Supplemental table 1. Hazard ratio and 95% confidence interval of endometrial cancer according to WHO BMI.

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|  | **WHO Body Mass Index (kg/m2)** |
|  | <18.50 | 18.50-22.99 | 23.0-24.99 | 25.0-27.49 | 27.5-29.9 | ≥30.0 | Trend(per 5 kg/m2) |
| No. of cases | 6 | 74 | 38 | 29 | 22 | 11 |  |
| Person-years | 35,095 | 443,107 | 242,903 | 176,951 | 68,913 | 31,838 |  |
| Age-area adjusted HR (95%CI) | 1.10(0.46-2.61) | 1.04(0.70-1.55) | 1.0 | 1.08(0.67-1.76) | 2.16(1.28-3.66) | 2.36(1.21-4.64) | 1.35 (1.01-1.68) |
| Multivariate HR1(95%CI) a | 1.06(0.44-2.51) | 1.05(0.71-1.55) | 1.0 | 1.09(0.67-1.77) | 2.17(1.28-3.68) | 2.37(1.20-4.66) | 1.35 (1.08-1.68) |

a Multivariate-adjusted HR1 was adjusted for age (in years) and study area (10 public health centers), smoking (never or ever), alcohol consumption (regular or none), coffee consumption (≤ 2 cups/week, 3-4 cups/week or ≥1 cup/day), history of diabetes mellitus (none or yes), sports (none or regular), use of exogenous female hormones (ever or never), age at menarche (<14, 14-15, 15-16 and ≥16), age at menopause (<48, 48-51 and ≥51), no of deliveries (nulliparous or ≥1) and menopausal status at baseline survey (pre or post menopausal).

Supplemental table 2. Subgroup analysis by menopausal status for hazard ratios and 95% confidence intervals of endometrial cancer according to BMI and height

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|  | **Premenopausal** |  | **Postmenopausal** |
|  | No. of cases/participants | Person-years | Age-area adjusted HR (95%CI) | Multivariate HRa(95%CI) |  | No. of cases/participants | Person-years | Age-area adjusted HR (95%CI) | Multivariate HRa(95%CI) |
| **Body Mass Index (kg/m2)** |  |  |  |  |  |  |  |  |
| ≤18.9 | 4/1350 | 23,806 | 0.83(0.28-2.41) | 0.83(0.28-2.44) |  | 4/1777 | 30,483 | 1.21(0.40-3.67) | 1.17(0.39-3.58) |
| 19.0-20.9 | 17/4193 | 76,367 | 1.09(0.57-2.06) | 1.10(0.58-2.08) |  | 10/4431 | 81,174 | 1.12(0.50-2.50) | 1.12(0.50-2.50) |
| 21.0-22.9 | 23/6027 | 112,549 | 0.93(0.52-2.06)3 | 0.96(0.53-1.72) |  | 21/7862 | 145,707 | 1.34(0.69-2.60) | 1.35(0.69-2.63) |
| 23.0-24.9 | 22/5037 | 96,629 | 1.0 | 1.0 |  | 15/7562 | 141,843 | 1.0 | 1.0 |
| 25.0-26.9 | 12/2772 | 53,613 | 0.96(0.47-1.93) | 0.96 (0.48-1.95) |  | 12/5001 | 93,502 | 1.25(0.59-2.67) | 1.29 (0.60-2.76) |
| 27.0-29.9 | 10/1670 | 32,072 | 1.32(0.63-2.81) | 1.32 (0.62-2.79) |  | 17/3303 | 61,654 | 2.82(1.41-5.67) | 2.98 (1.48-5.98) |
| ≥30.0 | 6/581 | 11,129 | 2.41(0.97-5.98) | 2.26 (0.90-5.67) |  | 4/1093 | 20,135 | 2.03(0.67-6.12) | 2.08 (0.69-6.32) |
| Trend(per 5 kg/m2) |  | 1.28(0.93-1.75) | 1.29(0.95-1.76) |  |  |  | 1.35(0.98-1.86) | 1.38 (1.01-1.91) |
| **Height (cm)** |  |  |  |  |  |  |  |  |  |
| <148 | 10/2324 | 45,716  | 1.01 | 1.01 |  | 16/7342 | 136,017  | 1.0 | 1.0 |
| 148-151 | 24/5351 | 102,561  | 1.19 (0.57-2.50) | 1.21(0.28-2.54) |  | 25/9722 | 180,267  | 1.19(0.63-2.24) | 1.20(0.64-2.26) |
| 152-155 | 28/6511 | 122,079  | 1.22 (0.59-2.54) | 1.24(0.60-2.59) |  | 24/8006 | 149,273  | 1.34(0.70-2.55) | 1.37(0.72-2.60) |
| 156-159 | 23/4578 | 84,423  | 1.53 (0.72-3.28) | 1.56(0.73-3.33) |  | 11/4127 | 75,457  | 1.20(0.55-2.64) | 1.24(0.56-2.73) |
| ≥160 | 9/2866 | 51,387  | 1.08 (0.43-2.71) | 1.07(0.42-2.71) |  | 7/1832 | 33,484  | 1.73(0.69-4.29) | 1.73(0.70-4.30) |
| Trend(per 5 cm) |  |  | 1.04(0.85-1.29) | 1.04 (0.85-1.28) |  |  |  | 1.15(0.92-1.43) | 1.15(0.93-1.43) |

