

**Association between Dietary phytochemical index adherence and
hypertension: a systematic review and meta-analysis of observational studies**

Electronic Supplementary Material Appendix Tables S1-S4

Electronic Supplementary Material Appendix Table S1. Search strategy to find potentially eligible trials for inclusion in this systematic review and meta-analysis.

PubMed	((("Hypertension"[Title/Abstract]) OR ("blood pressure"[Title/Abstract])) AND (((("dietary phytochemical index"[Title/Abstract]) OR ("phytochemical index"[Title/Abstract])) OR ("phytochemical score"[Title/Abstract])) OR ("phytochemical pattern"[Title/Abstract])) OR ("phytochemical style"[Title/Abstract]))	11
Scopus	((TITLE-ABS-KEY ("dietary phytochemical index") OR TITLE-ABS-KEY ("phytochemical index") OR TITLE-ABS-KEY ("phytochemical score") OR TITLE-ABS-KEY ("phytochemical pattern") OR TITLE-ABS-KEY ("phytochemical style"))) AND ((TITLE-ABS-KEY ("Hypertension") OR TITLE-ABS-KEY ("blood pressure")))	15
Web of science	Query #1 (((TS=("dietary phytochemical index")) OR TS=("phytochemical index")) OR TS=("phytochemical score")) OR TS=("phytochemical pattern")) OR TS=("phytochemical style") Query #2 (TS=("Hypertension")) OR TS=("Blood pressure") Final query: #1 and #2	17
Other sources		33
All		76
Eligible studies		9

Electronic Supplementary Material Appendix Table S2. Outcome definition in each included trial.

Study	Outcome diagnostic criteria
Bahadoran et al. 2013 (1)	blood pressure $\geq$ 130/85 mmHg or drug treatment for hypertension.
Golzarand et al. 2014 (2)	SBP $\geq$ 140 mmHg and/or DBP $\geq$ 90 mmHg and/or currently using antihypertensive drugs.
Kim and Park. 2020 (3)	blood pressure level $\geq$ 130/85 mmHg or use of antihypertension medication.
Dehghani Firouzabadi et al. 2021 (M) (4)	SBP $\geq$ 130 mmHg and/or DBP $\geq$ 85 mmHg.
Dehghani Firouzabadi et al. 2021 (F) (4)	SBP $\geq$ 130 mmHg and/or DBP $\geq$ 85 mmHg.
Ahmadi Vasmehjani et al. 2021 (5)	Blood pressure $\geq$ 130/85 mmHg
Jo and Park. 2022 (6)	SBP $\geq$ 130 mmHg or DBP $\geq$ 80 mmHg.
Gamba et al. 2023 (7)	SBP $\geq$ 130 mmHg or DBP $\geq$ 85 mmHg.
Hamedi-Shahraki et al. 2023 (8)	SBP $\geq$ 140 mmHg or DBP $\geq$ 90 mmHg or who were on treatment with antihypertensive drugs were diagnosed with hypertension.
Amani Tirani et al. 2024 (9)	Blood pressure $\geq$ 130/85 mmHg.

Abbreviations: SBP, systolic blood pressure; DBP, diastolic blood pressure.

Electronic Supplementary Material Appendix Table S3. Quality assessment of the included cross-sectional studies based on modified Newcastle-Ottawa quality assessment tool for cross-sectional studies

Newcastle–Ottawa Scale for cross-sectional studies		Bahadoran et al. 2013	Kim and Park. 2020	Dehghan i Firouzabadi et al. 2021	Ahmadi Vasmehjani et al. 2021	Jo and Park. 2022	Gamba et al. 2023	Hamed-Shahraki et al. 2023	Amani Tirani et al. 2024
Selection	Representativeness of the sample	*	*	*	*	*	*	-	*
	Sample size	*	*	*	*	*	*	*	*
	Non-respondents/missing data	*	*	*	*	*	*	-	-
	Ascertainment of the exposure (risk factor)	*	*	*	*	*	*	*	*
Comparability	Comparability of subjects in different outcome groups on the basis of design or analysis. Confounding factors controlled.	**	**	**	**	**	**	**	**
Outcome	Assessment of outcome	**	**	-	**	**	**	**	**
	Statistical test	*	*	*	*	*	*	*	*
Overall score		9 (Very Good)	9 (Very Good)	7 (Good)	9 (Very Good)	9 (Very Good)	9 (Very Good)	7 (Good)	8 (Good)

Electronic Supplementary Material Appendix Table S4. Quality assessment of the included cross-prospective study based on the Newcastle-Ottawa quality assessment tool for cohort studies.

Cohort studies	Representativeness of the sample	Selection of the non-exposed cohort	Ascertainment of exposure	Demonstration that outcome of interest was not present at start of study	Comparability of cohorts on the basis of the design or analysis	Study controls for any additional factor	Assessment of outcome	Was follow-up long enough for outcomes to occur (>10 years)	Adequacy of follow up of cohorts (loss-to follow up <20%)	Total score
Golzarand et al. 2014	*	*	*	**	**	*	*	-	-	8 (High)

According to the Newcastle-Ottawa Scale (NOS) criteria.

References

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