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| **Supplementary Table 1.** Other measures of sitting and risk of young-onset CRC diagnosed prior to age 50 |
|  | **Hours per week** | ***p*-trend||** |
|  | **≤7** | **7.1-14** |  **>14** |
| **Other sitting at home**\* |  |
|  Cases | 50 | 39 | 29 |  |
|  Person-years | 557,492 | 425,563 | 279,485 |  |
|  Age-adjusted RR (95% CI) | 1(referent) | 1.05 (0.69 to 1.60) | 1.30 (0.82 to 2.06) | 0.28 |
|  Multivariate model 1 RR (95% CI)†  | 1(referent) | 1.06 (0.69 to 1.61) | 1.34 (0.84 to 2.15) | 0.23 |
|  Multivariate model 2 RR (95% CI)‡ | 1(referent) | 1.06 (0.69 to 1.62) | 1.36 (0.85 to 2.18) | 0.21 |
|  Multivariate model 3 RR (95% CI)§ | 1(referent) | 1.05 (0.69 to 1.60) | 1.34 (0.84 to 2.15) | 0.23 |
| **Sitting at work or away from home or driving** |  |
|  Cases | 36 | 30 | 52 |  |
|  Person-years | 374,469 | 388,822 | 499,249 |  |
|  Age-adjusted RR (95% CI) | 1(referent) | 0.75 (0.46 to 1.21) | 1.09 (0.71 to 1.67) | 0.40 |
|  Multivariate model 1 RR (95% CI)†  | 1(referent) | 0.75 (0.46 to 1.23) | 1.07 (0.70 to 1.64) | 0.47 |
|  Multivariate model 2 RR (95% CI)‡ | 1(referent) | 0.75 (0.46 to 1.23) | 1.07 (0.70 to 1.65) | 0.46 |
|  Multivariate model 3 RR (95% CI)§ | 1(referent) | 0.75 (0.46 to 1.22) | 1.05 (0.68 to 1.62) | 0.52 |
| Abbreviations: CI, confidence interval; RR, relative risk.  |
| \*Includes time reading, meal time, time spent at a desk. |
| †Adjusted for height (continuous), family history of CRC (yes/no), diabetes (yes/no), screening lower endoscopy within past 10 years (yes/no), lower endoscopy due to other indications within past 10 years (yes/no), smoking (continuous pack-years), alcohol intake (continuous), regular use of aspirin (yes/no), non-steroidal anti-inflammatory drugs (yes/no), race, multivitamin (yes/no), menopausal status and menopausal hormone use (premenopausal, never, and current use of menopausal hormone), and dietary intake (total calories, red meat, fiber, folate, calcium, Alternate Healthy Eating Index 2010, continuous). |
| ‡Additionally adjusted for physical activities (continuous). |
| §Additionally adjusted for physical activities (continuous) and body mass index (continuous). |
| ||Calculated using the median of each sedentary behavior category as a continuous variable. |
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| **Supplementary Table 2.** Light-intensity behaviors and risk of young-onset CRC diagnosed prior to age 50 |
|  | **Hours per week** | ***p-*trend**§ |
|  | **0 - 14** | **14.1-34.9** | **≥35** |
| **Standing or walking at work** |  |
|  Cases | 35 | 62 | 21 |  |
|  Person-years | 316,302 | 689,715 | 254,369 |  |
|  Age-adjusted RR (95% CI) | 1(referent) | 0.81 (0.53 to 1.23) | 0.72 (0.42 to 1.25) | 0.24 |
|  Model 1 RR (95% CI) \*  | 1(referent) | 0.80 (0.52 to 1.21) | 0.72 (0.42 to 1.25) | 0.24 |
|  Model 2 RR (95% CI)† | 1(referent) | 0.79 (0.52 to 1.20) | 0.70 (0.41 to 1.23) | 0.21 |
|  Model 3 RR (95% CI)‡ | 1(referent) | 0.78 (0.52 to 1.19) | 0.69 (0.40 to 1.20) | 0.19 |
| **Standing or walking at home** |  |
|  Cases | 47 | 54 | 17 |  |
|  Person-years | 446,788 | 607,028 | 206,570 |  |
|  Age-adjusted RR (95% CI) | 1(referent) | 0.84 (0.57 to 1.24) | 0.79 (0.45 to 1.39) | 0.39 |
|  Model 1 RR (95% CI) \*  | 1(referent) | 0.86 (0.58 to 1.28) | 0.85 (0.48 to 1.49) | 0.54 |
|  Model 2 RR (95% CI)† | 1(referent) | 0.86 (0.58 to 1.28) | 0.84 (0.48 to 1.48) | 0.52 |
|  Model 3 RR (95% CI)‡ | 1(referent) | 0.88 (0.59 to 1.31) | 0.88 (0.50 to 1.56) | 0.64 |
| Abbreviations: CI, confidence interval; RR, relative risk.  |
