**Supplemental Material and Methods**. **Additional information on dietary assessment**

**(Supplemental Tables provided below)**

**European Prospective Investigation into Cancer and Nutrition (EPIC)**

The habitual diet of the EPIC study participants at enrolment was assessed using country-specific or study center-specific baseline dietary questionnaires that were designed to measure local dietary habits (1). Most countries used self-administered questionnaires while in Greece, Spain, and southern Italy (Naples and Ragusa) in-person interviews were conducted. The majority of countries used quantitative dietary questionnaires containing up to 260 food items, while in Denmark, Norway, Umeå (Sweden) and Naples, Italy, semi-quantitative food frequency questionnaires (FFQs) were used. In Malmö, Sweden an interview-based diet history method combined with a 7-day menu book was used and in the United Kingdom a FFQ and 7-day dietary records were used but the current results are based on the FFQ only.The country and center-specific dietary questionnaires have been validated with most centers using monthly 24-h recall interviews (2). The EPIC Nutrient Database was used to convert the quantities of food consumed into estimates of daily total energy and nutrient intake and nutrient values were standardized across the 10 countries (3). These analyses evaluated 55 total foods; 29could be investigated across all 10 countries while 26 foods were available for analysis in ≥8 countries. All food intake values were measured in g/day.

**Foods available in 10 countries (n=29)**

1. Butter
2. Margarine
3. Coffee (total coffee intake which includes caffeinated, decaffeinated and unspecified)
4. Potatoes (potatoes, French fries, potato products)
5. Cheese
6. Yoghurt and thick fermented milk
7. Processed meat
8. Root vegetables (carrots, celeriac, radishes, turnip, salsify, parsnips, beetroot)
9. Nuts (spreads and seeds)
10. Fruit and vegetable juices
11. Beer or alcoholic cider
12. Cakes, sweet pies, pastries, puddings (non-milk based)
13. Chocolate, candy bars (e.g., plain chocolate (dark, milk, white), filled chocolate, chocolate bars)
14. Pork
15. Fruit (all types)
16. Poultry
17. Bananas
18. Total milk
19. Ice cream
20. Red meat (beef, veal, pork, mutton/lamb)
21. Apples and pears
22. Pasta, rice and other grains
23. Citrus fruits (oranges, grapefruit, lemon)
24. Bread
25. Salty biscuits and crackers
26. Crispbread and rusks (e.g., crispbread ‘Wasa’, white or wholemeal bread sticks, cream cracker, cheese biscuit)
27. Carbonated/soft drinks (Carbonated/soft/isotonic drinks, diluted syrups)
28. Fish (all types including canned, marinated and salted fish)
29. Wine

**Foods available in ≥8 countries (n=26) and exclusions for these analyses**

1. Leafy vegetables (Lettuce, spinach, Swiss chard leaf, watercress; exclude Norway, Umeå)
2. Fruiting vegetables (tomato, sweet pepper, avocado, eggplant, artichoke, okra, green beans, squash, cucumber, gherkins, capers; exclude Norway)
3. Cabbages (exclude Umeå)
4. Mushrooms (exclude Norway, Umeå)
5. Grain and pod vegetables (all fresh legumes such as peas, fresh broad beans, corn; exclude Norway, Umeå)
6. Onion, garlic (exclude France, Norway, Umeå)
7. Stalk vegetables (leeks, sprouts, celery, fennel, asparagus, Swiss chard stalk; exclude Norway, Umeå)
8. Legumes (dry legumes such as red kidney beans, haricot beans, chickpeas, split peas, lentils; exclude Denmark, Norway)
9. Grape (grapes, raisins; exclude Denmark, Norway, Umeå)
10. Stone fruits (apricots, peaches, nectarines, plums, Mirabelles, cherries; exclude Norway, Umeå)
11. Berries (strawberries, raspberries, redcurrants, blackberries; exclude Norway, UK)
12. Cream desserts, puddings (milk based) (chocolate mousse, oat porridge with milk, rice milk pudding, custard, tiramisu, trifle; exclude Italy, Umeå)
13. Breakfast cereals (exclude Florence, Varese, Turin, Ragusa)
14. Beef (exclude Greece, Umeå)
15. Mutton/lamb (exclude The Netherlands, Florence, Varese, Turin, Umeå)
16. Offals (exclude Norway)
17. Liver (exclude The Netherlands, Norway, Umeå)
18. Lean (white) fish (cod, coley, hake, whiting; exclude Germany, Naples, Umeå)
19. Fatty/very fatty fish (anchovy, salmon, sardines, tuna; exclude Potsdam)
20. Crustaceans, molluscs (shrimps, prawns, crab, clams, mussels, octopus, squid; exclude Germany)
21. Eggs (whole, white, yolk; exclude Umeå)
22. Confectionery (non-chocolate) (sweets, chewing gum, nougat, torrone, cereal bar, toffee, peppermint, liquorice, halva, jelly sweets, marzipan; exclude Germany, Norway)
23. Tea (black and green; exclude Norway)
24. Dry cakes, biscuits (biscuit with butter, wafers, cookies; exclude Umeå)
25. Mayonnaise (mayonnaise, remoulade sauce; exclude Norway, Naples, Umeå)
26. Soup (clear soup, legume soup with pasta; exclude Denmark, Norway, Naples)

**Nutrients (standardized across all 10 countries)**

We evaluated intake as measured by dietary questionnaires of **29 nutrients**; this included all priority nutrients that were standardized across the 10 countries using the EPIC Nutrient Database (3). Values were measured in g/day unless stated otherwise.

1. Phosphorus (mg/day)
2. Total fat
3. Total fat (animal)
4. Total fat (plant)
5. Saturated fat
6. Polyunsaturated fat
7. Monounsaturated fat
8. Cholesterol (mg/day)
9. Carbohydrates
10. Starch
11. Sugars
12. Calcium (mg/day)
13. Beta-carotene (ug/day)
14. Retinol (ug/day)
15. Thiamin/B1 (mg/day)
16. Riboflavin/B2 (mg/day)
17. Vitamin B6 (mg/day)
18. Cobalamin/B12 (ug/day)
19. Vitamin C (mg/day)
20. Vitamin D (ug/day)
21. Vitamin E (mg/day)
22. Potassium (mg/day)
23. Magnesium (mg/day)
24. Iron (mg/day)
25. Fiber
26. Total protein
27. Protein (animal)
28. Protein (plant)
29. Alcohol

**Non-dietary covariates**

In the EPIC study, all non-dietary covariates that were included in multivariate models, specifically BMI, total energy, smoking status, age at menarche, oral contraceptive (OC) use, parity, and a combined variable for menopausal status and postmenopausal hormone (PMH) use, were self-reported with the exception of BMI which was based on direct measurements except in France, Norway and the Oxford health conscious cohorts where self-reported values were used (4). For individuals in the EPIC study that were missing BMI, values were imputed based on study center, age and gender-specific averages.

**Nurses’ Health Study (NHS) and NHSII**

Of the NHS and NHSII participants who completed the baseline FFQs, the follow-up rates through June 2010 (NHS) or June 2011 (NHSII) were 94% and 88%, respectively, of the potential person-years.

In the NHS/NHSII, intakes of nine selected foods and nutrients, namely butter, yogurt, cheese, potatoes, coffee, total fat, monounsaturated fat, carbohydrates and phosphorus, were assessed beginning with the 1980 FFQ (NHS) or 1991 FFQ (NHSII) and approximately every four years thereafter until the end of follow-up using a validated and reproducible FFQ (5, 6). The main analyses focused on diet at baseline for comparability with the EPIC study. In further sensitivity analyses of the cumulative average dietary intake, FFQs were included in the years 1980, 1984, 1986, 1990, 1994, 1998, 2002 and 2006 for the NHS and in 1991, 1995, 1999, 2003 and 2007 for the NHSII. Since the most recent dietary intake could be inﬂuenced by disease status, the cumulative average intake analyses included a 2-6 year time lag between the diet assessment and the start of follow-up. For example, in the NHS, the incidence of EC from 1984-1986 was related to the dietary intake from the 1980 (baseline) questionnaire, the incidence of EC from 1986-1988 was related to the average dietary intake from the 1980 and 1984 questionnaires, and so on.

To calculate food intake units that were comparable to the EPIC study, servings/day were converted to grams/day using food composition values from the U.S. Department of Agriculture food composition data (7). Similar food items also were evaluated in the EPIC and NHS/NHSII studies; for example, cheese refers to hard cheese only, potatoes included baked/boiled or mashed potatoes as well as french fried potatoes, and coffee intake was the sum of regular and decaffeinated coffee. Nutrient intakes were calculated by multiplying the frequency of intake of each food containing the nutrient by the nutrient content of specified portions as determined by the food composition values available from the U.S. Department of Agriculture food composition data (7).

**Non-dietary covariates**

In the NHS/NHSII, information on the non-dietary covariates, specifically BMI, total energy, smoking status, age at menarche, oral contraceptive (OC) use, parity, and a combined variable for menopausal status and postmenopausal hormone (PMH) use, were updated at each follow-up cycle except for the age at menarche.

**Statistical analyses**

Cox proportional hazards (PH) regression was used to estimate the hazard ratios (HRs) and 95% confidence intervals (CIs) in all analyses. The proportional hazards assumption was verified using the method described by Grambsch and Therneau (8). All nutrient intakes were energy-adjusted using the regression residual method (9). Random effects meta-analyses was used to combine HRs across studies (10).

