

CORRECTION

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Correction: Associations Between Plant-Based Dietary Patterns and Risks of Type 2 Diabetes, Cardiovascular Disease, Cancer, and Mortality – A Systematic Review and Meta-analysis

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Correction: *Nutr J* 22, 46 (2023)

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Following publication of the original article [1], the authors reported an error in data extraction. This error affected some cancer-related results, however the conclusions and key findings remain unchanged after the error was corrected.

Specifically, relative risks extracted from Fraser (1999) [2] were misinterpreted. The title of Table 7 by Fraser is “Incidence and relative risk of common cancers in Seventh-day Adventist vegetarians compared with

nonvegetarians”, suggests that the associations are for vegetarians, using the non-vegetarians as the comparison group, but the text in the Results section suggests the opposite. The authors regret not reading the text carefully.

All changes before and after the correction are presented in Table 1. The section of the content of the updated manuscript are also included.

The original Table 1, Figure 4, Supplementary Figure S2, S6, S8, S11–S12 are updated, and the original and corrected table and figures are presented below.

[†]Yeli Wang and Binkai Liu contributed equally to the manuscript.

The original article can be found online at <https://doi.org/10.1186/s12937-023-00877-2>.

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Table 1 List of changes in text. Corrected texts are underlined, and original texts are placed in square brackets in *italic*. The text deleted are marked with strikethrough

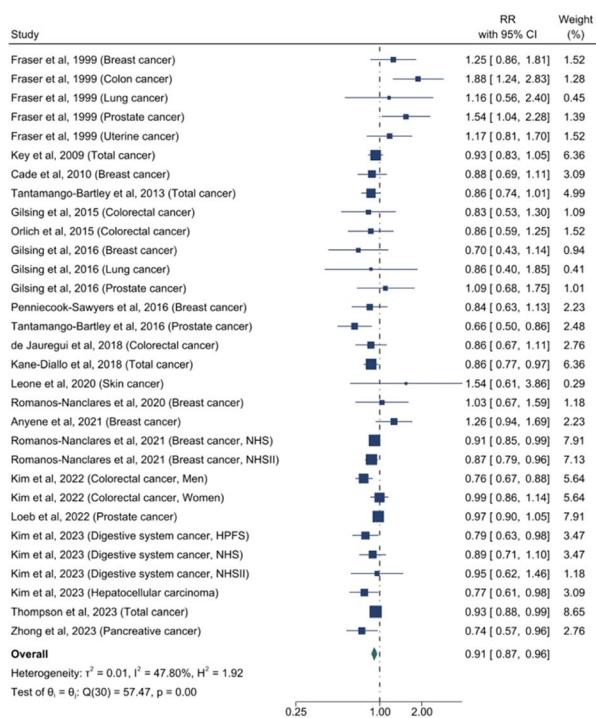
Section	Text change
Effect estimates for overall cancer and heterogeneity	An inverse association was observed between higher adherence to a plant-based dietary pattern and risks of... cancer (0.88 [0.84–0.92]) [(0.91 [0.87–0.96])] ... with moderate to high heterogeneity across studies (I^2 ranged: 30.2% [47.8%] –95.4%).
Abstract: Results (Page 1)	A greater adherence to plant-based dietary patterns was consistently associated with lower risks of T2D, CVD, cancer, and mortality. The random-effects pooled RR was 0.82 (95% CI: 0.77–0.86), 0.90 (95% CI: 0.85–0.94), 0.88 (95% CI: 0.84–0.92) [(0.91 (95% CI: 0.87–0.96))], and 0.84 (95% CI: 0.78–0.92), respectively. A moderate heterogeneity was observed among studies for T2D (60.9%), CVD (49.8%), cancer (30.2%) [47.8%], and a high heterogeneity was observed for studies reporting mortality (95.4%).
Results: Plant-Based Diet and Risk of T2D, CVD, cancer, and mortality (Page 5-6)	For various cancer types, plant-based dietary patterns were significantly associated with lower risk of breast cancer (0.91 [95% CI: 0.86–0.95; $I^2=0\%$] [(0.92 [95% CI: 0.87–0.97]; $I^2=11.1\%$)], digestive system cancer (0.82 [95% CI: 0.72–0.94; $I^2=0\%$]), pancreatic cancer (0.68 [95% CI: 0.55–0.84; $I^2=0\%$]) and prostate cancer (0.87 [95% CI: 0.77–0.99; $I^2=53.3\%$]), but not with risks of colorectal cancer (0.90 [95% CI: 0.79–1.02; $I^2=61.8\%$] [(0.98 [95% CI: 0.85–1.12; $I^2=68.4\%$)]], liver cancer (0.51 [95% CI: 0.22–1.21; $I^2=57.7\%$] [(0.74 [95% CI: 0.52–1.05; $I^2=48.1\%$)]], lung cancer (0.82 [95% CI: 0.54–1.26; $I^2=36.6\%$]) [(0.88 [95% CI: 0.56–1.38; $I^2=44.2\%$)]], prostate cancer (0.94 [95% CI: 0.61–1.08; $I^2=66.7\%$]) or stomach cancer (1.73 [95% CI: 0.90–3.31; $I^2=0\%$]) (Supplemental Figure S2).
Effect estimates for cancer subtypes and heterogeneity	Results: Plant-Based Diet and Risk of T2D, CVD, cancer, and mortality (Page 6)
Effect estimates for cancer subtypes and heterogeneity	Results: Assessment of Publication Bias and Risk of Bias in Individual Studies (Page 9)
Test estimates for Publication bias	Results: Assessment of Publication Bias and Risk of Bias in Individual Studies (Page 9)
Effect estimates after performing the trim-and-fill analysis	Results: Assessment of Publication Bias and Risk of Bias in Individual Studies (Page 9)
Significance change of prostate cancer results	Discussion (Page 9)
	Discussion (Page 12)
	Discussion (Page 13)

