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ESM Table 5. Item-level scoring for NutriGrade tool and quality of evidence for identified associations in prospective observational studies and randomized controlled trials.



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ESM Table 1. Reasons for study exclusion at the full-text eligibility assessment step.

[1-8]	Not relevant outcome
[9-20]	Longer follow-up/larger sample size available

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ESM Figure 2. Forest plot presenting pooled risk ratio with 95% confidence interval (CI) for all-cause mortality among cancer survivors in cohort studies. MD – Mediterranean diet;



ESM Figure 3. Forest plot presenting pooled risk ratio with 95% confidence interval (CI) for biliary tract cancer in cohort studies. MD – Mediterranean diet;



ESM Figure 4. Forest plot presenting pooled odds and risk ratios with 95% confidence interval (CI) for bladder cancer in case-control and cohort studies. MD – Mediterranean diet;



ESM Figure 5. Forest plot presenting pooled odds and risk ratios with 95% confidence interval (CI) for blood cancer in case-control and cohort studies. MD – Mediterranean diet;



ESM Figure 6. Forest plot presenting pooled odds and risk ratios with 95% confidence interval (CI) for breast cancer in case-control, cohort studies and RCTs. MD – Mediterranean diet; RCT – Randomized controlled trial;



ESM Figure 7. Forest plot presenting pooled risk ratio with 95% confidence interval (CI) for cancer reoccurrence among cancer survivors in cohort studies. MD – Mediterranean diet;

Study or Subgroup	log[Risk Ratio]	SE	Weight	Risk Ratio IV, Random, 95% CI	Risk Ratio IV, Random, 95% Cl	
Fung 2014	-0.1708	0.2665	8.5%	0.84 [0.50, 1.42]		
Kenfield 2014	0.0139	0.1539	25.4%	1.01 [0.75, 1.37]	_	
Kim 2011	0.1363	0.2232	12.1%	1.15 [0.74, 1.77]		
Total (95% CI)			100.0%	0.96 [0.82, 1.11]	•	
Heterogeneity: Tau² = 0.00; Chi² = 1.25, df = 3 (P = 0.74); l² = 0% Test for overall effect: Z = 0.59 (P = 0.56)					0.2 0.5 1 2 Favours high MD adherence Favours low MD adherence	5

ESM Figure 8. Forest plot presenting pooled risk ratio with 95% confidence interval (CI) for cancer mortality among cancer survivors in cohort studies. MD – Mediterranean diet;



Test for subgroup differences: $Chi^2 = 0.03$, df = 1 (P = 0.85), I² = 0%

ESM Figure 9. Forest plot presenting pooled risk ratios with 95% confidence interval (CI) for cancer mortality in cohort studies and RCTs. MD – Mediterranean diet; RCT – Randomized controlled trial;



ESM Figure 10. Forest plot presenting pooled odds and risk ratios with 95% confidence interval (CI) for colorectal cancer in case-control and cohort studies. MD – Mediterranean diet;



ESM Figure 14. Forest plot presenting pooled odds and risk ratios with 95% confidence interval (CI) for gastric cancer in case-control and cohort studies. MD – Mediterranean diet;



ESM Figure 15. Forest plot presenting pooled risk ratio with 95% confidence interval (CI) for glioma in cohort studies. MD – Mediterranean diet;



ESM Figure 16. Forest plot presenting pooled odds and risk ratios with 95% confidence interval (CI) for head and neck cancer in case-control and cohort studies. MD – Mediterranean diet;



ESM Figure 17. Forest plot presenting pooled odds and risk ratios with 95% confidence interval (CI) for liver cancer in case-control and cohort studies. MD – Mediterranean diet;



ESM Figure 18. Forest plot presenting pooled risk ratio with 95% confidence interval (CI) for ovarian cancer in cohort studies. MD – Mediterranean diet;



Test for subgroup differences: Chi² = 14.01, df = 1 (P = 0.0002), l² = 92.9%

ESM Figure 19. Forest plot presenting pooled odds and risk ratios with 95% confidence interval (CI) for pancreatic cancer in case-control and cohort studies. MD – Mediterranean diet;



