

# Supplemental Material

This appendix has been provided by the authors to give readers additional information about this work.

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**Supplemental Figure 1** Study risks of bias

**Supplemental Figure 2** Funnel plot for the meta-analysis of the risks of all-cause mortality for healthy eating patterns compared to other eating patterns

























































**Supplemental Table 1** Details of search terms

**Supplemental Table 2** Risk ratios with one study removed

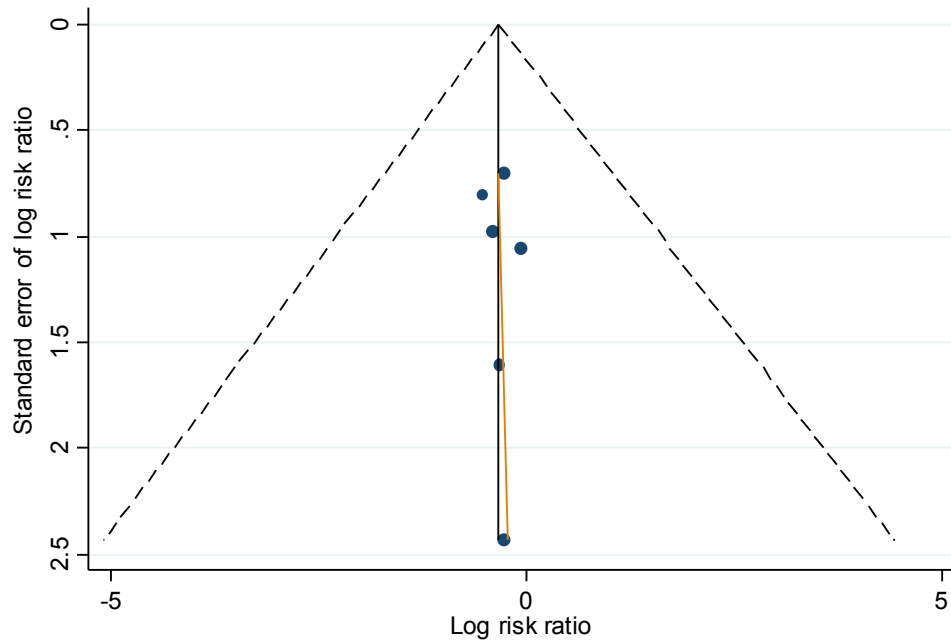
**Supplemental Table 3** Subgroup analysis for the meta-analysis of the risks of all-cause mortality for healthy eating patterns compared to other eating patterns

**Supplemental Figure 1 Quality assessment of included studies using Newcastle-Ottawa scale**

-  Low risk
-  Unclear risk
-  High risk

	Representativeness of exposed cohort	Selection of non-exposed cohort	Ascertainment of exposure to eating patterns	Demonstration that outcome was not present at baseline	Study accounts for energy intake in analyses	Ascertainment of outcome	Follow up sufficient for outcomes to occur	Adequacy of follow-up
Chen et al 2016 <sup>1</sup>								
Gutierrez et al 2014 <sup>2</sup>								
Huang et al, 2013 <sup>3</sup>								
Muntner et al, 2013 <sup>4</sup>								
Ricardo et al, 2015 <sup>5</sup>								
Ricardo et al, 2013 <sup>6</sup>								
Tsuruya et al, 2015 <sup>7</sup>								

**Supplemental Figure 2** Funnel plot for the meta-analysis of the risks of all-cause mortality for healthy eating patterns compared to other eating patterns



