**Supplementary Table 1. General characteristics of study participants at year 3 according to herbal tea consumed among the postmenopausal women, WHI-OS (N=62,622)**

|  |  |
| --- | --- |
|  | **Cups of herbal tea consumed at year 3** |
|  | **Nondrinkers N (%) (n=37,571)** | **<1 cup per week N (%) (n=9,331)** | **1-6 cups per week N(%)(n=11,456)** | **≥7 cups per week N(%)(n=4,264)** | **N=62,622** |
| **Sociodemographic factors** |
| **Age at year 3, Mean (SD)** | 66.9 (7.3) | 65.2 (7.2) | 65.5 (7.2) | 65.6 (7.2) | 66.3 (7.3) |
| **Age group at year 3** |  |  |  |  |  |
| 50-59 | 7,182 (53.6) | 2,416 (18.0) | 2,788 (20.8) | 1,021 (7.6) | 13,407  |
| 60-69 | 15,525 (58.1) | 4,130 (15.5) | 5,140 (19.3) | 1,902 (7.1) | 26,697  |
| 70-79+ | 14,864 (66.0) | 2,785 (12.4) | 3,528 (15.7) | 1,341 (6.0) | 22,518  |
| **Body Mass Index (BMI), kg/M2, Mean (SD)** | 27.1 (5.8) | 26.9 (5.6) | 26.8 (5.5) | 26.4 (5.4) | 27.0 (5.7) |
| **Body Mass Index (BMI) Group, kg/M2** |  |  |  |  |  |
| <25 | 15,786 (58.3) | 4,102 (15.2) | 5,107 (18.9) | 2,078 (7.7) | 27,073  |
| 25-<30 | 12,677 (60.0) | 3,153 (14.9) | 3,928 (18.6) | 1,376 (6.5) | 21,134  |
| 30- <35 | 5,765 (62.7) | 1,342 (14.6) | 1,573 (17.1) | 511 (5.6) | 9,191  |
| ≥35 | 3,343 (64.0) | 734 (14.1) | 848 (16.2) | 299 (5.7) | 5,224  |
| **Racial or Ethnic Group** |  |  |  |  |  |
| White (not of Hispanic origin) | 32,673 (60.6) | 8,003 (14.8) | 9,714 (18.0) | 3,536 (6.6) | 53,926  |
| Black or African American | 2,127 (52.9) | 665 (16.5) | 899 (22.4) | 331 (8.2) | 4,022  |
| Hispanic/Latino | 973 (52.3) | 300 (16.1) | 410 (22.1) | 176 (9.5) | 1,859  |
| American Indian/Alaskan Native | 132 (57.4) | 37 (16.1) | 42 (18.3) | 19 (8.3) | 230  |
| Asian/Pacific Islander | 1,304 (67.7) | 226 (11.7) | 253 (13.1) | 143 (7.4) | 1,926  |
| Others | 362 (54.9) | 100 (15.2) | 138 (20.9) | 59 (9.0) | 659  |
| **Education level** |  |  |  |  |  |
| High school diploma/below | 8,812 (70.8) | 1,418 (11.4) | 1,601 (12.9) | 612 (4.9) | 12,443  |
| School after high school | 3,891 (65.8) | 755 (12.8) | 882 (14.9) | 383 (6.5) | 5,911  |
| College degree or higher | 24,868 (56.2) | 7,158 (16.2) | 8,973 (20.3) | 3,269 (7.4) | 44,268  |
| **Lifestyle risk factors** |
| **Total energy intake (kcal/day), Mean (SD)** | 1,531.3 (664.1) | 1,555.2 (623.3) | 1,595.6 (654.4) | 1,619.5 (776.9) | 1,552.6 (665.5) |
| **Recreational physical activity group, METS-hours/week** |  |  |  |  |  |
| None | 7,612 (63.2) | 1,733 (14.4) | 2004 (16.7) | 688 (5.7) | 12,037  |
| 5-<10 | 6,128 (59.4) | 1,546 (15.0) | 1927 (18.7) | 709 (6.9) | 10,310  |
| 10-<20 | 9,028 (57.7) | 2,403 (15.4) | 3076 (19.7) | 1,130 (7.2) | 15,637  |
| 20-<30 | 4,525 (55.4) | 1,311 (16.4) | 1663 (20.4) | 670 (8.2) | 8,169  |