Original Table 1

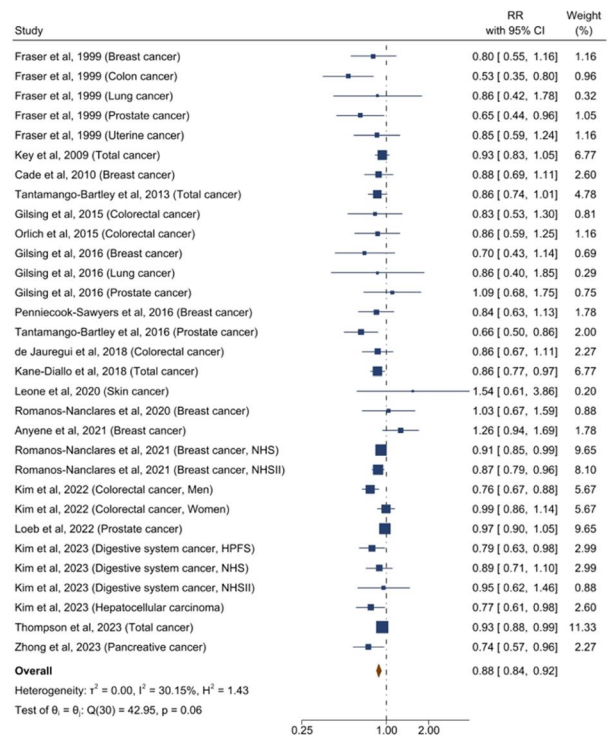
Characteristics	Study estimates, No.	Relative Risk (95% CI)		I^2 , %	P value for Heterogeneity Between Subgroups
		Inverse-Variance Fixed-Effects Meta-analysis	Random-Effects Meta-analysis		
Cancer					
Main estimate	32	0.91 (0.88-0.93)	0.91 (0.86-0.95)	47.5	-
Age, y					0.08
<55	14	0.92 (0.88-0.96)	0.97 (0.89-1.05)	53.1	
≥55	16	0.91 (0.87-0.94)	0.88 (0.82-0.94)	50.2	
Sex					0.29
Studies among males only	5	0.89 (0.84-0.95)	0.83 (0.70-0.98)	75.3	
Studies among females only	12	0.90 (0.86-0.94)	0.90 (0.86-0.94)	0	
Studies among males and females	15	0.92 (0.88-0.93)	0.95 (0.87-1.04)	55.4	
BMI, kg/m ²					0.51
<25	12	0.90 (0.87-0.94)	0.90 (0.87-0.94)	0	
≥25	19	0.92 (0.89-0.95)	0.94 (0.87-1.01)	60.0	
Region					0.76
North America	20	0.91 (0.88-0.94)	0.92 (0.85-0.99)	63.5	
Europe	12	0.91 (0.87-0.95)	0.91 (0.86-0.95)	0	
Asia/Australia	-	-	-	-	-
Dietary classification					0.35
Vegan or vegetarian diets	16	0.93 (0.87-0.99)	0.96 (0.85-1.07)	53.2	
A priori-defined PDI	16	0.91 (0.88-0.93)	0.90 (0.85-0.94)	43.0	
Follow-up duration, y					0.08
<15	15	0.93 (0.89-0.97)	0.97 (0.88-1.06)	60.7	
≥15	17	0.89 (0.86-0.93)	0.88 (0.84-0.93)	23.4	
Main estimate	32	0.90 (0.87-0.92)	0.88 (0.85-0.92)	29.0	-
Age, y					0.86
<55	14	0.88 (0.85-0.92)	0.88 (0.85-0.92)	0	
≥55	16	0.91 (0.87-0.94)	0.88 (0.82-0.94)	50.2	
Sex					0.40
Studies among males only	5	0.89 (0.84-0.95)	0.83 (0.70-0.98)	75.3	
Studies among females only	12	0.90 (0.86-0.94)	0.90 (0.86-0.94)	0	
Studies among males and females	15	0.89 (0.86-0.93)	0.87 (0.82-0.92)	18.5	
BMI, kg/m ²					0.51
<25	12	0.90 (0.87-0.94)	0.90 (0.87-0.94)	0	
≥25	19	0.89 (0.86-0.93)	0.87 (0.81-0.92)	41.0	
Region					0.39
North America	20	0.89 (0.85-0.92)	0.86 (0.81-0.91)	47.7	
Europe	12	0.91 (0.87-0.95)	0.91 (0.86-0.95)	0	
Asia/Australia	-	-	-	-	-

