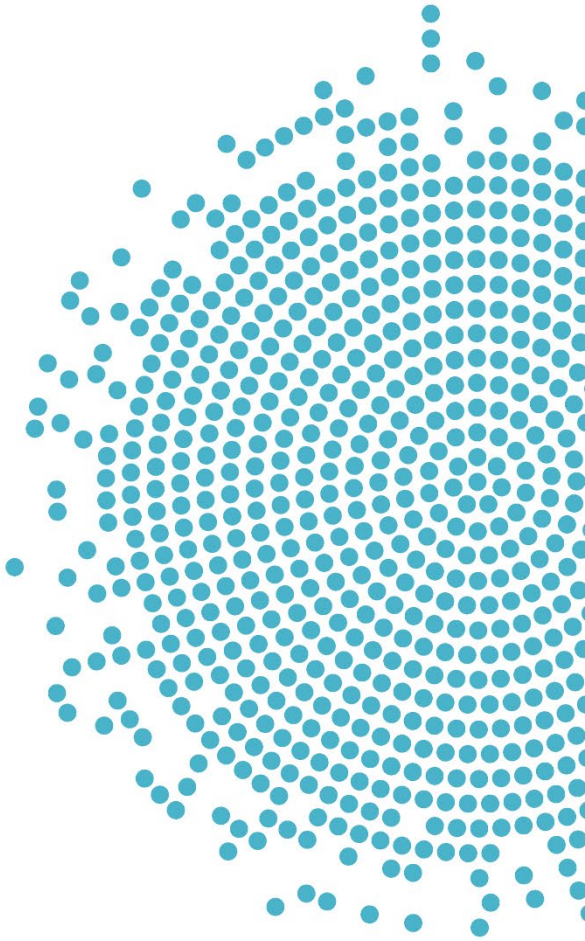
USDA
UNITED STATES DEPARTMENT OF AGRICULTURE

Dietary Patterns and Risk of Cognitive Decline, Dementia, Alzheimer's Disease, and Mild Cognitive Impairment: A Systematic Review



Sarah Booth, PhD, [a,b] Sameera Talegawkar, PhD, [a,c] Teresa Fung, ScD, RD, [a,d] Deanna M. Hoelscher, PhD, RDN, LD, CNS, FISBNPA, [a,e] Cheryl A.M. Anderson, PhD, MPH, MS, [a,f] Andrea Deierlein, PhD, MPH, MS, [a,g] Christopher Gardner, PhD, [a,h] Edward Giovannucci, MD, ScD, [a,i] Hollie Raynor, PhD, RD, LDN, [a,j] Fatima Cody Stanford, MD, MPH, MPA, MBA, FAAP, FACP, FAHA, FAMWA, FTOS, [a,i] Chris Taylor, PhD, RDN, LD, FAND, [a,k] Deirdre Tobias, ScD, [a,i] Nicole Reigh, PhD, [l] Laural Kelly English, PhD, [m] Molly Higgins, MLIS, [n] Gisela Butera, MEd, MLIS, [o] Nancy Terry, MLIS [o] Julie Obbagy, PhD, RD, [p]

[a] Dietary Patterns and Specific Dietary Pattern Components Across Life Stages Subcommittee, 2025 Dietary Guidelines Advisory Committee

[b] Tufts University, Committee Chair

[c] The George Washington University

[d] Simmons University

[e] UT Health Houston School of Public Health, Subcommittee Chair

[f] University of California San Diego

[g] New York University

[h] Stanford University

[i] Harvard University

[j] University of Tennessee Knoxville

[k] The Ohio State University

[l] Systematic Review Analyst, Nutrition Evidence Systematic Review (NESR) Branch; Panum Telecom, LLC (A wholly owned subsidiary of Aretum), under contract with FNS, USDA

[m] Systematic Review Analyst, NESR Branch; Nutrition Guidance and Analysis Division (NGAD), Center for Nutrition Policy and Promotion (CNPP), Food and Nutrition Service (FNS), U.S. Department of Agriculture (USDA)

[n] Systematic Review Librarian, NESR Branch; NGAD, CNPP, FNS, USDA

[o] Biomedical Librarian/Informationist, National Institutes of Health Library

[p] Branch Chief, NESR Branch; NGAD, CNPP, FNS, USDA

NESR

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Table of contents

Plain-language summary

What is the question?
The question is: What is the relationship between dietary patterns consumed and risk of cognitive decline, dementia, Alzheimer's disease, and mild cognitive impairment? The population of interest for this question include children and adolescents, and adults and older adults at intervention/exposure, and adults and older adults at outcome.

Why was this question asked?
This systematic review was conducted by the 2025 Dietary Guidelines Advisory Committee as part of the process to develop the *Dietary Guidelines for Americans, 2025-2030*.

How was this question answered?
The Committee conducted a systematic review to answer this question with support from the USDA Nutrition Evidence Systematic Review team. This review updated an existing review that was conducted by the Dietary Patterns Subcommittee of the 2020 Dietary Guidelines Advisory Committee.

What is the answer to the question?
Dietary patterns consumed by adults and older adults that are characterized by higher intakes of vegetables, fruits, legumes or beans, nuts, fish and/or seafood, and unsaturated vegetable oils/fats and lower in red and processed meats and sugar-sweetened beverages, are associated with lower risk of age-related cognitive decline, mild cognitive impairment, dementia and/or Alzheimer's disease. This conclusion statement is based on evidence graded as moderate.

How up-to-date is this systematic review?
The conclusion statement from this review is based on articles published between March 2020 and January 2024, as well as studies that were excluded from prior reviews but met the updated inclusion criteria.

Abstract

Background

This systematic review was conducted by the 2025 Dietary Guidelines Advisory Committee as part of the process to develop the *Dietary Guidelines for Americans, 2025-2030*. The U.S. Departments of Health and Human Services (HHS) and Agriculture (USDA) appointed the 2025 Dietary Guidelines Advisory Committee (Committee) in January 2023 to review evidence on high priority scientific questions related to diet and health. Their review forms the basis of their independent, science-based advice and recommendations to HHS and USDA, which is considered as the Departments develop the next edition of the *Dietary Guidelines*. As part of that process, the Committee conducted a systematic review with support from USDA's Nutrition Evidence Systematic Review (NESR) team to answer the following question: What is the relationship between dietary patterns and risk of cognitive decline, dementia, Alzheimer's disease, and mild cognitive impairment? This review is an update to an existing review that was conducted by the *2020 Dietary Guidelines Advisory Committee.*

Methods

The Committee conducted a systematic review using the methodology of the USDA NESR team. The Committee first developed a protocol. The intervention/exposure was consumption of a dietary pattern in children and adolescents, and adults and older adults, the comparator was consumption of a different dietary pattern or different adherence/consumption levels to the same dietary pattern, and the outcomes were measures of cognitive decline, dementia, Alzheimer's disease, and mild cognitive impairment. Additional inclusion criteria were established for the following study characteristics: a) use randomized or non-randomized controlled trial, prospective or retrospective cohort, or nested case-control study designs, b) be published in English in peer-reviewed journals, c) be from countries classified as high or very high on the Human Development Index, and d) enroll participants with a range of health statuses. The review excluded studies that did not control for any of the key confounders identified in the analytic framework, interventions with a length <12 weeks, or interventions that included <30 participants per study group for between-subject analyses and did not provide a power calculation indicating that the study was appropriately powered for the outcomes of interest.

NESR librarians conducted a literature search in PubMed, Embase, and Cochrane to identify articles published between March 2020 and January 2024. Two NESR analysts independently screened all electronic results and the reference lists of included articles based on the pre-determined criteria.

NESR analysts extracted data, from each included article, with a second analyst verifying accuracy of the extraction. Two NESR analysts independently conducted a formal risk of bias assessment, by study design, for each included article, then reconciled any differences in the assessment. The Committee qualitatively synthesized the evidence, with attention given to the overarching themes or key concepts from the findings, similarities and differences between studies, and factors that may have affected the results. The Committee developed a conclusion statement and graded the strength of evidence based on its consistency, precision, risk of bias, directness and generalizability. The Committee developed a conclusion statement by starting with the conclusion from the existing review and determining whether and what updates were needed based on the newly published evidence. After establishing the need for updating the review, the Committee then graded the strength of evidence for the conclusion statement based on its consistency, precision, risk of bias, directness and generalizability.

