

SUPPLEMENTAL MATERIAL

Table of Contents

Supplemental Table 1. List of search terms	2
Supplemental Table 2. Characteristics of the dietary patterns reported in the included studies	4
Supplemental Table 3. Measurement of outcomes	12
Supplemental Table 4. Results from sensitivity analysis substituting data from secondary publications of the same cohort dataset. The shaded rows represent the study citation included in the primary analysis.	14
Supplemental Table 5: Subgroup analysis for Incident CKD	16
Supplemental Figure 1. Funnel Plot for risk of incidence of CKD associated with adherence to healthy dietary patterns	17
Supplemental references.....	18

Supplemental Table 1. List of search terms

DATABASE SEARCHED	SEARCH TERMS	
Medline (via EBSCOhost)	renal function	
	kidney function	
	MDRD equation	
	cockcroft gault equation	
	glomerular filtration rate	
	renal dysfunction	
	kidney dysfunction	
	MH “Renal Insufficiency, Chronic+”	
	chronic renal disease	
	chronic kidney disease	
	Kidney insufficiency	
	MH “Renal Insufficiency+”	
	renal insufficiency	
	MH “Kidney Failure, Chronic+”	
	renal disease	
	kidney disease	
	CKD	
	or/1-17	
	inciden*	
	prevent*	
	or/19-20	
	dietary compliance	
	vegetarian adj2 diet	
	DASH adj2 diet	
	Mediterranean adj2 diet	
	health eating index	
	vegetable	
	fruit	
	MH “Diet+”	
	food habits	
	nutritional therapy	
	nutrition	
	diet	
	or/22-33	
	and/18,21,34	
	Embase	mdrd AND equation
		‘cockcroft gault equation’
		‘glomerulus filtration rate’
‘kidney function’		
‘renal dysfunction’		
‘kidney dysfunction’		
‘kidney failure’		
‘kidney disease’		
chronic AND kidney AND failure		
ckd		
or/1-10		
progress*		
inciden*		
prevent*		
or/12-14		
diet* AND pattern		
‘diet’/exp		
‘diet quality’		
nutrition		

Supplemental material is neither peer-reviewed nor thoroughly edited by CJASN. The authors alone are responsible for the accuracy and presentation of the material.

DATABASE SEARCHED	SEARCH TERMS
	fruit*
	vegetable*
	'healthy eating index'
	dietary AND compliance
	'feeding behavior'
	mediterranean NEAR/2 diet
	dash NEAR/2 diet
	vegetarian NEAR/2 diet
	or/16-27
	and/11,15,28

Supplemental Table 2. Characteristics of the dietary patterns reported in the included studies

Study	Dietary Pattern	Data Assessment Method	Dietary Exposure	Measurement of Exposure	Exposure Category	Reference Category	Covariates Included
Asghari, et al, 2017 ¹	Mediterranean Diet	FFQ	Mediterranean Diet Score. Eight components: high intake of legumes, vegetables, nuts, fruits, cereals; high dietary ratio of monounsaturated fatty acid to saturated fatty acid; moderately high intake of fish; low to moderate intake of dairy products (mostly cheese & yoghurt); low intake of meat & poultry. Sex-specific median intake was considered the cut-off for each component. Nil alcohol.	A value of 1 was assigned to a high intake (>median) for desirable components (fruit, nuts, vegetables, legumes, cereals & fish); or a low intake (<median) for detrimental foods (meat & dairy). Scores ranges from 1-8 points.	Quartile 4 (Highest) Mean score NP	Quartile 1 (Lowest) Mean score NP	Sex, age, smoking status, physical activity, total calorie intake, BMI, diabetes, hypertension, baseline GFR
Asghari, et al, 2017 ²	Dietary Approaches to Stop Hypertension	FFQ	DASH-style Diet Score. Eight components: high intakes of fruit, vegetables, low-fat dairy, nuts, legumes, wholegrains; low intakes of sodium, sweetened beverages, red & processed meats.	Bottom quartile given score of 1, those in top quartile given score of 5. Nil alcohol.	Quartile 5 (Highest) Mean score = 5	Quartile 1 (Lowest) Mean score = 1	Age, sex, smoking, total energy intake, BMI, GFR, triglycerides, physical activity, hypertension, diabetes

