

Supplemental Online Content

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eTable 1. Basic Characteristics of Diabetes Patients at Diagnosis in NHS and HPFS

eTable 2. Stratified Analysis of Diabetic Microvascular Complications According to Number of Low-Risk Lifestyle Factors Before Diabetes Diagnosis

eTable 3. Stratified Analysis of Diabetic Microvascular Complications According to Number of Low-Risk Lifestyle Factors After Diabetes Diagnosis

eTable 4. Relative Risk (95% CI) of Diabetic Microvascular Complications According to Different Combinations of Low-Risk Lifestyle Factors Before Diabetes Diagnosis

eTable 5. Relative Risk (95% CI) of Diabetic Microvascular Complications According to Different Combinations of Low-Risk Lifestyle Factors After Diabetes Diagnosis

This supplemental material has been provided by the authors to give readers additional information about their work.

eTable 1. Basic Characteristics of Diabetes Patients at Diagnosis in NHS and HPFS^a

	NHS (n=4,982)	HPFS (n=2,095)
Age, years	60.4 (8.9)	61.9 (8.5)
Body Mass Index, kg/m ²	31.5 (6.1)	29.0 (4.5)
Physical activity, Met-hrs/week	6.3 (2.0, 15.9)	15.1 (4.9, 33.8)
Alcohol consumption, g/day	0 (0, 2.1)	3.9 (0, 12.9)
Alternate Healthy Eating Index	44.4 (11.1)	46.7 (10.6)
Total energy intake, kcal/day	1755.1 (562.7)	2010.8 (642.5)
White, %	95.8	90.5
Smoking status, %		
Never	45.1	38.0
Past	42.0	54.4
Current	11.9	7.6
Hypertension, %	65.0	52.0
Hypercholesterolemia, %	51.9	47.0
Family history of MI, %	30.8	35.7
Aspirin use, %	48.3	46.1
Use of antihypertensive drugs, %	46.4	40.3
Use of cholesterol-lowering drugs, %	15.9	14.8

^a Values are means (SD), median (interquartile range), or %; NHS: Nurses' Health Study (in 2000 and 2005); HPFS: Health Professionals' Follow-Up Study (in 2000, 2004, and 2008); MI: myocardial infarction.

eTable 2. Stratified Analysis of Diabetic Microvascular Complications According to Number of Low-Risk Lifestyle Factors Before Diabetes Diagnosis

	Number of Low-Risk Lifestyle Factors ^a					<i>P</i> trend
	0	1	2	3	≥4	
Age at diagnosis (years)						
<60	1.00 (ref)	0.88 (0.75-1.04)	0.85 (0.72-1.00)	0.80 (0.65-0.99)	0.64 (0.46-0.90)	0.004
≥60	1.00 (ref)	0.94 (0.74-1.18)	0.96 (0.76-1.21)	0.89 (0.69-1.13)	0.82 (0.61-1.10)	0.17
Sex/Cohort						
Women/NHS	1.00 (ref)	0.91 (0.78-1.07)	0.90 (0.77-1.06)	0.87 (0.72-1.05)	0.75 (0.55-1.03)	0.08
Men/HPFS	1.00 (ref)	0.81 (0.63-1.02)	0.81 (0.65-1.03)	0.74 (0.58-0.95)	0.66 (0.50-0.89)	0.008

Multivariable model was adjusted for age at diagnosis (years), sex (men, women), race (white, non-white), total energy intake (in quartiles), current aspirin use (yes, no), presence of hypertension (yes, no), presence of hypercholesterolemia (yes, no), use of antihypertensive drugs (yes, no), and use of cholesterol-lowering drugs (yes, no). Strata variable was not included in the model when stratifying by itself.

^a Low-risk lifestyle factors: non-smoking, healthy body weight ($18.5 \leq \text{BMI shortly after diagnosis} < 25 \text{ kg/m}^2$), moderate to vigorous physical activity (>150 min/week), high quality diet (top two fifths of Alternative Healthy Eating Index), and moderate alcohol consumption (5-15 g/day for female and 5-30 g/day for male).

eTable 3. Stratified Analysis of Diabetic Microvascular Complications According to Number of Low-Risk Lifestyle Factors After Diabetes Diagnosis

	Number of Low-Risk Lifestyle Factors ^a					P trend
	0	1	2	3	≥4	
Age at diagnosis (years)						
<60	1.00 (ref)	0.87 (0.74-1.03)	0.90 (0.76-1.06)	0.81 (0.67-0.99)	0.64 (0.47-0.87)	0.01
≥60	1.00 (ref)	1.04 (0.78-1.38)	0.95 (0.72-1.26)	0.91 (0.68-1.22)	0.76 (0.54-1.06)	0.01
Sex/Cohort						
Women/NHS	1.00 (ref)	0.95 (0.80-1.12)	0.91 (0.77-1.09)	0.86 (0.70-1.05)	0.66 (0.48-0.92)	0.01
Men/HPFS	1.00 (ref)	0.79 (0.61-1.01)	0.78 (0.61-1.00)	0.74 (0.57-0.96)	0.61 (0.46-0.82)	0.003
Lifestyle score before diabetes diagnosis						
<2	1.00 (ref)	0.94 (0.80-1.10)	0.91 (0.77-1.09)	0.84 (0.65-1.10)	0.71 (0.33-1.50)	0.14
≥2	1.00 (ref)	0.80 (0.47-1.36)	0.77 (0.46-1.31)	0.73 (0.43-1.25)	0.60 (0.34-1.04)	0.004