Results

Dietary patterns and risk of cognitive decline, dementia, Alzheimer's disease, and mild cognitive impairment.

Conclusion statement and grade: Dietary patterns consumed by adults and older adults that are characterized by higher intakes of vegetables, fruits, legumes or beans, nuts, fish and/or seafood, and unsaturated vegetable oils/fats and lower in red and processed meats and sugar-sweetened beverages, are associated with lower risk of age-related cognitive decline, mild cognitive impairment, dementia and/or Alzheimer's disease. This conclusion statement is based on evidence graded as moderate. (Grade: Moderate)

Summary of the evidence:

- Eighty-three articles met inclusion for this review, including 1 randomized controlled trial, 1 nested case-control study, and 81 prospective cohort studies.
- The direction of results was similar across studies, but effect size differed.
- The sizes of study groups were adequate or large, though confidence intervals ranged from narrow to wide across studies.
- Some studies were designed and conducted well, though many were at high or very high risk of bias.
- The populations, interventions/exposures, and comparators that were examined directly represent those of interest in this review, but there were concerns with the directness of outcome assessment.
- The dietary patterns, outcomes, and participant characteristics are applicable to the U.S. population.

Introduction

To prepare for the development of the *Dietary Guidelines for Americans, 2025-2030*, the U.S. Departments of Health and Human Services (HHS) (Appendix 1) and Agriculture (USDA) identified a proposed list of scientific questions based on relevance, importance, potential federal impact, and avoiding duplication, which were posted for public comment.[*] The Departments appointed the 2025 Dietary Guidelines Advisory Committee (Committee) in January 2023 to review evidence on the scientific questions. The Committee's review of the evidence forms the basis of the Scientific Report of the 2025 Dietary Guidelines Advisory Committee[†], which includes independent, science-based advice and recommendations to HHS and USDA and is considered during the development of the next edition of the *Dietary Guidelines*.

The proposed scientific questions were refined and prioritized by the Committee for consideration in their review of the evidence. As part of that process, the following systematic review question was prioritized: What is the relationship between dietary patterns consumed and risk of cognitive decline, dementia, Alzheimer's disease, and mild cognitive impairment? The Committee conducted a systematic review to address this question, with support from USDA's Nutrition Evidence Systematic Review (NESR) team. This review is an update to the systematic review conducted by the 2020 Dietary Guidelines Advisory Committee (**Table 1**), and the conclusion statements developed as part of that existing work can be found in **Appendix 2**.

Table 1. Review history

Date	Description	Citation
February 2015	Original systematic review conducted by the 2015 Dietary Guidelines Advisory Committee published	2015 Dietary Guidelines Advisory Committee: Systematic Reviews of the Dietary Patterns, Foods and Nutrients, and Health Outcomes Subcommittee. February 2015. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: https://nesr.usda.gov/sites/default/files/2019-04/2015DGAC-SR-DietaryPatterns.pdf
July 2020	Updated systematic review published by the 2020 Dietary Guidelines Advisory Committee	Bouchey C, Ard J, Bazzano L, Heymsfield S, Mayer-Davis E, Sabaté J, Snetselaar L, Van Horn L, Schneeman B, English LK, Bates M, Callahan E, Venkatramanan S, Butera G, Terry N, Obbagy J. Dietary Patterns and Neurocognitive Health: A Systematic Review. July 2020. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: https://doi.org/10.52570/NESR.DGAC2020.SR0106
October 2023	Systematic review protocol for the 2025 Dietary Guidelines Advisory Committee published online	Hoelscher DM, Anderson C, Booth S, Deierlein A, Fung T, Gardner C, Giovannucci E, Raynor H, Stanford FC, Talegawkar S, Taylor C, Tobias D, Obbagy J, Callahan E, English LK, Fultz A, Raghavan R, Reigh N, Higgins M, Butera G, Terry N. Dietary Patterns and Risk of Cognitive Decline: A Systematic Review Protocol. May 2023. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: https://nesr.usda.gov/protocols

[*] Dietary Guidelines for Americans: Learn About the Process. 2022. Available at: https://www.dietaryguidelines.gov/work-under-way/learn-about-process

[†] 2025 Dietary Guidelines Advisory Committee. 2024. Scientific Report of the 2025 Dietary Guidelines Advisory Committee: Advisory Report to the Secretary of Health and Human Services and Secretary of Agriculture. U.S. Department of Health and Human Services. https://doi.org/10.52570/DGAC2025

Date	Description	Citation
February 2024	Revisions to the systematic review protocol for the 2025 Dietary Guidelines Advisory Committee published online	Hoelscher DM, Anderson C, Booth S, Deierlein A, Fung T, Gardner C, Giovannucci E, Raynor H, Stanford FC, Talegawkar S, Taylor C, Tobias D, Obbagy J, Callahan E, English LK, Fultz A, Raghavan R, Reigh N, Higgins M, Butera G, Terry N. Dietary Patterns and Risk of Cognitive Decline: A Systematic Review Protocol. May 2023. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: https://nesr.usda.gov/protocols

Methods

The Committee used NESR's methodology to conduct this systematic review. NESR's methodology is described in detail in its methodology manual,[*] as well as in the Committee's Scientific Report[†]. This section presents an overview of the specific methods used to answer the systematic review question: What is the relationship between dietary patterns consumed and risk of cognitive decline, dementia, Alzheimer's disease, and mild cognitive impairment?

This systematic review is an update to an existing NESR systematic review completed as part of the 2020-2025 Dietary Guidelines Advisory Committee,[‡] which included evidence published from January 2014 to February 2020. Eligible studies published since March 2020, as well as studies that were previously excluded due to size of study groups, were synthesized, and the new evidence was assessed as it relates to the existing evidence, according to the methods described below.

Develop a protocol

A systematic review protocol is the plan for how NESR's methodology will be used to conduct a specific systematic review and is established by the Committee, *a priori*, before any evidence is reviewed. The protocol is designed to capture the most appropriate and relevant body of evidence to answer the systematic review question. Development of the protocol involves discussion of the strengths and limitations of various methodological approaches relevant to the question, which then inform subsequent steps of the systematic review process. The protocol describes all of the methods that will be used throughout the systematic review process. Additionally, the protocol includes the following components, which are tailored to each systematic review question: the analytic framework, the inclusion and exclusion criteria, and the synthesis plan. The Committee used the analytic framework and the inclusion and exclusion criteria from the existing review and made adjustments to the protocol, as needed. Differences in the inclusion and exclusion criteria between existing and updated reviews are documented in **Appendix 3**.

The protocol was posted online (https://nesr.usda.gov/protocols) for the public to view and comment on. Revisions to the systematic review protocol were made during the review process. These amendments are documented in **Table 2**.

[*] USDA Nutrition Evidence Systematic Review Branch. USDA Nutrition Evidence Systematic Review: Methodology Manual. February 2023. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: https://nesr.usda.gov/methodology-overview

[†] 2025 Dietary Guidelines Advisory Committee. 2024. Scientific Report of the 2025 Dietary Guidelines Advisory Committee: Advisory Report to the Secretary of Health and Human Services and Secretary of Agriculture. U.S. Department of Health and Human Services. https://doi.org/10.52570/DGAC2025

[‡] Bouchey C, Ard J, Bazzano L, Heymsfield S, Mayer-Davis E, Sabaté J, Snetselaar L, Van Horn L, Schneeman B, English LK, Bates M, Callahan E, Venkatramanan S, Butera G, Terry N, Obbagy J. Dietary Patterns and Neurocognitive Health: A Systematic Review. July 2020. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: https://doi.org/10.52570/NESR.DGAC2020.SR0106

Table 2. Protocol revisions

Date	Protocol revision	Description
January 2024	Inclusion and exclusion criteria for publication date were updated to document that the review will include studies published through January 2024.	This revision was made to document the final publication date range covered by the literature search.