| ≥30 | 10,278 (62.4) | 2,338 (14.2) | 2786 (16.9) | 1,067 (6.5) | 16,469  |
| **Pack years of smoking group at baseline** |  |  |  |  |  |
| Nonsmokers | 19,288 (58.3) | 5,059 (15.3) | 6,345 (19.2) | 2,379 (7.2) | 33,071  |
| <5 | 5,193 (55.9) | 1,456 (15.7) | 1,963 (21.1) | 685 (7.4) | 9,297  |
| 5-<20 | 5,396 (60.2) | 1,373 (15.3) | 1,596 (17.8) | 597 (6.6) | 8,962  |
| ≥20 | 7,694 (68.1) | 1,443 (12.8) | 1,552 (13.7) | 603 (5.3) | 11,292  |
| **Alcohol use** |  |  |  |  |  |
| Nondrinkers or Past Drinkers  | 12,662 (65.1) | 2,503 (12.9) | 3,006 (15.5) | 1,274 (6.6) | 19,445 |
| ≤3 drinks per month | 12,007 (57.1) | 3,371 (16.0) | 4,185 (20.0) | 1,471 (7.0) | 21,034 |
| 1-4 drinks per week | 6,526 (54.3) | 1,954 (16.2) | 2,622 (21.8) | 927 (7.7) | 12,029 |
| ≥5 drinks per week | 6,376 (63.0) | 1,503 (14.9) | 1,643 (16.2) | 592 (5.9) | 10,114 |
| **Clinical risk factors and Current medical conditions** |
| **Hormone replacement therapy (HRT)** |  |  |  |  |  |
| Never use last 2 years | 16,879 (61.1) | 3,813 (13.8) | 4,927 (17.8) | 2,027 (7.3) | 27,646  |
| Estrogen along use last 2 years | 9,620 (59.6) | 2,511 (15.5) | 2,975 (18.4) | 1,049 (6.5) | 16,155  |
| Combined Estrogen-progestin use last 2 years | 82 (52.6) | 19 (12.2) | 35 (22.4) | 20 (12.8) | 156  |
| Hormones use last 2 years (estrogen or progesterone) | 1,316 (65.8) | 259 (13.0) | 331 (16.6) | 93 (4.7) | 1,999 |
| Both use last 2 years | 9,674 (58.1) | 2,729 (16.4) | 3,188 (19.1) | 1,075 (6.5) | 16,666 |
| **Systemic lupus erythematosus (SLE)** |  |  |  |  |  |
| Yes | 189 (58.2) | 47 (14.5) | 64 (19.7) | 25 (7.7) | 325  |
| No | 37,382 (60.0) | 9,284 (14.9) | 11,392 (18.3) | 4,239 (6.8) | 62,297  |
| **Rheumatoid arthritis (RA)** |  |  |  |  |  |
| Yes | 1,811 (59.7) | 429 (14.1) | 580 (19.1) | 215 (7.1) | 3,035  |
| No/Other | 35,760 (60.0) | 8,902 (14.9) | 10,876 (18.3) | 4,049 (6.8) | 59,587 |
| **Type II diabetes (T2DM) and treatment** |  |  |  |  |  |
| No diabetes | 35,690 (59.8) | 8,951 (15.0) | 10,982 (18.4) | 4,089 (6.9) | 59,712  |
| Diabetes without treatment | 535 (63.4) | 108 (12.8) | 146 (17.3) | 55 (6.5) | 844  |
| Diabetes with Treatment | 1,346 (65.2) | 272 (13.2) | 328 (15.9) | 120 (5.8) | 2,066  |
| **Hypertension and treatment status** |  |  |  |  |  |
| Never hypertensive | 24,993 (58.5) | 6,655 (15.6) | 8,034 (18.8) | 3,065 (7.2) | 42,747  |
| Untreated hypertensive | 2,880 (59.9) | 722 (15.0) | 874 (18.2) | 334 (6.9) | 4,810  |
| Treated hypertensive | 9,698 (64.4) | 1,954 (13.0) | 2,548 (16.9) | 865 (5.7) | 15,065  |
| **Family history of cancer** |  |  |  |  |  |
| Yes | 24,086 (60.1) | 6,027 (15.0) | 7,302 (18.2) | 2,689 (6.7) | 40,104  |
| No | 13,485 (59.9) | 3,304 (14.7) | 4,154 (18.5) | 1,575 (7.0) | 22,518  |

