

SUPPLEMENTARY DATA

**Supplementary Table 1.** The Healthy Diet Score and its Changes and Risk of Type 2 Diabetes in the Shanghai Women's and Men's Health Studies (1996-2015)\*

	Cases / Person-years	HR (95%CI) in Q5 vs. Q1	HR (95%CI) in high-high vs. low-low group
All participants	6,111 / 1,355,157	0.85 (0.78-0.92)	0.74 (0.63-0.85)
Women	3,480 / 883,963	0.85 (0.76-0.95)	0.78 (0.65-0.95)
Men	2,631 / 471,194	0.85 (0.74-0.97)	0.66 (0.52-0.85)
Age < 55 years	2,793 / 778,359	0.88 (0.77-0.99)	0.85 (0.68-1.06)
Age ≥ 55 years	3,318 / 576,799	0.82 (0.73-0.92)	0.65 (0.54-0.80)
Low education level	3,492 / 670,087	0.90 (0.80-1.01)	0.74 (0.60-0.92)
High education level	2,619 / 685,070	0.76 (0.67-0.86)	0.66 (0.53-0.84)
Never smoking	4,108 / 1,002,146	0.81 (0.73-0.90)	0.76 (0.64-0.90)
Ever smoking	2,003 / 353,011	0.89 (0.76-1.04)	0.62 (0.46-0.83)
No leisure-time exercise	3,940 / 895,542	0.89 (0.80-0.99)	0.72 (0.59-0.87)
With leisure-time exercise	2,171 / 459,615	0.72 (0.63-0.83)	0.65 (0.52-0.81)
BMI < 25 kg/m <sup>2</sup>	2,356 / 921,383	0.81 (0.71-0.93)	0.73 (0.57-0.94)
BMI ≥ 25 kg/m <sup>2</sup>	3,755 / 433,774	0.85 (0.77-0.95)	0.71 (0.59-0.86)
No family history of diabetes	4,466 / 1,147,387	0.82 (0.75-0.91)	0.71 (0.60-0.84)
With family history of diabetes	1,645 / 207,770	0.87 (0.74-1.03)	0.75 (0.56-1.01)
No hypertension/dyslipidemia	3,158 / 991,926	0.86 (0.77-0.97)	0.73 (0.59-0.91)
With hypertension/dyslipidemia	2,953 / 363,231	0.82 (0.72-0.92)	0.70 (0.57-0.86)

Abbreviations: HR, hazard ratio; CI, confidence interval; Q, quintile; BMI, body mass index.

\*Sex-specific quintiles of the cumulative average of the Healthy Diet Score. Low-low or high-high group was defined as staying in the lowest or highest quintile of the Healthy Diet Score. The same statistical model (multivariable and BMI-adjusted) was used as shown in the footnote of Table 2. All *P* for interaction ≥0.05, except for HDS quintiles with education (*P*<sub>interaction</sub>=0.02), HDS quintiles with leisure-time exercise (*P*<sub>interaction</sub>=0.004), and HDS high-high group with leisure-time exercise (*P*<sub>interaction</sub>=0.02).

SUPPLEMENTARY DATA

**Supplementary Table 2.** Food Intakes and Risk of Type 2 Diabetes in the Shanghai Women’s and Men’s Health Studies (1996-2015)

	Hazard ratio (95% confidence interval) by quintiles (Q) of food group intake*					<i>P</i> <sub>continuous</sub>
	Q 1 (low)	Q 2	Q 3	Q 4	Q 5 (high)	
Vegetables, exclude potato						
Multivariable and BMI-adjusted	1.00 (ref)	0.94 (0.87-1.02)	0.95 (0.87-1.03)	0.93 (0.86-1.00)	0.91 (0.84-0.99)	0.01
Further adjusted for other food intakes	1.00 (ref)	0.94 (0.87-1.02)	0.95 (0.88-1.04)	0.94 (0.86-1.03)	0.92 (0.84-1.01)	0.48
Fruits						
Multivariable and BMI-adjusted	1.00 (ref)	1.00 (0.93-1.09)	1.00 (0.92-1.08)	0.90 (0.83-0.98)	0.96 (0.89-1.05)	0.14
Further adjusted for other food intakes	1.00 (ref)	1.02 (0.94-1.10)	1.02 (0.94-1.10)	0.92 (0.85-1.01)	0.99 (0.90-1.09)	0.15
Dairy products						
Multivariable and BMI-adjusted	1.00 (ref)	0.95 (0.88-1.02)	0.87 (0.80-0.94)	0.85 (0.79-0.92)	0.85 (0.78-0.93)	0.04
Further adjusted for other food intakes	1.00 (ref)	0.94 (0.88-1.02)	0.84 (0.80-0.94)	0.85 (0.78-0.93)	0.85 (0.78-0.93)	0.0006
Fish and seafood						
Multivariable and BMI-adjusted	1.00 (ref)	1.00 (0.92-1.08)	1.00 (0.93-1.09)	0.96 (0.89-1.05)	0.96 (0.88-1.05)	0.07
Further adjusted for other food intakes	1.00 (ref)	1.00 (0.92-1.08)	1.01 (0.93-1.10)	0.97 (0.89-1.06)	0.98 (0.89-1.07)	0.88
Nuts and legumes						
Multivariable and BMI-adjusted	1.00 (ref)	1.00 (0.92-1.08)	0.95 (0.88-1.03)	1.02 (0.94-1.10)	0.97 (0.90-1.06)	0.86
Further adjusted for other food intakes	1.00 (ref)	1.00 (0.92-1.08)	0.96 (0.88-1.04)	1.03 (0.95-1.12)	0.98 (0.90-1.08)	0.46
Red meat						
Multivariable and BMI-adjusted	1.00 (ref)	1.00 (0.93-1.09)	1.02 (0.95-1.11)	1.08 (1.00-1.17)	1.01 (0.93-1.10)	0.27
Further adjusted for other food intakes	1.00 (ref)	0.99 (0.92-1.07)	1.01 (0.93-1.09)	1.05 (0.96-1.15)	0.98 (0.88-1.08)	0.46
Processed meat <sup>†</sup>						
Multivariable and BMI-adjusted	1.00 (ref)	1.13 (1.05-1.21)	1.11 (1.03-1.19)	1.12 (1.03-1.22)	1.23 (1.12-1.35)	0.0002
Further adjusted for other food intakes	1.00 (ref)	1.13 (1.05-1.21)	1.11 (1.03-1.19)	1.13 (1.04-1.22)	1.23 (1.12-1.36)	0.0003
Refined grains						
Multivariable and BMI-adjusted	1.00 (ref)	0.96 (0.88-1.04)	1.01 (0.93-1.10)	1.06 (0.98-1.15)	1.07 (1.00-1.16)	0.02
Further adjusted for other food intakes	1.00 (ref)	0.94 (0.86-1.03)	0.97 (0.88-1.07)	0.98 (0.88-1.10)	0.97 (0.85-1.12)	0.64

\*Sex-specific quintiles of the cumulative average of the food group intake. The same multivariable and BMI-adjusted model was used as shown in the footnote of Table 2. In the model that further adjusted for other food intakes, all eight food groups were mutually adjusted.

<sup>†</sup>Data on processed meat consumption frequency was used and participants were classified into five groups: none or <once every two months, <once/month, <twice/month, <once/week, or ≥once/week.