Develop an analytic framework

An analytic framework visually represents the overall scope of the systematic review question and depicts the contributing elements that were examined and evaluated. It presents the core elements of each systematic review question, including the **P**opulation (i.e., those who experience the intervention/exposure and/or outcome), **I**ntervention and/or exposure (i.e., the independent variable of interest), **C**omparator (i.e., the alternative being compared to the intervention or exposure), and **O**utcome(s). Definitions for key terms are also included because they provide the basis for how concepts are operationalized throughout the review. The Committee identified key confounders based on their knowledge of nutrition and health research and experience as subject matter experts. Key confounders are participant characteristics, such as demographics, health status, and diet and lifestyle behaviors, and/or other factors related to both the intervention/exposure and the outcome of interest that may impact the relationships of interest. Key confounders were considered during review and evaluation of the evidence, particularly during the risk of bias assessment of non-randomized and observational studies.

Figure 1 is the analytic framework for the systematic review. The intervention or exposure of interest is dietary patterns consumed by children, adolescents, adults, and older adults. The comparators are different dietary patterns or different levels of adherence to/consumption of the same dietary pattern. The outcomes are cognitive decline, mild cognitive impairment, dementia, and Alzheimer's disease in adults and older adults. The key confounders are sex, age, physical activity, anthropometry, race and/or ethnicity, education, and socioeconomic position in all populations, alcohol intake and smoking in adults, older adults. Dietary patterns are defined as the quantities, proportions, variety, or combination of different foods, drinks, and nutrients (when available) in diets, and the frequency with which they are habitually consumed.

Figure 1. Analytic framework for the systematic review question: What is the relationship between dietary patterns and risk of cognitive decline, dementia, Alzheimer's disease, and mild cognitive impairment?

Population	***Intervention/ exposure***	***Comparator***	***Outcome***	***Key confounders***
Children and adolescents (2 years up to 19 years) Adults and older adults (19 years and older)	Consumption of a dietary pattern	• Different dietary pattern(s) • Different adherence/ consumption levels to the same dietary pattern	In adults and older adults: • Cognitive decline • Mild cognitive impairment • Dementia • Alzheimer's disease	• Sex • Age • Physical activity • Anthropometry • Race and/or ethnicity • Socioeconomic position • Education • Smoking (adults, older adults) • Alcohol intake (adults, older adults)

Synthesis organization:

I. ***Population:*** Adults and older adults

a. ***Outcome:*** Cognitive decline, mild cognitive impairment, dementia, Alzheimer's disease

i. ***Intervention/exposure:*** Consumption of a dietary pattern

Key definitions:

Dietary patterns: the quantities, proportions, variety, or combination of different foods, drinks, and nutrients (when available) in diets, and the frequency with which they are habitually consumed.

Develop inclusion and exclusion criteria

The inclusion and exclusion criteria provide an objective, consistent, and transparent framework for determining which articles to include in the systematic review (**Table 3**). These criteria ensure that the most relevant and appropriate body of evidence is identified for the systematic review question, and that the evidence reviewed is[*]:

- Applicable to the U.S. population of interest
- Relevant to Federal public health nutrition policies and programs
- Rigorous from a scientific perspective

[*]USDA Nutrition Evidence Systematic Review Branch. USDA Nutrition Evidence Systematic Review: Methodology Manual. February 2023. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: https://nesr.usda.gov/methodology-overview

Table 3. Inclusion and exclusion criteria

Category	Inclusion Criteria	Exclusion Criteria
Study design	• Randomized controlled trials • Non-randomized controlled trials[*] • Prospective cohort studies • Retrospective cohort studies • Nested case-control studies	• Uncontrolled trials[†] • Case-control studies • Cross-sectional studies • Ecological studies • Narrative reviews • Systematic reviews • Meta-analyses • Modeling and simulation studies • Mendelian randomization studies
Publication date	• Before January 1980, after January 2024	• January 1980 – January 2024[‡]
Population: Study participants	• Human	• Non-human

Population:
Life stage
	• At intervention or exposure:
	  ○ Children and adolescents (2 up to 19 years)
	  ○ Adults and older adults (19 years and older)
	• At outcome:
	  ○ Adults and older adults (19 years and older)
		• At intervention or exposure:
		  ○ Infants and young children (birth up to 24 months)
		  ○ Individuals during pregnancy
		  ○ Individuals during postpartum
		• At outcome:
		  ○ Children and adolescents (2 up to 19 years)

Population:
Health status
	• Studies that <u>exclusively</u> enroll participants not diagnosed with a disease[§]
	• Studies that enroll <u>some</u> participants:
	  ○ diagnosed with a disease;
	  ○ with severe undernutrition, failure to thrive/underweight, stunting, or wasting;
	  ○ with the outcome of interest
	  ○ and/or hospitalized for an illness, injury, or surgery[**]
		• Studies that <u>exclusively</u> enroll participants:
		  ○ diagnosed with a disease;[††]
		  ○ with severe undernutrition, failure to thrive/underweight, stunting, or wasting;
		  ○ pre- or post-bariatric surgery;
		  ○ and/or hospitalized for an illness, injury, or surgery[‡‡]

[*] Including quasi-experimental and controlled before-and-after studies

[†] Including uncontrolled before-and-after studies

[‡] This review update date range encompasses the original systematic review date range, which included articles published from January 1980 to January 2014.

[§] Studies that enroll participants who are at risk for chronic disease were included

[**] Studies that exclusively enroll participants post-cesarean section were included

[††] Studies that exclusively enroll participants with obesity were included

[‡‡] Studies that exclusively enroll participants post-cesarean section were included

Category	Inclusion Criteria	Exclusion Criteria
Intervention/ exposure	• Studies that examine consumption of and/or adherence to a dietary pattern [i.e., the quantities, proportions, variety, or combination of different foods, drinks, and nutrients (when available) in diets, and the frequency with which they are habitually consumed], including, at a minimum, a description of the foods and beverages in the pattern of each intervention/exposure and comparator group ○ Dietary patterns may be measured or derived using a variety of approaches, such as adherence to *a priori* patterns (indices/scores), data driven patterns (factor or cluster analysis), reduced rank regression, or other methods, including clinical trials • Multi-component intervention in which the isolated effect of the intervention of interest on the outcome(s) of interest is provided or can be determined	• Studies that do not provide a description of the dietary pattern, which at minimum, must include the foods and beverages in the pattern (i.e., studies that examine a labeled dietary pattern, but do not describe the foods and beverages consumed) in each intervention/exposure and comparator group • Multi-component intervention in which the isolated effect of the dietary pattern on the outcome(s) of interest is not analyzed or cannot be determined (e.g., due to multiple intervention components within groups)
Comparator	• Consumption of and/or adherence to a different dietary pattern Different levels of consumption of and/or adherence to a dietary pattern	• Consumption of and/or adherence to a similar dietary pattern of which only a specific component or food source is different between groups
Outcome(s)	• Cognitive decline • Mild cognitive impairment • Dementia Alzheimer's disease	• N/A
Study duration	• Intervention length ≥12 weeks	• Intervention length <12 weeks
Size of study groups	• For intervention studies: ○ ≥30 participants per study group for between-subject analyses, • or a power calculation indicating that the study is appropriately powered for the outcome(s) of interest.	• For intervention studies: ○ <30 participants per study group for between-subject analyses, • and no power calculation indicating that the study is appropriately powered for the outcome(s) of interest.
Confounders	• Studies that control for at least one of the key confounders listed in the analytic framework	• Studies that do not control for any of the key confounders listed in the analytic framework
Publication status	• Peer-reviewed articles published in research journals	• Non-peer-reviewed articles, unpublished data or manuscripts, pre-prints, reports, editorials, retracted articles, and conference abstracts or proceedings
Language	• Published in English	• Not published in English

Category	Inclusion Criteria	Exclusion Criteria
Country*	• Studies conducted in countries classified as high or very high on the Human Development Index the year(s) the intervention/exposure data were collected	• Studies conducted in countries classified as medium or low on the Human Development Index the year(s) the intervention/exposure data were collected

Search for and screen studies

NESR librarians, in collaboration with NESR analysts and the Committee, used the analytic framework and inclusion and exclusion criteria to develop a comprehensive literature search strategy. The literature search strategy included selecting and searching the appropriate bibliographic databases, translating search using syntax appropriate for the databases being searched, and employing search refinements, such as search filters. For existing reviews, search strategies were updated, as appropriate, for each database. The full literature search is documented in **Appendix 4**.