**Supplementary Table 2. General characteristics of study participants at year 3 according to decaffeinated tea consumed among the postmenopausal women, WHI-OS (N=62,622)**

|  |  |
| --- | --- |
|  | **Cups of decaffeinated tea consumed at year 3** |
|  | **Nondrinkers N (%) (n=47,564)** | **<1 cup per week N (%) (n=4,534)** | **1-6 cups per week N(%)(n=6,527)** | **≥7 cups per week N(%)( n=3,997)** | **N=62,622** |
| **Sociodemographic factors** |
| **Age at year 3, Mean (SD)** | 66.4 (7.3) | 65.5 (7.1) | 66.1 (7.1) | 66.4 (7.0) | 66.3 (7.3) |
| **Age group at year 3** |  |  |  |  |  |
| 50-59 | 10,122 (75.5) | 1,122 (8.4) | 1,379 (10.3) | 784 (5.9) | 13,407 |
| 60-69 | 19,990 (74.9) | 2,006 (7.5) | 2,905 (10.9) | 1,796 (6.7) | 26,697  |
| 70-79+ | 17,452 (77.5) | 1,406 (6.2) | 2,243 (10.0) | 1,417 (6.3) | 22,518 |
| **Body Mass Index (BMI), kg/M2, Mean (SD)** | 27.1 (5.7) | 26.7 (5.6) | 26.7 (5.5) | 26.5 (5.3) | 27.0 (5.7) |
| **Body Mass Index (BMI) Group, kg/M2** |  |  |  |  |  |
| <25 | 20,187 (74.6) | 2,071 (7.7) | 2,951 (10.9) | 1,864 (6.9) | 27,073 |
| 25-<30 | 16,080 (76.1) | 1,505 (7.1) | 2,193 (10.4) | 1,356 (6.4) | 21,134  |
| 30- <35 | 7,154 (77.8) | 604 (6.6) | 918 (10.0) | 515 (5.6) | 9,191  |
| ≥35 | 4,143 (79.3) | 354 (6.8) | 465 (8.9) | 262 (5.0) | 5,224  |
| **Racial or Ethnic Group** |  |  |  |  |  |
| White (not of Hispanic origin) | 40,357 (74.8) | 4,063 (7.5) | 5,825 (10.8) | 3,681 (6.8) | 53,926 |
| Black or African American | 3,255 (80.9) | 242 (6.0) | 368 (9.2) | 157 (3.9) | 4,022 |
| Hispanic/Latino | 1,517 (81.6) | 100 (5.4) | 164 (8.8) | 78 (4.2) | 1,859  |
| American Indian/Alaskan Native | 190 (82.6) | 12 (5.2) | 19 (8.3) | 9 (3.9) | 230  |
| Asian/Pacific Islander | 1,724 (89.5) | 81 (4.2) | 81 (4.2) | 40 (2.1) | 1,926  |
| Others | 521 (79.1) | 36 (5.5) | 70 (10.6) | 32 (4.9) | 659  |
| **Education level** |  |  |  |  |  |
| High school diploma/below | 9,659 (77.6) | 743 (6.0) | 1,213 (9.8) | 828 (6.7) | 12,443 |
| School after high school | 4,590 (77.7) | 398 (6.7) | 544 (9.2) | 379 (6.4) | 5,911 |
| College degree or higher | 33,315 (75.3) | 3,393 (7.7) | 4,770 (10.8) | 2,790 (6.3) | 44,268 |
| **Lifestyle risk factors** |
| **Total energy intake (kcal/day), Mean (SD)** | 1,549.1 (665.0) | 1,553.4 (654.4) | 1,561.0 (645.2) | 1,579 (713.9) | 1,552.6 (665.5) |
| **Recreational physical activity group, METS-hours/week** |  |  |  |  |  |
| None | 9,302 (77.3) | 816 (6.8) | 1,197 (9.9) | 722 (6.0) | 12,037  |
| 5-<10 | 7,806 (75.7) | 747 (7.3) | 1,116 (10.8) | 641 (6.2) | 10,310  |
| 10-<20 | 11,614 (74.3) | 1,209 (7.7) | 1,750 (11.2) | 1,064 (6.8) | 15,637  |
| 20-<30 | 6,050 (74.1) | 644 (7.9) | 918 (11.2) | 557 (6.8) | 8,169  |
| ≥30 | 12,792 (77.7) | 1,118 (6.8) | 1,546 (9.4) | 1,013 (6.2) | 16,469  |
| **Pack years of smoking group at baseline** |  |  |  |  |  |
| Nonsmokers | 24,674 (74.6) | 2,476 (7.5) | 3,614 (10.9) | 2,307 (7.0) | 33,071  |
| <5 | 6,881 (74.0) | 754 (8.1) | 1,094 (11.8) | 568 (6.1) | 9,297  |
| 5-<20 | 6,885 (76.8) | 633 (7.1) | 918 (10.2) | 526 (5.9) | 8,962  |
| ≥20 | 9,124 (80.8) | 671 (5.9) | 901 (8.0) | 596 (5.3) | 11,292  |
| **Alcohol use at year 3** |  |  |  |  |  |
| Nondrinkers or Past Drinkers  | 14,787 (76.1) | 1,241 (6.4) | 1,986 (10.2) | 1,431 (7.4) | 19,445 |
| ≤3 drinks per month | 15,516 (73.4) | 1,727 (8.2) | 2,375 (11.3) | 1,416 (6.7) | 21,034 |
| 1-4 drinks per week | 9,056 (75.3) | 917 (7.6) | 1,369 (11.4) | 687 (5.7) | 12,029 |
| ≥5 drinks per week | 8,205 (81.1) | 649 (6.4) | 797 (7.9) | 463 (4.6) | 10,114 |
| **Clinical risk factors and Current medical conditions** |
| **Hormone replacement therapy (HRT)** |  |  |  |  |  |
| Never use last 2 years | 21,321 (77.1) | 1,837 (6.6) | 2,714 (9.8) | 1,774 (6.4) | 27,646 |
| Estrogen along use last 2 years | 12,065 (74.7) | 1,233 (7.6) | 1,787 (11.1) | 1,070 (6.6) | 16,155 |
| Combined Estrogen-progestin use last 2 years | 112 (71.8) | 10 (6.4) | 21 (13.5) | 13 (8.3) | 156  |
| Hormones use last 2 years (estrogen or progesterone) | 1,560 (78.0) | 151 (7.6) | 178 (8.9) | 110 (5.5) | 1,999  |
| Both use last 2 years | 12,506 (75.0) | 1,303 (7.8) | 1,827 (11.0) | 1,030 (6.2) | 16,666 |
| **Systemic lupus erythematosus (SLE)** |  |  |  |  |  |
| Yes | 248 (76.3) | 17 (5.2) | 39 (12.0) | 21 (6.5) | 325  |
| No | 47,316 (76.0) | 4,517 (7.3) | 6,488 (10.4) | 3,976 (6.4) | 62,297 |
| **Rheumatoid arthritis (RA)** |  |  |  |  |  |
| Yes | 2,340 (77.1) | 190 (6.3) | 305 (10.1) | 200 (6.6) | 3,035  |
| No/Other | 45,224 (75.9) | 4,344 (7.3) | 6,222 (10.4) | 3,797 (6.4) | 59,587 |
| **Type II diabetes (T2DM) and treatment** |  |  |  |  |  |
| No diabetes | 45,289 (75.9) | 4,340 (7.3) | 6,254 (10.5) | 3,829 (6.4) | 59,712 |
| Diabetes without treatment | 642 (76.1) | 62 (7.4) | 84 (10.0) | 56 (6.6) | 844 |
| Diabetes with Treatment | 1,633 (79.0) | 132 (6.4) | 189 (9.2) | 112 (5.4) | 2,066 |
| **Hypertension and treatment status** |  |  |  |  |  |
| Never hypertensive | 32,477 (76.0) | 3,161 (7.4) | 4,382 (10.3) | 2,727 (6.4) | 42,747 |
| Untreated hypertensive | 3,701 (76.9) | 323 (6.7) | 482 (10.0) | 304 (6.3) | 4,810 |
| Treated hypertensive | 11,386 (75.6) | 1,050 (7.0) | 1,663 (11.0) | 966 (6.4) | 15,065  |
| **Family history of cancer** |  |  |  |  |  |
| Yes | 30,373 (75.7) | 2,926 (7.3) | 4,169 (10.4) | 2,636 (6.6) | 40,104 |
| No | 17,191 (76.3) | 1,608 (7.1) | 2,358 (10.5) | 1,361 (6.0) | 22,518 |

