

ONLINE SUPPLEMENTAL MATERIAL

Supplemental Table 1 Association of fiber intake with estimated glomerular filtration rate using the CKD-EPI equation (mL/min/1.73m²).

Linear regression models	Cut point	Unadjusted		Model 1		Model 2	
		Difference (95% CI)	<i>P</i>	Difference (95% CI)	<i>P</i>	Difference (95% CI)	<i>P</i>
Entire cohort (n=1110)							
Dietary fiber	Per 10g/day higher	3.68 (1.53, 5.82)	0.001	3.06 (0.81, 5.30)	0.01	2.58 (0.30, 4.87)	0.03

Covariates in model 1 include protein intake (energy adjusted), age, BMI, smoking, physical activity, and education.

Covariates in model 2 include protein intake (energy adjusted), age, BMI, smoking, physical activity, education, cardiovascular disease, diabetes, hyperlipidemia, hypertension, and urinary albumin excretion rate.

Abbreviations: CI, confidence interval.

Supplemental Table 2 Associations of dietary fiber with serum IL-6 (per Log₂ increase, ng/L) (n=1110).

Linear regression models	Cut point/limits	Unadjusted		Model 1		Model 2	
		Difference (95% CI)	<i>P</i>	Difference (95% CI)	<i>P</i>	Difference (95% CI)	<i>P</i>
Continuous Model	10g/day higher						
All participants		-0.30 (-0.49, -0.12)	0.001	-0.14 (-0.34, 0.05)	0.14	-0.11 (-0.30, 0.09)	0.27
eGFR \geq 60mL/min/1.73m ²		-0.27 (-0.52,-0.02)	0.03	-0.09 (-0.34,0.17)	0.50	-0.10 (-0.36,0.16)	0.45
eGFR<60mL/min/1.73m ²		-0.29 (-0.57,-0.01)	0.04	-0.20 (-0.49,0.09)	0.19	-0.14 (-0.44,0.15)	0.34
<i>P</i> for interaction		0.92		0.61		0.74	
Multi-category Model							
Quartile 1	\leq 14.5 g/day	Reference		Reference		Reference	
Quartile 2	>4.5-16.8 g/day	-0.17 (-0.37, 0.03)	0.09	-0.11 (-0.32, 0.10)	0.31	-0.11 (-0.32, 0.10)	0.31
Quartile 3	>16.8-19.2 g/day	-0.30 (-0.50, -0.10)	0.01	-0.23 (-0.44, -0.02)	0.03	-0.20 (-0.41, 0.00)	0.05
Quartile 4	> 19.2 g/day	-0.41 (-0.61, -0.21)	<0.001	-0.25 (-0.46, -0.05)	0.02	-0.23 (-0.44, -0.02)	0.03
<i>P</i> for trend		<0.001		0.05		0.13	

Total participants, n=1110: eGFR \geq 60mL/min/1.73m², n= 604; eGFR<60mL/min/1.73m², n= 506

Covariates in model 1 includes protein intake (energy adjusted), age, BMI, smoking status, physical activity, and education.

Covariates in model 2 includes protein intake (energy adjusted), age, BMI, smoking status, physical activity, education, cardiovascular disease, diabetes, hyperlipidemia, hypertension, urinary albumin excretion rate and estimated glomerular filtration rate.

Abbreviations: OR, odd ratio; CI, confidence interval.

Supplemental Table 3 Associations of dietary fiber with elevated serum CRP (>3 mg/L) stratified by CKD-EPI equation (n=1110).

Fiber intake	Cut point	Unadjusted		Model 1		Model 2	
		OR (95% CI)	<i>P</i>	OR (95% CI)	<i>P</i>	OR (95% CI)	<i>P</i>
Continuous Model	10g/day higher						
All participants		0.57 (0.40, 0.81)	0.002	0.68 (0.46, 0.99)	0.04	0.73 (0.50, 1.08)	0.12
eGFR \geq 60mL/min/1.73m ²		0.56 (0.32,0.99)	0.05	0.61(0.33,1.13)	0.12	0.68 (0.31,1.11)	0.10
eGFR<60mL/min/1.73m ²		0.62 (0.39,0.97)	0.04	0.74(0.46,1.21)	0.24	0.84 (0.50,1.40)	0.49
<i>P</i> for interaction		0.80		0.57		0.39	

Total participants, n=1110: eGFR \geq 60mL/min/1.73m², n= 490; eGFR<60mL/min/1.73m², n= 620

Covariates in model 1 includes protein intake (energy adjusted), age, BMI, smoking status, physical activity, and education.