The results of all electronic database searches, after removal of duplicates, were screened independently by two NESR analysts using a step-wise process by reviewing titles, abstracts, and full-texts to determine which articles meet the inclusion criteria. Manual searching was conducted to find peer-reviewed published articles not identified through the electronic database search. These articles were also screened independently by 2 NESR analysts at the abstract and full-text levels.

Extract data and assess the risk of bias

NESR analysts extracted all essential data from each included article to describe key characteristics of the available evidence, such as the author, publication year, cohort/trial name, study design, population life stage at intervention/exposure and outcome, intervention/exposure and outcome assessment methods, and outcomes. One NESR analyst extracted the data and a second NESR analyst reviewed the extracted data for accuracy. Each article included in the systematic review underwent a formal risk of bias assessment, with 2 NESR analysts independently completing the risk of bias assessment using the tool that is appropriate for the study design.[†‡§]

Synthesize the evidence

The Committee described, compared, and combined the evidence from all included studies to answer the systematic review question[**]. Synthesis of the body of evidence involved identifying overarching themes or key concepts from the findings, identifying and explaining similarities and differences between studies, and

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[*] The classification of countries on the Human Development Index (HDI) is based on the UN Development Program Human Development Report Office (http://hdr.undp.org/en/data) for the year the study intervention occurred or data were collected. If the study does not report the year(s) in which the intervention/exposure data were collected, the HDI classification for the year of publication is applied. Studies conducted prior to 1990 are classified based on 1990 HDI classifications. If the year is more recent than the available HDI values, then the most recent HDI classifications are used. If a country is not listed in the HDI, then the current country classification from the World Bank is used (The World Bank Country and Lending Groups, available from: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-country-and-lending-groups)

[†] Sterne JAC, Savović J, Page MJ, et al. RoB 2: a revised tool for assessing risk of bias in randomised trials. *BMJ* 2019; 366: l4898.doi:10.1136/bmj.l4898

[‡] Sterne JAC, Hernán MA, Reeves BC, et al. ROBINS-I: a tool for assessing risk of bias in non-randomized studies of interventions. BMJ 2016; 355; i4919; doi: 10.1136/bmj.i4919

[§] Higgins JPT, Morgan RL, Rooney AA, et al. A tool to assess risk of bias in non-randomized follow-up studies of exposure effects (ROBINS-E). *Environment International* 2024 (published online Mar 24); doi: 10.1016/j.envint.2024.108602.

[**] USDA Nutrition Evidence Systematic Review Branch. USDA Nutrition Evidence Systematic Review: Methodology Manual. February 2023. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: https://nesr.usda.gov/methodology-overview

determining whether certain factors impact the relationships being examined, which includes potential causes of heterogeneity across all included evidence.

Extracted data and risk of bias assessments for all included studies were tabulated to visually display results and facilitate synthesis. During synthesis, the Committee considered the effect direction, magnitude, and statistical significance of the results reported across the articles included in the body of evidence. The evidence was synthesized qualitatively without meta-analysis of effect estimates, statistical pooling or conversion of data, or quantitative tests of heterogeneity.

The synthesis plan for this review was designed with the end-use in mind, to inform the Committee's advice to HHS and USDA regarding dietary guidance across life stages. The first level of synthesis organization was by population at intervention or exposure. When synthesizing dietary patterns evidence, focus was placed on the food and beverage components of the dietary patterns examined in the included studies (i.e., fruits, vegetables, whole grains, seafood), and not on the "label" or "name" of the pattern assigned by researchers (e.g., Mediterranean, DASH). To accomplish this, data visualizations were created to illustrate the components reflected in each dietary pattern studied. These visualizations allowed the Committee to compare and contrast the results across patterns while also identifying common foods and beverages reflected in patterns associated with beneficial, null, or adverse health outcomes.[*]

Develop a conclusion statement and grade the evidence

After the Committee synthesized the body of evidence, they drafted a conclusion statement. A conclusion statement is one or more summary statements carefully constructed to answer the systematic review question. Each conclusion statement reflects the evidence reviewed, as outlined in the analytic framework (e.g., PICO elements) and synthesis plan, and does not take evidence from other sources into consideration. Conclusion statements do not draw implications and should not be interpreted as dietary guidance. The Committee reviewed, discussed, and revised the conclusion statement[s] until they reached agreement on wording that accurately reflected the body of evidence.

The Committee then developed a conclusion statement by starting with the conclusion from the existing review and determining whether updates were needed based on the newly published evidence. In doing so, the Committee determined if the existing conclusion statements and grades should be retained without any modifications or should be updated to appropriately reflect both the existing review and the newer evidence.[†]

The Committee then graded the strength of the evidence underlying each conclusion statement. They do this using NESR's predefined criteria, based on five grading elements: consistency, precision, risk of bias, directness and generalizability of the evidence. Study design and publication bias were also considered.[‡]

- Consistency: Consistency considers the degree of similarity in the direction and magnitude of effect across the body of evidence. This element also considers whether differences across the results can be explained by variations in study designs and methods.

[*] English LK, Raghavan R, Obbagy JE, et al. Dietary Patterns and Health: Insights From NESR Systematic Reviews to Inform the Dietary Guidelines for Americans. JNEB. 2024 Jan; 56(4):75-87. doi: 10.1016/j.jneb.2023.10.001

[†] USDA Nutrition Evidence Systematic Review Branch. USDA Nutrition Evidence Systematic Review: Methodology Manual, Chapter 8: Updating NESR Systematic Reviews. February 2023. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: https://nesr.usda.gov/methodology-overview

[‡] Spill MK, English LK, Raghavan R, et al. Perspective: USDA Nutrition Evidence Systematic Review Methodology: Grading the Strength of Evidence in Nutrition- and Public Health-Related Systematic Reviews. Adv Nutr. 2022 Aug 1;13(4):982-991. doi: 10.1093/advances/nmab147

- Precision: Precision considers the degree of certainty around an effect estimate for a given outcome. This element considers measures of variability, such as the width and range of confidence intervals, the number of studies, and sample sizes, within and across studies.
- Risk of bias: Risk of bias considers the likelihood that systematic errors resulting from the design and conduct of the studies could have impacted the accuracy of the reported results across the body of evidence.
- Directness: Directness considers the extent to which studies are designed to directly examine the relationship among the interventions/exposures, comparators, and outcome(s) of primary interest in the systematic review question.
- Generalizability: Generalizability considers whether the study participants, interventions and/or exposures, comparators, and outcomes examined in the body of evidence are applicable to the U.S. population of interest for the review.

The Committee assigned a grade to each conclusion statement (i.e., strong, moderate, limited, or grade not assignable). The grade communicates the strength of the evidence supporting a specific conclusion statement to decision makers and stakeholders. A conclusion statement can receive a grade of Strong, Moderate, or Limited, and if insufficient or no evidence is available to answer a systematic review question, then no grade is assigned (i.e., Grade Not Assignable) (**Table 4**). The overall grade is not based on a predefined formula for scoring or tallying ratings of each element. Rather, each overall grade reflects the expert group's thorough consideration of all of the grading elements, as they each relate to the specific nuances of the body of evidence under review.

Table 4. Definitions of NESR grades

Grade	Definition
Strong	The conclusion statement is based on a strong body of evidence as assessed by consistency, precision, risk of bias, directness, and generalizability. The level of certainty in the conclusion is strong, such that if new evidence emerges, modifications to the conclusion are unlikely to be required.
Moderate	The conclusion statement is based on a moderate body of evidence as assessed by consistency, precision, risk of bias, directness, and generalizability. The level of certainty in the conclusion is moderate, such that if new evidence emerges, modifications to the conclusion may be required.
Limited	The conclusion statement is based on a limited body of evidence as assessed by consistency, precision, risk of bias, directness, and generalizability. The level of certainty in the conclusion is limited, such that if new evidence emerges, modifications to the conclusion are likely to be required.
Grade Not Assignable	A conclusion statement cannot be drawn due to either a lack of evidence, or evidence that has severe limitations related to consistency, precision, risk of bias, directness, and generalizability.