## Supplemental Table 1 Search terms

Database searched	Search terms
Medline	<p>Kidney Diseases/            Diabetic Nephropathies/            exp Renal Replacement Therapy/            Renal Insufficiency/            exp Renal Insufficiency, Chronic/            dialysis.tw.            (hemodialysis or haemodialysis).tw.            (hemofiltration or haemofiltration).tw.            (hemodiafiltration or haemodiafiltration).tw.            (kidney disease or renal disease or kidney failure or renal failure).tw.            (ESRF or ESKF or ESRD or ESKD).tw.            (CKF or CKD or CRF or CRD).tw.            (CAPD or CCPD or APD).tw.            (predialysis or pre-dialysis).tw.            (kidney transplant* or renal transplant* or kidney graft* or renal graft*).tw.            diabetic nephropath*.tw.            exp Proteinuria/            Glomerular Filtration Rate/            proteinuria.tw.            albuminuria.tw.            (glomerular filtration rate or GFR or eGFR).tw.            or/1-21            exp Diet/            Diet Therapy/            exp Food Habits/            Fruit/ and Vegetables/            ((diet or diets or dietary or nutrition*) adj2 (pattern* or quality or guideline*)).tw.            ((diet or diets or dietary) adj5 (Mediterranean or vegetarian or plant-based or American Heart Association* or DASH or western or seafood)).tw.            ((diet or diets or dietary or high or increase* or rich) adj5 (fruit* or vegetable* or nut or nuts or fibre or fiber or olive oil or omega-3</p>

Database searched	Search terms
	fatty acids or unsaturated or polyunsaturated or monounsaturated or fish or seafood pulses)).tw.
	(food adj2 group*).tw.
	healthy eating index.tw.
	((diet or dietary or nutrition*) adj (survey* or record or records or score)).tw.
	food frequency questionnaire*.tw.
	diet.tw.
	or/23-34
	and/22,35
	exp Cohort Studies/
	between group*.tw.
	risk.mp.
	exp Case-Control Studies/
	((cohort or concurrent or longitudinal or follow-up or followup or prospective or retrospective or cross-sectional or case-control) adj2 (analys* or design* or evaluation* or research or study or studies or survey*)).tw.
	(incidence adj1 (analys* or research or study or studies or survey*)).tw.
	or/37-42
	and/36,43
Embase	exp renal replacement therapy/
	kidney disease/
	chronic kidney disease/
	kidney failure/
	chronic kidney failure/
	mild renal impairment/
	stage 1 kidney disease/
	moderate renal impairment/
	severe renal impairment/
	end stage renal disease/
	renal replacement therapy-dependent renal disease/
	kidney transplantation/
	diabetic nephropathy/
	(hemodialysis or haemodialysis).tw.

Database searched	Search terms
	(hemofiltration or haemofiltration).tw.
	(hemodiafiltration or haemodiafiltration).tw.
	(kidney disease* or renal disease* or kidney failure or renal failure).tw.
	(kidney transplant* or renal transplant* or kidney graft* or renal graft*).tw.
	(ESRF or ESKF or ESRD or ESKD).tw.
	(CKF or CKD or CRF or CRD).tw.
	(CAPD or CCPD or APD).tw.
	dialysis.tw.
	predialysis.tw.
	diabetic nephropath*.tw.
	exp Proteinuria/ glomerulus filtration rate/ proteinuria.tw.
	albuminuria.tw.
	(glomerular filtration rate or GFR or eGFR).tw.
	or/1-29
	exp diet/ diabetic diet/ low fat diet/ diet therapy/ dietary intake/ Fruit/ and Vegetable/ ((diet or diets or dietary or nutrition*) adj2 (pattern* or quality or guideline*)).tw.
	((diet or diets or dietary) adj5 (Mediterranean or vegetarian or plant-based or American Heart Association* or DASH or western or seafood)).tw.
	((diet or diets or dietary or high or increase* or rich) adj5 (fruit* or vegetable* or nut or nuts or fibre or fiber or olive oil or omega-3 fatty acids or unsaturated or polyunsaturated or monounsaturated or fish or seafood or pulses)).tw.
	(food adj2 group*).tw.
	healthy eating index.tw.