Characteristics	Study estimates, No.	Relative Risk (95% CI)		I ² , %	P value for Heterogeneity Between Subgroups
		Inverse-Variance Fixed-Effects Meta-analysis	Random-Effects Meta-analysis		
Dietary classification					0.14
Vegan or vegetarian diets	16	0.85 (0.80-0.91)	0.85 (0.80-0.91)	0	
A priori-defined PDI	16	0.91 (0.88-0.93)	0.90 (0.85-0.94)	43.0	
Follow-up duration, y					0.98
<15	15	0.90 (0.86-0.94)	0.87 (0.81-0.94)	38.2	
≥15	17	0.89 (0.86-0.93)	0.88 (0.84-0.93)	23.4	

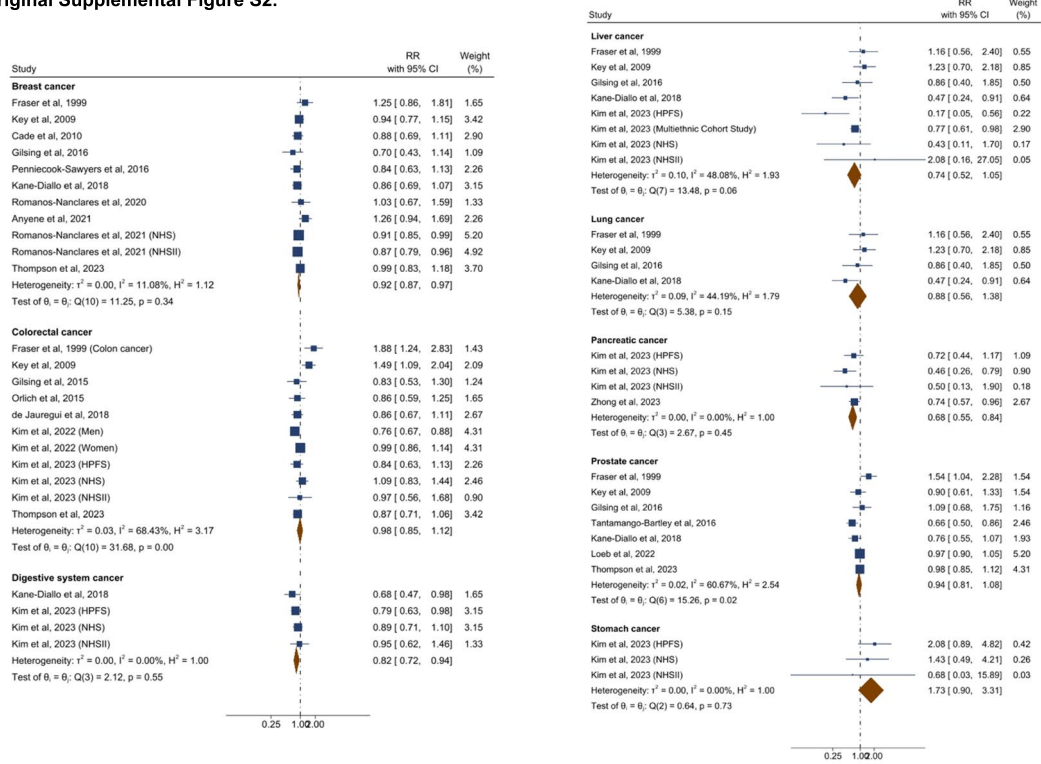
Original Figure 4 (Cancer)



