1	18,289	23.7	19,175	24.8	19,361	25.1
University	13,067	16.9	16,649	21.5	19,705	25.5	22,591	29.2
Not specified	1,193	1.5	1,954	2.5	3,949	5.1	5,379	7.0
Menopausal status								
Premenopausal	29,916	38.7	29,074	37.6	26,584	34.4	25,013	32.4
Postmenopausal	30,657	39.7	32,314	41.8	36,164	46.8	36,860	47.7
Perimenopausal	16,710	21.6	15,894	20.6	14,534	18.8	15,409	19.9
Ever had any live born children								
No	3,727	4.8	2,618	3.4	1,962	2.5	1,850	2.4
Yes	61,159	79.1	57,561	74.5	57,734	74.7	60,473	78.3
Not specified	12,397	16.0	17,103	22.1	17,586	22.8	14,959	19.4
Full term pregnancy								
No	10,035	13.0	10,910	14.1	12,184	15.8	12,278	15.9
Yes	64,035	82.9	62,299	80.6	61,739	79.9	61,907	80.1
Not specified	3,213	4.2	4,073	5.3	3,359	4.4	3,097	4.0
Ever use of oral contraceptive								
No	33,443	43.3	28,883	37.4	26,723	34.6	26,284	34.0
Yes	41,445	53.6	45,426	58.8	48,671	63.0	49,894	64.6
Not specified	2,395	3.1	2,973	3.9	1,888	2.4	1,104	1.4

Duration of oral contraceptive (years)								
≤1	9,950	12.9	8,577	11.1	7,431	9.6	7,278	9.4
2 – 4	10,728	13.9	9,693	12.5	9,352	12.1	10,136	13.1
5 – 7	6,388	8.3	6,780	8.8	7,838	10.1	7,873	10.2
8 – 10	4,934	6.4	6,214	8.0	7,407	9.6	7,370	9.5
>10	7,096	9.2	10,367	13.4	11,737	15.2	10,680	13.8
Not specified	38,187	49.4	35,651	46.1	33,517	43.4	33,945	43.9
Ever use of hormone replacement therapy								
No	55,025	71.2	52,652	68.1	52,713	68.2	52,781	68.3
Yes	16,394	21.2	17,352	22.5	19,344	25.0	21,438	27.7
Not specified	5,864	7.6	7,278	9.4	5,225	6.8	3,063	4.0
Ever breast-feed								
No	16,702	21.6	18,033	23.3	20,773	26.9	21,908	28.4
Yes	52,881	68.4	48,365	62.6	46,985	60.8	49,115	63.6
Not specified	7,700	10.0	10,884	14.1	9,524	12.3	6,259	8.1

Supplementary Table S2. Hazard ratios and 95% confidence intervals for epithelial ovarian cancer, according to quartile of intake of total polyphenols, flavonoids and phenolic acids by coffee intake categories in the EPIC study.

	Coffee non-consumers	Coffee consumers
	HR (95% CI)	HR (95% CI)
N	24,582	284,302
Cases	96	1,371
Total polyphenols		
Quartile 1	1.00 (ref)	1.00 (ref)
Quartile 2	0.65 (0.33-1.28)	1.05 (0.89-1.24)
Quartile 3	0.67 (0.32-1.40)	1.10 (0.92-1.33)
Quartile 4	0.41 (0.17-0.94)	1.23 (1.00-1.50)
P-trend	0.04	0.05
Continuous (log2)	0.87 (0.63-1.21)	1.17 (1.04-1.30)
Flavonoids		
Quartile 1	1.00 (ref)	1.00 (ref)
Quartile 2	0.57 (0.29-1.1)	1.03 (0.88-1.22)
Quartile 3	0.61 (0.30-1.24)	1.06 (0.88-1.27)
Quartile 4	0.50 (0.23-1.09)	1.11 (0.91-1.36)
P-trend	0.30	0.12
Continuous (log2)	0.89 (0.70-1.15)	1.04 (0.97-1.12)
Phenolic acids		
Quartile 1	1.00 (ref)	1.00 (ref)
Quartile 2	0.65 (0.32-1.29)	0.98 (0.83-1.15)
Quartile 3	0.65 (0.30-1.40)	1.04 (0.88-1.22)
Quartile 4	0.55 (0.23-1.28)	1.16 (0.97-1.38)
P-trend	0.08	0.23
Continuous (log2)	0.80 (0.56-1.14)	1.11 (1.03-1.19)
Hydroxycinnamic acids		
Quartile 1	1.00 (ref)	1.00 (ref)

Quartile 2	1.05 (0.56-1.95)	1.11 (0.95-1.3)
Quartile 3	0.59 (0.27-1.27)	1.06 (0.9-1.25)
Quartile 4	0.80 (0.35-1.79)	1.17 (0.99-1.39)
P-trend	0.12	0.33
Continuous (log ₂)	0.78 (0.52-1.16)	1.08 (1.01-1.15)

Abbreviations: BMI body mass index; CI confidence interval, HR hazard ratio

Model 2: stratified by study centre and age at baseline (1-year interval) and adjusted for BMI, smoking status, alcohol consumption, education level, physical activity, menopausal status, age at menopause, age at first menstrual period, use of oral contraceptives, duration of oral contraceptives, hormone replacement therapy use, and full-term pregnancies.