**Supplementary Table 3. Associations of NHL and major subtypes with decaffeinated tea intake among 62,622 postmenopausal women**

|  |  |
| --- | --- |
|  | **Decaffeinated tea intake** |
| **No. of cases** | **Person-years** | **Incidence rate (per 10,000)** | **HR\*(95% CI)** | **HR**†**(95% CI)** |
| **NHL** | 663 |  |  |  |  |
| None | 503  | 622,433.6 | 8.08 | 1.00 (Ref.) | 1.00 (Ref.) |
| <1 cup per week | 43  | 63,410.7 | 6.78 | 0.86(0.63-1.18) | 0.85(0.62-1.16) |
| 1-6 cups per week | 66  | 88,953.4 | 7.42 | 0.92(0.71-1.19) | 0.90(0.70-1.17) |
| ≥7 cups per week | 51  | 53,890.4 | 9.46 | 1.16(0.87-1.55) | 1.13(0.85-1.52) |
| ***P-value*** |  |  |  | 0.46‡/0.81§ | 0.46‡/0.98§ |
|  | **No. of cases** | **Person-years** | **Incidence rate (per 10,000)** | **HR\*(95% CI)** | **HR**†**(95% CI)** |
| **Diffuse large B-cell lymphoma (DLBCL)** | 195  |  |  |  |  |
| None | 143  | -- | 2.30 | 1.00 (Ref.) | 1.00 (Ref.) |
| <1 cup per week | 18  | -- | 2.84 | 1.28(0.78-2.09) | 1.25(0.76-2.04) |
| 1-6 cups per week | 20  | -- | 2.25 | 0.98(0.62-1.57) | 0.94(0.59-1.51) |
| ≥7 cups per week | 14  | -- | 2.60 | 1.13(0.65-1.95) | 1.08(0.62-1.87) |
| ***P-value*** |  |  |  | 0.77‡/0.67§ | 0.82‡/0.85§ |
|  | **No. of cases** | **Person-years** | **Incidence rate (per 10,000)** | **HR\*(95% CI)** | **HR**†**(95% CI)** |
| **Follicular lymphoma (FL)** | 128  |  |  |  |  |
| None | 98  | -- | 1.57 | 1.00 (Ref.) | 1.00 (Ref.) |
| <1 cup per week | 8  | -- | 1.26 | 0.81(0.39-1.67) | 0.78(0.38-1.61) |
| 1-6 cups per week | 14  | -- | 1.57 | 1.00(0.57-1.75) | 0.96(0.55-1.69) |
| ≥7 cups per week | 8  | -- | 1.48 | 0.93(0.45-1.92) | 0.91(0.44-1.88) |
| ***P-value*** |  |  |  | 0.95‡/0.82§ | 0.92‡/0.72§ |
|  | **No. of cases** | **Person-years** | **Incidence rate (per 10,000)** | **HR\*(95% CI)** | **HR**†**(95% CI)** |
| **Chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL)** | 51 |  |  |  |  |
| Nondrinkers | 35  | 622,433.6 | 0.56 | 1.00 (Ref.) | 1.00 (Ref.) |
| Drinkers | 16 | 206,254.4 | 0.78 | 1.38(0.76-2.49) | 1.24(0.69-2.26) |
| ***P-value*** |  |  |  | 0.29‡ | 0.47‡ |