Recommend future research

The Committee identified and documented research gaps and methodological limitations throughout the systematic review process. These gaps and limitations are used to develop research recommendations that describe the research, data, and methodological advances that are needed to strengthen the body of evidence on a particular topic. Rationales for the necessity of additional or stronger research are also provided with the research recommendations.

Peer review

This systematic review underwent external peer review in a process coordinated by staff from the National Institutes of Health (NIH). NIH staff identified potential peer reviewers through outreach to a variety of professional organizations to select academic reviewers from U.S. colleges and universities across the country with a doctorate degree, including MDs, and expertise specific to the questions being reviewed. All peer reviewers were external to the *Dietary Guidelines* process, and therefore, current Committee members or Federal staff who supported the Committee or the development of the *Dietary Guidelines* were not eligible to serve as peer reviewers.

The peer review process was anonymous and confidential in that the peer reviewers were not identified to the Committee members or NESR staff, and in turn, the reviewers were asked not to share or discuss the review with anyone. Peer reviewers were made aware that per USDA, Food and Nutrition Service (FNS) agency policy, all peer reviewer comments would be summarized and made public, but comments would not be attributed to a specific reviewer.

Peer review occurred after draft conclusion statements were discussed by the full Committee at its third, fourth, fifth, and sixth public meetings. NICHDH staff assigned and distributed the reviews to at least 2 peer reviewers based on area of expertise. Following peer review, the Committee reviewed and discussed comments and made revisions to the systematic review, as needed, based on the discussion.

Health equity considerations

The Committee was charged by HHS and USDA to review all scientific questions with a health equity lens to ensure that the next edition of the *Dietary Guidelines* is relevant to people with diverse racial, ethnic, socioeconomic, and cultural backgrounds. The Committee made a number of health equity considerations throughout the NESR systematic review process. The Committee's Scientific Report[*] includes a more detailed discussion of their approach to applying a health equity lens to their review of evidence, but examples include consideration of key confounders relevant to health equity and assessment of generalizability of the evidence.

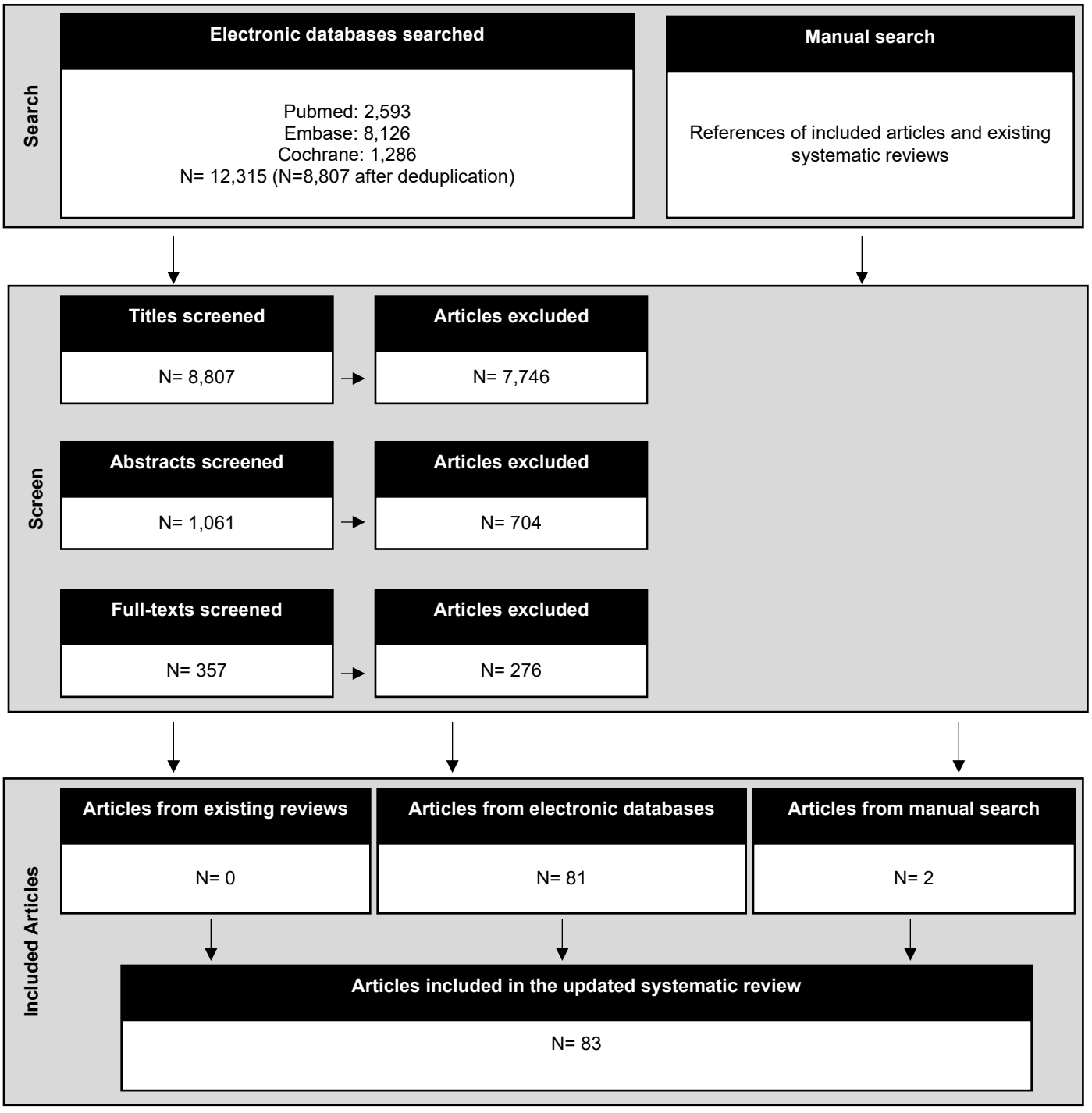
Results

Literature search and screening results

The literature search (Appendix 3) yielded 8,807 search results after the removal of duplicates (see **Figure 2**). Dual-screening resulted in the exclusion of 7,746 titles, 704 abstracts, and 276 full-texts articles. Reasons for full-text exclusion are in **Appendix 5**. Two additional articles were identified from the manual search. The body of evidence included 83 articles.

[*] 2025 Dietary Guidelines Advisory Committee. 2024. Scientific Report of the 2025 Dietary Guidelines Advisory Committee: Advisory Report to the Secretary of Health and Human Services and Secretary of Agriculture. U.S. Department of Health and Human Services. https://doi.org/10.52570/DGAC2025

Figure 2. Literature search and screen flowchart



Description of the evidence

Eighty-three articles met inclusion criteria examining the relationship between dietary patterns consumed and risk of cognitive decline, dementia, Alzheimer's disease, and/or mild cognitive impairment (see **Table 6**). Included articles were published between January 2012 and February 2024 and came from the following study designs: 1 article from a randomized controlled trial[1] (RCT) and 82 articles from observational studies (1 nested case-control study,[2] and 81 prospective cohort studies[3-83]).

Population

Analytic sample size of study group of the 1 RCT was N=571.[1] Among observational studies, sample size of study groups ranged from N=76[59] up to N=180,532[75]. Follow-up times for the RCT were conducted at 6 months, 1 year, 2 years, and 3 years[1]. Among observational studies, all participants were followed for a mean of at least 1.5 years, but the mean follow-up duration across observational evidence ranged between 18 months/1.5 years up to 31 years. Follow-up duration was not specified in 4 observational studies[22, 32, 38, 71].