Study	Dietary Pattern	Data Assessment Method	Dietary Exposure	Measurement of Exposure	Exposure Category	Reference Category	Covariates Included
Asghari, et al, 2018	Lacto-vegetarian diet	FFQ	Lacto-vegetarian diet, characterised using factor analysis, including fruit, most vegetables, flavonoids (from fruits), dark yellow vegetables, tomato, most fruits, leafy vegetables, dates, low fat dairy, olive oil, dried fruit.	NA	Tertile 3 (highest exposure)	Tertile 1 (lowest exposure)	Age, sex, smoking, total energy intake, physical activity, BMI, diabetes, and hypertension
Chang, et al, 2013 ³	Dietary Approaches to Stop Hypertension	FFQ	DASH Diet Score. Eight components. Five components: increased intake of fruits, vegetables, low-fat dairy products, whole grains, nuts & legumes	Scores ranged from 8 (least healthy) to 32 (most healthy)	Quartile 1 (Lowest) Mean score NP	Quartile (Highest) Mean score NP	Age, sex, race, family history of kidney disease, education, baseline ACR, total energy intake, baseline obesity, baseline hypertension, baseline diabetes
Chung, et al, 2017 ⁴	Fish & Vegetables	FFQ	Fish Vegetable Diet. Characterised by light-and-dark coloured vegetables, freshwater fish and marine fish.	Food items with a factor loading of $\geq \pm 0.3$ was considered important. A factor score for each identified pattern was calculated by multiplying food items with corresponding factor loading. Scores ranged from 8 (least healthy) to 32 (most healthy)	Quartile 1 (Lowest)	Quartile 4 (Highest)	Age, energy intake, sex, diabetes duration, education, current smoker, alcohol, exercise, BMI, hypertension, HbA1C, triglycerides
Dunkler, et al, 2016 ⁵	Modified Alternate Healthy Eating Index	FFQ	mAHEI. Eight components: higher intake of vegetables, fruits, nuts, & wholegrains and lower intakes of red & processed meats, fried foods & alcohol.	Each food groups contributes between 0 and 10 points. Healthy Lifestyle Score: summaries adherence to 5 healthy behaviours and ranges from 0 to 5 (optimal level).	>3.5 points	0-1 points	Age, sex, duration of diabetes, ONTARGET randomisation arm, albuminuria status, eGFR, d-UACR

Supplemental material is neither peer-reviewed nor thoroughly edited by CJASN. The authors alone are responsible for the accuracy and presentation of the material.

Study	Dietary Pattern	Data Assessment Method	Dietary Exposure	Measurement of Exposure	Exposure Category	Reference Category	Covariates Included
Foster, et al, 2014 ⁶	Dietary Guidelines Adherence Score	FFQ	Five vegetable subgroups, fruit, a variety of fruits and vegetables, meat & legumes, milk & milk products, grains, & discretionary energy.	Reported on a 0-20 scale based on adherence to 20 energy-specific food and nutrient recommendations. Three possible values; 1 meets recommended level; 0.5 meets 33% of recommended level; 0 for <33% of recommended level.	Quartile 4 (Highest) Mean score = 12.9±1.2	Quartile 1 (Lowest) Mean score = 9.3±2.8	Age, sex, baseline GFR, BMI, hypertension, diabetes, dipstick proteinuria
Haring, et al, 2016 ⁷	Vegetable Protein	FFQ	Dietary Protein Intake. Major sources: unprocessed red meat, processed red meat, red and processed meat intake (combined), poultry, fish & seafood, eggs, high fat dairy products, low fat dairy products, nuts & legumes. Vegetable protein defined as difference between total and animal protein: nuts & legumes.	NA	Quartile 5 (Highest adherence) Mean score NP	Quartile 1 (Lowest adherence) Mean score NP	Age, race, sex, education level, total caloric intake, LDL cholesterol, HDL cholesterol, triglycerides, total cholesterol, lipid-lowering medication use, systolic BP, antihypertensive medication use, alcohol intake, current smoker, physical activity index, leisure-related physical activity, total carbohydrate intake, BMI, waist-to-hip ratio