**\***: Model adjusted for age group (50-59, 60-69 and 70-79+) only.

†: Model adjusted for all sociodemographic risk factors, lifestyle risk factors, clinical risk factors and current medical conditions*.*

‡: *P-value* was estimated from Cox Proportional Hazard Model across the total amount of decaffeinated tea consumed at year 3.

§: *P-value* was estimated from linear trend test.

**Supplementary Table 4: Interactions between Tea intake (Regular tea/Herbal tea/Decaffeinated tea), Age Group, and Risk of NHL among 62,622 Postmenopausal Women**

|  |  |
| --- | --- |
| **Multivariable adjusted HR (95% CI)\*** | **Age group** |
| **50-59** | **60-69** | **70-79+** | **P-value**† |
| **Regular tea intake (not herbal, not decaf)** |  |  |  | 0.49 |
| None | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) |  |
| <1 cup per week | 0.49(0.25-0.96) | 0.83(0.59-1.17) | 1.00(0.70-1.42) |  |
| 1-6 cups per week | 0.68(0.39-1.17) | 0.96(0.71-1.26) | 0.94(0.68-1.29) |  |
| ≥7 cups per week | 1.01(0.59-1.73) | 1.02(0.74-1.40) | 0.97(0.68-1.37) |  |
| **Herbal tea intake**  |  |  |  | 0.62 |
| None | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) |  |
| <1 cup per week | 1.09(0.67-1.80) | 1.21(0.90-1.64) | 1.18(0.83-1.68) |  |
| 1-6 cups per week | 0.85(0.51-1.42) | 0.99(0.73-1.34) | 1.10(0.79-1.53) |  |
| ≥7 cups per week | 0.11(0.02-0.82) | 0.88(0.54-1.42) | 0.84(0.48-1.48) |  |
| **Decaffeinated tea intake** |  |  |  | 0.77 |
| None | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) |  |
| <1 cup per week | 0.86(0.42-1.77) | 0.94(0.61-1.46) | 0.72(0.41-1.27) |  |
| 1-6 cups per week | 0.90(0.46-1.74) | 0.96(0.66-1.39) | 0.83(0.54-1.27) |  |
| ≥7 cups per week | 0.76(0.31-1.88) | 1.42(0.97-2.09) | 0.90(0.55-1.52) |  |

**\***: Hazard ratios (95% Confidence Intervals) of NHL risks by habitual tea intake (caffeinated tea tea/herbal tea/decaffeinated tea) at year 3 \* age group, after adjusted for other all sociodemographic risk factors, lifestyle risk factors, clinical risk factors and current medical conditions.

†: *P-value* was estimated from Cox Proportional Hazard Model.

**Supplementary Table 5: Interactions between Tea intake (Regular tea/Herbal tea/Decaffeinated tea), BMI Group, and Risk of NHL among 62,622 Postmenopausal Women**