Collectively, studies were conducted in a total of 18 countries. Twenty-nine (n=29) articles were published using data collected in the United States, including 1 RCT,[1] with the following 19 cohorts represented in the observational data:

- Rush Memory and Aging Project (MAP),[22, 47, 48, 64, 71, 73] n= 6
- Framingham Heart Study (FHS) Offspring Cohort,[9, 44, 65] n=3
- Nurses' Health Study (NHS),[2, 45, 76] n=3
- Chicago Health and Aging Project,[3, 38, 71] n=3
- Boston Puerto Rican Health Study (BPRHS),[7, 43] n=2
- Health and Retirement Study (HRS),[9, 39] n=2
- National Health and Nutrition Examination Survey (NHANES) II,[6] n=1
- Multi-Ethnic Study of Atherosclerosis (MESA),[19] n=1
- Geisinger Rural Aging Study (GRAS),[23] n=1
- Honolulu-Asia Aging Study (HAAS),[25] n=1
- Washington Heights-Inwood Columbia Aging Project (WHICAP),[29] n=1
- Atherosclerosis Risk in Communities (ARIC) Study,[31] n=1
- Age-Related Eye Disease Studies 2,[33] n=1
- Hispanic Community Health Study/Study of Latinos (HCHS/SOL),[49] n=1
- Wisconsin Registry for Alzheimer's Prevention (WRAP),[50] n=1
- Women's Antioxidant Cardiovascular Study (WACS),[69] n=1
- Women's Health Initiative Memory Study (WHIMS),[71] n=1
- Maine-Syracuse Longitudinal Study (MSLS),[72] n=1
- Whitehall II Study,[9] n=1

Additional countries and cohorts were represented in the data as follows:

- China, n=7 (China Health and Nutrition Survey (CHNS),[32, 80] n=2; Chinese Longitudinal Healthy Longevity Survey (CLHS),[37, 61, 74, 83] n=4; Effects and Mechanism Investigation of Cholesterol and Oxysterol on Alzheimer's disease (EMCOA) Study,[81] n=1)

- Spain, n=7 (European Prospective Investigation into Cancer and Nutrition (EPIC) Spain,[4] n=1; SUN (Seguimiento Universidad de Navarra) Study,[24, 51, 52, 58] n=4; PREDIMED-Plus secondary analysis,[54] n=1)
- United Kingdom, n=5 (UK Biobank,[17, 62, 75, 77] n=4; Newcastle 85+ Study,[27] n=1)
- Australia, n=4 (Sydney Memory and Ageing Study (MAS),[12, 13] n=2; Australian Diabetes, Obesity and Lifestyle Study (AusDiab),[5] n=1; Wellbeing, Eating and Exercise for a Long Life (WELL) study,[46] n=1)
- Greece, n=4 (Hellenic Longitudinal Investigation of Aging and Diet (HELIAD),[8, 42, 70] n=3; European Prospective Investigation into Cancer and Nutrition (EPIC) Greece,[67] n=1)
- Netherlands, n=4 (Rotterdam Study,[20, 21] n=2; Doetinchem Cohort Study,[55] n=1; B-Proof trial, Control group only,[68] n=1)
- Singapore, n=4 (Singapore Chinese Health Study,[35, 66, 78, 82] n=4)
- Sweden, n=4 (Malmo Diet and Cancer study (MDCS),[26] n=1; Swedish Infrastructure for Medical Population-based Life-course Environmental Research (SIMPLER),[36] n=1; Uppsala Longitudinal Study of Adult Men (ULSAM),[56] n=1; Gothenburg H70 Birth Cohort Studies,[60] n=1)
- Taiwan, n=4 (Taiwan Initiative for Geriatric Epidemiological Research (TIGER),[11, 15] n=2; Taiwan Longitudinal Study on Aging (TLSA),[30] n=1; not reported,[14] n=1)
- Canada, n=2 (Quebec Longitudinal Study on Nutrition and Successful Aging (NuAge),[18, 57] n=2)
- Italy, n=2 (Monzino 80-plus study,[53] n=1; InCHIANTI,[63] n=1)
- Japan, n=2 (Ohsaki Cohort Study & Ohsaki Cohort 2006 Study,[40] n=1; National Institute for Longevity Sciences-Longitudinal Study of Aging (NILS-LSA) project,[79] n=1)
- Denmark, n=1 (Copenhagen General Population Study,[34] n=1)
- Finland, n=1 (Cardiovascular Risk in Young Finns Study (YFS),[10] n=1)
- Malaysia, n=1 (Long Term Research Grant Scheme-Towards Useful Ageing (LRGS-TUA),[41] n=1)
- Portugal, n=1 (SWITCHBOX consortium,[59] n=1)
- Scotland, n=1 (Lothian Birth Cohort 1936 (LBC1936),[16] n=1)
- Multiple European Union countries (Belgium, France, Greece, Italy, Spain, Sweden, Switzerland, The Netherlands, UK), n=1 (European Prevention of Alzheimer's Dementia Longitudinal Cohort Study (EPAD LCS),[28] n=1)

Health Status

Participants across many studies were at high-risk for diet-related chronic disease based on either BMI, overweight or obesity, hypertension, or other cardiometabolic risk factors. Specifically, the RCT exclusively enrolled participants with a BMI ≥25 (mean=33.9 kg/m2) and family history of Alzheimer's disease, and approximately half of the participants also had a history of hypertension.[1] Most observational studies reported mean BMI ≥25.0 kg/m2 of study participants,[2, 3, 5-8, 12, 13, 16-21, 24, 26, 31, 34, 36, 38, 42, 45-47, 49-52, 54-57, 59, 60, 63-65, 68, 69, 71, 72, 75-77] but the full range included 21.3 kg/m2[83] up to ~32 kg/m2.[7] Several studies reported that ≥40% of the study participants had overweight and/or obesity.[4, 9, 23, 25, 35, 45, 58, 62, 67, 73, 77, 80] One study exclusively enrolled participants with overweight/obesity or metabolic syndrome,[54] and another exclusively enrolled those with CVD

or 3+ CVD risk factors.[69] Among studies that reported prevalence of HTN within the study sample (n=46), prevalence was generally ≥40%,[3, 7, 9, 12-15, 18-20, 23, 29, 33, 34, 45-49, 53, 54, 56-58, 64, 66, 67, 69, 71, 73, 76, 79, 80] although it ranged from ~16%[17] up to ~84%.[29, 54]

Many (n=38) observational studies excluded those with dementia, Alzheimer's disease, cognitive impairment, and/or cognitive decline at baseline/exposure assessment.[2, 8, 9, 11-13, 15, 16, 20, 21, 23, 25, 26, 29, 33, 34, 36, 37, 39, 42, 47, 48, 50, 53, 56, 57, 59, 60, 63-65, 70-72, 75, 77, 79, 83] Of the studies that did not specify excluding those with dementia, Alzheimer's disease, cognitive impairment, and/or cognitive decline at baseline/exposure, few reported information on cognitive status at baseline. One reported that ~67% of the sample had subjective cognitive decline at baseline[70]; one reported that 11.1% had mild cognitive impairment at baseline[8]; and one reported that ~27% had an impaired MMSE score.[27] Several additional studies reported family/parental history of dementia and/or Alzheimer's disease: ~66% to 68% with family history of dementia[28]; 72.6% with parental history sporadic Alzheimer's disease[50]; 4.87% to 5.11% with family history of dementia[75]; ~2% with family Hx dementia[17]; 13.7% with family history of Alzheimer's disease[77]; 20.6% with parental history of dementia.[76]

Race and/or Ethnicity

The included RCT enrolled majority (88%) White participants, with 11% Black participants and 1% "other."[1] Among the observational studies, many articles (n=20) reported that the majority (≥70%) of the analytic sample was non-Hispanic White[6, 9, 13, 17, 18, 23, 31, 33, 34, 39, 47, 48, 50, 62, 68, 69, 71, 73, 75-77] while several (n=4) others mentioned that the majority of participants were white, although exact percentage was not reported.[22, 27, 44, 45] Several articles reported exclusively enrolling those of Chinese ancestry (n=5),[11, 35, 66, 78, 82] those of Japanese ancestry (n=2),[25, 79] or those of Hispanic or Puerto Rican descent (n=3).[7, 43, 49] Additionally, 5 articles from 3 unique cohorts in the United States reported enrolling majority racial/ethnic minorities: 42% non-Hispanic White, 11% Chinese, 25% non-Hispanic Black, 21% Hispanic[19]; 60% African-American, 40% White[38]; 63% African-American, 37% White[3]; 60% Black, 40% White in CHAP cohort[71]; 28.23% White, 29.44% Black, 40.36% Hispanic, 1.96% Other.[29] Forty articles did not report data on race and/or ethnicity of the sample.

