

Supplementary Table S1. Insulin resistance indices in middle-aged participants between April 1990 and March 2003

| Variables | NFG/NGT | IFG | IGT | Diabetes |
|------------------------|-------------|--------------------------|---------------------------|----------------------------|
| N | 640 | 286 | 334 | 189 |
| Mean age, years | 58.0 ± 4.2 | 58.3 ± 4.1 | 58.6 ± 4.1 | 57.8 ± 4.3 |
| Female, n (%) | 404 (63) | 133 (47) | 164 (49) | 86 (46) |
| BMI, kg/m ² | 21.9 ± 2.5 | 23.2 ± 2.8 | 23.7 ± 2.9 | 24.5 ± 3.5 |
| HOMA-IR | 1.25 ± 0.55 | 1.78 ± 0.78 ^a | 1.82 ± 0.86 ^a | 3.06 ± 1.81 ^{abc} |
| Matsuda Index | 10.6 ± 5.77 | 7.72 ± 4.46 ^a | 5.08 ± 2.40 ^{ab} | 3.62 ± 1.91 ^{abc} |

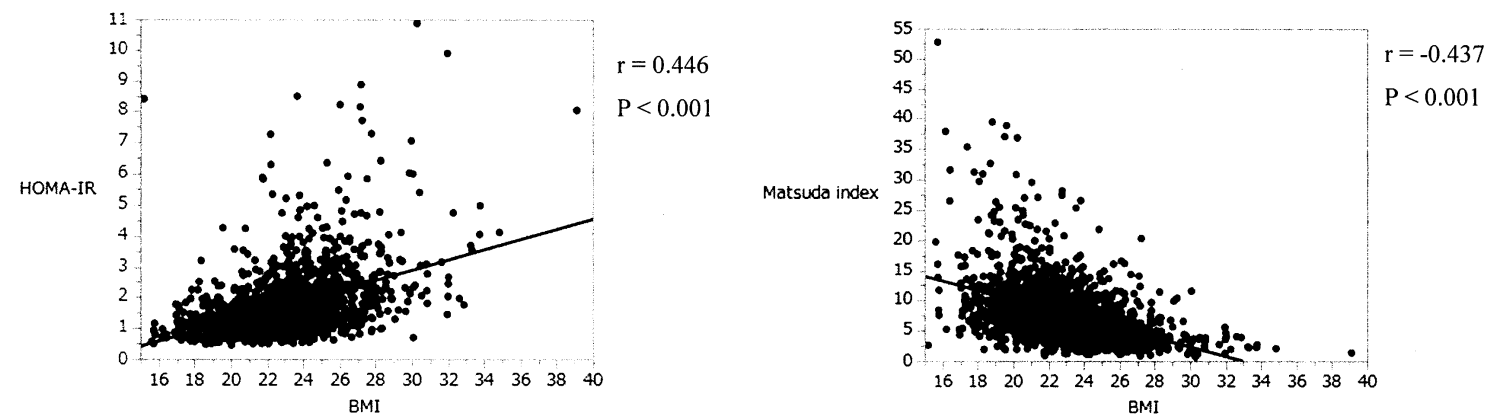
^aP < 0.001 versus the NFG/NGT group. ^bP < 0.001 versus the IFG group. ^cP < 0.001 versus the IGT group.

Data are expressed as mean ± standard deviation or number and percentage.

Abbreviations: BMI, body mass index; HOMA-IR, homeostasis model assessment of insulin resistance; IFG, impaired fasting glucose; IGT, impaired glucose tolerance; NFG, normal fasting glucose; NGT, normal glucose tolerance.

Supplementary Figure S1. Association between body mass index and insulin resistance indices in middle-aged participants between April 1990 and March 2003

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Supplementary Table S2. Impact of renal dysfunction and proteinuria on incident hypertension in middle-aged and elderly groups

| Variables | N | Univariate | | | Multivariate | | |
|--------------------------------------|------|------------|-------------|-------|--------------|-------------|-------|
| | | OR | 95% CI | P | OR | 95% CI | P |
| Middle-aged group (n =2130) | | | | | | | |
| NFG/NGT | 1019 | 1 | | | 1 | | |
| IFG | 416 | 1.48 | (1.12–1.95) | 0.006 | 1.28 | (0.96–1.71) | 0.088 |
| IGT | 465 | 1.62 | (1.25–2.12) | <.001 | 1.30 | (0.98–1.71) | 0.064 |
| Diabetes | 230 | 1.71 | (1.22–2.38) | 0.002 | 1.28 | (0.90–1.82) | 0.175 |
| BMI, kg/m ² | | 1.11 | (1.07–1.15) | <.001 | 1.10 | (1.06–1.14) | <.001 |
| Renal function | | | | | | | |
| eGFR ≥ 60 mL/min/1.73 m ² | 1903 | 1 | | | 1 | | |
| eGFR < 60 mL/min/1.73 m ² | 227 | 1.01 | (0.72–1.41) | 0.960 | 0.90 | (0.64–1.28) | 0.570 |
| Proteinuria | | | | | | | |
| Negative | 2081 | 1 | | | 1 | | |
| Positive | 49 | 1.19 | (0.62–2.31) | 0.601 | 0.94 | (0.48–1.84) | 0.862 |
| Elderly group (n =3391) | | | | | | | |
| NFG/NGT | 1743 | 1 | | | 1 | | |
| IFG | 596 | 1.23 | (1.01–1.49) | 0.040 | 1.12 | (0.92–1.37) | 0.251 |
| IGT | 770 | 1.13 | (0.94–1.35) | 0.182 | 1.02 | (0.85–1.23) | 0.806 |
| Diabetes | 282 | 1.09 | (0.84–1.42) | 0.523 | 0.93 | (0.70–1.22) | 0.598 |
| BMI, kg/m ² | | 1.08 | (1.06–1.11) | <.001 | 1.08 | (1.06–1.11) | <.001 |
| Renal function | | | | | | | |
| eGFR ≥ 60 mL/min/1.73 m ² | 2675 | 1 | | | 1 | | |

| | | | | | | | |
|--------------------------------------|------|------|-------------|-------|------|-------------|-------|
| eGFR < 60 mL/min/1.73 m ² | 716 | 1.26 | (1.06–1.50) | 0.008 | 1.17 | (0.98–1.39) | 0.082 |
| Proteinuria | | | | | | | |
| Negative | 3247 | 1 | | | 1 | | |
| Positive | 144 | 2.18 | (1.56–3.05) | <.001 | 2.12 | (1.51–2.98) | <.001 |

Multivariate model included age, sex, BMI, total cholesterol level, follow-up period, smoking, drinking, impaired glucose metabolism categories (NFG/NGT, IFG, IGT, and diabetes), renal function (eGFR < 60 or ≥ 60 mL/min/1.73 m²), and proteinuria (yes or no).

Abbreviations: BMI, body mass index; eGFR, estimated glomerular filtration rate; IFG, impaired fasting glucose; IGT, impaired glucose tolerance;

NFG, normal fasting glucose; NGT, normal glucose tolerance