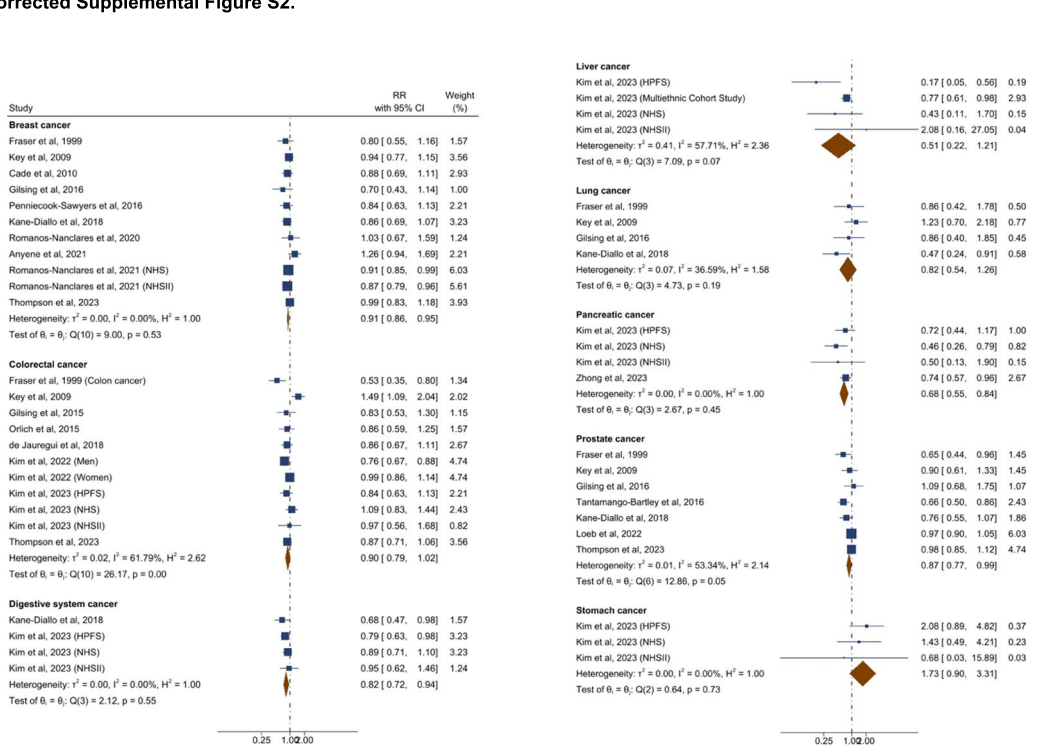
Corrected Figure 4 (Cancer)



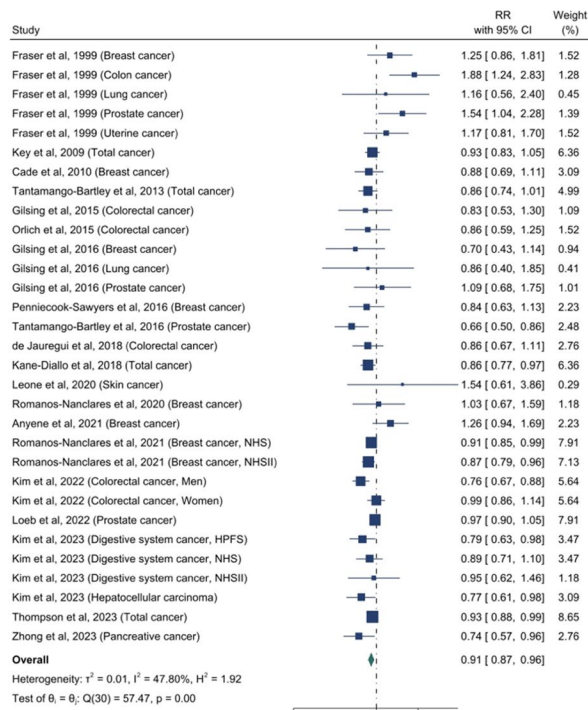
Original Supplemental Figure S2.