Study	Dietary Pattern	Data Assessment Method	Dietary Exposure	Measurement of Exposure	Exposure Category	Reference Category	Covariates Included
Khatri, et al, 2014 ⁸	Mediterranean Diet	FFQ	MeDi Score. Kilocalorie intake was regressed & residuals of daily gram intake were calculated for: dairy, meat, fruit, vegetables (excluding potatoes), legumes, cereals & fish.	Value of 1 assigned for beneficial category (fruit, vegetables, legumes, cereals, fish) when consumption was as high as sex-specific median; value of 1 assigned for detrimental groups (meat & dairy); additional 1 for moderate alcohol consumption (<2 drink/ day) & a dietary ratio of monounsaturated fats to saturated fats (>median).	Quartiles 6-9 (Highest) Mean score NP	Quartiles 0-3 (Lowest) Mean score NP	Age, sex, race/ethnicity (black, white, Hispanic, or other), education (high school completion versus not), insurance status (Medicare/ private versus Medicaid/no insurance), physical activity (any exercise versus not) BMI, diabetes, smoking status, hypertension, LDL HDL, baseline GFR, ACE inhibitor/ARB usage.
Liu, et al, 2016 ⁹	Dietary Approaches to Stop Hypertension	FFQ	DASH Diet Score. Eight target nutrients: total fat, saturated fat, protein, fibre, cholesterol, calcium, magnesium, potassium, sodium.	Indexed to total energy intake & diet score generated by sum of all nutrients (max score of 9).	High Accordance (1.5-8.0)	Low Accordance (0-1.0)	Age, sex, race, poverty status, tobacco use, education level, diabetes, systolic BP, total energy intake
Lin, et al, 2011 ¹⁰	Dietary Approaches to Stop Hypertension	FFQ	DASH Diet Score. Eight components: high intake of fruits, vegetables, nuts & legumes, low-fat dairy products & wholegrains, & low intake of sodium, sweetened beverages & red & processed meats.	Score ranging from 8-40 points	Quartile 4 (Highest) Median diet score= 29	Quartile 1 (Lowest) Median diet score= 20	Age, hypertension, BMI, physical activity, energy intake, cigarette smoking, diabetes, cardiovascular disease, ACE-inhibitor/ARB medication

Supplemental material is neither peer-reviewed nor thoroughly edited by CJASN. The authors alone are responsible for the accuracy and presentation of the material.

Study	Dietary Pattern	Data Assessment Method	Dietary Exposure	Measurement of Exposure	Exposure Category	Reference Category	Covariates Included
Ma, et al, 2016 ¹¹	Dietary Guidelines Adherence Index	FFQ	Dietary Guidelines Adherence Index. 11 components: fruit, 5 vegetable sub-groups (dark green vegetables, orange vegetables, legumes, starchy vegetables, & other vegetables), a variety of fruits & vegetables, grains, meat & legumes, dairy products, & discretionary energy or added sugar.	For all items (except discretionary energy), 0 was assigned if consumption was $\leq 33\%$ of recommendations, 0.5 was given if consumption was 33-100% of recommendations & 1 was given if consumption met dietary recommendation.	5 points	1 points	Sex, age, GFR, current smoking status, physical activity, BMI, diabetes, hypertension, dipstick proteinuria
Naderinejad, et al, 2016 ¹²	Healthy Diet	FFQ	Vegetable, fruits, vegetable oil, fish, nuts, low fat dairy, poultry, solid fats.	NA	Quartile 1 (Lowest)	Quartile 3 (Highest)	Age, gender, energy intake, physical activity, education, smoking, BMI, T2DM, TG, high BP diagnosis duration, blood lipid medication, history of kidney diseases
Rebholz, et al, 2015 ¹³	American Heart Association-Life's Simple 7 Healthy Diet	FFQ	Healthy Diet Score. Fruit, vegetables, fish, fibre-rich wholegrains.	Sum of score of five individual components/day: ≥ 4 -5 serves fruits & vegetables, ≥ 7 ounces fish, ≥ 3 ounces fibre-rich wholegrains (≥ 1.1 g of dietary fibre/10g carbohydrate), < 1500 mg sodium, ≤ 36 ounces sugar sweetened beverages. Range 0 to 5, with lower score being unhealthy.	Ideal (4-5 points)	Poor (0-1 points)	Age, sex, race, baseline GFR.

Study	Dietary Pattern	Data Assessment Method	Dietary Exposure	Measurement of Exposure	Exposure Category	Reference Category	Covariates Included
Rebholz, et al, 2016 ¹⁴	Dietary Acid Load	FFQ	Dietary acid load estimated using Potential Renal Acid Load (PRAL).	PRAL= 0.49* protein + 0.037* phosphorus- 0.021* potassium – 0.026* magnesium- 0.013* calcium. Net Endogenous Acid Production (NEAP) was used as as a sensitivity analysis. NEAP= 54.5* (protein/potassium)-10.2.	Quartile 4 (Highest)	Quartile 1 (Lowest)	Age, sex, race-centre, total caloric intake, diabetes status, hypertension status, overweight/obese status, smoking status, education level, physical activity, baseline GFR
Rebholz, et al, 2016 ¹⁵	Dietary Approaches to Stop Hypertension	FFQ	DASH Diet Score. Low intake of (1) red & processed meat, (2) sweetened beverages & (3) sodium, as well as high intakes of (4) fruits, (5) vegetables, (6) whole grains, (7), nuts & legumes, & (8) low-fat dairy.	Each component scored from 1-5 based on ranking distribution in quintiles.	Tertile 1 (Low: 8-22)	Tertile 3 (High: 27-40)	Age, sex, race-centre, education level, smoking status, physical activity, total caloric intake, baseline GFR, overweight/obese status, diabetes, hypertension, systolic blood pressure, use of angiotensin-converting enzyme inhibitors or angiotensin receptor blockers

