**Supplement 1 Multiple linear regression analysis for the independent factors determining hemoglobin**

 (n= 16,060)

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| --- | --- |
| Variables | Hemoglobin (mg/dL) |
| *β* | 95% CI | *p*-value | *β* | 95% CI | *p*-value |
| Age (years) | -0.007 | -0.009 – -0.006 | < 0.001 | -0.007 | -0.008 – -0.005 | < 0.001 |
| Women | -1.902 | -1.959 – -1.844 | < 0.001 | -2.023 | -2.080 – -1.965 | < 0.001 |
| Current drinker | 0.017 | -0.022 – 0.055 | 0.398 | 0.038 | 0.001 – 0.077 | 0.055 |
| Current smoker | 0.123 | 0.095 – 0.151 | < 0.001 | 0.108 | 0.079 – 0.136 | < 0.001 |
| Regular exercising | 0.011 | -0.050 – 0.072 | 0.716 | 0.001 | -0.061 – 0.063 | 0.972 |
| BMI (kg/m2) | 0.025 | 0.015 – 0.036 | < 0.001 | 0.042 | 0.032 – 0.053 | < 0.001 |
| WM (cm) | 0.007 | 0.004 – 0.011 | < 0.001 | 0.006 | 0.002 – 0.010 | 0.003 |
| TC (mg/dL) | 0.004 | 0.004 – 0.005 | < 0.001 | 0.005 | 0.004 – 0.005 | < 0.001 |
| TGs (mg/dL) | 0.001 | 0.001 – 0.002 | < 0.001 | 0.001 | 0.001 – 0.002 | < 0.001 |
| HDL-C (mg/dL) | 0.001 | -0.001 – 0.002 | 0.378 | 0.002 | 0.001 – 0.003 | 0.034 |
| FBG (mg/dL) | 0.002 | 0.001 – 0.003 | < 0.001 | 0.002 | 0.001 – 0.003 | < 0.001 |
| BUN (mg/dL) | -0.012 | -0.016 – -0.007 | < 0.001 | -0.014 | -0.018 – -0.009 | < 0.001 |
| Crea (mg/dL) | -0.136 | -0.255 – -0.018 | 0.024 | -0.161 | -0.282 – -0.040 | 0.009 |
| SBP (mmHg) | -0.007 | -0.009 – -0.006 | < 0.001 |  | – |  |
| DBP (mmHg) | 0.029 | 0.027 – 0.032 | < 0.001 |  | – |  |
| PP (mmHg) |  | – |  | -0.007 | -0.009 – -0.006 | < 0.001 |

**Supplement 2 Multiple linear regression analysis for the independent factors determining hematocrit**

 (n= 16,060)

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| Variables | Hematocrit (%) |
| *β* | 95% CI | *p*-value | *β* | 95% CI | *p*-value |
| Age (years) | -0.018 | -0.022 – -0.014 | < 0.001 | -0.016 | -0.020 – -0.012 | < 0.001 |
| Women | -4.803 | -4.955 – -4.651 | < 0.001 | -5.121 | -5.273 – -4.969 | < 0.001 |
| Current drinker | -0.023 | -0.125 – 0.078 | 0.651 | 0.033 | -0.070 – 0.136 | 0.526 |
| Current smoker | 0.364 | 0.290 – 0.438 | < 0.001 | 0.323 | 0.248 – 0.399 | < 0.001 |
| Regular exercising | -0.001 | -0.162 – 0.159 | 0.986 | -0.028 | -0.192 – 0.136 | 0.736 |
| BMI (kg/m2) | 0.075 | 0.048 – 0.103 | < 0.001 | 0.120 | 0.092 – 0.147 | < 0.001 |
| WM (cm) | 0.018 | 0.008 – 0.028 | < 0.001 | 0.014 | 0.004 – 0.025 | 0.006 |
| TC (mg/dL) | 0.012 | 0.010 – 0.013 | < 0.001 | 0.013 | 0.012 – 0.015 | < 0.001 |
| TGs (mg/dL) | 0.001 | 0.001 – 0.002 | < 0.001 | 0.002 | 0.001 – 0.002 | < 0.001 |
| HDL-C (mg/dL) | 0.006 | 0.002 – 0.010 | 0.008 | 0.009 | 0.004 – 0.013 | < 0.001 |
| FBG (mg/dL) | 0.001 | -0.001 – 0.003 | 0.250 | 0.001 | -0.001 – 0.004 | 0.241 |
| BUN (mg/dL) | -0.030 | -0.042 – -0.018 | < 0.001 | -0.035 | -0.047 – -0.022 | < 0.001 |
| Crea (mg/dL) | -0.342 | -0.655 – -0.029 | 0.032 | -0.408 | -0.727 – -0.089 | 0.012 |
| SBP (mmHg) | -0.020 | -0.024 – -0.016 | < 0.001 |  | – |  |
| DBP (mmHg) | 0.077 | 0.071 – 0.083 | < 0.001 |  | – |  |
| PP (mmHg) |  | – |  | -0.019 | -0.024 – -0.015 | < 0.001 |