Test for subgroup differences: $Chi^2 = 1.49$, df = 1 (P = 0.22), I² = 32.9%

ESM Figure 20. Forest plot presenting pooled odds and risk ratios with 95% confidence interval (CI) for prostate

cancer in case-control and cohort studies. MD - Mediterranean diet;



ESM Figure 21. Forest plot presenting pooled risk ratio with 95% confidence interval (CI) for respiratory cancer in cohort studies. MD – Mediterranean diet;



ESM Figure 22. Forest plot presenting pooled risk ratio with 95% confidence interval (CI) for skin cancer in cohort studies. MD – Mediterranean diet;

ESM Table 2. Subgroup analysis for association between adherence to the MedDiet and risk of cancer mortality.

Subgroup	N	RR	95%CI	$I^{2}(\%)$	Psubgroup
Sex					
Male	6	0.88	0.82, 0.95	90	0.80
Female	11	0.89	0.84, 0.95	77	
MD score					
tMedDiet	6	0.88	0.77, 0.99	77	0.69
aMedDiet	7	0.85	0.78, 0.93	87	
Location					
Mediterranean countries	4	0.85	0.76, 0.95	0	0.82
Non-Mediterranean countries	13	0.86	0.81, 0.92	87	

 $CI-Confidence\ interval;\ NA-Not\ applicable;\ aMedDiet-Fung\ MedDiet\ Score;$

 $tMedDiet-Trichopoulou\ MedDiet\ score;$

ESM Table 3. Subgroup analysis for association between adherence to the MedDiet and risk of breast cancer.

Subgroup	N	RR	95%CI	$I^{2}(\%)$	P _{subgroup}
MD score					
tMedDiet	4	0.99	0.87, 1.13	38	0.82
aMedDiet	5	0.98	0.93, 1.02	0	
Location					
Mediterranean countries	2	0.95	0.57, 1.59	46	0.94
Non-Mediterranean countries	8	0.98	0.94, 1.02	0	
Menopausal status					
Premenopausal	5	0.99	0.71, 1.37	81	0.85
Postmenopausal	8	0.95	0.92, 0.99	0	
Receptor expression					
ER+	4	0.98	0.89, 1.06	30	0.85
ER-	4	0.86	0.64, 1.15	73	
PR+	2	1.00	0.91, 1.09	0	
PR-	2	0.91	0.61, 1.36	82	
ER+/PR+	4	0.95	0.88, 1.02	21	
ER-/PR-	4	0.89	0.66, 1.20	76	
ER+/PR-	1	0.98	0.81, 1.19	NA	
ER-/PR+	1	0.82	0.56, 1.20	NA	
ER-/PR-/HER2-	1	0.66	0.37. 1.19	NA	

 $CI-Confidence\ interval;\ NA-Not\ applicable;\ aMedDiet-Fung\ MedDiet\ Score;$

 $tMedDiet-Trichopoulou\ MedDiet\ score;$

ESM Table 4. Subgroup analysis for association between adherence to the MedDiet and risk of colorectal cancer.

Subgroup	N	RR	95%CI	$I^{2}(\%)$	Psubgroup
Sex					
Male	6	0.88	0.78, 0.98	72	0.14
Female	9	0.91	0.90, 1.00	0	
MD score					
tMedDiet	2	0.88	0.80, 0.98	0	0.84
aMedDiet	5	0.89	0.82, 0.98	53	
Location					
Mediterranean countries	1	1.02	0.51, 2.04	NA	0.79
Non-Mediterranean countries	8	0.93	0.86, 1.00	61	
Anatomical site					
Proximal colon	5	1.01	0.93, 1.09	0	0.03
Distal colon	5	0.88	0.79, 0.96	0	
Rectum	7	0.86	0.75, 0.98	42	

CI – Confidence interval; NA – Not applicable; aMedDiet – Fung MedDiet Score;

tMedDiet - Trichopoulou MedDiet score;