Study	Dietary Pattern	Data Assessment Method	Dietary Exposure	Measurement of Exposure	Exposure Category	Reference Category	Covariates Included
Smyth, et al, 2016 ¹⁶	Alternate Healthy Eating Index; Healthy Eating Index; Mediterranean Diet Score; Recommended Food Score; Dietary Approaches to Stop Hypertension	FFQ	AHEI: total vegetables, total fruit, whole grains, sugar sweetened beverages, nuts & legumes, red/processed meat, trans fat, long-chain fats, polyunsaturated fatty acids, sodium & alcohol. Compared with AHEI, HEI included dairy and excludes sugar sweetened beverages, but shares other components. MDS: total vegetables, total fruits, whole grains, dairy, red/processed meat, poultry, fish, fats & alcohol. RFS: 23 components including, vegetables, fruit, grains, poultry & fish, but does not account for fats, sugars, sodium or alcohol. DASH: total vegetables, total fruit, while grains, dairy, sugar sweetened beverages, nuts & legumes, red/processed meat & sodium.	Scored based on 1 (worst) for the lowest quartile & 4 (best) for the highest quartile). Three components: reduced intake of sodium, sugar sweetened beverages, & red and processed meats (Lowest quartile given score of 4 & highest quartile given score of 1. AHEI vs HEI: Differences: (1) separate scores are included for total vegetables & greens & beans; (2) fruits are divided into total fruit & whole fruit; (3) grains include whole and refine separately; (4) includes total protein and protein from seafood or plant sources; (5) fats are scored differently; (6) “empty calories” are also a component (including calories from solid fats, alcohol & added sugars).	Quartile 5 (Highest) Med diet score = 7.3±0.5 Mean RFS = 63.2±5.2	Quartile 1 (Lowest) Med diet score = 2.3±0.8 Mean RFS = 0.0±0.0	Age, sex, gender, BMI, smoking, education, ethnicity, physical activity, diabetes, heart disease, stroke, potassium intake, sodium intake

Study	Dietary Pattern	Data Assessment Method	Dietary Exposure	Measurement of Exposure	Exposure Category	Reference Category	Covariates Included
Yuzbashian, et al 2018	Dietary Approaches to Stop Hypertension	FFQ	DASH-style Diet Score. Eight components: high intakes of fruit, vegetables, low-fat dairy, nuts, legumes, wholegrains; low intakes of sodium, sweetened beverages, red & processed meats.	Bottom quartile given score of 1, those in top quartile given score of 5. Nil alcohol.	Quartile 5 (Highest) Mean score = 5	Quartile 1 (Lowest) Mean score = 1	Age, sex, smoking, total angiotensin-converting enzyme use, BMI, physical activity. For the dylipidemia analysis, adjustments also included hypertension and dysglycemia. For the hypertension analysis, adjustments also included dylipidemia and dysglycemia. For the dysglycemia analysis, adjustments also included dylipidemia and hypertension.

Abbreviations: ACR= albumin/Creatinine Ratio; UACR= urinary Albumin/Creatinine Ratio; CKD= chronic kidney disease; GFR= glomerular filtration rate; BMI= body mass index; LDL= low-density lipoprotein; HDL= high-density lipoprotein; TG= triglycerides; BP= blood pressure; T2DM= type II diabetes; FFQ= Food frequency questionnaire; PRAL=potential renal acid load; NAE=net acid excretion. NA= not applicable; NP= not published; DASH= dietary approaches to stop hypertension; RFS= recommended food score; AHEI= alternate healthy eating index; HEI= healthy eating index; ACE= angiotensin converting enzyme; HbA1c= glycosylated haemoglobin; ONTARGET= Ongoing Telmisartan Alone and in combination with Ramipril Global Endpoint Trial; ARB= angiotensin receptor blockade