|  |  |
| --- | --- |
| **Multivariable adjusted HR (95% CI)\*** | **Body Mass Index (BMI) Group, kg/M2** |
| **<25** | **25-<30** | **30-<35** | **≥35** | **P-value†** |
| **Regular tea intake (not herbal, not decaf)** |  |  |  |  | 0.27 |
| None | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) |  |
| <1 cup per week | 0.84(0.59-1.21) | 1.03(0.72-1.47) | 0.44(0.22-0.91) | 0.62(0.23-1.65) |  |
| 1-6 cups per week | 0.99(0.73-1.35) | 0.90(0.65-1.25) | 0.50(0.28-0.90) | 1.50(0.75-3.00) |  |
| ≥7 cups per week | 1.01(0.73-1.41) | 1.11(0.79-1.58) | 0.59(0.31-1.14) | 1.62(0.73-3.60) |  |
| **Herbal tea intake**  |  |  |  |  | 0.46 |
| None | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) |  |
| <1 cup per week | 1.41(1.04-1.91) | 1.04(0.74-1.46) | 0.91(0.47-1.76) | 1.17(0.53-2.62) |  |
| 1-6 cups per week | 1.00(0.72-1.38) | 0.82(0.58-1.16) | 1.44(0.86-2.44) | 1.77(0.89-3.52) |  |
| ≥7 cups per week | 0.90(0.55-1.47) | 0.66(0.37-1.19) | 0.70(0.22-2.27) | 0.68(0.34-2.45) |  |
| **Decaffeinated tea intake** |  |  |  |  | 0.78 |
| None | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) |  |
| <1 cup per week |  0.70(0.42-1.16) | 1.10(0.69-1.74) | 1.28(0.59-2.81) | 1.10(0.48-2.10) |  |
| 1-6 cups per week | 0.88(0.60-1.31) | 1.00(0.67-1.50) | 0.85(0.39-1.87) | 0.62(0.19-2.03) |  |
| ≥7 cups per week | 0.91(0.57-1.45) | 1.17(0.73-1.88) | 1.79(0.88-3.59) | 1.45(0.50-4.18) |  |

**\***: Hazard ratios (95% Confidence Intervals) of NHL risks by habitual tea intake (caffeinated tea tea/herbal tea/decaffeinated tea) at year 3 \* BMI group, after adjusted for all other sociodemographic risk factors, lifestyle risk factors, clinical risk factors and current medical conditions.

†: *P-value* was estimated from Cox Proportional Hazard Model.

**Supplementary Table 6: Interactions between Tea intake (Regular tea/Herbal tea/Decaffeinated tea), Racial or Ethnic Group, and Risk of NHL among 62,622 Postmenopausal Women**

|  |  |
| --- | --- |
| **Multivariable adjusted HR (95% CI)\*** | **Racial or Ethnic Group** |
| **White (not of Hispanic origin)** | **Others** | **P-value†** |
| **Regular tea intake (not herbal, not decaf)** |  |  | 0.62 |
| None | 1.00(ref.) | 1.00(ref.) |  |
| <1 cup per week | 0.84(0.66-1.06) | 0.72(0.30-1.78) |  |
| 1-6 cups per week | 0.90(0.73-1.10) | 0.92(0.45-1.91) |  |
| ≥7 cups per week | 0.97(0.78-1.22) | 1.46(0.67-3.03) |  |
| **Herbal tea intake**  |  |  | 0.06 |
| None | 1.00(ref.) | 1.00(ref.) |  |
| <1 cup per week | 1.10(0.88-1.36) | 2.34(0.98-4.43) |  |
| 1-6 cups per week | 1.03(0.84-1.28) | 0.74(0.32-1.75) |  |
| ≥7 cups per week | 0.74(0.51-1.07) | 0.75(0.22-2.52) |  |
| **Decaffeinated tea intake** |  |  | 0.78 |
| None | 1.00(ref.) | 1.00(ref.) |  |
| <1 cup per week | 0.86(0.63-1.19) | 0.67(0.16-2.75) |  |
| 1-6 cups per week | 0.93(0.72-1.21) | 0.47(0.11-1.95) |  |
| ≥7 cups per week | 1.15(0.85-1.54) | 0.97(0.23-4.00) |  |

**\***: Hazard ratios (95% Confidence Intervals) of NHL risks by habitual tea intake (caffeinated tea tea/herbal tea/decaffeinated tea) at year 3 \* racial or ethnic group (White (not of Hispanic origin)/Others), after adjusted for all other sociodemographic risk factors, lifestyle risk factors, clinical risk factors and current medical conditions.

†: P-value was estimated from Cox Proportional Hazard Model.

**Supplementary Table 7: Interactions between Tea intake (Regular tea/Herbal tea/Decaffeinated tea), Alcohol Intake Group, and Risk of NHL among 62,622 Postmenopausal Women**