Multivariable model was adjusted for age at diagnosis (years), sex (men, women), race (white, non-white), total energy intake (in quartiles), current aspirin use (yes, no), presence of hypertension (yes, no), presence of hypercholesterolemia (yes, no), use of antihypertensive drugs (yes, no), use of cholesterol-lowering drugs (yes, no), and lifestyle score before diabetes diagnosis. Strata variable was not included in the model when stratifying by itself.

^aLow-risk lifestyle factors: non-smoking, healthy body weight ($18.5 \leq \text{BMI}$ shortly after diagnosis $< 25 \text{ kg/m}^2$), moderate to vigorous physical activity ($> 150 \text{ min/week}$), high quality diet (top two fifths of Alternative Healthy Eating Index), and moderate alcohol consumption (5-15 g/day for female and 5-30 g/day for male).

eTable 4. Relative Risk (95% CI) of Diabetic Microvascular Complications According to Different Combinations of Low-Risk Lifestyle Factors Before Diabetes Diagnosis

	Number of Low-Risk Lifestyle Factors*					P trend
	0	1	2	3	≥4	
Three low-risk factors (healthy diet, regular physical activity, non-smoking)						
N	773	2,952	3,352			
Multivariable-adjusted model	1.00 (ref)	0.88 (0.78-0.98)	0.86 (0.76-0.96)	-	-	0.03
Above three low-risk factors + healthy body weight						
N	679	2,700	2,549	1,149		
Multivariable-adjusted model	1.00 (ref)	0.89 (0.78-1.00)	0.89 (0.79-1.01)	0.82 (0.70-0.95)	-	0.03
Above three low-risk factors + moderate alcohol drinking						
N	676	2,589	2,573	1,239		
Multivariable-adjusted model	1.00 (ref)	0.88 (0.78-1.00)	0.86 (0.76-0.97)	0.80 (0.69-0.92)	-	0.004
Above three low-risk factors + healthy body weight + moderate alcohol drinking						
N	301	971	1,014	453	139	
Multivariable-adjusted model	1.00 (ref)	0.89 (0.78-1.02)	0.89 (0.78-1.01)	0.84 (0.72-0.97)	0.73 (0.60-0.91)	0.006

Multivariable model was adjusted for age at diagnosis (years), sex (men, women), race (white, non-white), total energy intake (in quartiles), current aspirin use (yes, no), presence of hypertension (yes, no), presence of hypercholesterolemia (yes, no), use of antihypertensive drugs (yes, no), and use of cholesterol-lowering drugs (yes, no).

eTable 5. Relative Risk (95% CI) of Diabetic Microvascular Complications According to Different Combinations of Low-Risk Lifestyle Factors After Diabetes Diagnosis

	Number of Low-Risk Lifestyle Factors*					P trend
	0	1	2	3	≥4	
Three low-risk factors (healthy diet, regular physical activity, non-smoking)						
N	617	3,184	3,276			
Multivariable-adjusted model	1.00 (ref)	0.89 (0.78-1.01)	0.85 (0.74-0.96)	-	-	0.01
Above three low-risk factors + healthy body weight						
N	535	2,820	2,417	1,305		
Multivariable-adjusted model	1.00 (ref)	0.89 (0.78-1.02)	0.91 (0.79-1.04)	0.77 (0.66-0.90)	-	0.004
Above three low-risk factors + moderate alcohol drinking						
N	566	2,803	2,502	1,206		
Multivariable-adjusted model	1.00 (ref)	0.91 (0.80-1.04)	0.86 (0.75-0.98)	0.77 (0.67-0.90)	-	<0.001
Above three low-risk factors + healthy body weight + moderate alcohol drinking						
N	255	1,040	964	473	146	
Multivariable-adjusted model	1.00 (ref)	0.90 (0.78-1.04)	0.88 (0.76-1.02)	0.82 (0.70-0.97)	0.68 (0.55-0.83)	<0.001

Multivariable model was adjusted for age at diagnosis (years), sex (men, women), race (white, non-white), total energy intake (in quartiles), current aspirin use (yes, no), presence of hypertension (yes, no), presence of hypercholesterolemia (yes, no), use of antihypertensive drugs (yes, no), use of cholesterol-lowering drugs (yes, no), and lifestyle score before diabetes diagnosis.