Supplemental Table 3. Measurement of outcomes

Study	Outcomes	Measurement of Outcomes	Type of Ratio
Asghari, et al, 2017 ¹	Incident CKD	<60mL/min per 1.73m ² (self-reported)	OR
Asghari, et al, 2017 ²	Incident CKD	<60mL/min per 1.73m ²	OR
Asghari, et al, 2018 ¹⁷	Incident CKD	<60mL/min per 1.73m ²	OR
Dunkler, et al, 2016 ⁵	Incident CKD	New moderate or severe albuminuria (UACR >3.4 or >33.9mg/mmol) and/or decline in eGFR (annual eGFR decline >5%, need for dialysis during follow-up, and/or eGFR ≤15mL/min per 1.73m ² at 5.5 years)	OR
Foster, et al, 2014 ⁶	Incident CKD	<60mL/min per 1.73m ²	OR
	eGFR decline	≥3mL/min per 1.73m ² per year	
Khatri, et al, 2014 ⁸	Incident CKD	<60mL/min per 1.73m ²	OR
	eGFR decline	≥2.5mL/min per 1.73m ² per year	
	Incident CKD	<60mL/min per 1.73m ²	
Liu, et al, 2016 ⁹	Rapid kidney function decline	≥3mL/min per 1.73m ² per year	RR
	eGFR decline	≥25% from baseline	
Rebholz, et al, 2015 ¹³	Incident CKD	<60mL/min per 1.73m ² accompanied by ≥25% eGFR decline from baseline	HR
Rebholz, et al, 2016 ¹⁴	Incident CKD	<60mL/min per 1.73m ² accompanied by ≥25% eGFR decline from baseline	HR
Rebholz, et al, 2016 ¹⁵	Incident CKD	Meet at least one of the following: (1) <60mL/min per 1.73m ² accompanied by ≥25% eGFR decline from baseline; (2) ≥25% eGFR decline from baseline; (3) ESRD (dialysis or transplantation)	HR
Haring, et al, 2016 ⁷	Incident CKD	<60mL/min per 1.73m ² accompanied by ≥25% eGFR decline from baseline	HR
Chang, et al, 2013 ³	Spot urine albumin-creatinine ratio	Albumin: Nephelometric procedure with anti-albumin monoclonal antibody; Creatinine: Jaffe method.	OR

Study	Outcomes	Measurement of Outcomes	Type of Ratio
	Incident Microalbuminuria	Presence of race & sex-adjusted ACR ≥ 25 mg/g at 2 or more successive follow-ups.	
Smyth, et al, 2016 ¹⁶	Death (due to renal causes)	Death where CKD was listed as primary or contributing cause of death based on the International Classification of Diseases coding system	HR
	Dialysis	Self-reported questionnaire	
Lin, et al, 2011 ¹⁰	Incident Microalbuminuria	ACR ≥ 25 mg/g	OR
	eGFR decline	$\geq 30\%$ from baseline or ≥ 3 mL/min per 1.73m ² per year	
Chung, et al, 2017 ⁴	Incident Albuminuria	ACR ≥ 30 mg/g	OR
	Elevated serum creatinine	Men: ≥ 1.5 mg/dL & Women: ≥ 1.2 mg/dL	OR
	Incident CKD	< 60 mL/min per 1.73m ²	
	Incident CKD	< 60 mL/min per 1.73m ²	
Ma, et al, 2016 ¹¹	eGFR decline	Mean annual eGFR decline ≥ 3 mL/min per 1.72m ²	OR
	Incident Albuminuria	UACR ≥ 17 mg/g for men & ≥ 25 mg/g for women	
Naderinejad, et al, 2016 ¹²	Incident CKD	< 60 mL/min per 1.73m ²	OR
Yukbashian, et al 2018 ¹⁸	Incident CKD	< 60 mL/min per 1.73m ²	OR

Abbreviations: CKD= chronic kidney disease; UACR= urine albumin-to-creatinine ratio; eGFR= estimated glomerular filtration rate; ESRD= end stage renal disease; ACR= albumin-to-creatinine ratio; RR= relative risk; OR= odds ratio; HR: hazard ratio

Supplemental Table 4. Results from sensitivity analysis substituting data from secondary publications of the same cohort dataset. The shaded rows represent the study citation included in the primary analysis.