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**Supplemental Table S1**. **Hazard Ratiosa and 95% CIs from analyses of nutrient and food intakes (FDR≤0.10) reported in the baseline dietary assessment in relation to endometrial cancer risk in the EPIC studyb**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Cases/** |  | **Model 1** | **Model 2** |  |
| **Variable** | **Value** | **Person-years** | **Median** | **HR (95% CI)** | **HR (95% CI)** | **FDR**c |
| Total fatd (g/day) | Q1 | 386/826233 | 49.7 | 1.00 (Ref) | 1.00 (Ref) | 0.06 |
|  | Q2 | 339/829737 | 58.1 | 0.91 (0.79-1.06) | 0.92 (0.79-1.06) |  |
|  | Q3 | 313/829949 | 65.5 | 0.87 (0.75-1.02) | 0.88 (0.75-1.02) |  |
|  | Q4 | 265/817290 | 73.7 | 0.85 (0.72-1.00) | 0.84 (0.71-0.99) |  |
|  | P-trende |  |  | 0.04 | 0.03 |  |
| Monounsaturated fatd | Q1 | 359/822282 | 16.2 | 1.00 (Ref) | 1.00 (Ref) | 0.03 |
| (g/day) | Q2 | 332/822808 | 19.5 | 0.95 (0.82-1.11) | 0.97 (0.83-1.12) |  |
|  | Q3 | 349/826381 | 22.5 | 1.01 (0.87-1.18) | 1.02 (0.87-1.19) |  |
|  | Q4 | 263/831739 | 29.0 | 0.79 (0.65-0.97) | 0.80 (0.65-0.97) |  |
|  | P-trende |  |  | 0.05 | 0.05 |  |
| Carbohydratesd | Q1 | 275/816348 | 148.1 | 1.00 (Ref) | 1.00 (Ref) | 0.06 |
| (g/day) | Q2 | 314/824219 | 171.7 | 1.06 (0.90-1.24) | 1.06 (0.90-1.24) |  |
|  | Q3 | 352/827205 | 189.3 | 1.17 (0.99-1.37) | 1.17 (0.99-1.38) |  |
|  | Q4 | 362/835437 | 212.0 | 1.20 (1.02-1.42) | 1.19 (1.01-1.41) |  |
|  | P-trende |  |  | 0.02 | 0.02 |  |
| Phosphorusd | Q1 | 319/828747 | 984.2 | 1.00 (Ref) | 1.00 (Ref) | 0.04 |
| (mg/day) | Q2 | 304/833314 | 1137.0 | 0.91 (0.78-1.07) | 0.88 (0.75-1.03) |  |
|  | Q3 | 356/825558 | 1275.4 | 1.03 (0.87-1.21) | 0.97 (0.83-1.14) |  |
|  | Q4 | 324/815591 | 1490.1 | 0.89 (0.75-1.06) | 0.82 (0.69-0.97) |  |
|  | P-trende |  |  | 0.35 | 0.05 |  |
| Butterf (g/day) | 0 | 474/1029195 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.02 |
|  | >0- 0.4 | 224/644740 | 0.1 | 1.09 (0.89-1.33) | 1.11 (0.90-1.35) |  |
|  | 0.4- 4.3 | 288/822969 | 1.4 | 1.06 (0.88-1.28) | 1.09 (0.90-1.32) |  |
|  | ≥4.3 | 317/806305 | 10.3 | 1.17 (0.98-1.40) | 1.23 (1.03-1.47) |  |
|  | P-trende |  |  | 0.11 | 0.03 |  |
| Yogurt (g/day) | Q1 | 310/816885 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.10 |
|  | Q2 | 292/833020 | 18.2 | 1.01 (0.86-1.19) | 1.01 (0.85-1.19) |  |
|  | Q3 | 330/820028 | 62.5 | 1.17 (1.00-1.38) | 1.16 (0.99-1.37) |  |
|  | Q4 | 371/833278 | 145.3 | 1.17 (0.99-1.37) | 1.15 (0.98-1.36) |  |
|  | P-trende |  |  | 0.04 | 0.05 |  |
| Cheese (g/day) | Q1 | 373/835460 | 7.5 | 1.00 (Ref) | 1.00 (Ref) | 0.07 |
|  | Q2 | 341/827633 | 21.9 | 0.93 (0.80-1.08) | 0.94 (0.81-1.10) |  |
|  | Q3 | 319/825723 | 39.9 | 0.91 (0.77-1.07) | 0.92 (0.78-1.09) |  |
|  | Q4 | 270/814394 | 74.7 | 0.83 (0.69-1.00) | 0.83 (0.69-1.01) |  |
|  | P-trende |  |  | 0.05 | 0.06 |  |
| Potatoes (g/day) | Q1 | 281/814645 | 20.8 | 1.00 (Ref) | 1.00 (Ref) | 0.06 |
|  | Q2 | 259/814745 | 53.5 | 1.00 (0.83-1.20) | 1.00 (0.83-1.19) |  |
|  | Q3 | 346/840214 | 85.7 | 1.17 (0.97-1.41) | 1.16 (0.96-1.39) |  |
|  | Q4 | 417/833605 | 142.2 | 1.24 (1.03-1.51) | 1.20 (0.99-1.46) |  |
|  | P-trende |  |  | 0.01 | 0.03 |  |
| Coffee (g/day) | Q1 | 329/819733 | 8.6 | 1.00 (Ref) | 1.00 (Ref) | 0.02 |
|  | Q2 | 275/831117 | 169.7 | 0.76 (0.65-0.90) | 0.77 (0.66-0.91) |  |
|  | Q3 | 369/831822 | 397.7 | 0.85 (0.72-1.01) | 0.88 (0.74-1.04) |  |
|  | Q4 | 330/820538 | 750.0 | 0.78 (0.65-0.93) | 0.81 (0.68-0.97) |  |
|  | P-trende |  |  | 0.03 | 0.09 |  |

**Supplemental Table S1 (continued). Hazard Ratiosa and 95% CIs from analyses of nutrient and food intakes (FDR≤0.10) reported in the baseline dietary assessment in relation to endometrial cancer risk in the EPIC studyb**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Cases/** |  | **Model 1** | **Model 2** |  |
| **Variable** | **Value** | **Person-years** | **Median** | **HR (95% CI)** | **HR (95% CI)** | **FDR**c |
| Cream dessertsf,g (g/day) | 0 | 406/874586 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.05 |
|  | >0- 6.6 | 175/534879 | 2.9 | 0.92 (0.74-1.13) | 0.91 (0.74-1.13) |  |
|  | 6.6- 20.3 | 262/715227 | 11.6 | 0.89 (0.75-1.05) | 0.87 (0.73-1.03) |  |
|  | ≥20.3 | 259/705817 | 35.1 | 0.88 (0.73-1.05) | 0.85 (0.71-1.01) |  |
|  | P-trende |  |  | 0.22 | 0.11 |  |

a **Model 1** was adjusted for total energy intake (kcal, continuous) and was stratified by the age of recruitment (continuous) and the study center. **Model 2** was adjusted for BMI (<23 kg/m2, 23-24.9 [Ref], 25-29.9, 30-39.9, 40+), total energy intake (kcal, continuous), smoking status (never [Ref], former, current, unknown), age at menarche (<12 years, 12, 13 [Ref], 14+, unknown), oral contraceptive use (never use [Ref], ever use, unknown), a combined variable for menopausal status and postmenopausal hormone (PMH) use (premenopausal/uncertain menopause, postmenopausal/no PMH [Ref], postmenopausal/ever use PMH, unknown), parity (nulliparous [Ref], parous, unknown) and was stratified by the age of recruitment (continuous) and the study center.

b Results refer to the entire EPIC cohort; there was no heterogeneity by country for the association between intake of the 10 dietary factors shown and risk of endometrial cancer (P-het ≥ 0.11). When testing all 84 foods/nutrients, P-het ≥ 0.05, except for the association with potassium intake (P-het = 0.01).

c Nutrients/foods with a False Discovery Rate (FDR) ≤ 0.10 for the comparison of quartile 4 (Q4) versus Q1 of intake were selected for validation studies.

d Nutrient intakes were adjusted for total energy intake using the regression residuals method.

e P-value test for trend using a trend variable based on the median of each category of intake.

f Butter and cream desserts could not be categorized into quartiles due to the high proportion of participants who never consumed these foods, hence the ranges of intake are presented.

g Cream dessert intake was missing for participants from Italy and Umeå (13.3%).

**Supplemental Table S2. Hazard Ratiosa and 95% CIs from analyses of intake of nutrients/foods at baseline (FDR > 0.10) in relation to endometrial cancer risk in the EPIC studyb**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Cases/** |  | **Model 1** | **Model 2** |  |
| **Variable** | **Value** | **Person-years** | **Median** | **HR (95% CI)** | **HR (95% CI)** | **FDRc** |
| Alcohold (g/day) | Q1 | 366/836395 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.77 |
|  | Q2 | 301/821558 | 1.4 | 0.88 (0.75-1.03) | 0.93 (0.80-1.09) |  |
|  | Q3 | 325/824321 | 5.0 | 0.93 (0.80-1.09) | 1.04 (0.89-1.22) |  |
|  | Q4 | 311/820935 | 14.0 | 0.84 (0.72-0.99) | 0.97 (0.83-1.15) |  |
|  | P-trende |  |  | 0.10 | 0.99 |  |
| Calciumd (mg/day) (g/day) | Q1 | 318/811504 | 545.6 | 1.00 (Ref) | 1.00 (Ref) | 0.13 |
|  | Q2 | 310/822901 | 712.6 | 0.94 (0.80-1.10) | 0.93 (0.79-1.08) |  |
|  | Q3 | 327/831864 | 862.7 | 0.92 (0.78-1.07) | 0.89 (0.76-1.05) |  |
|  | Q4 | 348/836941 | 1098.6 | 0.92 (0.78-1.08) | 0.89 (0.75-1.04) |  |
|  | P-trende |  |  | 0.32 | 0.15 |  |
| Beta-carotened (ug/day) | Q1 | 333/848015 | 1307.6 | 1.00 (Ref) | 1.00 (Ref) | 0.14 |
|  | Q2 | 302/827930 | 2201.0 | 0.99 (0.85-1.16) | 0.98 (0.84-1.15) |  |
|  | Q3 | 314/814403 | 3373.1 | 1.07 (0.91-1.25) | 1.04 (0.89-1.23) |  |
|  | Q4 | 354/812862 | 5550.3 | 1.18 (1.00-1.39) | 1.15 (0.98-1.35) |  |
|  | P-trende |  |  | 0.02 | 0.06 |  |
| Cholesterold (mg/day) | Q1 | 261/842434 | 147.8 | 1.00 (Ref) | 1.00 (Ref) | 0.97 |
|  | Q2 | 323/824869 | 210.0 | 1.00 (0.84-1.19) | 0.97 (0.82-1.16) |  |
|  | Q3 | 347/815825 | 260.3 | 1.05 (0.87-1.26) | 1.00 (0.83-1.20) |  |
|  | Q4 | 372/820082 | 334.4 | 1.07 (0.89-1.29) | 1.00 (0.83-1.20) |  |
|  | P-trende |  |  | 0.38 | 0.91 |  |
| Saturated fatd (g/day) | Q1 | 333/827860 | 17.3 | 1.00 (Ref) | 1.00 (Ref) | 0.64 |
|  | Q2 | 324/821304 | 21.5 | 0.97 (0.83-1.13) | 0.97 (0.83-1.14) |  |
|  | Q3 | 317/822997 | 24.8 | 0.94 (0.80-1.10) | 0.95 (0.81-1.11) |  |
|  | Q4 | 329/831049 | 29.5 | 0.94 (0.80-1.11) | 0.95 (0.81-1.12) |  |
|  | P-trende |  |  | 0.43 | 0.55 |  |
| Polyunsaturated fatd | Q1 | 368/838831 | 7.0 | 1.00 (Ref) | 1.00 (Ref) | 0.13 |
| (g/day) | Q2 | 359/826013 | 8.9 | 1.08 (0.93-1.26) | 1.07 (0.92-1.24) |  |
|  | Q3 | 322/821779 | 10.9 | 0.99 (0.84-1.16) | 0.96 (0.82-1.13) |  |
|  | Q4 | 254/816587 | 14.5 | 0.89 (0.74-1.06) | 0.87 (0.73-1.03) |  |
|  | P-trende |  |  | 0.08 | 0.05 |  |
| Total fat (animal)d (g/day) | Q1 | 294/833640 | 16.9 | 1.00 (Ref) | 1.00 (Ref) | 0.50 |
|  | Q2 | 314/831865 | 24.0 | 0.92 (0.78-1.09) | 0.92 (0.78-1.08) |  |
|  | Q3 | 357/823507 | 29.7 | 1.03 (0.88-1.22) | 1.02 (0.87-1.20) |  |
|  | Q4 | 338/814197 | 38.2 | 0.96 (0.81-1.14) | 0.94 (0.80-1.11) |  |
|  | P-trende |  |  | 0.93 | 0.73 |  |
| Total fat (plant)d (g/day) | Q1 | 390/804077 | 8.5 | 1.00 (Ref) | 1.00 (Ref) | 0.97 |
|  | Q2 | 365/827737 | 14.1 | 1.08 (0.93-1.25) | 1.09 (0.94-1.27) |  |
|  | Q3 | 285/837632 | 20.8 | 0.93 (0.78-1.11) | 0.96 (0.81-1.14) |  |
|  | Q4 | 263/833764 | 33.0 | 0.98 (0.80-1.20) | 1.00 (0.82-1.23) |  |
|  | P-trende |  |  | 0.58 | 0.78 |  |