ESM Figure 23. Funnel plot showing study precision against the relative risk effect estimate for cancer mortality. $P_{Egger} - P$ -value for Egger's linear regression test; SE – Standard error;



ESM Figure 24. Funnel plot showing study precision against the relative risk effect estimate for breast cancer. $P_{Egger} - P$ -value for Egger's linear regression test; SE – Standard error;



ESM Figure 25. Funnel plot showing study precision against the relative risk effect estimate for colorectal cancer. $P_{Egger} - P$ -value for Egger's linear regression test; SE – Standard error;

Outcome	Risk of bias, study quality, and study limitations	Precision	Heterogeneity	Directness	Publication bias	Funding bias	Effect size ¹	Dose response ¹	Total score	Quality of evidence
Cohort studies										
All-cause mortality among survivors	2 points	1 points	0.4 points	0 points	0 points	1 point	0.5 points	0 points	4.9 points	Low
Biliary tract cancer	1 point	0 points	0 points	0 points	0 points	1 point	0 points	0 points	2 points	Very low
Bladder cancer	2 points	1 point	0 point	1 point	0 points	1 point	0 points	0 points	5 points	Low
Blood cancer	2 points	1 point	0 point	0 points	0 points	1 point	0 points	0 points	4 points	Low
Breast cancer	2 points	1 points	0.8 points	0 points	0.5 points	1 point	0 points	0 points	5.3 points	Low
Cancer reoccurrence among survivors	1 point	0 points	0 points	0 points	0 points	1 point	0 points	0 points	2 points	Very low
Cancer mortality	2 points	1 point	0.6 points	1 point	0.5 points	1 point	0 points	0 points	6.1 points	Moderate
Cancer mortality among survivors	2 points	0 points	0 points	0 point	0 points	1 point	0 points	0 points	3 points	Very low
Colorectal cancer	2 points	1 point	0.6 points	1 point	1 point	1 point	0 points	0 points	6.6 points	Moderate
Endometrial cancer	1 point	0 points	0 points	0 points	0 points	1 point	0 points	0 points	2 points	Very low
Esophageal cancer	2 points	0 points	0 point	0 points	0 points	1 point	0 points	0 points	3 points	Very low
Gallbladder cancer	1 point	0 points	0 points	0 points	0 points	1 point	0 points	0 points	2 points	Very low
Gastric cancer	2 points	1 point	0 point	1 point	0 points	1 point	1 point	0 points	5 points	Very low
Glioma	1 point	1 point	0 points	0 points	0 points	1 point	0 points	0 points	3 points	Very low
Head and neck cancer	1 point	1 point	0 points	0 points	0 points	1 point	0 points	0 points	3 points	Low
Liver cancer	2 points	1 point	0 points	0 points	0 points	1 point	1 point	0 points	4 points	Very low
Ovarian cancer	1 point	0 points	0 points	0 points	0 points	1 point	0 points	0 points	2 points	Very low
Pancreatic cancer	2 points	0 points	0 points	0 points	0 points	1 point	0 points	0 points	3 points	Low
Prostate cancer	2 points	1 point	0.8 points	1 point	0 points	1 point	0 points	0 points	5.8 points	Very low
Respiratory cancer	2 points	1 point	0 points	1 point	0 points	1 point	0 points	0 points	5 points	Very low
Skin cancer	1 point	1 point	0 points	0 points	0 points	1 point	0 points	0 points	3 points	Low
Randomized controlled trials	Risk of bias, study quality, and study limitations	Precision	Heterogeneity	Directness	Publication bias	Funding bias	Study design ²	-	Total score	Low
Cancer mortality	2.25 points	0 points	0 points	0 points	0 points	1 point	2 points	-	5.25 points	Very low
Breast cancer	2 points	0 points	0 points	0 points	0 points	1 point	2 points	-	5 points	Low

	ESM Table 5. Item-level scoring	for NutriGrade tool and q	juality	of evidence for ide	entified association	is in cohort	studies and ra	ndomized co	ntrolled trials.
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¹Applies only for cohort studies; ²Applies only for randomized controlled trials;