Citation	Diet pattern	Cohort	Cohort sample size	Association estimate in sensitivity analysis
CKD incidence				
Ashghari, et al 2017	DASH	Tehran Lipid and Glucose Study 2006-08	1630	0.70 (0.60, 0.82); I ² =51%
Ashghari, et al 2017	MED		1212	0.71 (0.61, 0.81); I ² =40%
Ashghari, et al 2018	Lacto-vegetarian		1630	0.70 (0.61, 0.80); I ² =42%
Naderinejad, et al 2016	Healthy diet score		1521	0.73 (0.63, 0.84); I ² =39%
Yuzbashian, et al 2018	DASH, dyslipidemia	Tehran Lipid and Glucose Study 2009-11	2715	0.70 (0.60, 0.82); I ² =51%
Yuzbashian, et al 2018	DASH, dysglycemia		1100	0.69 (0.59, 0.82); I ² =52%
Yuzbashian, et al 2018	DASH, hypertension		2089	0.70 (0.59, 0.82); I ² =52%
Rebholz, et al 2015	Diet acid load	ARIC	15,055	0.70 (0.60, 0.82); I ² =51%
Rebholz, et al 2016	AHA Healthy diet score		14,832	0.74 (0.60, 0.93); I ² =73%
Rebholz, et al 2016	DASH		14,882	0.73 (0.60, 0.88); I ² =70%
Haring, et al 2018	Vegetable protein		11,952	0.69 (0.59, 0.82); I ² =50%
Ma, et al 2016	Dietary Guidelines Index	Framingham Offspring Cohort	1822	0.70 (0.60, 0.82); I ² =51%
Foster, et al 2015	Dietary Guidelines Adherence Score		1802	0.69 (0.58, 0.81); I ² =50%

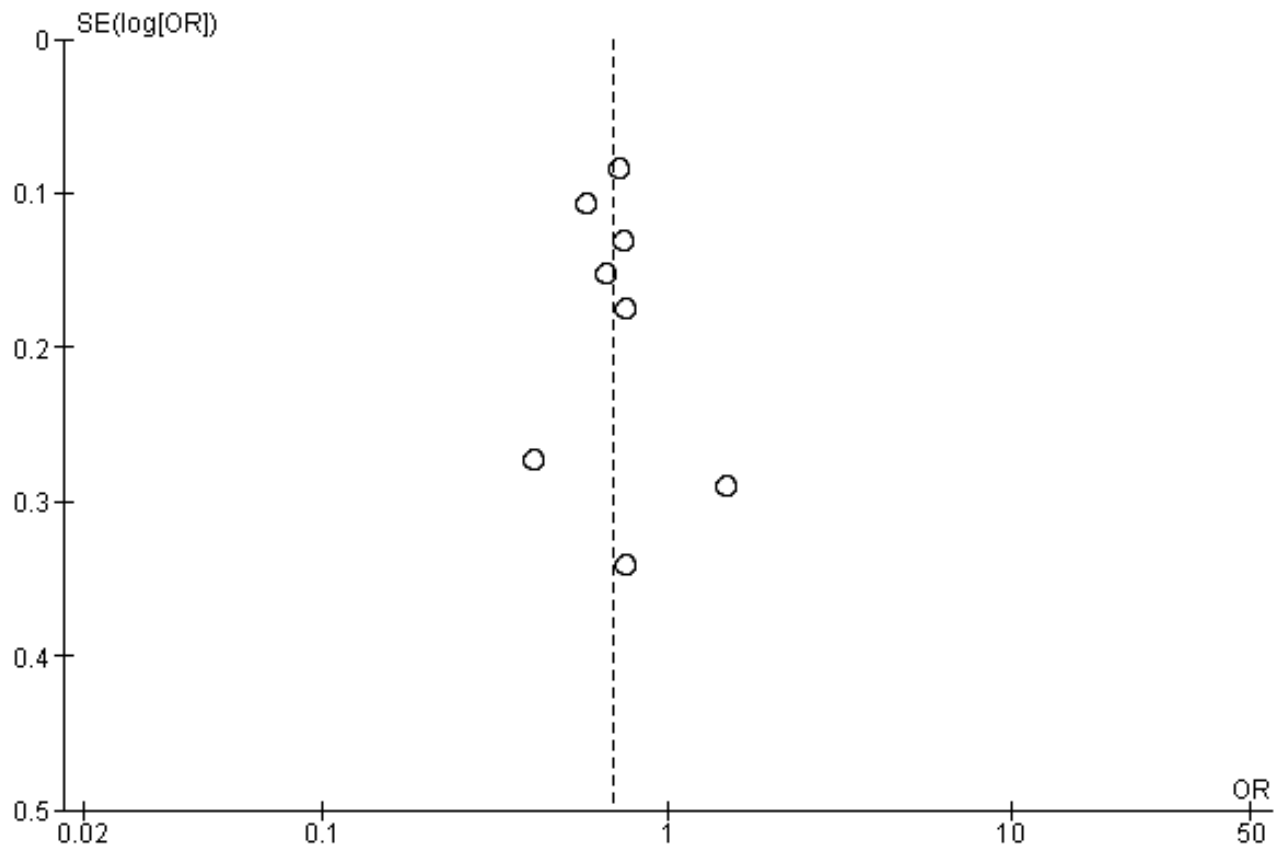
Supplemental material is neither peer-reviewed nor thoroughly edited by CJASN. The authors alone are responsible for the accuracy and presentation of the material.