**Supplemental Table S2 (continued). Hazard Ratiosa and 95% CIs from analyses of intake of nutrients/foods at baseline (FDR > 0.10) in relation to endometrial cancer risk in the EPIC studyb**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Cases/** |  | **Model 1** | **Model 2** |  |
| **Variable** | **Value** | **Person-years** | **Median** | **HR (95% CI)** | **HR (95% CI)** | **FDRc** |
| Irond (mg/day) | Q1 | 344/838744 | 8.3 | 1.00 (Ref) | 1.00 (Ref) | 0.24 |
|  | Q2 | 313/824467 | 9.7 | 0.99 (0.85-1.16) | 0.99 (0.84-1.16) |  |
|  | Q3 | 332/823066 | 10.8 | 1.09 (0.93-1.28) | 1.07 (0.91-1.26) |  |
|  | Q4 | 314/816933 | 12.6 | 1.18 (1.00-1.40) | 1.14 (0.96-1.35) |  |
|  | P-trende |  |  | 0.03 | 0.10 |  |
| Fiberd (g/day) | Q1 | 294/831243 | 14.1 | 1.00 (Ref) | 1.00 (Ref) | 0.31 |
|  | Q2 | 309/819412 | 17.4 | 1.09 (0.93-1.28) | 1.07 (0.91-1.26) |  |
|  | Q3 | 328/821488 | 20.3 | 1.11 (0.94-1.31) | 1.08 (0.92-1.27) |  |
|  | Q4 | 372/831067 | 24.9 | 1.19 (1.01-1.40) | 1.14 (0.97-1.35) |  |
|  | P-trende |  |  | 0.04 | 0.12 |  |
| Potassiumd (mg/day) | Q1 | 289/823898 | 2443.4 | 1.00 (Ref) | 1.00 (Ref) | 0.56 |
|  | Q2 | 303/824420 | 2888.6 | 1.03 (0.88-1.22) | 1.02 (0.86-1.20) |  |
|  | Q3 | 348/825554 | 3267.5 | 1.16 (0.98-1.37) | 1.13 (0.96-1.34) |  |
|  | Q4 | 363/829337 | 3812.5 | 1.15 (0.96-1.37) | 1.09 (0.91-1.30) |  |
|  | P-trende |  |  | 0.08 | 0.26 |  |
| Magnesiumd (mg/day) | Q1 | 327/852668 | 232.1 | 1.00 (Ref) | 1.00 (Ref) | 0.21 |
|  | Q2 | 324/829361 | 278.6 | 1.07 (0.90-1.27) | 1.07 (0.90-1.27) |  |
|  | Q3 | 325/817989 | 312.7 | 1.05 (0.88-1.25) | 1.04 (0.87-1.25) |  |
|  | Q4 | 327/803192 | 367.0 | 1.16 (0.97-1.39) | 1.14 (0.95-1.37) |  |
|  | P-trende |  |  | 0.13 | 0.19 |  |
| Total proteind (g/day) | Q1 | 298/830788 | 56.0 | 1.00 (Ref) | 1.00 (Ref) | 0.50 |
|  | Q2 | 311/825749 | 65.2 | 0.94 (0.80-1.11) | 0.91 (0.77-1.07) |  |
|  | Q3 | 319/822768 | 72.8 | 0.94 (0.79-1.11) | 0.88 (0.74-1.04) |  |
|  | Q4 | 375/823905 | 83.4 | 1.07 (0.91-1.27) | 0.94 (0.80-1.12) |  |
|  | P-trende |  |  | 0.33 | 0.58 |  |
| Protein (animal)d (g/day) | Q1 | 247/818096 | 25.5 | 1.00 (Ref) | 1.00 (Ref) | 0.59 |
|  | Q2 | 347/826148 | 36.8 | 1.10 (0.93-1.31) | 1.07 (0.90-1.27) |  |
|  | Q3 | 342/830586 | 45.2 | 1.02 (0.86-1.21) | 0.97 (0.81-1.15) |  |
|  | Q4 | 367/828379 | 57.1 | 1.05 (0.88-1.26) | 0.95 (0.79-1.14) |  |
|  | P-trende |  |  | 0.84 | 0.32 |  |
| Protein (plant)d (g/day) | Q1 | 376/839294 | 15.5 | 1.00 (Ref) | 1.00 (Ref) | 0.76 |
|  | Q2 | 340/826661 | 19.6 | 0.97 (0.83-1.13) | 0.97 (0.83-1.13) |  |
|  | Q3 | 323/817619 | 23.0 | 1.02 (0.87-1.20) | 1.02 (0.87-1.20) |  |
|  | Q4 | 264/819636 | 28.2 | 1.03 (0.86-1.23) | 1.03 (0.86-1.23) |  |
|  | P-trende |  |  | 0.63 | 0.65 |  |
| Retinold (ug/day) | Q1 | 254/827456 | 226.1 | 1.00 (Ref) | 1.00 (Ref) | 0.26 |
|  | Q2 | 332/816438 | 388.9 | 1.25 (1.05-1.50) | 1.25 (1.05-1.50) |  |
|  | Q3 | 348/829542 | 594.5 | 1.14 (0.95-1.37) | 1.12 (0.93-1.35) |  |
|  | Q4 | 369/829775 | 1061.4 | 1.14 (0.95-1.37) | 1.12 (0.93-1.34) |  |
|  | P-trende |  |  | 0.74 | 0.93 |  |

**Supplemental Table S2 (continued). Hazard Ratiosa and 95% CIs from analyses of intake of nutrients/foods at baseline (FDR > 0.10) in relation to endometrial cancer risk in the EPIC studyb**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Cases/** |  | **Model 1** | **Model 2** |  |
| **Variable** | **Value** | **Person-years** | **Median** | **HR (95% CI)** | **HR (95% CI)** | **FDRc** |
| Riboflavin/B2d (mg/day) | Q1 | 282/817379 | 1.0 | 1.00 (Ref) | 1.00 (Ref) | 0.50 |
|  | Q2 | 351/829531 | 1.3 | 1.12 (0.95-1.32) | 1.09 (0.93-1.28) |  |
|  | Q3 | 332/832669 | 1.6 | 1.05 (0.89-1.25) | 1.01 (0.85-1.20) |  |
|  | Q4 | 338/823630 | 2.1 | 1.15 (0.95-1.39) | 1.07 (0.89-1.30) |  |
|  | P-trende |  |  | 0.26 | 0.67 |  |
| Starchd (g/day) | Q1 | 336/812951 | 67.2 | 1.00 (Ref) | 1.00 (Ref) | 0.38 |
|  | Q2 | 320/827498 | 85.3 | 0.94 (0.80-1.09) | 0.92 (0.79-1.08) |  |
|  | Q3 | 340/825894 | 100.3 | 1.03 (0.88-1.20) | 1.01 (0.87-1.18) |  |
|  | Q4 | 307/836867 | 122.2 | 0.94 (0.79-1.12) | 0.92 (0.77-1.10) |  |
|  | P-trende |  |  | 0.70 | 0.55 |  |
| Sugarsd (g/day) | Q1 | 271/814149 | 55.9 | 1.00 (Ref) | 1.00 (Ref) | 0.11 |
|  | Q2 | 333/825183 | 72.8 | 1.14 (0.97-1.34) | 1.15 (0.98-1.35) |  |
|  | Q3 | 336/832598 | 87.8 | 1.09 (0.92-1.28) | 1.10 (0.93-1.29) |  |
|  | Q4 | 363/831280 | 110.7 | 1.14 (0.96-1.35) | 1.15 (0.97-1.37) |  |
|  | P-trende |  |  | 0.21 | 0.18 |  |
| Thiamin/B1d (mg/day) | Q1 | 319/825855 | 0.8 | 1.00 (Ref) | 1.00 (Ref) | 0.82 |
|  | Q2 | 339/817593 | 1.0 | 1.09 (0.91-1.30) | 1.05 (0.88-1.25) |  |
|  | Q3 | 333/820437 | 1.1 | 1.08 (0.90-1.30) | 1.00 (0.83-1.20) |  |
|  | Q4 | 312/839325 | 1.4 | 1.15 (0.93-1.42) | 1.03 (0.83-1.27) |  |
|  | P-trende |  |  | 0.23 | 0.92 |  |
| Vitamin B6d (mg/day) | Q1 | 278/798555 | 1.1 | 1.00 (Ref) | 1.00 (Ref) | 0.21 |
|  | Q2 | 320/820731 | 1.4 | 1.06 (0.90-1.25) | 1.03 (0.87-1.21) |  |
|  | Q3 | 348/835823 | 1.6 | 1.16 (0.98-1.38) | 1.09 (0.92-1.29) |  |
|  | Q4 | 357/848101 | 2.0 | 1.26 (1.04-1.53) | 1.16 (0.96-1.41) |  |
|  | P-trende |  |  | 0.01 | 0.10 |  |
| Cobalamin/B12d (ug/day) | Q1 | 270/833030 | 2.7 | 1.00 (Ref) | 1.00 (Ref) | 0.67 |
|  | Q2 | 317/832974 | 4.0 | 0.95 (0.81-1.12) | 0.93 (0.79-1.09) |  |
|  | Q3 | 339/822399 | 5.2 | 0.96 (0.81-1.13) | 0.91 (0.77-1.08) |  |
|  | Q4 | 377/814807 | 7.5 | 1.03 (0.87-1.22) | 0.96 (0.81-1.14) |  |
|  | P-trende |  |  | 0.51 | 0.87 |  |
| Vitamin Cd (mg/day) | Q1 | 317/823232 | 59.0 | 1.00 (Ref) | 1.00 (Ref) | 0.79 |
|  | Q2 | 341/826623 | 88.3 | 1.10 (0.94-1.28) | 1.09 (0.94-1.28) |  |
|  | Q3 | 339/827480 | 118.2 | 1.09 (0.93-1.28) | 1.08 (0.92-1.26) |  |
|  | Q4 | 306/825874 | 172.0 | 1.05 (0.89-1.24) | 1.02 (0.87-1.21) |  |
|  | P-trende |  |  | 0.69 | 0.95 |  |
| Vitamin Dd (ug/day) | Q1 | 268/809787 | 1.5 | 1.00 (Ref) | 1.00 (Ref) | 0.68 |
|  | Q2 | 272/822033 | 2.3 | 0.86 (0.73-1.03) | 0.86 (0.72-1.02) |  |
|  | Q3 | 360/832148 | 3.3 | 1.03 (0.87-1.23) | 1.01 (0.84-1.20) |  |
|  | Q4 | 403/839241 | 5.6 | 1.08 (0.89-1.32) | 1.05 (0.86-1.28) |  |
|  | P-trende |  |  | 0.14 | 0.25 |  |

