

Supplementary Table 5. Sex-stratified hazard ratios of incident type 2 diabetes mellitus by the change of obesity status before and after 50 by Cox regression analysis

Variable	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value	HR (95% CI)	P value
Men												
BMI group												
Maintaining normal	1 (reference)		1 (reference)		1 (reference)		1 (reference)		1 (reference)		1 (reference)	
Becoming obese	1.46 (1.30–1.64)	<0.001	1.46 (1.30–1.65)	<0.001	1.08 (0.95–1.22)	0.237	1.07 (0.94–1.21)	0.296	1.06 (0.94–1.21)	0.346	1.06 (0.94–1.21)	0.352
Becoming normal	1.36 (1.20–1.53)	<0.001	1.36 (1.20–1.53)	<0.001	1.16 (1.03–1.31)	0.016	1.12 (0.99–1.27)	0.070	1.11 (0.98–1.25)	0.110	1.11 (0.98–1.25)	0.102
Maintaining obese	1.86 (1.75–1.98)	<0.001	1.86 (1.75–1.98)	<0.001	1.19 (1.09–1.31)	<0.001	1.14 (1.04–1.26)	0.007	1.11 (1.01–1.23)	0.032	1.11 (1.01–1.23)	0.033
Age			0.99 (0.96–1.03)	0.618	0.99 (0.96–1.03)	0.584	0.99 (0.96–1.03)	0.705	0.98 (0.95–1.02)	0.030	0.98 (0.95–1.02)	0.324
BMI					1.10 (1.08–1.11)	<0.001	1.10 (1.08–1.11)	<0.001	1.09 (1.07–1.11)	<0.001	1.09 (1.07–1.11)	<0.001
IFG												
No							1 (reference)		1 (reference)		1 (reference)	
Yes							2.32 (2.18–2.46)	<0.001	2.28 (2.15–2.42)	<0.001	2.28 (2.15–2.42)	<0.001
Hypertension												
No									1 (reference)		1 (reference)	
Yes									1.38 (1.29–1.47)	<0.001	1.38 (1.30–1.47)	<0.001
FHx of diabetes												
No									1 (reference)		1 (reference)	
Yes									0.90 (0.82–0.99)	0.035	0.90 (0.82–0.99)	0.036
Smoking												
None									1 (reference)		1 (reference)	
Light									1.27 (1.12–1.44)	<0.001	1.27 (1.13–1.44)	<0.001
Moderate									1.43 (1.33–1.54)	<0.001	1.43 (1.33–1.54)	<0.001
Heavy									1.50 (1.39–1.62)	<0.001	1.49 (1.39–1.61)	<0.001
Physical activity												
No											1 (reference)	
Yes											0.96 (0.89–1.02)	0.203
Women												
BMI group												
Maintaining normal	1 (reference)		1 (reference)		1 (reference)		1 (reference)		1 (reference)		1 (reference)	
Becoming obese	1.80 (1.56–2.08)	<0.001	1.80 (1.56–2.07)	<0.001	1.09 (0.93–1.27)	0.306	1.08 (0.92–1.27)	0.323	1.08 (0.92–1.27)	0.348	1.08 (0.92–1.26)	0.360
Becoming normal	1.70 (1.45–2.00)	<0.001	1.70 (1.45–1.99)	<0.001	1.34 (1.14–1.57)	<0.001	1.25 (1.07–1.48)	0.006	1.23 (1.04–1.44)	0.014	1.23 (1.05–1.45)	0.013
Maintaining obese	2.81 (2.59–3.05)	<0.001	2.81 (2.59–3.04)	<0.001	1.32 (1.16–1.50)	<0.001	1.28 (1.13–1.487)	<0.001	1.26 (1.10–1.44)	<0.001	1.26 (1.10–1.44)	<0.001
Age			1.04 (1.00–1.08)	0.084	1.03 (0.99–1.07)	0.140	1.03 (0.99–1.07)	0.155	1.02 (0.98–1.07)	0.259	1.02 (0.98–1.07)	0.264
BMI					1.14 (1.12–1.16)	<0.001	1.14 (1.12–1.16)	<0.001	1.12 (1.10–1.14)	<0.001	1.12 (1.10–1.14)	<0.001
IFG												
No							1 (reference)		1 (reference)		1 (reference)	
Yes							2.82 (2.61–3.05)	<0.001	2.78 (2.57–3.01)	<0.001	2.78 (2.57–3.01)	<0.001
Hypertension												
No									1 (reference)		1 (reference)	
Yes									1.53 (1.41–1.65)	<0.001	1.53 (1.41–1.65)	<0.001
FHx of diabetes												
No									1 (reference)		1 (reference)	
Yes									0.98 (0.88–1.08)	0.649	0.98 (0.88–1.09)	0.676
Smoking												
None									1 (reference)		1 (reference)	
Light									1.33 (0.93–1.90)	0.114	1.33 (0.94–1.90)	0.111
Moderate									1.73 (1.17–2.54)	0.006	1.72 (1.17–2.54)	0.006
Heavy									2.07 (1.24–3.44)	0.005	2.06 (1.24–3.43)	0.005
Physical activity												
No											1 (reference)	
Yes											0.93 (0.85–1.02)	0.119

Model 1: Unadjusted; Model 2: Adjusted for sex and age; Model 3: Adjusted for age, sex, body mass index; Model 4: Adjusted for age, sex, impaired fasting glucose; Model 5: Adjusted for age, sex, body mass index, impaired fasting glucose, hypertension, family history of diabetes, smoking habit. HR, hazard ratio; CI, confidence interval; BMI, body mass index; IFG, impaired fasting glucose; FHx, family history.