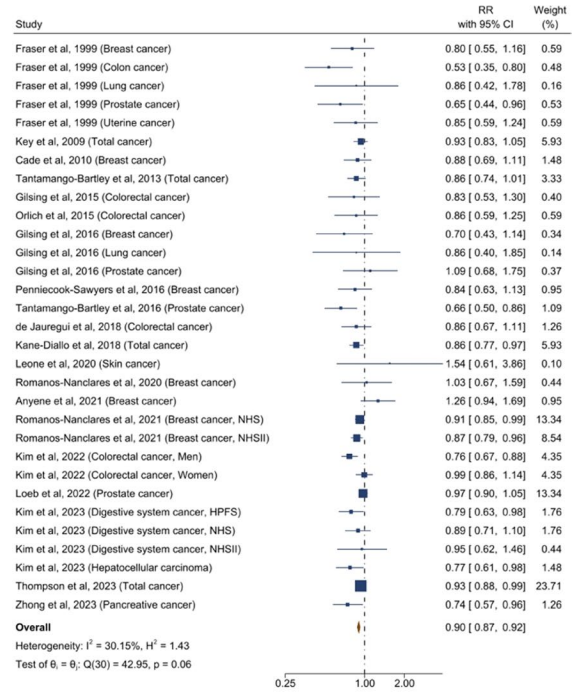
Corrected Supplemental Figure S2.



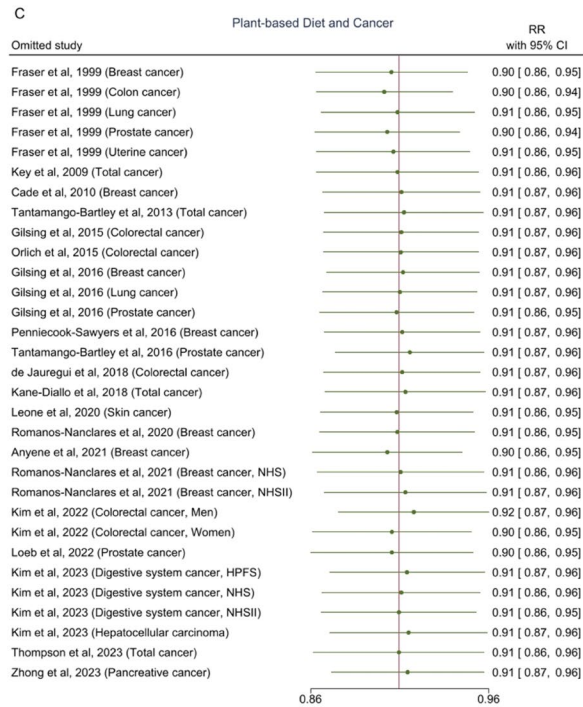
Original Supplemental Figure S6.



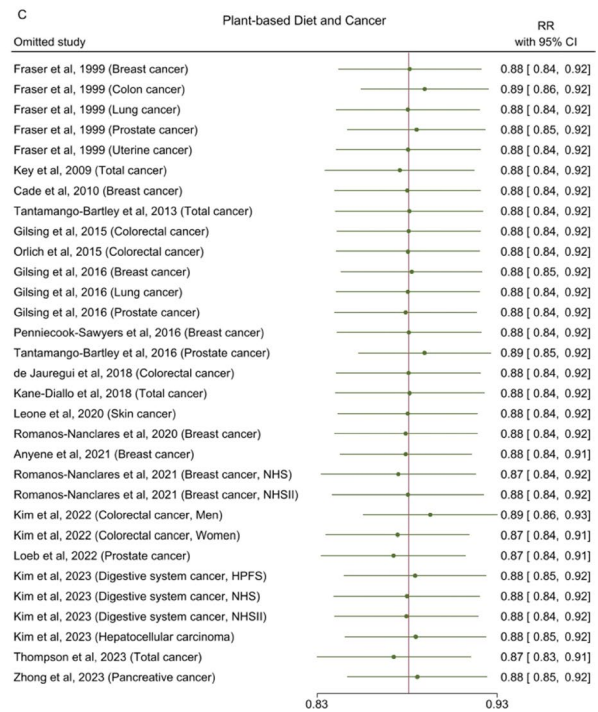
Corrected Supplemental Figure S6.