**Supplemental Table S2 (continued). Hazard Ratiosa and 95% CIs from analyses of intake of nutrients/foods at baseline (FDR > 0.10) in relation to endometrial cancer risk in the EPIC studyb**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Cases/** |  | **Model 1 HR** | **Model 2 HR** |  |
| **Variable** | **Value** | **Person-years** | **Median** | **HR (95% CI)** | **HR (95% CI)** | **FDRc** |
| Vitamin Ed (mg/day) | Q1 | 385/846583 | 6.3 | 1.00 (Ref) | 1.00 (Ref) | 0.44 |
|  | Q2 | 351/827279 | 8.0 | 1.04 (0.89-1.21) | 1.03 (0.89-1.20) |  |
|  | Q3 | 330/825466 | 10.1 | 1.09 (0.93-1.29) | 1.08 (0.92-1.27) |  |
|  | Q4 | 237/803881 | 14.3 | 0.93 (0.77-1.12) | 0.92 (0.76-1.10) |  |
|  | P-trende |  |  | 0.42 | 0.33 |  |
| Root vegetables (g/day) | Q1 | 296/828812 | 2.5 | 1.00 (Ref) | 1.00 (Ref) | 0.33 |
|  | Q2 | 331/827652 | 13.3 | 1.14 (0.97-1.34) | 1.13 (0.96-1.34) |  |
|  | Q3 | 307/825906 | 30.6 | 1.10 (0.93-1.31) | 1.09 (0.92-1.30) |  |
|  | Q4 | 369/820839 | 62.8 | 1.28 (1.08-1.53) | 1.26 (1.05-1.50) |  |
|  | P-trende |  |  | 0.01 | 0.02 |  |
| Leafy vegetablesf | Q1 | 357/698819 | 2.2 | 1.00 (Ref) | 1.00 (Ref) | 0.67 |
| (g/day) | Q2 | 263/716186 | 13.3 | 1.06 (0.87-1.29) | 1.08 (0.89-1.32) |  |
|  | Q3 | 256/704636 | 34.7 | 1.08 (0.86-1.35) | 1.09 (0.87-1.37) |  |
|  | Q4 | 228/695356 | 82.8 | 1.10 (0.85-1.43) | 1.09 (0.84-1.42) |  |
|  | P-trende |  |  | 0.56 | 0.72 |  |
| Fruiting vegetablesg | Q1 | 333/743135 | 16.7 | 1.00 (Ref) | 1.00 (Ref) | 0.93 |
| (g/day) | Q2 | 324/750928 | 43.9 | 1.06 (0.90-1.24) | 1.05 (0.90-1.23) |  |
|  | Q3 | 280/747030 | 74.1 | 1.04 (0.87-1.23) | 1.03 (0.87-1.22) |  |
|  | Q4 | 236/735820 | 140.3 | 1.07 (0.88-1.29) | 1.04 (0.86-1.26) |  |
|  | P-trende |  |  | 0.57 | 0.77 |  |
| Cabbageh (g/day) | Q1 | 324/805161 | 0.3 | 1.00 (Ref) | 1.00 (Ref) | 0.26 |
|  | Q2 | 320/781173 | 11.4 | 1.13 (0.96-1.34) | 1.13 (0.96-1.34) |  |
|  | Q3 | 274/777659 | 26.4 | 1.08 (0.90-1.30) | 1.07 (0.89-1.29) |  |
|  | Q4 | 316/777300 | 62.2 | 1.31 (1.07-1.60) | 1.28 (1.05-1.57) |  |
|  | P-trende |  |  | 0.02 | 0.03 |  |
| Mushroomsf (g/day) | Q1 | 320/709780 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.86 |
|  | Q2 | 252/698184 | 1.2 | 0.85 (0.71-1.03) | 0.87 (0.72-1.06) |  |
|  | Q3 | 288/710376 | 5.4 | 0.92 (0.75-1.11) | 0.95 (0.78-1.15) |  |
|  | Q4 | 244/696657 | 19.3 | 1.02 (0.83-1.26) | 1.04 (0.84-1.28) |  |
|  | P-trende |  |  | 0.27 | 0.27 |  |
| Grain and pod | Q1 | 289/704668 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.99 |
| vegetablesf (g/day) | Q2 | 300/705528 | 3.0 | 0.97 (0.81-1.16) | 0.98 (0.82-1.17) |  |
|  | Q3 | 287/698180 | 9.5 | 1.12 (0.93-1.34) | 1.12 (0.93-1.34) |  |
|  | Q4 | 228/706622 | 24.4 | 1.00 (0.81-1.23) | 0.98 (0.79-1.22) |  |
|  | P-trende |  |  | 0.90 | 0.95 |  |
| Onion, garlici (g/day) | Q1 | 239/547029 | 1.8 | 1.00 (Ref) | 1.00 (Ref) | 0.11 |
|  | Q2 | 239/550530 | 6.2 | 1.12 (0.93-1.35) | 1.12 (0.93-1.35) |  |
|  | Q3 | 238/550554 | 16.4 | 1.23 (1.00-1.52) | 1.23 (0.99-1.52) |  |
|  | Q4 | 191/536992 | 33.5 | 1.22 (0.96-1.55) | 1.23 (0.96-1.56) |  |
|  | P-trende |  |  | 0.17 | 0.15 |  |

**Supplemental Table S2 (continued). Hazard Ratiosa and 95% CIs from analyses of intake of nutrients/foods at baseline (FDR > 0.10) in relation to endometrial cancer risk in the EPIC studyb**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Cases/** |  | **Model 1 HR** | **Model 2 HR** |  |
| **Variable** | **Value** | **Person-years** | **Median** | **HR (95% CI)** | **HR (95% CI)** | **FDRc** |
| Stalk vegetables, | Q1 | 294/725616 | 0.4 | 1.00 (Ref) | 1.00 (Ref) | 0.40 |
| sproutsf (g/day) | Q2 | 280/690166 | 4.0 | 1.07 (0.89-1.29) | 1.09 (0.90-1.31) |  |
|  | Q3 | 277/702642 | 10.0 | 1.07 (0.88-1.29) | 1.09 (0.89-1.32) |  |
|  | Q4 | 253/696573 | 22.9 | 1.13 (0.93-1.39) | 1.14 (0.93-1.39) |  |
|  | P-trende |  |  | 0.28 | 0.30 |  |
| Legumesj (g/day) | Q1 | 300/680519 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.55 |
|  | Q2 | 256/668682 | 5.4 | 0.98 (0.81-1.18) | 0.99 (0.82-1.20) |  |
|  | Q3 | 237/680598 | 14.3 | 1.01 (0.83-1.24) | 1.04 (0.85-1.27) |  |
|  | Q4 | 198/677204 | 41.3 | 1.05 (0.83-1.32) | 1.08 (0.86-1.35) |  |
|  | P-trende |  |  | 0.59 | 0.48 |  |
| Fruit (g/day) | Q1 | 296/811612 | 73.5 | 1.00 (Ref) | 1.00 (Ref) | 0.63 |
|  | Q2 | 328/825982 | 160.9 | 1.02 (0.87-1.20) | 1.01 (0.86-1.18) |  |
|  | Q3 | 340/832585 | 256.6 | 1.06 (0.90-1.25) | 1.03 (0.87-1.21) |  |
|  | Q4 | 339/833031 | 425.3 | 1.11 (0.94-1.32) | 1.06 (0.90-1.27) |  |
|  | P-trende |  |  | 0.20 | 0.43 |  |
| Citrus fruits (g/day) | Q1 | 298/792300 | 1.6 | 1.00 (Ref) | 1.00 (Ref) | 0.83 |
|  | Q2 | 328/825834 | 17.5 | 1.06 (0.90-1.24) | 1.05 (0.90-1.24) |  |
|  | Q3 | 331/836159 | 45.9 | 1.04 (0.88-1.22) | 1.03 (0.87-1.21) |  |
|  | Q4 | 346/848917 | 105.0 | 1.08 (0.91-1.28) | 1.05 (0.89-1.24) |  |
|  | P-trende |  |  | 0.45 | 0.73 |  |
| Apples and pearsk | 0-15.2 | 285/824874 | 2.5 | 1.00 (Ref) | 1.00 (Ref) | 0.85 |
|  | 15.2-45.6 | 295/843485 | 29.5 | 0.98 (0.83-1.16) | 0.97 (0.82-1.14) |  |
|  | 45.6-95.6 | 318/798418 | 65.5 | 1.05 (0.88-1.25) | 1.02 (0.86-1.22) |  |
|  | ≥95.6 | 405/836433 | 137.0 | 1.13 (0.95-1.35) | 1.07 (0.90-1.28) |  |
|  | P-trende |  |  | 0.07 | 0.26 |  |
| Bananas (g/day) | Q1 | 312/816410 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.73 |
|  | Q2 | 298/815244 | 6.6 | 0.92 (0.76-1.10) | 0.93 (0.77-1.11) |  |
|  | Q3 | 330/837212 | 16.5 | 0.99 (0.82-1.18) | 0.99 (0.83-1.19) |  |
|  | Q4 | 363/834344 | 62.4 | 1.03 (0.85-1.25) | 1.04 (0.86-1.27) |  |
|  | P-trende |  |  | 0.34 | 0.32 |  |
| Grapesk,l (g/day) | 0-0.5 | 229/605441 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.99 |
|  | 0.5-6.0 | 254/679115 | 3.5 | 1.20 (0.97-1.49) | 1.20 (0.97-1.49) |  |
|  | 6.0-16.2 | 228/633668 | 9.5 | 1.12 (0.90-1.38) | 1.14 (0.92-1.41) |  |
|  | ≥16.3 | 211/626863 | 26.3 | 1.03 (0.83-1.27) | 1.04 (0.84-1.29) |  |
|  | P-trende |  |  | 0.50 | 0.59 |  |
| Stone fruitf,k (g/day) | 0-2.1 | 251/638384 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.95 |
|  | 2.1-14.5 | 315/776465 | 6.8 | 1.05 (0.88-1.26) | 1.05 (0.87-1.26) |  |
|  | 14.5-50.0 | 263/703916 | 28.9 | 1.07 (0.88-1.30) | 1.05 (0.86-1.27) |  |
|  | ≥50.0 | 275/696232 | 83.1 | 1.15 (0.94-1.41) | 1.12 (0.91-1.38) |  |
|  | P-trende |  |  | 0.19 | 0.30 |  |

