## Electronic Supplementary Material (ESI) for Food & Function. This journal is © The Royal Society of Chemistry 2024



DODS components	Droporty	DOBS score			
DOBS components	Flopenty	0	1	2	
Dietary fiber (g/d)	А	≤12.00	>12.00, ≤18.10	>18.10	
Carotene (µg/d)	А	≤178.47	>178.47, ≤241.68	>241.68	
Vitamin B2 (mg/d)	А	≤1.53	>1.53, ≤2.16	>2.16	
Niacin (mg/d)	А	≤16.62	>16.62, ≤23.69	>23.69	
Vitamin B6 (mg/d)	А	≤1.37	>1.37, ≤2.02	>2.02	
Folic acid (µg/d)	А	$\leq\!\!277.00$	>277.00, ≤404.00	>404.00	
Vitamin B12 (µg/d)	А	≤2.96	>2.96, ≤5.14	>5.14	
Vitamin C (mg/d)	А	≤46.40	>46.40, ≤99.13	>99.13	
Vitamin E (mg/d)	А	≤4.75	>4.75, ≤7.50	>7.50	
Calcium (mg/d)	А	≤603.50	>603.50, ≤901.00	>901.00	
Magnesium (mg/d)	А	≤214.00	>214.00, ≤295.50	>295.50	
Zinc (mg/d)	А	≤7.63	>7.63, ≤11.18	>11.18	
Copper (mg/d)	А	≤0.91	>0.91, ≤1.27	>1.27	
Selenium (µg/d)	А	≤75.90	>75.90, ≤107.37	>107.37	
Total fat (g/d)	Р	>74.59	≤74.59, >50.86	≤50.86	
Iron (mg/d)	Р	>15.49	≤15.49, >10.64	≤10.64	

Table S1. The DOBS assignment scheme.

A, Anti-oxidant; P, Pro-oxidant. DOBS, Dietary Oxidative Balance Score.

Table S2. Association of single CVD or DOBS status with all-cause mortality among US older adults, NHANES 2003-2014 (n=9059).

Marality autaoma		Hazard ratio (95% CI)			
woranty outcome	death (%)	Crude model	Model 1	Model 2	
All-causes					
Non-CVD	2118 (31.06)	Ref.	Ref.	Ref.	
CVD	1262 (56.36)	2.54 (2.31-2.81), <0.001	1.87 (1.7-2.05), <0.001	1.64 (1.50-1.80), <0.001	
Anti-oxidant diet	632 (32.49)	Ref.	Ref.	Ref.	
Pro-oxidant diet	2748 (38.63)	1.38 (1.22-1.57), <0.001	1.41 (1.24-1.6), <0.001	1.25 (1.09-1.43), 0.001	

Table S3. Joint association of CVD and DOBS status with all-cause mortality among US older adults, NHANES 2003-2014 (n=9059).

Manality autooma		Hazard ratio (95% CI)			
Moranty outcome	death (%)	Crude model	Model 1	Model 2	
All-causes					
Non-CVD & Anti-oxidant diet	413 (27.37)	Ref.	Ref.	Ref.	
Non-CVD & Pro-oxidant diet	1705 (32.10)	1.27 (1.10-1.47), 0.001	1.26 (1.10-1.44), 0.001	1.13 (0.97-1.31), 0.114	
CVD & Anti-oxidant diet	219 (50.23)	2.17 (1.74-2.70), <0.001	1.50 (1.21-1.85), <0.001	1.30 (1.05-1.62), 0.016	
CVD & Pro-oxidant diet	1043 (57.85)	3.33 (2.81-3.95), <0.001	2.45 (2.09-2.88), <0.001	1.96 (1.64-2.34), <0.001	

		Hazard ratio (95%	P for		
<b>Morality outcome</b>	dath(0/)	Cuudo modol	Model 1	Model 2	interaction
	ueatii (70)	Crude model	widdel 1		in Model 2
All-causes					0.015
Non-CVD cohorts					
Anti-oxidant diet	413 (27.37)	Ref.	Ref.	Ref.	
Pro-oxidant diet	1705 (32.10)	1.27 (1.10-1.47),	1.29 (1.13-1.47),	1.13 (0.97-1.31),	
		0.001	< 0.001	0.130	
CVD cohorts					
Anti-oxidant diet	219 (50.23)	Ref.	Ref.	Ref.	
Pro-oxidant diet	1043 (57.85)	1.53 (1.24-1.89),	1.53 (1.23-1.90),	1.48 (1.18-1.86),	
		< 0.001	< 0.001	0.001	

Table S4. Association of DOBS status with all-cause mortality among US older adults in CVD and non-CVD cohorts, NHANES 2003-2014 (n=9059).

Table S5. Sensitivity Analyses of the association between single CVD or DOBS status and all-cause mortality among US older adults excluding participants who died within two years of follow-up, NHANES 2003-2014 (n=8616).

Marality autoomo		Hazard ratio (95% CI)				
	death (%)	Crude model	Model 1	Model 2		
All-causes						
Non-CVD	1884 (28.61)	Ref.	Ref.	Ref.		
CVD	1053 (51.87)	2.46 (2.23-2.71), <0.001	1.81 (1.65-1.98), <0.001	1.60 (1.45-1.75), <0.001		
Anti-oxidant diet	567 (30.16)	Ref.	Ref.	Ref.		
Pro-oxidant diet	2370 (35.18)	1.33 (1.16-1.51), <0.001	1.36 (1.20-1.55), <0.001	1.23 (1.07-1.42), 0.004		

Table S6. Sensitivity Analyses of the joint association between CVD and DOBS status and all-cause mortality among US older adults excluding participants who died within two years of follow-up, NHANES 2003-2014 (n=8616).

Manality autooma		Hazard ratio (95% CI)				
woranty outcome	death (%)	Crude model	Model 1	Model 2		
All-causes						
Non-CVD & Anti-oxidant diet	380 (25.75)	Ref.	Ref.	Ref.		
Non-CVD & Pro-oxidant diet	1504 (29.43)	1.23 (1.06-1.44), 0.007	1.23 (1.08-1.41), 0.003	1.12 (0.97-1.31), 0.132		
CVD & Anti-oxidant diet	187 (46.29)	2.14 (1.69-2.71), <0.001	1.47 (1.17-1.86), 0.001	1.28 (1.01-1.63), 0.041		
CVD & Pro-oxidant diet	866 (53.26)	3.13 (2.65-3.69), <0.001	2.32 (1.99-2.71), <0.001	1.90 (1.60-2.26), <0.001		

Table S7. Sensitivity Analyses of the association between DOBS status and all-cause mortality among US older adults in CVD and non-CVD cohorts excluding participants who died within two years of follow-up, NHANES 2003-2014 (n=8616).

		Hazard ratio (959	P for		
Morality outcome	death (%)	Crude model	Model 1	Model 2	interaction
					in Model 2
All-causes					0.040
Non-CVD cohorts					
Anti-oxidant diet	380 (25.75)	Ref.	Ref.	Ref.	
Pro-oxidant diet	1504 (29.43)	1.23 (1.06-1.44),	1.26 (1.1-1.44),	1.11 (0.95-1.30),	
		0.007	0.001	0.198	
CVD cohorts					
Anti-oxidant diet	187 (46.29)	Ref.	Ref.	Ref.	
Pro-oxidant diet	866 (53.26)	1.46 (1.16-1.84),	1.49 (1.16-1.9),	1.51 (1.17-1.95),	
		0.001	0.002	0.002	