|  |  |
| --- | --- |
| **Multivariable adjusted HR (95% CI)\*** | **Alcohol Intake Group** |
| **Nondrinkers or past drinkers** | **≤3 drinks per month** | **1-4 drinks per week** | **≥5 drinks per week** | **P-value**† |
| **Regular tea intake (not herbal, not decaf)** |  |  |  |  | 0.21 |
| None | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) |  |
| <1 cup per week | 0.68(0.41-1.13) | 0.80(0.54-1.18) | 0.95(0.60-1.52) | 0.92(0.53-1.60) |  |
| 1-6 cups per week | 1.04(0.71-1.51) | 0.89(0.64-1.24) | 0.68(0.43-1.07) | 1.00(0.61-1.63) |  |
| ≥7 cups per week | 1.17(0.79-1.72) | 0.99(0.69-1.43) | 0.53(0.29-0.96) | 1.45(0.90-2.35) |  |
| **Herbal tea intake**  |  |  |  |  | 0.28 |
| None | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) |  |
| <1 cup per week | 0.80(0.51-1.26) | 1.23(0.87-1.73) | 1.22(0.76-1.96) | 1.78(1.14-2.77) |  |
| 1-6 cups per week | 1.06(0.72-1.56) | 1.05(0.75-1.47) | 1.04(0.66-1.63) | 0.90(0.52-1.56) |  |
| ≥7 cups per week | 0.49(0.23-1.06) | 0.65(0.34-1.24) | 1.26(0.68-2.36) | 0.63(0.23-1.74) |  |
| **Decaffeinated tea intake** |  |  |  |  | 0.66 |
| None | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) |  |
| <1 cup per week | 0.75(0.39-1.42) | 0.82(0.49-1.38) | 0.93(0.47-1.84) | 1.02(0.50-2.11) |  |
| 1-6 cups per week | 0.86(0.52-1.40) | 0.77(0.49-1.21) | 1.17(0.69-1.96) | 1.03(0.53-1.97) |  |
| ≥7 cups per week | 0.82(0.47-1.46) | 1.57(1.03-2.37) | 1.07(0.52-2.22) | 0.73(0.27-2.00) |  |

**\***: Hazard ratios (95% Confidence Intervals) of NHL risks by habitual tea intake (caffeinated tea tea/herbal tea/decaffeinated tea) at year 3 \* alcohol intake group, after adjusted for all other sociodemographic risk factors, lifestyle risk factors, clinical risk factors and current medical conditions.

†: *P-value* was estimated from Cox Proportional Hazard Model.

**Supplementary Table 8: Interactions between Tea intake (Regular tea/Herbal tea/Decaffeinated tea), Pack-Years of Smoking Group, and Risk of NHL among 62,622 Postmenopausal Women**

|  |  |
| --- | --- |
| **Multivariable adjusted HR (95% CI)\*** | **Pack-Years of Smoking Group** |
| **Nonsmokers** | **<5** | **5-<20** | **≥20** | **P-value†** |
| **Regular tea intake (not herbal, not decaf)** |  |  |  |  |  |
| None | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) | 0.17 |
| <1 cup per week | 0.77(0.56-1.07) | 1.23(0.73-2.06) | 0.93(0.54-1.62) | 0.57(0.29-1.12) |  |
| 1-6 cups per week | 0.98(0.75-1.28) | 0.67(0.38-1.17) | 0.87(0.52-1.45) | 0.85(0.50-1.45) |  |
| ≥7 cups per week | 0.85(0.62-1.15) | 0.91(0.52-1.62) | 1.07(0.63-1.82) | 1.58(0.98-2.55) |  |
| **Herbal tea intake**  |  |  |  |  | 0.07 |
| None | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) |  |
| <1 cup per week | 1.17(0.87-1.57) | 1.59(0.99-2.56) | 1.45(0.90-2.33) | 0.62(0.32-1.19) |  |
| 1-6 cups per week | 1.30(0.99-1.70) | 0.68(0.38-1.22) | 0.79(0.45-1.40) | 0.74(0.41-1.33) |  |
| ≥7 cups per week | 0.82(0.51-1.32) | 0.87(0.37-2.03) | 0.69(0.28-1.74) | 0.42(0.13-1.34) |  |
| **Decaffeinated tea intake** |  |  |  |  | 0.27 |
| None | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) | 1.00(ref.) |  |
| <1 cup per week | 0.84(0.55-1.29) | 1.57(0.87-2.84) | 0.58(0.24-1.43) | 0.30(0.07-1.22) |  |
| 1-6 cups per week | 1.03(0.74-1.43) | 0.90(0.48-1.71) | 0.83(0.43-1.61) | 0.44(0.16-1.19) |  |
| ≥7 cups per week | 0.87(0.56-1.35) | 0.84(0.36-1.94) | 1.29(0.65-2.58) | 2.34(1.32-4.15) |  |

**\***: Hazard ratios (95% Confidence Intervals) of NHL risks by habitual tea intake (caffeinated tea tea/herbal tea/decaffeinated tea) at year 3 \* pack-years of smoking group, after adjusted for all other sociodemographic risk factors, lifestyle risk factors, clinical risk factors and current medical conditions.

†: *P-value* was estimated from Cox Proportional Hazard Model.