| \*Adjusted for height (continuous), family history of CRC (yes/no), diabetes (yes/no), screening lower endoscopy within past 10 years (yes/no), lower endoscopy due to other indications within past 10 years (yes/no), smoking (continuous pack-years), alcohol intake (continuous), regular use of aspirin (yes/no), non-steroidal anti-inflammatory drugs (yes/no), race, multivitamin (yes/no), menopausal status and menopausal hormone use (premenopausal, never, and current use of menopausal hormone), and dietary intake (total calories, red meat, fiber, folate, calcium, Alternate Healthy Eating Index 2010, continuous). |
| †Additionally adjusted for physical activities (continuous). |
| ‡Additionally adjusted for physical activities (continuous) and body mass index (continuous). |
| §Calculated using the median of each sedentary behavior category as a continuous variable. |

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| **Supplementary Table 3.** Sedentary TV viewing time and risk of conventional CRC diagnosed at age 50 and above |
|  | **Sedentary TV viewing time (Hours per week)** | ***p*-trend**§ |
|   | **≤7** | **7.1-14** |  **>14** |
|  Cases | 77 | 56 | 32 |  |
|  Person-years | 900,227 | 525,691 | 361,465 |  |
|  Age-adjusted RR (95% CI) | 1(referent) | 1.25 (0.89 to 1.77) | 1.19 (0.79 to 1.81) | 0.30 |
|  Model 1 RR (95% CI) \*  | 1(referent) | 1.27 (0.89 to 1.80) | 1.18 (0.78 to 1.81) | 0.32 |
|  Model 2 RR (95% CI)† | 1(referent) | 1.28 (0.90 to 1.82) | 1.20 (0.79 to 1.84) | 0.29 |
|  Model 3 RR (95% CI)‡ | 1(referent) | 1.30 (0.91 to 1.85) | 1.23 (0.80 to 1.89) | 0.24 |
| Abbreviations: CI, confidence interval; RR, relative risk.  |
| \*Adjusted for height (continuous), family history of CRC (yes/no), diabetes (yes/no), screening lower endoscopy within past 10 years (yes/no), lower endoscopy due to other indications within past 10 years (yes/no), smoking (continuous pack-years), alcohol intake (continuous), regular use of aspirin (yes/no), non-steroidal anti-inflammatory drugs (yes/no), race, multivitamin (yes/no), menopausal status and menopausal hormone use (premenopausal, never, and current use of menopausal hormone), and dietary intake (total calories, red meat, fiber, folate, calcium, Alternate Healthy Eating Index 2010, continuous). |
| †Additionally adjusted for physical activities (continuous). |
| ‡Additionally adjusted for physical activities (continuous) and body mass index (continuous). |
| §Calculated using the median of each sedentary behavior category as a continuous variable. |

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| **Supplementary Table 4.** Joint analysis of sedentary TV viewing time, body mass index, and risk of young-onset CRC diagnosed prior to age 50 |
|  | **Sedentary TV viewing time (Hours per week)** |
|   | **0-14** |  **≥14** |
| **BMI**\* |  |  |
| <25 kg/m2 |  |  |
|  Cases  | 50 | 12 |
|  RR (95% CI) | 1(referent) | 1.30 (0.68 to 2.47) |
| ≥25 kg/m2 |  |  |
|  Cases  | 35 | 21 |
|  RR (95% CI) | 1.26 (0.80 to 1.96) | 2.41 (1.41 to 4.11) |
| Abbreviations: BMI: body mass index; CI, confidence interval; RR, relative risk.  |
| \*Adjusted for height (continuous), family history of CRC (yes/no), diabetes (yes/no), screening lower endoscopy within past 10 years (yes/no), lower endoscopy due to other indications within past 10 years (yes/no), smoking (continuous pack-years), alcohol intake (continuous), regular use of aspirin (yes/no), non-steroidal anti-inflammatory drugs (yes/no), race, multivitamin (yes/no), menopausal status and menopausal hormone use (premenopausal, never, and current use of menopausal hormone), and dietary intake (total calories, red meat, fiber, folate, calcium, Alternate Healthy Eating Index 2010, continuous). |