a Multivariate-adjusted HR1 was adjusted for age (in years) and study area (10 public health centers), smoking (never or ever), alcohol consumption (regular or none), coffee consumption (≤2 cups/week, 3-4 cups/week or ≥1 cup/day), sports (none or regular), use of exogenous female hormones (ever or never), age at menarche (<14, 14-15, 15-16 and ≥16), age at menopause (<48, 48-51 and ≥51) for postmenopausal women only, no of deliveries (nulliparous or ≥1), menopausal status at baseline survey (pre- or postmenopausal) and body mass index (<18.9, 19.0-20.9, 21.0-22.9, 23.0-24.9, 25.0-26.9, 27.0-29.9 and ≥30) (height only)

Supplemental table 3. Hazard ratios and 95% confidence intervals of endometrial cancer according to BMI in exogenous female hormone never-users.

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| **Hormone never user** | **Body Mass Index (kg/m2)** |
|  | ≤18.9 | 19.0-20.9 | 21.0-22.9 | 23.0-24.9 | 25.0-26.9 | 27.0-29.9 | ≥30.0 | Trend (per　5 kg/m2) |
| No. of participants | 2830  | 7772  | 12533  | 11369  | 7000  | 4524  | 1507  |  |
| No. of cases | 7 | 26 | 39 | 32　 | 20 | 26 | 11 |  |
| Person-years | 48,696  | 140,846  | 231,685  | 214,148  | 131,846  | 84,675  | 27,875  |  |
| Age-area adjusted HR (95%CI) | 0.95(0.42-2.15) | 1.19(0.71-2.00) | 1.11(0..69-1.77) | 1.0 | 1.05(0.60-1.83) | 2.20(1.31-3.69) | 2.83(1.42-5.63) | 1.41 (1.03-1.72) |
| Multivariate HR1(95%CI) a | 0.92(040-2.09) | 1.17(0.70-1.98) |  1.11(0.69-1.77) | 1.0 | 1.05 (0.60-1.84) | 2.23 (1.33-3.76) | 2.86 (1.43-5.72) | 1.43 (1.04-1.80) |
|  | **Height (cm)** |
|  | <148 | 148-151 | 152-155 | 156-159 | ≥160 | Trend(per 5 cm) |
| No. of participants | 8873 | 13618 | 13066 | 7773 | 4205 |  |
| No. of cases | 24 | 41 | 48 | 33 | 15 |  |
| Person-years | 165,562  | 253,830  | 242,762  | 141,930  | 75,689  |  |
| Age-area adjusted HR 2(95%CI) | 1.0 | 1.12(0.68-1.87) | 1.34(0.81-2.21) | 1.59(0.92-2.74) | 1.37(0.70-2.67) | 1.15(0.98-1.34) |
| Multivariate HR2 (95%CI) b | 1.0 | 1.13(0.68-1.88) | 1.36(0.82-2.24) | 1.59(0.92-2.75) | 1.35(0.69-2.64) | 1.14(0.98-1.34) |

a Multivariate-adjusted HR1 was adjusted for age (in years) and study area (10 public health centers), smoking (never or ever), alcohol consumption (regular or none), coffee consumption (≤2 cups/week, 3-4 cups/week or ≥1 cup/day), sports (none or regular), use of exogenous female hormones (ever or never), age at menarche (<14, 14-15, 15-16 and ≥16), age at menopause (<48, 48-51 and ≥51) for postmenopausal women only, no of deliveries (nulliparous or ≥1), menopausal status at baseline survey (pre- or postmenopausal) and body mass index (<18.9, 19.0-20.9, 21.0-22.9, 23.0-24.9, 25.0-26.9, 27.0-29.9 and ≥30) (height only)

Supplemental table 4. Hazard ratios and 95% confidence intervals of endometrial cancer according to weight change from age 20 years

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| --- | --- |
|  | **Weight Change (kg)** |
|  | <-5 | -4.9+4.9 | +5< |
| No. of participants | 5442 | 13193 | 23506 |
| No. of cases | 15 | 56 | 84 |
| Person-years | 102,909 | 245,832 | 450,232 |
| Age-area adjusted HR (95%CI) | 0.63(0.36-1.11) | 1.0 | 0.82(0.59-1.15) |
| Multivariate HR2 (95%CI) a | 0.67(0.38-1.19) | 1.0 | 0.68(0.46-1.00) |

a. Multivariate-adjusted HR1 was adjusted for age (in years) and study area (10 public health centers), smoking (never or ever), alcohol consumption (regular or none), coffee consumption (≤ 2 cups/week, 3-4 cups/week or ≥1 cup/day), sports (none or regular), use of exogenous female hormones (ever or never), age at menarche (<14, 14-15, 15-16 and ≥16), age at menopause (<48, 48-51 and ≥51), no of deliveries (nulliparous or ≥1), menopausal status at baseline survey (pre- or postmenopausal) and body mass index (<18.9, 19.0-20.9, 21.0-22.9, 23.0-24.9, 25.0-26.9, 27.0-29.9 and ≥30).