**Supplemental Table S2 (continued). Hazard Ratiosa and 95% CIs from analyses of intake of nutrients/foods at baseline (FDR > 0.10) in relation to endometrial cancer risk in the EPIC studyb**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Cases/** |  | **Model 1 HR** | **Model 2 HR** |  |
| **Variable** | **Value** | **Person-years** | **Median** | **HR (95% CI)** | **HR (95% CI)** | **FDRc** |
| Berriesk,m (g/day) | 0-0.1 | 261/628493 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 1.00 |
|  | 0.1-3.6 | 254/577389 | 1.7 | 0.93 (0.71-1.21) | 0.95 (0.73-1.23) |  |
|  | 3.6-12.0 | 252/653791 | 7.1 | 0.87 (0.68-1.11) | 0.88 (0.69-1.12) |  |
|  | ≥12.0 | 236/603425 | 20.3 | 0.94 (0.75-1.19) | 0.95 (0.75-1.19) |  |
|  | P-trende |  |  | 0.90 | 0.86 |  |
| Nuts (spreads and | 0 | 431/867562 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.41 |
| seeds)k (g/day) | >0-1.0 | 347/802146 | 0.4 | 1.01 (0.85-1.21) | 1.05 (0.88-1.26) |  |
|  | 1.0-4.2 | 307/814030 | 2.5 | 1.03 (0.88-1.21) | 1.09 (0.93-1.28) |  |
|  | ≥4.2 | 218/819472 | 8.4 | 0.86 (0.71-1.03) | 0.92 (0.77-1.11) |  |
|  | P-trende |  |  | 0.06 | 0.24 |  |
| Total milkk (g/day) | 0-16.5 | 286/799014 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.74 |
|  | 16.5-146.5 | 324/807620 | 64.2 | 1.00 (0.85-1.17) | 0.98 (0.83-1.15) |  |
|  | 146.5-292.7 | 327/819143 | 184.6 | 1.01 (0.86-1.20) | 0.99 (0.84-1.17) |  |
|  | ≥292.7 | 366/877433 | 402.7 | 0.99 (0.83-1.18) | 0.97 (0.81-1.15) |  |
|  | P-trende |  |  | 0.92 | 0.77 |  |
| Pasta, rice, other grains | Q1 | 460/822460 | 13.0 | 1.00 (Ref) | 1.00 (Ref) | 0.82 |
| (g/day) | Q2 | 334/825694 | 35.7 | 0.91 (0.79-1.05) | 0.93 (0.80-1.08) |  |
|  | Q3 | 282/832868 | 62.9 | 0.93 (0.79-1.10) | 0.97 (0.83-1.15) |  |
|  | Q4 | 227/822188 | 118.4 | 0.90 (0.74-1.10) | 0.94 (0.77-1.15) |  |
|  | P-trende |  |  | 0.38 | 0.65 |  |
| Breadk (g/day) | 0-60.0 | 327/831429 | 34.3 | 1.00 (Ref) | 1.00 (Ref) | 0.84 |
|  | 60.0-100.0 | 324/779291 | 80.7 | 1.05 (0.89-1.24) | 1.05 (0.89-1.23) |  |
|  | 100.0-152.8 | 349/885726 | 116.0 | 0.98 (0.83-1.16) | 0.97 (0.82-1.15) |  |
|  | ≥152.8 | 303/806764 | 188.0 | 1.02 (0.85-1.24) | 1.02 (0.84-1.23) |  |
|  | P-trende |  |  | 0.93 | 0.96 |  |
| Salty biscuits, crackersk | 0 | 485/1037847 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.85 |
| (g/day) | >0-1.3 | 222/588169 | 0.4 | 0.85 (0.71-1.02) | 0.86 (0.72-1.04) |  |
|  | 1.3-3.7 | 311/844266 | 2.1 | 0.89 (0.76-1.04) | 0.90 (0.77-1.05) |  |
|  | ≥3.8 | 285/832928 | 6.3 | 0.97 (0.83-1.14) | 0.98 (0.84-1.15) |  |
|  | P-trende |  |  | 0.76 | 0.72 |  |
| Crispbread, rusksk | 0 | 302/847641 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.45 |
| (g/day) | >0-1.7 | 289/787548 | 0.7 | 1.08 (0.88-1.31) | 1.09 (0.90-1.33) |  |
|  | 1.7-9.0 | 327/803890 | 4.4 | 1.09 (0.90-1.31) | 1.09 (0.90-1.31) |  |
|  | ≥9 | 385/864131 | 20.9 | 1.10 (0.92-1.32) | 1.08 (0.90-1.30) |  |
|  | P-trende |  |  | 0.5 | 0.74 |  |
| Breakfast cerealk,n (g/day) | 0 | 607/1569078 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.87 |
|  | >0-6.0 | 143/662917 | 2.8 | 0.92 (0.76-1.12) | 0.93 (0.76-1.13) |  |
|  | >6.0 | 430/811429 | 30.0 | 1.01 (0.86-1.18) | 1.02 (0.87-1.19) |  |
|  | P-trende |  |  | 0.71 | 0.66 |  |

**Supplemental Table S2 (continued). Hazard Ratiosa and 95% CIs from analyses of intake of nutrients/foods at baseline (FDR > 0.10) in relation to endometrial cancer risk in the EPIC studyb**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Cases/** |  | **Model 1 HR** | **Model 2 HR** |  |
| **Variable** | **Value** | **Person-years** | **Median** | **HR (95% CI)** | **HR (95% CI)** | **FDRc** |
| Red meat (g/day) | Q1 | 279/828194 | 4.5 | 1.00 (Ref) | 1.00 (Ref) | 0.80 |
|  | Q2 | 337/812811 | 21.7 | 1.04 (0.88-1.23) | 1.02 (0.86-1.20) |  |
|  | Q3 | 322/828629 | 41.2 | 0.93 (0.77-1.11) | 0.89 (0.75-1.07) |  |
|  | Q4 | 365/833574 | 74.1 | 1.09 (0.90-1.31) | 1.03 (0.85-1.24) |  |
|  | P-trende |  |  | 0.41 | 0.81 |  |
| Porkk (g/day) | 0-1.1 | 286/806830 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.60 |
|  | 1.2-7.6 | 307/846707 | 4.1 | 0.99 (0.83-1.17) | 0.98 (0.83-1.16) |  |
|  | 7.6-16.4 | 334/813928 | 10.7 | 0.96 (0.81-1.13) | 0.94 (0.80-1.12) |  |
|  | ≥16.4 | 376/835745 | 25.3 | 0.98 (0.82-1.18) | 0.94 (0.78-1.13) |  |
|  | P-trende |  |  | 0.87 | 0.49 |  |
| Poultry (g/day) | Q1 | 316/829993 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.71 |
|  | Q2 | 333/827803 | 8.2 | 0.93 (0.79-1.10) | 0.92 (0.78-1.08) |  |
|  | Q3 | 317/812915 | 17.1 | 0.92 (0.78-1.09) | 0.90 (0.76-1.06) |  |
|  | Q4 | 337/832499 | 39.2 | 1.04 (0.88-1.23) | 0.96 (0.81-1.14) |  |
|  | P-trende |  |  | 0.41 | 0.95 |  |
| Processed meat (g/day) | Q1 | 280/820767 | 2.5 | 1.00 (Ref) | 1.00 (Ref) | 0.32 |
|  | Q2 | 367/834935 | 15.5 | 0.96 (0.81-1.13) | 0.94 (0.80-1.10) |  |
|  | Q3 | 353/832156 | 29.2 | 0.99 (0.84-1.17) | 0.95 (0.80-1.12) |  |
|  | Q4 | 303/815352 | 54.5 | 0.95 (0.79-1.15) | 0.88 (0.73-1.07) |  |
|  | P-trende |  |  | 0.70 | 0.24 |  |
| Beefo (g/day) | Q1 | 279/746798 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.99 |
|  | Q2 | 290/745218 | 4.8 | 1.11 (0.91-1.36) | 1.12 (0.91-1.37) |  |
|  | Q3 | 314/745856 | 14.4 | 1.00 (0.82-1.22) | 0.99 (0.81-1.21) |  |
|  | Q4 | 333/767325 | 32.4 | 1.04 (0.84-1.28) | 1.01 (0.82-1.25) |  |
|  | P-trende |  |  | 0.93 | 0.66 |  |
| Mutton/lambk,p (g/day) | 0 | 387/1020956 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.21 |
|  | >0-1.0 | 87/314304 | 0.3 | 0.88 (0.64-1.21) | 0.89 (0.64-1.23) |  |
|  | 1.0-6.6 | 261/644499 | 2.3 | 1.10 (0.90-1.35) | 1.10 (0.90-1.35) |  |
|  | ≥6.6 | 278/673165 | 12.0 | 1.20 (1.00-1.44) | 1.18 (0.98-1.41) |  |
|  | P-trende |  |  | 0.05 | 0.08 |  |
| Offalg,k (g/day) | 0 | 541/1389541 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.89 |
|  | >0-0.3 | 46/131358 | 0.2 | 0.90 (0.62-1.31) | 0.91 (0.63-1.32) |  |
|  | 0.3-3.3 | 279/724059 | 1.2 | 1.00 (0.85-1.18) | 0.99 (0.84-1.17) |  |
|  | ≥3.3 | 307/731955 | 7.5 | 1.05 (0.90-1.23) | 1.01 (0.87-1.18) |  |
|  | P-trende |  |  | 0.49 | 0.82 |  |
| Liverk,q (g/day) | 0 | 508/1346061 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.61 |
|  | >0-1.3 | 110/359804 | 0.6 | 1.08 (0.85-1.39) | 1.07 (0.84-1.36) |  |
|  | ≥1.3 | 379/848633 | 3.9 | 1.07 (0.92-1.24) | 1.04 (0.90-1.21) |  |
|  | P-trende |  |  | 0.44 | 0.66 |  |

**Supplemental Table S2 (continued). Hazard Ratiosa and 95% CIs from analyses of intake of nutrients/foods at baseline (FDR > 0.10) in relation to endometrial cancer risk in the EPIC studyb**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Cases/** |  | **Model 1 HR** | **Model 2 HR** |  |
| **Variable** | **Value** | **Person-years** | **Median** | **HR (95% CI)** | **HR (95% CI)** | **FDRc** |
| Eggsh,k (g/day) | 0-7.4 | 290/746536 | 3.8 | 1.00 (Ref) | 1.00 (Ref) | 0.87 |
|  | 7.4-14.5 | 309/825766 | 9.9 | 0.98 (0.83-1.15) | 0.98 (0.83-1.15) |  |
|  | 14.5-23.4 | 323/782466 | 18.4 | 1.07 (0.90-1.26) | 1.05 (0.89-1.24) |  |
|  | ≥23.4 | 312/786525 | 33.0 | 1.05 (0.88-1.25) | 1.02 (0.85-1.21) |  |
|  | P-trende |  |  | 0.42 | 0.69 |  |
| Fish (g/day) | Q1 | 321/864139 | 2.3 | 1.00 (Ref) | 1.00 (Ref) | 0.97 |
|  | Q2 | 302/817965 | 15.3 | 0.91 (0.76-1.09) | 0.90 (0.75-1.08) |  |
|  | Q3 | 339/819650 | 29.3 | 0.97 (0.80-1.16) | 0.95 (0.79-1.14) |  |
|  | Q4 | 341/801456 | 62.1 | 1.04 (0.85-1.27) | 1.00 (0.82-1.22) |  |
|  | P-trende |  |  | 0.33 | 0.57 |  |
| Lean (white) fishr (g/day) | Q1 | 278/733973 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.55 |
|  | Q2 | 267/714430 | 6.8 | 0.92 (0.76-1.10) | 0.92 (0.76-1.10) |  |
|  | Q3 | 308/715260 | 17.2 | 0.97 (0.81-1.16) | 0.96 (0.80-1.15) |  |
|  | Q4 | 290/695053 | 39.1 | 0.95 (0.78-1.16) | 0.92 (0.75-1.12) |  |
|  | P-trende |  |  | 0.84 | 0.55 |  |
| Fatty/very fatty fishs | Q1 | 293/819367 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.34 |
| (g/day) | Q2 | 293/793462 | 4.0 | 0.96 (0.81-1.15) | 0.98 (0.82-1.16) |  |
|  | Q3 | 315/788532 | 10.2 | 0.97 (0.81-1.15) | 0.97 (0.81-1.15) |  |
|  | Q4 | 354/777348 | 23.8 | 1.10 (0.93-1.31) | 1.09 (0.92-1.30) |  |
|  | P-trende |  |  | 0.13 | 0.18 |  |
| Crustaceansk,t (g/day) | 0 | 330/842293 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.59 |
|  | >0-1.1 | 276/680045 | 0.6 | 0.98 (0.81-1.18) | 1.00 (0.83-1.21) |  |
|  | 1.1-4.3 | 337/773537 | 3.0 | 0.98 (0.83-1.16) | 1.01 (0.86-1.20) |  |
|  | ≥4.3 | 278/775756 | 8.3 | 0.91 (0.77-1.08) | 0.93 (0.78-1.11) |  |
|  | P-trende |  |  | 0.29 | 0.35 |  |
| Margarinek (g/day) | 0-0.2 | 298/801118 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.23 |
|  | 0.2-4.2 | 312/821513 | 1.1 | 1.06 (0.89-1.26) | 1.07 (0.90-1.28) |  |
|  | 4.2-15.6 | 328/820185 | 9.1 | 0.94 (0.78-1.13) | 0.94 (0.78-1.14) |  |
|  | ≥15.6 | 365/860394 | 25.4 | 0.86 (0.70-1.05) | 0.86 (0.70-1.06) |  |
|  | P-trende |  |  | 0.03 | 0.04 |  |
| Mayonnaisek,u (g/day) | 0 | 354/909374 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.46 |
|  | >0-0.4 | 186/441994 | 0.1 | 1.06 (0.84-1.34) | 1.09 (0.87-1.38) |  |
|  | 0.4-3.1 | 302/689845 | 1.3 | 0.92 (0.76-1.11) | 0.94 (0.78-1.13) |  |
|  | ≥3.1 | 253/722786 | 6.6 | 0.91 (0.74-1.13) | 0.93 (0.75-1.14) |  |
|  | P-trende |  |  | 0.43 | 0.43 |  |
| Ice cream (g/day) | Q1 | 350/826818 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.74 |
|  | Q2 | 304/804982 | 1.6 | 0.96 (0.81-1.14) | 0.95 (0.80-1.12) |  |
|  | Q3 | 324/837714 | 5.8 | 1.07 (0.91-1.26) | 1.04 (0.88-1.23) |  |
|  | Q4 | 325/833696 | 14.3 | 1.02 (0.86-1.22) | 0.97 (0.82-1.16) |  |
|  | P-trende |  |  | 0.63 | 0.95 |  |