Database searched	Search terms
	((diet or dietary or nutrition*) adj (survey* or record or records or score)).tw.
	food frequency questionnaire*.tw.
	diet.tw.
	or/31-44
	and/30,45
	risk*.mp.
	case-control study/
	longitudinal study/
	retrospective study/
	prospective study/
	cohort analysis/
	cross-sectional study/
	cohort analysis/
	health survey/
	incidence/
	between group*.tw.
	((cohort or concurrent or longitudinal or follow-up or followup or prospective or retrospective or cross-sectional or case-control) adj2 (analys* or design* or evaluation* or research or study or studies or survey*)).tw.
	(incidence adj1 (analys* or research or study or studies or survey*)).tw.
	or/47-59
	and/46,60

**Supplemental Table 2 Risk ratio for all-cause mortality in sequential meta-analyses with one study removed**

<b>Study removed</b>	<b>Cohort</b>	<b>Risk ratio of all-cause mortality with study removed</b>	<b>p-value for association</b>	<b>Risk ratio of ESKD with study removed</b>	<b>p-value for association</b>
Chen 2016 <sup>1</sup>	NHANES III	0.77 (0.66 to 0.90)	0.001	--	--
Gutiérrez 2014 <sup>2</sup>	REGARDS	0.74 (0.61 to 0.90)	0.002	0.97 (0.64 to 1.48)	0.89
Huang 2013 <sup>3</sup>	Uppsala	0.75 (0.64 to 0.88)	0.001	--	--
Muntner 2013 <sup>4</sup>	REGARDS	0.79 (0.68 to 0.92)	0.003	1.06 (0.74 to 1.54)	0.75
Ricardo 2015 <sup>5</sup>	CRIC	0.75 (0.64 to 0.88)	<0.001	1.12 (0.74 to 1.69)	0.60
Ricardo 2013 <sup>6</sup>	NHANES	0.70 (0.60 to 0.83)	<0.001	--	--

NHANES III - Third National Health and Nutrition Examination Survey; REGARDS - Reasons for Geographic and Racial Differences in Stroke study; Uppsala - Uppsala Longitudinal Study of Adult Men; CRIC - Chronic Renal Insufficiency Cohort (CRIC) Study. The remaining study by Tsuruya et al was not included in the meta-analysis.<sup>7</sup>



### Supplemental Table 3 Subgroup analysis for all-cause mortality

Variable (No of studies)	Relative risk (95% CI)
Duration:	
<6.3 years (3)	0.63 (0.48 to 0.78)
>6.3 years (3)	0.81 (0.67 to 0.95)
Country of origin:	
USA (5)	0.73 (0.61 to 0.85)
Other (1)	0.73 (0.63 to 0.83)
Age:	
> 60 years (3)	0.69 (0.57 to 0.82)
< 60 years (2)	0.73 (0.63 to 0.83)
Study quality:	
Lower (4)	0.72 (0.55 to 0.89)
Higher (2)	0.73 (0.63 to 0.83)

## Supplemental References

1. Chen X, Wei G, Jalili T, et al. The associations of plant protein intake with all-cause mortality in CKD. *Am J Kidney Dis* 2016;**67**(3):423-30.
2. Gutierrez OM, Muntner P, Rizk DV, et al. Dietary patterns and risk of death and progression to ESRD in individuals with CKD: a cohort study. *Am J Kidney Dis* 2014;**64**(2):204-13.
3. Huang X, Jimenez-Moleon JJ, Lindholm B, et al. Mediterranean diet, kidney function, and mortality in men with CKD. *Clin J Am Soc Nephrol* 2013;**8**(9):1548-55.
4. Muntner P, Judd SE, Gao L, et al. Cardiovascular risk factors in CKD associate with both ESRD and mortality. *J Am Soc Nephrol* 2013;**24**(7):1159-65.
5. Ricardo AC, Anderson CA, Yang W, et al. Healthy lifestyle and risk of kidney disease progression, atherosclerotic events, and death in CKD: findings from the Chronic Renal Insufficiency Cohort (CRIC) Study. *Am J Kidney Dis* 2015;**65**(3):412-24.
6. Ricardo AC, Madero M, Yang W, et al. Adherence to a healthy lifestyle and all-cause mortality in CKD. *Clin J Am Soc Nephrol* 2013;**8**(4):602-9.
7. Tsuruya K, Fukuma S, Wakita T, et al. Dietary patterns and clinical outcomes in hemodialysis patients in Japan: a cohort study. *PLoS One* 2015;**10**(1):e0116677.