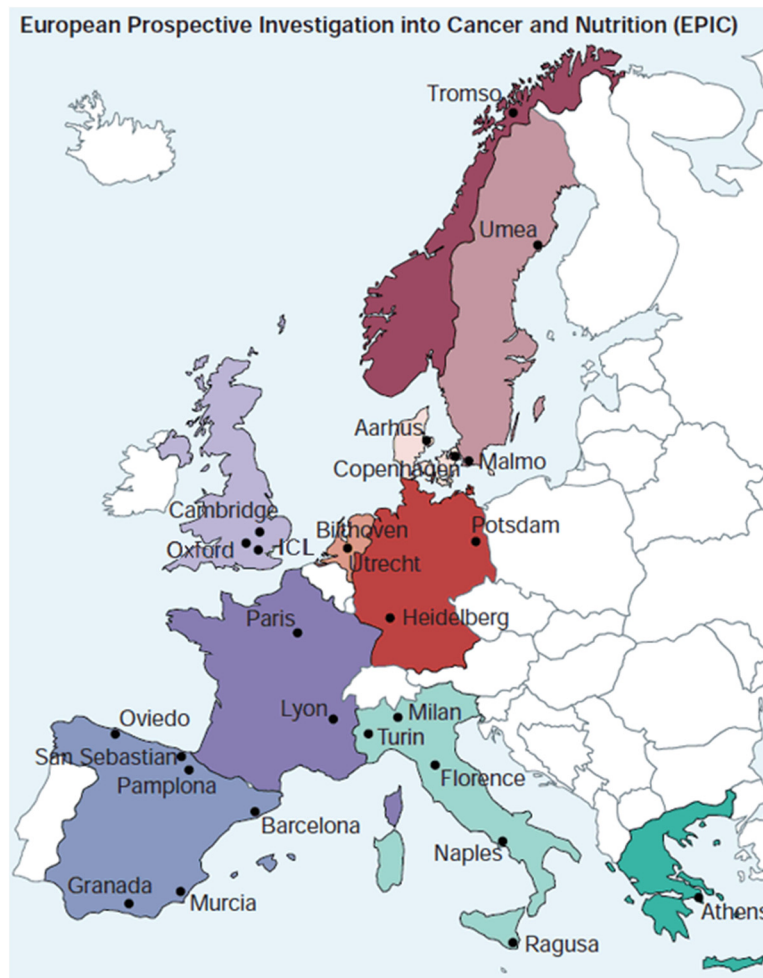
Supplementary Table S3. Hazard ratios and 95% confidence intervals for epithelial ovarian cancer, according to quartile of intake of total polyphenols, flavonoids and phenolic acids by body mass index categories in the EPIC study.

	BMI < 25	BMI 25 – 29.9	BMI ≥ 30	P for interaction
	HR (95% CI)	HR (95% CI)	HR (95% CI)	
N	186,764	87,590	34,775	
Cases	808	451	210	
Total polyphenols				0.018
Quartile 1	1.00 (ref)	1.00 (ref)	1.00 (ref)	
Quartile 2	0.99 (0.80-1.22)	1.18 (0.87-1.60)	1.08 (0.67-1.76)	
Quartile 3	0.96 (0.75-1.22)	1.22 (0.88-1.71)	1.58 (0.96-2.59)	
Quartile 4	1.05 (0.81-1.36)	1.41 (0.98-2.03)	1.61 (0.93-2.82)	
P-trend	0.89	0.07	0.15	
Continuous (log ₂)	1.06 (0.92-1.21)	1.18 (0.98-1.42)	1.23 (0.95-1.60)	
Flavonoids				0.25
Quartile 1	1.00 (ref)	1.00 (ref)	1.00 (ref)	
Quartile 2	0.90 (0.72-1.11)	1.13 (0.84-1.53)	1.01 (0.66-1.53)	
Quartile 3	0.93 (0.73-1.17)	1.34 (0.97-1.85)	1.10 (0.70-1.72)	
Quartile 4	0.99 (0.77-1.28)	1.37 (0.96-1.95)	0.99 (0.77-1.28)	
P-trend	0.73	0.11	0.47	
Continuous (log ₂)	1.01 (0.92-1.11)	1.07 (0.94-1.21)	0.98 (0.83-1.17)	
Phenolic acids				0.09
Quartile 1	1.00 (ref)	1.00 (ref)	1.00 (ref)	
Quartile 2	1.09 (0.88-1.34)	0.95 (0.71-1.25)	0.98 (0.63-1.55)	
Quartile 3	1.18 (0.96-1.46)	1.01 (0.76-1.35)	0.97 (0.61-1.55)	
Quartile 4	1.09 (0.86-1.37)	1.24 (0.91-1.67)	1.57 (0.99-2.51)	
P-trend	0.50	0.09	0.02	
Continuous (log ₂)	1.04 (0.96-1.13)	1.07 (0.95-1.21)	1.19 (1.01-1.41)	

Abbreviations: BMI body mass index; CI confidence interval, HR hazard ratio

Model 2: stratified by study centre and age at baseline (1-year interval) and adjusted for BMI, smoking status, alcohol consumption, education level, physical activity, menopausal status, age at menopause, age at first menstrual period, use of oral contraceptives, duration of oral contraceptives, hormone replacement therapy use, and full-term pregnancies.

Supplementary Figure S1



Supplementary Figure S1. Map of the participating centres in the European Prospective Investigation into Cancer and Nutrition study. All centres of France, Utrecht (The Netherlands) and Florence only recruited women. Data from Greece was not available for the present study. ICL: Imperial College of London. Reproduced from <https://epic.iarc.fr/centers/epicmap.php>. Accessed on 2021-07-22.