**Supplemental Table S2 (continued). Hazard Ratiosa and 95% CIs from analyses of intake of nutrients/foods at baseline (FDR > 0.10) in relation to endometrial cancer risk in the EPIC studyb**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Cases/** |  | **Model 1 HR** | **Model 2 HR** |  |
| **Variable** | **Value** | **Person-years** | **Median** | **HR (95% CI)** | **HR (95% CI)** | **FDRc** |
| Dry cakes, biscuitsh,k | 0 | 360/874153 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.31 |
| (g/day) | >0-2.1 | 275/680397 | 0.7 | 1.00 (0.83-1.21) | 1.01 (0.84-1.22) |  |
|  | 2.1-8.0 | 322/784746 | 4.1 | 1.03 (0.87-1.21) | 1.03 (0.87-1.21) |  |
|  | ≥8.0 | 277/801998 | 16.9 | 0.90 (0.75-1.07) | 0.90 (0.75-1.07) |  |
|  | P-trende |  |  | 0.15 | 0.14 |  |
| Cakes, sweets (non-milk | Q1 | 353/821059 | 3.3 | 1.00 (Ref) | 1.00 (Ref) | 0.58 |
| based)k (g/day) | Q2 | 306/823509 | 15.9 | 0.91 (0.78-1.07) | 0.91 (0.78-1.07) |  |
|  | Q3 | 295/824781 | 32.9 | 0.92 (0.77-1.08) | 0.91 (0.77-1.08) |  |
|  | Q4 | 349/833861 | 67.4 | 1.06 (0.89-1.26) | 1.05 (0.88-1.25) |  |
|  | P-trende |  |  | 0.23 | 0.29 |  |
| Chocolate, candy bars | Q1 | 336/821401 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.80 |
| (g/day) | Q2 | 324/824162 | 1.6 | 0.83 (0.70-0.99) | 0.85 (0.72-1.01) |  |
|  | Q3 | 362/837169 | 5.7 | 1.02 (0.86-1.22) | 1.05 (0.88-1.25) |  |
|  | Q4 | 281/820478 | 19.2 | 0.94 (0.78-1.12) | 0.97 (0.81-1.16) |  |
|  | P-trende |  |  | 0.88 | 0.65 |  |
| Confectionery (non- | 0 | 442/1125296 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.46 |
| chocolate)k,v (g/day) | >0-2.1 | 248/689626 | 0.4 | 1.18 (0.97-1.43) | 1.19 (0.98-1.44) |  |
|  | ≥2.1 | 401/930412 | 6.9 | 1.07 (0.90-1.28) | 1.08 (0.90-1.29) |  |
|  | P-trende |  |  | 0.99 | 0.98 |  |
| Fruit and vegetable | Q1 | 370/823265 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.44 |
| juices (g/day) | Q2 | 329/840537 | 8.4 | 1.00 (0.84-1.18) | 1.02 (0.86-1.20) |  |
|  | Q3 | 276/824998 | 44.2 | 0.92 (0.78-1.08) | 0.95 (0.81-1.12) |  |
|  | Q4 | 328/814409 | 148.6 | 1.04 (0.88-1.22) | 1.07 (0.91-1.26) |  |
|  | P-trende |  |  | 0.54 | 0.35 |  |
| Carbonated/soft drinksk | 0 | 578/1396113 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.92 |
|  | >0-6.5 | 92/290724 | 4.2 | 0.96 (0.74-1.24) | 0.96 (0.75-1.25) |  |
|  | 6.5-60.7 | 316/778963 | 28.6 | 1.07 (0.92-1.25) | 1.05 (0.90-1.22) |  |
|  | ≥60.7 | 317/837409 | 152.4 | 1.06 (0.91-1.24) | 0.99 (0.84-1.16) |  |
|  | P-trende |  |  | 0.51 | 0.81 |  |
| Teag,k | 0 | 446/1026060 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.25 |
|  | >0-24.6 | 144/463098 | 6.6 | 0.74 (0.60-0.93) | 0.77 (0.62-0.95) |  |
|  | 24.6-322.3 | 277/743375 | 137.5 | 0.81 (0.68-0.98) | 0.82 (0.68-0.99) |  |
|  | ≥322.5 | 306/744380 | 560.0 | 0.86 (0.70-1.05) | 0.88 (0.72-1.08) |  |
|  | P-trende |  |  | 0.95 | 0.91 |  |
| Wine (g/day) | Q1 | 380/832664 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 1.00 |
|  | Q2 | 321/834076 | 6.7 | 0.89 (0.75-1.04) | 0.93 (0.79-1.09) |  |
|  | Q3 | 292/820633 | 40.0 | 0.81 (0.68-0.95) | 0.89 (0.75-1.05) |  |
|  | Q4 | 310/815836 | 125.0 | 0.87 (0.74-1.03) | 1.00 (0.85-1.18) |  |
|  | P-trende |  |  | 0.31 | 0.62 |  |

**Supplemental Table S2 (continued). Hazard Ratiosa and 95% CIs from analyses of intake of nutrients/foods at baseline (FDR > 0.10) in relation to endometrial cancer risk in the EPIC studyb**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Cases/** |  | **Model 1 HR** | **Model 2 HR** |  |
| **Variable** | **Value** | **Person-years** | **Median** | **HR (95% CI)** | **HR (95% CI)** | **FDRc** |
| Beer, ciderk (g/day) | 0 | 631/1506638 | 0.0 | 1.00 (Ref) | 1.00 (Ref) | 0.45 |
|  | >0-2.7 | 26/57385 | 1.3 | 1.07 (0.71-1.63) | 1.08 (0.71-1.64) |  |
|  | 2.8-32.5 | 330/902117 | 8.2 | 0.99 (0.85-1.15) | 1.03 (0.88-1.20) |  |
|  | ≥32.5 | 316/837069 | 75.7 | 0.98 (0.84-1.14) | 1.06 (0.91-1.23) |  |
|  | P-trende |  |  | 0.82 | 0.54 |  |
| Soupk,w (g/day) | 0-8.2 | 244/662668 | 0.6 | 1.00 (Ref) | 1.00 (Ref) | 0.28 |
|  | 8.3-28.6 | 220/659977 | 16.3 | 1.04 (0.86-1.25) | 1.06 (0.88-1.28) |  |
|  | 28.6-71.5 | 238/630875 | 40.0 | 1.20 (0.99-1.45) | 1.19 (0.99-1.45) |  |
|  | ≥71.5 | 280/702485 | 142.8 | 1.12 (0.92-1.35) | 1.12 (0.92-1.35) |  |
|  | P-trende |  |  | 0.43 | 0.47 |  |

a **Model 1** was adjusted for total energy intake (kcal, continuous) and was stratified by the age of recruitment (continuous) and the study center. **Model 2** was adjusted for BMI (<23 kg/m2, 23-24.9 [Ref], 25-29.9, 30-39.9, 40+), total energy intake (kcal, continuous), smoking status (never [Ref], former, current, unknown), age at menarche (<12 years, 12, 13 [Ref], 14+, unknown), oral contraceptive use (never use [Ref], ever use, unknown), a combined variable for menopausal status and postmenopausal hormone (PMH) use (premenopausal/uncertain menopause, postmenopausal/no PMH [Ref], postmenopausal/ever use PMH, unknown), parity (nulliparous [Ref], parous, unknown) and was stratified by the age of recruitment (continuous) and the study center.

b Results refer to the entire EPIC cohort except when specific exclusions were specified; with one exception (potassium, P-het = 0.01) there was no heterogeneity by country (P-het ≥ 0.05) for the association between intake of all 84 foods/nutrients tested and risk of endometrial cancer.

c The False Discovery Rate (FDR) refers to the comparison of quartile 4 (Q4) versus Q1 of intake.

d Nutrient intakes were adjusted for total energy intake using the regression residuals method.

e P-value test for trend using a trend variable based on the median of each category of intake.

f Intake of Leafy vegetables, mushrooms, grain and pod vegetables, stalk vegetables and stone fruit was missing for participants from Norway and Umeå (15.2%).

g Fruiting vegetable, offal and tea intake was missing for participants from Norway (11.1%).

h Cabbage, egg and dry cake/biscuit intake was missing for participants from Umeå (4.1%).

i Onion and garlic intake was missing for participants from France, Norway and Umeå (35.4%).

j Legume intake was missing for participants from Denmark and Norway (19.3%).

k These foods could not be categorized into exact quartiles due to the uneven distribution of intake, hence the ranges of intake are presented.

l Grape intake was missing for participants from Denmark, Norway and Umeå (23.3%).

m Berry intake was missing for participants from Norway and the UK (26.4%).

n Cereal intake was missing for participants from Italy (North) and Ragusa (7.7%).

o Beef intake was missing for participants from Greece and Umeå (8.7%).

p Mutton/lamb intake was missing for participants from Italy (North), The Netherlands and Umeå (18.2%).

q Liver intake was missing for participants from The Netherlands, Norway and Umeå (22.6%).

r Lean (white) fish intake was missing for participants from Germany, Naples and Umeå (13.3%).

s Fatty fish intake was missing for participants from Potsdam (4.4%).

t Crustacean intake was missing for participants from Germany (7.8%).

u Mayonnaise intake was missing for participants from Norway, Naples and Umeå (16.7%).

v Confectionery (non-chocolate) intake was missing for participants from Germany and Norway (18.9%).

w Soup intake was missing for participants from Denmark, Norway and Naples (20.8%).

**Supplemental Table S3. Age-standardized dietary intake of selected foods/nutrients (FDR≤0.10 in the EPIC studya) at the study baseline in the EPIC, NHS and NHSII study populations**

|  | **EPIC** | **NHS** | **NHSII** |
| --- | --- | --- | --- |
|  | (n=301,107) | (n=68,063b) | (n=87,343b) |
| Total fat (g/day) | 61.6 (10.7) | 69.9 (13.8) | 63.1 (11.3) |
| Monounsaturated fat (g/day) | 22.3 (6.7) | 28.7 (6.8) | 23.9 (4.9) |
| Carbohydrates (g/day) | 180 (28) | 155 (37) | 225 (34) |
| Phosphorus (mg/day) | 1230 (234) | 1146 (260) | 1389 (248) |
| Butter (g/day) | 4.0 (7.9) | 2.6 (4.9) | 0.8 (2.2) |
| Yogurt (g/day) | 65.1 (82.1) | 22.1 (53.3) | 32.6 (59.5) |
| Cheese (g/day) | 39.2 (34.3) | 13.6 (13.1) | 12.1 (12.2) |
| Potatoes (g/day) | 80.9 (61.5) | 69.8 (56.5) | 68.2 (50.4) |
| Coffee (g/day) | 355 (337) | 529 (453) | 362 (396) |

Values are means (SD).

aCream desserts had an FDR≤0.10 in the EPIC study; however, this variable was not available to confirm in the NHS/NHSII.

bFood intake values (butter, yogurt, cheese, potatoes and coffee) were based on n=61,449 NHS and n=85,128 NHSII participants after excluding women missing any one of these food items.