Socioeconomic position (SEP)

Participants across the body of evidence collectively represented a range of SEP, based primarily on educational attainment, although other indicators that were reported included household income, SES (e.g., Townsend index), cohabitation status, and occupational status/type. Participant education was reported in 79 of the 83 included articles and distributed as follows: low educational attainment or a mean of less than 12 years of education was reported in 26 articles,[4, 7, 8, 12, 13, 16, 18-21, 23, 26, 27, 29, 37, 41-43, 56, 61, 63, 68, 70, 74, 80, 83] higher educational attainment and/or a mean of 12 years of education or more in 30 articles,[1-3, 9, 14, 15, 22, 24, 28, 31, 38, 39, 45-48, 50-53, 58, 59, 62, 64, 65, 71-73, 75, 76] and a range of education levels across participants (e.g., 31% high school or less, 30% some college, 39% college degree or higher) were reported in 23 articles.[5, 6, 17, 30, 32-36, 40, 44, 49, 54, 55, 60, 66, 67, 77-79, 81, 82] Only three included articles did not report any type of information regarding the SEP of participants.[11, 25, 57] Fourteen articles[6, 7, 9, 17, 19, 32, 34, 37, 39, 41, 49, 74, 80, 83] reported information on the household income, poverty-income ratio, and/or SES that indicated a majority of participants had lower or a range of SES (e.g., ≥ 50% of participants with low household income[34, 74]; ~20-30% of participants at each income level.[9, 19, 80]

Intervention/exposure and Comparator

Dietary pattern consumption was examined among participants at a mean age of 11 years[10] up to 92 years.[53] Thirty-eight articles analyzed samples with a mean age ≥70 years; 51 studies analyzed samples with a mean age ≥65 years, while 63 studies analyzed samples with a mean age ≥60 years. One study examined the relationship between dietary patterns consumed during both childhood and adulthood, and subsequent cognitive decline in adulthood,[10] while all other included studies examined dietary patterns during adulthood only. The majority of articles from observational studies (n=59) assessed dietary intake once at baseline, while 21 used repeated assessments and 2 used only baseline data after testing that change in dietary intake was minimal.[47, 73] The most common diet assessment method was FFQ and/or other food screeners (n=59)[2, 3, 5, 7-9,

11-16, 18-22, 24, 29-31, 33-40, 42-48, 50-55, 57, 58, 63-65, 67-71, 73, 74, 76, 78, 81-83 followed by 24-hour dietary recall (n=12),[84] diet history or other health questionnaires (n=6),[4, 23, 28, 41, 60, 72] diet records (n=2), or some combination of methods (n=6).[10, 26, 35, 66, 78, 82]

Dietary pattern methods included:

- Intervention: 1 article
- Index/Score analysis: n=71
- Factor/cluster or latent-class analysis: n=14
- Reduced Rank Regression: n=2

A visualization of all dietary pattern components in each dietary pattern examined in relation to outcomes of interest is available in Appendix 6: Dietary pattern visualization.

Outcome

Studies used various methods to assess cognitive outcomes:

- Cognitive decline and/or mild cognitive impairment outcomes were reported in 60 articles.[1-3, 5, 7, 8, 10, 12-19, 22, 24, 27, 28, 30, 32, 33, 35, 37-39, 41, 43-47, 49-52, 54-59, 61, 63, 64, 66-74, 76, 78, 80-83]
    - Cognitive function was most often assessed using researcher-administered, domain-specific tasks (n=10) that were reported separately and/or combined to create a researcher-defined global/composite cognitive function score. Cognitive questionnaires were also commonly used (e.g., Montreal Cognitive Assessment; Cognitive Abilities Screening Instrument; MMSE; TICS-M, n=4), or a combination of both cognitive tasks and questionnaires (n=9).
    - Cognitive decline and mild cognitive impairment were most often assessed using cognitive questionnaires that applied pre-determined cutoff values to define cognitive impairment/decline (n=17) and/or assessed change across 2 or more time points (n=11). The Mini-Mental State Examination (MMSE) or an adapted version of it was the most commonly used questionnaire, either used as a standalone measure (n=16) or in combination with other measures (n=6). Cognitive decline and/or impairment was also assessed using other cognitive questionnaires (e.g., TICS-M, n=9; Cognitive Abilities Screening Instrument, n=1; Montreal Cognitive Assessment, n=1), change in cognitive domains (n=6), or a combination of both (n=3). Subjective measures of cognitive decline and/or mild cognitive impairment were reported in 3 articles, though little additional information was provided.
- Risk of dementia (26 articles[4, 6, 8, 11, 17, 20, 21, 23, 25, 26, 29, 31, 34, 36, 40, 41, 53, 56, 60, 62, 65, 71, 75, 77, 79, 80]) and/or Alzheimer's Disease (11 articles[4, 6, 17, 23, 25, 26, 34, 42, 48, 56, 71]) were most often assessed using data obtained from medical insurance databases, medical/hospital records, and/or death records (n=16). Additional methods included researcher/expert diagnosis based on performance on cognitive screening tools and/or tasks (n=9) and MMSE scores (n=3).

Synthesis of the evidence

Statistically significant associations between dietary patterns and ***lower risk of*** cognitive decline, dementia, Alzheimer's disease, and/or mild cognitive impairment were reported in 54 articles (all from observational studies[2-5, 7-10, 15, 17, 20, 22, 24, 28, 32-35, 37-43, 45, 47, 48, 51, 52, 54, 55, 58, 59, 61-67, 70-76, 78-80, 82, 83]). These dietary patterns were generally characterized by a **higher intake of vegetables (often excluding potatoes), fruits, legumes, nuts, fish/seafood, unsaturated vegetable oils/fats, and lower intakes of red and processed meats and sugar-**

sweetened beverages. These dietary patterns included dairy and/or dairy products as well as alcoholic beverage components, but varied considerably in scoring procedures and specificity of components. Many of the dietary patterns included a grains/cereals component scored positively, but varied considerably in whether intake was specifically from whole grains, other cereals/grains, or total grains collectively.

"Mediterranean" dietary pattern scores were assessed in 34 articles and significantly associated with lower risk of adverse cognitive outcomes in 24 articles, including better cognitive function/lower risk of cognitive decline (n=17),[2, 3, 8, 24, 28, 33, 43, 54, 55, 58, 59, 63, 64, 67, 72, 76, 82] as well as lower risk of dementia (n=6),[4, 8, 20, 62, 65, 70] Alzheimer's Disease (n=2),[42, 48] and mild cognitive impairment (n=1).[33] No statistically significant associations between Mediterranean dietary pattern scores and cognitive outcomes were reported in 10 articles. Dietary patterns shared the following components **positively scored: vegetables (not potatoes), fruit, legumes, nuts, cereals/whole grains, fish, and unsaturated vegetable oils/fats; and; positive or positive in moderation: alcoholic beverages; and negatively scored: red and processed meat, sugar-sweetened beverages.**

- Several of these studies reported statistically significant results with at least one outcome, but not all results across cognitive outcomes reached statistical significance. For example, a Mediterranean dietary pattern was associated with lower risk of cognitive decline based on one cognitive test (Four Mountains Test) but was not associated with cognitive decline assessed using a different test (Repeatable Battery for the Assessment of Neuropsychological Status).[28]
- Several articles reported associations between Mediterranean-style dietary patterns and cognitive outcomes by additional factors such as age or health status. For example, in one of these articles, a Mediterranean dietary pattern score was associated with lower risk of cognitive decline in those ≥70 years old but was not associated with cognitive decline in those <70 years old.[72] However, other articles did not report associations between Mediterranean dietary patterns and cognitive outcomes by age, and there does not appear to be a trend across studies by age. Several articles stratified groups by various health markers and found differences in the association between Mediterranean diet and cognitive outcomes. One article found that Mediterranean dietary patterns were associated with a lower risk of Alzheimer's disease in those at low genetic risk for Alzheimer's disease, but no association was found for those at high genetic risk.[42] Another article found that a Mediterranean dietary pattern was associated with better cognitive function in those with type 2 diabetes, but no association was found for those without type 2 diabetes.[43] Lastly, one article found that lower adherence to a Mediterranean dietary pattern was associated with greater cognitive decline in those with hypertension, although this association was not significant in those without hypertension.[58]