eGFR decline				
Ma, et al 2016	Dietary Guidelines Index	Framingham Offspring Cohort	1822	0.70 (0.49, 1.01); I ² =59%
Foster, et al 2015	Dietary Guidelines Adherence Score		1802	0.73 (0.52, 1.03); I ² =56%

Abbreviations: AHEI: Alternate Healthy Eating Index, ARIC: Atherosclerosis Risk in Communities, CARDIA: Coronary Artery Risk Development in young Adults, DASH: Dietary Approaches to Stop Hypertension, DMIDS: Diabetes Management through an Integrated Delivery System, HEI: Healthy Eating Index, mAHEI: Modified Alternate Healthy Eating Index, MED: Mediterranean, NIH-AARP: National Institute of Health - American Association of Retired Persons, RFS: Recommended Food Score, ONTARGET: Ongoing Telmisartan Alone and in combination with Ramipril Global Endpoint Trial.

Supplemental Table 5: Subgroup analysis for Incident CKD

Variable (No of studies)	Odds Ratio (95% CI)
Dietary pattern:	
DASH (4)	0.81 (0.47-1.39)
Mediterranean (2)	0.61 (0.40-0.93)
Dietary Guidelines (2)	0.64 (0.50-0.84)
Duration:	
<6 years (4)	0.76 (0.59-0.97)
>6 years (5)	0.68 (0.55-0.84)
Country of origin:	
USA (4)	0.82 (0.63-1.06)
Other (4)	0.62 (0.52-0.75)
Association estimate:	
Odds Ratio (6)	0.65 (0.56-0.75)
Hazard Ratio (2)	0.98 (0.49-0.1.97)
Sample size:	
<5,000 participants (6)	0.73 (0.58-0.94)
>5,000 participants (2)	0.65 (0.53-0.81)



Supplemental Figure 1. Funnel Plot for risk of incidence of CKD associated with adherence to healthy dietary patterns

Supplemental references

1. Asghari, G, Farhadnejad, H, Mirmiran, P, A, DI, Yuzbashian, E, Azizi, F: Adherence to the Mediterranean diet is associated with reduced risk of incident chronic kidney diseases among Tehranian adults. *Hypertension Research*, 40: 96-102, 2017.
2. Asghari, G, Yuzbashian, E, Mirmiran, P, Azizi, F: The association between Dietary Approaches to Stop Hypertension and incidence of chronic kidney disease in adults: The Tehran Lipid and Glucose Study. *Nephrology Dialysis Transplantation*, 32: ii224-ii230, 2017.
3. Chang, A, Van Horn, L, Jacobs Jr, DR, Liu, K, Muntner, P, Newsome, B, Shoham, DA, Durazo-Arvizu, R, Bibbins-Domingo, K, Reis, J, Kramer, H: Lifestyle-related factors, obesity, and incident microalbuminuria: The CARDIA (Coronary Artery Risk Development in Young Adults) study. *American Journal of Kidney Diseases*, 62: 267-275, 2013.
4. Chung, H-F, Hsu, C-C, Al Mamun, A, Long, KZ, Huang, Y-F, Shin, S-J, Hwang, S-J, Huang, M-C: Dietary patterns, dietary biomarkers, and kidney disease in patients with type 2 diabetes: a repeated-measure study in Taiwan. *Asia Pacific journal of clinical nutrition*, 27: 366, 2018.
5. Dunkler, D, Kohl, M, Teo, KK, Heinze, G, Dehghan, M, Clase, CM, Gao, P, Yusuf, S, Mann, JFE, Oberbauer, R: Population-Attributable Fractions of Modifiable Lifestyle Factors for CKD and Mortality in Individuals with Type 2 Diabetes: A Cohort Study. *American Journal of Diseases*, 68: 29-40, 2016.
6. Foster, MC, Hwang, SJ, Massaro, JM, Jacques, PF, Fox, CS, Chu, AY: Lifestyle Factors and Indices of Kidney Function in the Framingham Heart Study. *American Journal of Nephrology*, 41: 267-274, 2015.