Covariates in model 2 includes protein intake (energy adjusted), age, BMI, smoking status, physical activity, education, cardiovascular disease, diabetes, hyperlipidemia, hypertension, urinary albumin excretion rate and estimated glomerular filtration rate.

Abbreviations: OR, odd ratio; CI, confidence interval.

Supplemental Table 4 Associations of dietary fiber (per 10g/day higher) with risk of mortality excluding deaths that occurred within 2 years from baseline (n=1090).

Outcomes	No of events /No.at risk	Unadjusted		Adjusted	
		HR (95% CI)	P value	HR (95% CI)	P value
All-cause mortality					
All participants	280/1090	0.67 (0.48, 0.94)	0.02	0.83 (0.57, 1.20)	0.32
eGFR \geq 60mL/min/1.73m ²	124/596	1.03 (0.64, 1.65)	0.89	1.29 (0.75, 2.22)	0.36
eGFR<60mL/min/1.73m ²	156/494	0.49 (0.31, 0.79)	0.01	0.59 (0.36, 0.99)	0.04
<i>P</i> for interaction		0.03		0.04	
CVD-mortality					
All participants	127/1090	0.91 (0.57, 1.46)	0.70	1.20 (0.71, 2.02)	0.49
eGFR \geq 60mL/min/1.73m ²	46/596	1.30 (0.62, 2.77)	0.48	1.56 (0.66, 3.68)	0.31
eGFR<60mL/min/1.73m ²	81/494	0.81 (0.44, 1.49)	0.50	1.06 (0.55, 2.06)	0.85
<i>P</i> for interaction		0.34		0.78	
Cancer-mortality					
All participants	103/1090	0.59 (0.34, 1.00)	0.05	0.62 (0.33, 1.15)	0.13
eGFR \geq 60mL/min/1.73m ²	51/596	1.10 (0.53, 2.28)	0.79	1.51 (0.64, 3.59)	0.35
eGFR<60mL/min/1.73m ²	52/494	0.30 (0.13, 0.70)	0.01	0.31 (0.12, 0.81)	0.02
<i>P</i> for interaction		0.02		0.01	

Covariates in adjusted model includes protein intake (energy adjusted), age, BMI, smoking status, physical activity, education, cardiovascular disease, diabetes, hyperlipidemia, hypertension, and estimated glomerular filtration rate, urinary albumin excretion rate and CRP (additionally cancer at baseline was included in the cancer related mortality analysis).

Abbreviations: CVD, cardiovascular disease; HR, hazard ration; CI, confidence interval

Supplemental Table 5 Associations of dietary fiber (per 10g/day higher) with risk of mortality stratified by CKD-EPI equation (n=1110).

Outcomes	No. of events/ No.at risk	Unadjusted		Adjusted Model	
		HR (95% CI)	<i>P</i> value	HR (95% CI)	<i>P</i> value
All-cause mortality					
All participants	300/1110	0.66 (0.48, 0.91)	0.01	0.80 (0.56, 1.15)	0.23
eGFR \geq 60mL/min/1.73m ²	107/490	1.17 (0.70, 1.95)	0.54	1.47 (0.84, 2.58)	0.18
eGFR<60mL/min/1.73m ²	193/620	0.50 (0.33, 0.75)	0.001	0.59 (0.37, 0.96)	0.03
<i>P</i> for interaction		0.01		0.02	
CVD-mortality					
All participants	127/1110	0.87 (0.55, 1.38)	0.56	1.13 (0.68, 1.89)	0.64
eGFR \geq 60mL/min/1.73m ²	43/490	1.26 (0.57, 2.78)	0.57	2.00 (0.83, 4.82)	0.12
eGFR<60mL/min/1.73m ²	95/620	0.80 (0.46, 1.39)	0.42	0.90 (0.48, 1.70)	0.74
<i>P</i> for interaction		0.35		0.36	
Cancer-mortality					
All participants	111/1110	0.57 (0.33, 0.97)	0.04	0.60 (0.32, 1.10)	0.09
eGFR \geq 60mL/min/1.73m ²	44/490	1.56 (0.73, 3.37)	0.25	1.61 (0.68, 3.85)	0.28
eGFR<60mL/min/1.73m ²	67/620	0.28 (0.14, 0.58)	0.001	0.35 (0.15, 0.84)	0.02
<i>P</i> for interaction		0.001		0.01	

Covariates in adjusted model includes protein intake (energy adjusted), age, BMI, smoking status, physical activity, education, cardiovascular disease, diabetes, hyperlipidemia, hypertension, and estimated glomerular filtration rate, urinary albumin excretion rate and CRP (additionally cancer at baseline was included in the cancer related mortality analysis).

Abbreviations: CVD, cardiovascular disease; HR, hazard ratio; CI, confidence interval