**Supplemental Table S4. Hazard Ratiosa and 95% CIs from analyses of intake of selected nutrients/foods at baseline in relation to endometrial cancer risk in the Nurses’ Health Study (NHS) and NHSIIb**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | **Model 1** | **Model 2** |
| **Variable** | **Value** | **Cases/Person-years** | **Median** | **HR****(95% CI)** | **HR****(95% CI)** |
| Total fat (g/day)c | Q1 | 322/754669 | 52.0 | 1.00 (Ref) | 1.00 (Ref) |
|  | Q2 | 344/761403 | 62.0 | 0.97 (0.83-1.13) | 0.95 (0.81-1.11) |
|  | Q3 | 337/738268 | 70.0 | 0.90 (0.78-1.06) | 0.87 (0.75-1.02) |
|  | Q4 | 528/761118 | 81.0 | 1.06 (0.92-1.23) | 1.00 (0.87-1.15) |
|  | P-trendd |  |  | 0.36 | 0.96 |
| Monounsaturated fatc | Q1 | 280/727359 | 19.1 | 1.00 (Ref) | 1.00 (Ref) |
| (g/day) | Q2 | 314/769192 | 24.0 | 0.95 (0.81-1.12) | 0.94 (0.80-1.10) |
|  | Q3 | 412/795329 | 28.0 | 0.92 (0.79-1.07) | 0.88 (0.76-1.03) |
|  | Q4 | 525/723578 | 34.0 | 1.02 (0.87-1.18) | 0.95 (0.81-1.10) |
|  | P-trendd |  |  | 0.65 | 0.59 |
| Carbohydratesc (g/day) | Q1 | 598/743172 | 131.0 | 1.00 (Ref) | 1.00 (Ref) |
|  | Q2 | 508/770219 | 173.0 | 1.03 (0.91-1.16) | 1.01 (0.89-1.14) |
|  | Q3 | 276/752931 | 210.0 | 1.10 (0.94-1.29) | 1.10 (0.94-1.29) |
|  | Q4 | 149/749135 | 247.0 | 0.92 (0.73-1.15) | 1.01 (0.81-1.26) |
|  | P-trendd |  |  | 0.88 | 0.55 |
| Phosphorusc (mg/day) | Q1 | 505/752572 | 951.0 | 1.00 (Ref) | 1.00 (Ref) |
|  | Q2 | 393/755395 | 1157.0 | 1.02 (0.89-1.17) | 0.97 (0.85-1.11) |
|  | Q3 | 356/752775 | 1338.0 | 1.28 (1.11-1.48) | 1.17 (1.02-1.35) |
|  | Q4 | 277/754715 | 1597.0 | 1.21 (1.04-1.41) | 1.05 (0.90-1.23) |
|  | P-trendd |  |  | 0.001 | 0.19 |
| Buttere,f (g/day) | 0 | 818/1701441 | 0 | 1.00 (Ref) | 1.00 (Ref) |
|  | 0.4-0.7 | 157/427738 | 0.4 | 1.00 (0.84-1.19) | 1.03 (0.87-1.23) |
|  | ≥2.2 | 429/702350 | 5.0 | 1.02 (0.91-1.15) | 1.10 (0.97-1.24) |
|  | P-trende |  |  | 0.69 | 0.14 |
| Yogurte,f (g/day) | 0 | 774/1451823 | 0 | 1.00 (Ref) | 1.00 (Ref) |
|  | 17.2 | 331/691133 | 17.2 | 1.17 (1.02-1.33) | 1.14 (1.00-1.30) |
|  | ≥34.3 | 299/688573 | 105.4 | 1.05 (0.92-1.20) | 1.06 (0.93-1.22) |
|  | P-trendd |  |  | 0.66 | 0.52 |
| Cheesef,g (g/day) | 0-2.0 | 233/486455 | 2.0 | 1.00 (Ref) | 1.00 (Ref) |
|  | 3.9 | 276/586269 | 3.9 | 1.01 (0.85-1.20) | 1.02 (0.86-1.22) |
|  | 12.0 | 526/1051450 | 12.0 | 1.04 (0.89-1.22) | 1.02 (0.87-1.19) |
|  | ≥22.1 | 369/707356 | 28.0 | 0.99 (0.84-1.17) | 0.98 (0.82-1.16) |
|  | P-trende |  |  | 0.79 | 0.61 |
| Potatoesf,g (g/day) | 0-25.9 | 467/868146 | 25.9 | 1.00 (Ref) | 1.00 (Ref) |
|  | 38.9-51.8 | 269/660478 | 38.9 | 1.04 (0.89-1.21) | 1.04 (0.89-1.21) |
|  | 79.6-92.5 | 374/652232 | 92.5 | 1.02 (0.89-1.17) | 1.05 (0.91-1.21) |
|  | ≥105.5 | 294/650673 | 146.2 | 0.94 (0.81-1.10) | 0.94 (0.80-1.10) |
|  | P-trendd |  |  | 0.42 | 0.44 |
| Coffeef,g (g/day) | 0 | 365/737995 | 0 | 1.00 (Ref) | 1.00 (Ref) |
|  | 16.6-270.2 | 286/679532 | 203.8 | 0.83 (0.71-0.97) | 0.88 (0.76-1.03) |
|  | 289.1-592.5 | 439/755421 | 592.5 | 0.82 (0.72-0.95) | 0.92 (0.80-1.06) |
|  | ≥609.1 | 314/658580 | 1066.5 | 0.72 (0.62-0.84) | 0.82 (0.70-0.96) |
|  | P-trendd |  |  | 0.0001 | 0.04 |

**Supplemental Table S4 (continued). Hazard Ratiosa and 95% CIs from analyses of intake of selected nutrients/foods at baseline in relation to endometrial cancer risk in the Nurses’ Health Study (NHS) and NHSII**

a **Model 1** was adjusted for total energy intake (kcal, continuous) and was stratified by age in months, cohort and time period. **Model 2** was adjusted for BMI (<23 kg/m2, 23-24.9 [Ref], 25-29.9, 30-39.9, 40+), total energy intake (kcal, continuous), smoking status (never [Ref], former, current), age at menarche (<12 years, 12, 13 [Ref], 14+), oral contraceptive use (never use [Ref], ever use), a combined variable for menopausal status and postmenopausal hormone (PMH) use (premenopausal/uncertain menopause, postmenopausal/no PMH [Ref], postmenopausal/ever use PMH, unknown), parity (nulliparous [Ref], parous) and was stratified by age in months, cohort, and time period (2-year questionnaire cycle).

b Results for the NHS and NHSII cohorts were pooled after testing for heterogeneity for these risk associations across the cohorts (P-het ≥ 0.14).

c Nutrient intakes were adjusted for total energy intake using the regression residuals method.

d P-value test for trend using a trend variable based on the median of each category of intake.

e Butter and yogurt were classified into three categories due to the uneven distribution of intake for these foods hence ranges of intake are presented.

f To obtain food intake units that were similar to the EPIC study, servings/day were converted to grams/day using food composition values from the USDA food composition data. Similar food items to the EPIC study also were evaluated; specifically, cheese refers to hard cheese only, potatoes included baked/boiled or mashed potatoes as well as french fried potatoes, and coffee intake was the sum of regular and decaffeinated coffee.

g These foods could not be categorized into quartiles due to the uneven distribution of intake levels, hence ranges of intake are presented.

**Supplemental Table S5**. **Hazard Ratiosa and 95% CIs from analyses of the cumulative average intake of selected nutrients/foods in relation to endometrial cancer risk in the Nurses’ Health Study (NHS) and NHSIIb**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | **Model 1** | **Model 2** |
| **Variable** | **Value** | **Cases/Person-years** | **Median** | **HR****(95% CI)** | **HR****(95% CI)** |
| Total fat (g/day)c | Q1 | 372/596729 | 50.7 | 1.00 (Ref) | 1.00 (Ref) |
|  | Q2 | 350/596547 | 58.8 | 0.94 (0.81-1.08) | 0.89 (0.77-1.03) |
|  | Q3 | 341/597454 | 65.1 | 0.97 (0.84-1.13) | 0.89 (0.76-1.03) |
|  | Q4 | 323/596734 | 74.0 | 1.07 (0.92-1.25) | 0.95 (0.81-1.11) |
|  | P-trendd |  |  | 0.36 | 0.51 |
| Monounsaturated fatc | Q1 | 368/599238 | 19.0 | 1.00 (Ref) | 1.00 (Ref) |
| (g/day) | Q2 | 347/593719 | 22.5 | 0.92 (0.80-1.07) | 0.89 (0.77-1.03) |
|  | Q3 | 352/597263 | 25.3 | 0.99 (0.85-1.15) | 0.92 (0.79-1.07) |
|  | Q4 | 319/597244 | 29.4 | 1.01 (0.86-1.18) | 0.91 (0.78-1.07) |
|  | P-trendd |  |  | 0.76 | 0.32 |
| Carbohydratesc (g/day) | Q1 | 458/597253 | 158.8 | 1.00 (Ref) | 1.00 (Ref) |
|  | Q2 | 448/593757 | 190.6 | 1.02 (0.89-1.17) | 1.02 (0.89-1.17) |
|  | Q3 | 337/598294 | 215.6 | 1.11 (0.95-1.29) | 1.16 (0.99-1.35) |
|  | Q4 | 143/598159 | 247.5 | 0.83 (0.66-1.03) | 0.95 (0.76-1.20) |
|  | P-trendd |  |  | 0.64 | 0.52 |
| Phosphorusc (mg/day) | Q1 | 412/596346 | 987.7 | 1.00 (Ref) | 1.00 (Ref) |
|  | Q2 | 401/597106 | 1164.8 | 1.14 (0.99-1.31) | 1.05 (0.91-1.21) |
|  | Q3 | 334/596981 | 1320.0 | 1.29 (1.11-1.50) | 1.15 (0.99-1.34) |
|  | Q4 | 239/597030 | 1541.0 | 1.33 (1.12-1.58) | 1.14 (0.96-1.36) |
|  | P-trendd |  |  | <0.001 | 0.07 |
| Buttere,f (g/day) | 0 | 466/908378 | 0 | 1.00 (Ref) | 1.00 (Ref) |
|  | 0.1-0.2 | 157/265564 | 0.1 | 1.03 (0.85-1.24) | 1.00 (0.83-1.21) |
|  | 0.3-1.9 | 351/594516 | 0.7 | 1.08 (0.93-1.24) | 1.08 (0.94-1.25) |
|  | ≥1.9 | 400/586450 | 4.0 | 1.03 (0.90-1.19) | 1.09 (0.95-1.25) |
|  | P-trendd |  |  | 0.84 | 0.30 |
| Yogurte,f (g/day) | 0 | 426/737385 | 0 | 1.00 (Ref) | 1.00 (Ref) |
|  | 2.5-14.7 | 265/382641 | 8.6 | 1.04 (0.89-1.22) | 0.98 (0.83-1.14) |
|  | 17.2-45.7 | 366/641847 | 22.9 | 1.12 (0.97-1.30) | 1.07 (0.93-1.24) |
|  | ≥46.6 | 317/593035 | 87.0 | 1.01 (0.87-1.18) | 1.00 (0.86-1.16) |
|  | P-trendd |  |  | 0.89 | 0.94 |
| Cheesef (g/day) | Q1 | 281/591249 | 2.9 | 1.00 (Ref) | 1.00 (Ref) |
|  | Q2 | 414/585613 | 8.0 | 1.22 (1.04-1.42) | 1.16 (0.99-1.36) |
|  | Q3 | 344/595690 | 12.0 | 1.20 (1.02-1.41) | 1.15 (0.98-1.36) |
|  | Q4 | 335/582356 | 22.1 | 1.14 (0.96-1.35) | 1.10 (0.92-1.30) |
|  | P-trendd |  |  | 0.38 | 0.58 |
| Potatoesf (g/day) | Q1 | 304/582368 | 25.9 | 1.00 (Ref) | 1.00 (Ref) |
|  | Q2 | 364/594531 | 48.1 | 1.11 (0.95-1.30) | 1.08 (0.92-1.26) |
|  | Q3 | 383/634059 | 79.6 | 0.98 (0.83-1.14) | 0.94 (0.81-1.11) |
|  | Q4 | 323/543950 | 118.4 | 1.00 (0.84-1.18) | 0.96 (0.81-1.14) |
|  | P-trendd |  |  | 0.47 | 0.28 |
| Coffeef (g/day) | Q1 | 263/583632 | 0 | 1.00 (Ref) | 1.00 (Ref) |
|  | Q2 | 378/594029 | 253.6 | 0.99 (0.84-1.16) | 1.08 (0.92-1.27) |
|  | Q3 | 363/586995 | 592.5 | 0.86 (0.73-1.01) | 0.98 (0.83-1.16) |
|  | Q4 | 370/590252 | 981.2 | 0.74 (0.63-0.88) | 0.89 (0.75-1.05) |
|  | P-trendd |  |  | <0.001 | 0.03 |