7. Haring, B, Selvin, E, Liang, M, Coresh, J, Grams, ME, Petruski-Ivleva, N, Steffen, LM, Rebholz, CM: Dietary protein sources and risk for incident chronic kidney disease: results from the Atherosclerosis Risk in Communities (ARIC) Study. *Journal of Renal Nutrition*, 27: 233-242, 2017.
8. Khatri, M, Moon, YP, Scarmeas, N, Gu, Y, Gardener, H, Cheung, K, Wright, CB, Sacco, RL, Nickolas, TL, Elkind, MSV: The association between a mediterranean-style diet and kidney function in the northern manhattan study cohort. *Clinical Journal of the American Society of Nephrology*, 9: 1868-1875, 2014.
9. Liu, Y, Kuzmarski, MF, Miller, ER, 3rd, Nava, MB, Zonderman, AB, Evans, MK, Powe, NR, Crews, DC: Dietary Habits and Risk of Kidney Function Decline in an Urban Population. *Journal Of Renal Nutrition: The Official Journal Of The Council On Renal Nutrition Of The National Kidney Foundation*, 27: 16-25, 2017.
10. Lin, J, Fung, TT, Hu, FB, Curhan, GC: Association of dietary patterns with albuminuria and kidney function decline in older white women: a subgroup analysis from the Nurses' Health Study. *American Journal of Kidney Diseases*, 57: 245-254, 2011.
11. Ma, J, Jacques, PF, Hwang, SJ, Troy, LM, McKeown, NM, Chu, AY, Fox, CS: Dietary Guideline Adherence Index and Kidney Measures in the Framingham Heart Study. *American Journal of Kidney Diseases*, 68: 703-715, 2016.
12. Naderinejad, N, Ejtahed, HS, Asghari, G, Mirmiran, P, Azizi, F: Association between dietary patterns and incidence of chronic kidney disease in adults with high blood pressure: Tehran lipid and glucose study. *Iranian Journal of Endocrinology and Metabolism*, 18: 231-242, 2016.
13. Rebholz, CM, Anderson, CAM, Grams, ME, Bazzano, LA, Crews, DC, Chang, AR, Coresh, J, Appel, LJ: Relationship of the American heart association's impact goals (Life's Simple 7) with risk of chronic kidney disease: Results from the atherosclerosis

- risk in communities (ARIC) cohort study. *Journal of the American Heart Association*, 5, 2016.
14. Rebholz, CM, Coresh, J, Grams, ME, Steffen, LM, Anderson, CAM, Appel, LJ, Crews, DC: Dietary Acid Load and Incident Chronic Kidney Disease: Results from the ARIC Study. *American Journal of Nephrology*, 42: 427-435, 2015.
 15. Rebholz, CM, Crews, DC, Grams, ME, Steffen, LM, Levey, AS, Miller, ER, Appel, LJ, Coresh, J: DASH (Dietary Approaches to Stop Hypertension) Diet and Risk of Subsequent Kidney Disease. *American Journal of Kidney Diseases*, 68: 853-861, 2016.
 16. Smyth, A, Griffin, M, Yusuf, S, Mann, JFE, Reddan, D, Canavan, M, Newell, J, O'Donnell, M: Diet and Major Renal Outcomes: A Prospective Cohort Study. The NIH-AARP Diet and Health Study. *Journal Of Renal Nutrition: The Official Journal Of The Council On Renal Nutrition Of The National Kidney Foundation*, 26: 288-298, 2016.
 17. Asghari, G, Momenan, M, Yuzbashian, E, Mirmiran, P, Azizi, F: Dietary pattern and incidence of chronic kidney disease among adults: A population-based study 11 Medical and Health Sciences 1117 Public Health and Health Services. *Nutrition and Metabolism*, 15, 2018.
 18. Yuzbashian, E, Asghari, G, Mirmiran, P, Amouzegar-Bahambari, P, Azizi, F: Adherence to low-sodium Dietary Approaches to Stop Hypertension-style diet may decrease the risk of incident chronic kidney disease among high-risk patients: A secondary prevention in prospective cohort study. *Nephrology Dialysis Transplantation*, 33: 1159-1168, 2018.