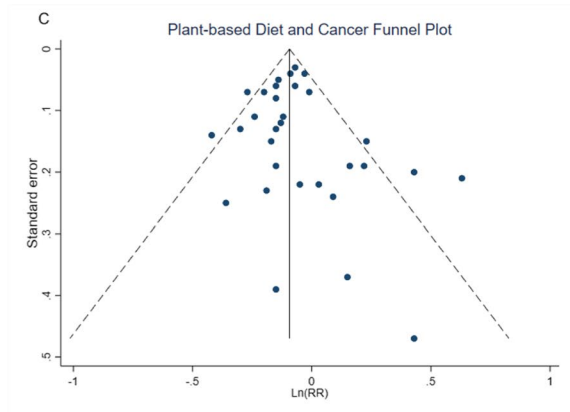
Original Supplemental Figure S8 (Panel C. Cancer)



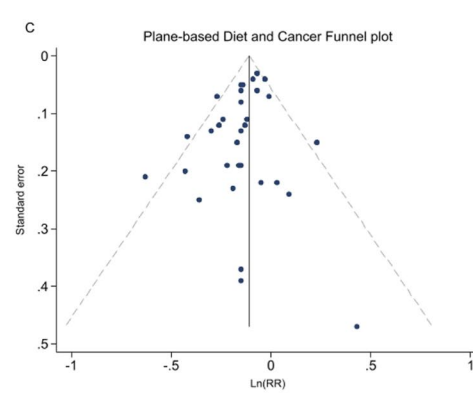
Corrected Supplemental Figure S8. (Panel C. Cancer)



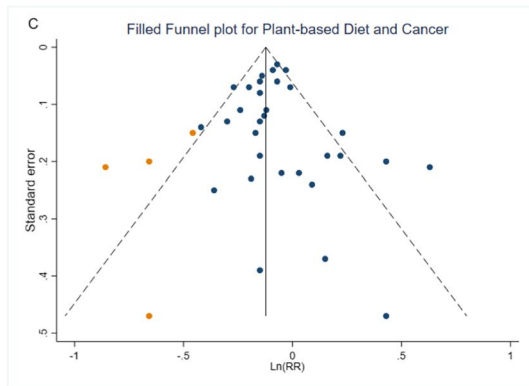
Original Supplemental Figure S11 (Panel C. Cancer)



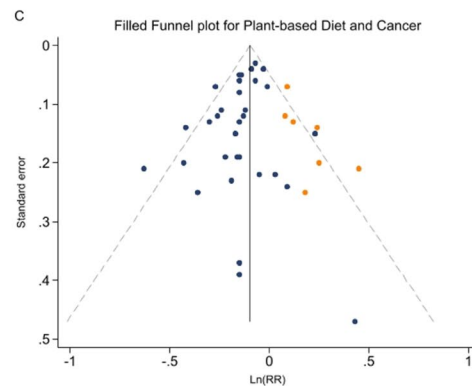
Corrected Supplemental Figure S11. (Panel C. Cancer)



Original Supplemental Figure S12 (Panel C. Cancer)



Corrected Supplemental Figure S12. (Panel C. Cancer)



Acknowledgement

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References

1. Wang Y, Liu B, Han H, et al. Associations between plant-based dietary patterns and risks of type 2 diabetes, cardiovascular disease, cancer, and mortality – a systematic review and meta-analysis. *Nutr J.* 2023;22:46. <https://doi.org/10.1186/s12937-023-00877-2>.
2. Fraser GE. Associations between diet and cancer, ischemic heart disease, and all-cause mortality in non-Hispanic white California Seventh-day Adventists. *Am J Clin Nutr.* 1999;70(3):532s–8s. <https://doi.org/10.1093/ajcn/70.3.532s>.