**Supplemental Table S5 (continued). Hazard Ratiosa and 95% CIs from analyses of the cumulative average intake of selected nutrients/foods in relation to endometrial cancer risk in the Nurses’ Health Study (NHS) and NHSIIb**

a **Model 1** was adjusted for total energy intake (kcal, continuous) and was stratified by age in months, cohort and time period. **Model 2** was adjusted for BMI (<23 kg/m2, 23-24.9 [Ref], 25-29.9, 30-39.9, 40+), total energy intake (kcal, continuous), smoking status (never [Ref], former, current), age at menarche (<12 years, 12, 13 [Ref], 14+), oral contraceptive use (never use [Ref], ever use), a combined variable for menopausal status and postmenopausal hormone (PMH) use (premenopausal/uncertain menopause, postmenopausal/no PMH [Ref], postmenopausal/ever use PMH, unknown), parity (nulliparous [Ref], parous) and was stratified by age in months, cohort, and time period (2-year questionnaire cycle). The cumulative average intake includes FFQs from 1980-2006 and 1991-2007 for the NHS and NHSII, respectively.

b Results for the NHS and NHSII cohorts were pooled after testing for heterogeneity for these risk associations across the cohorts (P-het ≥ 0.12).

c Nutrient intakes were adjusted for total energy intake using the regression residuals method.

d P-value test for trend using a trend variable based on the median of each category of intake.

e Butter and yogurt could not be categorized into quartiles due to the high proportion of participants who never consumed these foods, hence ranges of intake are presented.

f To obtain food intake units that were similar to the EPIC study, servings/day were converted to grams/day using food composition values from the USDA food composition data. Similar food items to the EPIC study also were evaluated; specifically, cheese refers to hard cheese only, potatoes included baked/boiled or mashed potatoes as well as french fried potatoes, and coffee intake was the sum of regular and decaffeinated coffee.

**Supplemental Table S6. Hazard Ratiosa and 95% CIs from analyses of the cumulative average intake of selected nutrients/foods in relation to invasive endometrial adenocarcinoma risk in the Nurses’ Health Study (NHS) and NHSIIb**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Variable** | **Value** | **Cases/Person-years** | **Median** | **Model 1**  **HR****(95% CI)** | **Model 2**  **HR (95% CI)** |
| Total fat (g/day)c | Q1 | 244/596853 | 50.7 | 1.00 (Ref) | 1.00 (Ref) |
|  | Q2 | 236/596646 | 58.8 | 0.96 (0.80-1.15) | 0.92 (0.77-1.11) |
|  | Q3 | 213/597580 | 65.1 | 0.94 (0.78-1.13) | 0.87 (0.72-1.05) |
|  | Q4 | 206/596837 | 74.0 | 1.11 (0.91-1.35) | 0.99 (0.81-1.20) |
|  | P-trendd |  |  | 0.39 | 0.72 |
| Monounsaturated fatc | Q1 | 246/599359 | 19.0 | 1.00 (Ref) | 1.00 (Ref) |
| (g/day) | Q2 | 229/593821 | 22.5 | 0.91 (0.76-1.09) | 0.88 (0.73-1.06) |
|  | Q3 | 222/597384 | 25.3 | 0.95 (0.79-1.14) | 0.89 (0.74-1.07) |
|  | Q4 | 202/597350 | 29.4 | 1.01 (0.83-1.22) | 0.92 (0.75-1.11) |
|  | P-trendd |  |  | 0.89 | 0.39 |
| Carbohydratesc (g/day) | Q1 | 288/597414 | 158.8 | 1.00 (Ref) | 1.00 (Ref) |
|  | Q2 | 308/593893 | 190.6 | 1.09 (0.92-1.28) | 1.09 (0.92-1.29) |
|  | Q3 | 220/598397 | 215.6 | 1.16 (0.95-1.40) | 1.20 (0.99-1.46) |
|  | Q4 | 83/598211 | 247.5 | 0.83 (0.63-1.11) | 0.95 (0.71-1.27) |
|  | P-trendd |  |  | 1.00 | 0.43 |
| Phosphorusc (mg/day) | Q1 | 276/596477 | 987.7 | 1.00 (Ref) | 1.00 (Ref) |
|  | Q2 | 267/597220 | 1164.8 | 1.12 (0.95-1.33) | 1.04 (0.88-1.24) |
|  | Q3 | 213/597090 | 1320.0 | 1.24 (1.03-1.49) | 1.11 (0.93-1.34) |
|  | Q4 | 143/597128 | 1541.0 | 1.23 (0.99-1.52) | 1.07 (0.86-1.33) |
|  | P-trendd |  |  | 0.02 | 0.37 |
| Buttere,f (g/day) | 0.0 | 294/908535 | 0 | 1.00 (Ref) | 1.00 (Ref) |
|  | 0.1-0.2 | 98/265622 | 0.1 | 1.00 (0.79-1.26) | 0.97 (0.77-1.23) |
|  | 0.3-1.9 | 237/594621 | 0.7 | 1.13 (0.94-1.34) | 1.13 (0.95-1.35) |
|  | ≥1.9 | 264/586574 | 4.0 | 1.04 (0.87-1.23) | 1.09 (0.92-1.29) |
|  | P-trendd |  |  | 0.91 | 0.42 |
| Yogurte,f (g/day) | 0 | 273/737537 | 0 | 1.00 (Ref) | 1.00 (Ref) |
|  | 2.5-14.7 | 183/382712 | 8.6 | 1.09 (0.90-1.32) | 1.03 (0.85-1.25) |
|  | 17.2-45.7 | 232/641962 | 22.9 | 1.09 (0.91-1.31) | 1.05 (0.88-1.26) |
|  | ≥46.6 | 205/593141 | 87.0 | 1.00 (0.83-1.20) | 0.98 (0.81-1.19) |
|  | P-trendd |  |  | 0.67 | 0.72 |
| Cheesef (g/day) | Q1 | 176/591342 | 2.9 | 1.00 (Ref) | 1.00 (Ref) |
|  | Q2 | 264/585764 | 8.0 | 1.20 (0.98-1.45) | 1.14 (0.94-1.39) |
|  | Q3 | 228/595795 | 12.0 | 1.24 (1.01-1.51) | 1.20 (0.98-1.47) |
|  | Q4 | 225/582451 | 22.1 | 1.17 (0.95-1.44) | 1.13 (0.92-1.39) |
|  | P-trendd |  |  | 0.28 | 0.40 |
| Potatoesf (g/day) | Q1 | 190/582469 | 25.9 | 1.00 (Ref) | 1.00 (Ref) |
|  | Q2 | 231/594648 | 48.1 | 1.11 (0.91-1.35) | 1.07 (0.88-1.31) |
|  | Q3 | 249/634191 | 79.6 | 0.97 (0.80-1.19) | 0.95 (0.78-1.16) |
|  | Q4 | 223/544043 | 118.4 | 1.05 (0.85-1.30) | 1.02 (0.82-1.26) |
|  | P-trendd |  |  | 0.97 | 0.80 |
| Coffeef (g/day) | Q1 | 165/583725 | 0 | 1.00 (Ref) | 1.00 (Ref) |
|  | Q2 | 257/594139 | 253.6 | 1.04 (0.86-1.27) | 1.14 (0.93-1.39) |
|  | Q3 | 237/587110 | 592.5 | 0.86 (0.71-1.06) | 0.99 (0.80-1.21) |
|  | Q4 | 234/590378 | 981.2 | 0.73 (0.59-0.89) | 0.86 (0.70-1.06) |
|  | P-trendd |  |  | <0.0001 | 0.02 |

**Supplemental Table S6 (continued). Hazard Ratiosa and 95% CIs from analyses of the cumulative average intake of selected nutrients/foods in relation to invasive endometrial adenocarcinoma risk in the Nurses’ Health Study (NHS) and NHSIIb**

a **Model 1** was adjusted for total energy intake (kcal, continuous) and was stratified by age in months, cohort and time period. **Model 2** was adjusted for BMI (<23 kg/m2, 23-24.9 [Ref], 25-29.9, 30-39.9, 40+), total energy intake (kcal, continuous), smoking status (never [Ref], former, current), age at menarche (<12 years, 12, 13 [Ref], 14+), oral contraceptive use (never use [Ref], ever use), a combined variable for menopausal status and postmenopausal hormone (PMH) use (premenopausal/uncertain menopause, postmenopausal/no PMH [Ref], postmenopausal/ever use PMH, unknown), parity (nulliparous [Ref], parous) and was stratified by age in months, cohort, and time period (2-year questionnaire cycle). The cumulative average intake includes FFQs from 1980-2006 and 1991-2007 for the NHS and NHSII, respectively.

b Results for the NHS and NHSII cohorts were pooled after testing for heterogeneity for these risk associations across the cohorts (P-het ≥ 0.16).

c Nutrient intakes were adjusted for total energy intake using the regression residuals method.

d P-value test for trend using a trend variable based on the median of each category of intake.

e Butter and yogurt could not be categorized into quartiles due to the high proportion of participants who never consumed these foods, hence the ranges of intake are presented.

f To obtain food intake units that were similar to the EPIC study, servings/day were converted to grams/day using food composition values from the USDA food composition data. Similar food items to the EPIC study also were evaluated; specifically, cheese refers to hard cheese only, potatoes included baked/boiled or mashed potatoes as well as french fried potatoes, and coffee intake was the sum of regular and decaffeinated coffee.

**Supplemental Figure S1**. **Summary of NWAS analytical method to test associations between food and nutrient intake and risk of endometrial cancer (EC)**

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