**Supplementary Table 9. Distribution of Health-related Lifestyle Factors (Smoking, Alcohol use, Recreational physical activity, and BMI groups) according to Different Types of Tea Intake among the Postmenopausal Women, WHI-OS (N=62,622)**

|  |  |
| --- | --- |
|  | **Regular tea intake** |
| **Nondrinkers N(%)(n=29,229)** | **Yes N(%)(n=33,393)** |
| **Pack years of smoking group**  |  |  |
| Nonsmokers | 14,930 (51.1) | 18,141 (54.3) |
| <5 | 4,356 (14.9) | 4,941 (14.8) |
| 5-<20 | 4,240 (14.5) | 4,722 (14.1) |
| ≥20 | 5,703 (19.5) | 5,589 (16.7) |
| **Alcohol use**  |  |  |
| Nondrinkers or Past Drinkers  | 9,991 (34.2) | 9,454 (28.3) |
| ≤3 drinks per month | 14,930 (51.1) | 18,141 (54.3) |
| 1-4 drinks per week | 5,107 (17.5) | 6,922 (20.7) |
| ≥5 drinks per week | 4,724 (16.2) | 5,390 (16.1) |
| **Recreational physical activity group, METS-hours/week** |  |  |
| None | 5,404 (18.5) | 6,633 (19.9) |
| 5-<10 | 4,784 (16.4) | 5,526 (16.5) |
| 10-<20 | 7,145 (24.4) | 8,492 (25.4) |
| 20-<30 | 3,814 (13.0) | 4,355 (13.0) |
| ≥30 | 8,082 (27.7) | 8,387 (25.1) |
| **Body Mass Index (BMI) Group, kg/M2** |  |  |
| <25 | 12,691 (43.4) | 14,382 (43.1) |
| 25-<30 | 9,738 (33.3) | 11,396 (34.1) |
| 30- <35 | 4,303 (14.7) | 4,888 (14.6) |
| ≥35 | 2,497 (8.5) | 2,727 (8.2) |
|  | **Herbal tea intake** |
|  | **Nondrinkers N(%)(n=37,571)** | **Yes N(%)(n=25,051)** |
| **Pack years of smoking group**  |  |  |
| Nonsmokers | 19,288 (51.3) | 13,783 (55.0) |
| <5 | 5,193 (13.8) | 4,104 (16.4) |
| 5-<20 | 5,396 (14.4) | 3,566 (14.2) |
| ≥20 | 7,694 (20.5) | 3,598 (14.4) |
| **Alcohol use**  |  |  |
| Nondrinkers or Past Drinkers  | 12,662 (33.7) | 6,783 (27.1) |
| ≤3 drinks per month | 12,007 (32.0) | 9,027 (36.0) |
| 1-4 drinks per week | 6,526 (17.4) | 5,503 (22.0) |
| ≥5 drinks per week | 6,376 (17.0) | 3,738 (14.9) |
| **Recreational physical activity group, METS-hours/week** |  |  |
| None | 7,612 (20.3) | 4,425 (17.7) |
| 5-<10 | 6,128 (16.3) | 4,182 (16.7) |
| 10-<20 | 9,028 (24.0) | 6,609 (26.4) |
| 20-<30 | 4,525 (12.0) | 3,644 (14.5) |
| ≥30 | 10,278 (27.4) | 6,191 (24.7) |
| **Body Mass Index (BMI) Group, kg/M2** |  |  |
| <25 | 15,786 (42.0) | 11,287 (45.1) |
| 25-<30 | 12,677 (33.7) | 8,457 (33.8) |
| 30- <35 | 5,765 (15.3) | 3,426 (13.7) |
| ≥35 | 3,343 (8.9) | 1,881 (7.5) |
|  | **Decaffeinated tea intake** |
|  | **Nondrinkers N(%)(n=47,564)** | **Yes N(%)(n=15,058)** |
| **Pack years of smoking group**  |  |  |
| Nonsmokers | 24,674 (51.9) | 8,397 (55.8) |
| <5 | 6,881 (14.5) | 2,416 (16.0) |
| 5-<20 | 6,885 (14.5) | 2,077 (13.8) |
| ≥20 | 9,124 (19.2) | 2,168 (14.4) |
| **Alcohol use**  |  |  |
| Nondrinkers or Past Drinkers  | 14,787 (31.1) | 4,658 (30.9) |
| ≤3 drinks per month | 15,516 (32.6) | 5,518 (36.6) |
| 1-4 drinks per week | 9,056 (19.0) | 2,973 (19.7) |
| ≥5 drinks per week | 8,205 (17.3) | 1,909 (12.7) |
| **Recreational physical activity group, METS-hours/week** |  |  |
| None | 9,302 (19.6) | 2,735 (18.2) |
| 5-<10 | 7,806 (16.4) | 2,504 (16.6) |
| 10-<20 | 11,614 (24.4) | 4,023 (26.7) |
| 20-<30 | 6,050 (12.7) | 2,119 (14.1) |
| ≥30 | 12,792 (26.9) | 3,677 (24.4) |
| **Body Mass Index (BMI) Group, kg/M2** |  |  |
| <25 | 20,187 (42.4) | 6,886 (45.7) |
| 25-<30 | 16,080 (33.8) | 5,054 (33.6) |
| 30- <35 | 7,154 (15.0) | 2,037 (13.5) |
| ≥35 | 4,143 (8.7) | 1,081 (7.2) |