Mediterranean-Dash Intervention for Neurodegenerative Delay (MIND) dietary patterns were assessed in 14 observational articles and 1 RCT,[1] and associated with lower risk of adverse cognitive outcomes in 10 articles, including better cognitive function/lower risk of cognitive decline (n=7),[7, 17, 22, 47, 52, 71, 73], lower risk of dementia (n=3),[9, 20, 71] and lower risk of Alzheimer's' disease (n=2).[48, 71] None of these articles examined risk of mild cognitive impairment. The MIND score used in most of these studies similarly scored the following components **positively: vegetables (especially green leafy), beans, berries, nuts, whole grains, seafood, poultry, olive oil; positive or positive in moderation: wine; and negatively: red meat, cheese, pastries and sweets, butter and stick margarine, fried/fast food.**

- One of these articles examined data from multiple cohorts and found that a MIND dietary pattern was not associated with cognitive outcomes (cognitive decline, dementia, Alzheimer's disease) in a majority-Black (60%) cohort but was associated with better cognitive outcomes in a different cohort, of which the racial/ethnic composition was not reported.[71]
- Conversely, another article reported that MIND dietary pattern adherence was associated with lower risk of dementia in a cohort that was ~70.5% White, 15.4% Black, 10.8% Hispanic, and 3.3% other, but no association was found within a cohort that was primarily (90.9%) White.[9]

- One RCT examined the effect of a MIND dietary pattern versus a control (usual) dietary pattern, both of which emphasized a 250 kcal/d energy deficit, on change in global cognitive function. No difference was found in change in global cognitive function between the two dietary patterns.[1]

'DASH' style scores were examined in 13 articles and were significantly associated with lower risk of adverse cognitive outcomes in 7 articles, including better cognitive function/lower risk of cognitive decline (n=6)[35, 43, 54, 64, 76, 82] and lower risk of mild cognitive impairment (n=1).[66] Most of these results included "DASH"-style indices that similarly scored the following components **positively: vegetables (not potatoes), nuts and legumes, fruit and fruit juice, whole grains, dairy; and negatively: red and processed meat, sugar-sweetened beverages, sodium.** One of these studies found that a DASH dietary pattern was associated with better cognitive function in those without type 2 diabetes, but no association was found in those with type 2 diabetes.[43] However, no statistically significant associations were reported between DASH scores and risk of dementia and/or Alzheimer's disease.

Dietary Guidelines-related scores (e.g., Healthy Eating Index) were examined in 12 articles and associated with lower risk of adverse cognitive outcomes in 8 articles, including better cognitive function/lower risk of cognitive decline (n=7),[15, 17, 39, 43, 52, 76, 82] and lower risk of dementia (n=1).[65] However, no statistically significant associations were reported between Dietary Guidelines-related scores and Alzheimer's disease or mild cognitive impairment. These articles generally scored the following dietary pattern components **positively: vegetables (not potatoes, French fries), fruit, legumes and nuts, whole grains; and negatively: added sugars/sugar-sweetened beverages, red and processed meats.**

- One study found that both Alternative Healthy Eating Index, 2010 and Healthy Eating Index 2015 scores were each associated better cognitive function in select domains in those without type 2 diabetes but were not associated with global cognitive function (in those with or without type 2 diabetes).[43]

Country-specific dietary patterns scores were examined in 9 articles, including the Japanese Dietary Index (n=2),[40, 79] adherence to the Danish Dietary Guidelines (n=1),[34] the Dietary Guideline Index for Australia (n=2),[12, 46] the Swiss Dietary Guidelines Score (n=1),[26] China Elderly Dietary Guidelines Index (n=1),[32] Chinese Dietary Guidelines Index (n=1),[81] and adherence to the Dutch Dietary Guidelines (n=1).[20] These dietary patterns were associated with lower risk of adverse cognitive outcomes in 5 articles, including lower risk of dementia (n=3),[34, 40, 79] lower risk of mild cognitive impairment (n=1)[81] and better global cognition (n=1).[32] Articles varied considerably in the dietary pattern components, but generally scored the following **positively: vegetables, fruit; positively or moderately: fish/seafood; and negatively or moderately: meats (all, red, and/or processed).**

- In one of these articles, one variation of a Japanese Diet Index was associated with lower risk of dementia, though three different variations were not. Compared to the variations not associated with dementia risk, the dietary pattern associated with lower dementia risk emphasized higher intake of mushrooms, moderate (rather than high) intake of rice, and did not emphasize intake of pickles or coffee.[79] Another article found that lower adherence to the Danish Dietary Guidelines was associated with higher risk of dementia but not Alzheimer's disease.[34] In one article examining results by age group, adherence to the China Elderly Dietary Guidelines Index was associated with better global cognition in those <65 years old at baseline, but not in those ≥ 65 years at baseline.[32]

Other index/score analyses were examined in 16 articles and were associated with lower risk of adverse cognitive outcomes in 9 articles, including lower risk for cognitive decline or cognitive impairment (n=8)[37, 38, 45, 55, 74, 78, 82, 83] and lower risk of dementia (n=1).[75] The majority of these articles (n=5) included a plant-based dietary index,[37, 38, 75, 82, 83] which emphasizes intake of vegetables (including potatoes), fruits, nuts, legumes, grains (whole and refined), tea & coffee, and vegetable oils and negatively scores animal fats, dairy, eggs, fish/seafood, and meat (poultry and red meat). Other dietary patterns associated with lower risk for adverse cognitive outcomes similarly scored the following components **positively: vegetables, legumes, fruit, and**

grains; and negatively: saturated/animal fats and meat (red and/or poultry). Fish and/or seafood and dairy were mixed, with some dietary patterns scoring positively and some scoring negatively.

Dietary patterns examined by factor/cluster analysis or reduced-rank regression were examined in 11 articles and associated with lower risk of adverse cognitive outcomes in 6 articles, including lower risk of dementia (n=1)[41] and better cognitive function/lower risk of cognitive decline (n=5).[5, 10, 51, 61, 80] Though the dietary components varied widely across these studies, they commonly scored the following components **positively: vegetables, fruits, and legumes**.

Dietary patterns related to ***higher risk*** of adverse cognitive outcomes in 5 articles from observational studies, including higher risk of cognitive decline/poorer cognitive function (n=3),[51, 57, 83] higher risk of cognitive impairment (n=1),[37] and higher risk of dementia (n=1).[75] Three of these studies used index/score analysis to examine dietary patterns, specifically an unhealthy plant-based dietary pattern,[37, 75, 83] while two others used factor/cluster to derive what both authors described as a "Western-style" dietary pattern.[51, 57] Though there was considerable variability in the components of these dietary patterns, they generally scored the following components **positively: refined grains, sugar-sweetened beverages, and sweets/desserts.**

Conclusion statement and grade

The 2025 Dietary Guidelines Advisory Committee updates the existing systematic review, updated by the 2020 Dietary Guidelines Advisory Committee, by synthesizing an additional 83 articles that were published between March 2020 and January 2024 and met inclusion criteria, as well as studies that were previously excluded but met updated inclusion criteria (see Table 5).

Table 5. Conclusion statement, grade for dietary patterns and risk of cognitive decline, dementia, Alzheimer's disease, and mild cognitive impairment.

Conclusion Statement	Dietary patterns consumed by adults and older adults that are characterized by higher intakes of vegetables, fruits, legumes or beans, nuts, fish and/or seafood, and unsaturated vegetable oils/fats and lower in red and processed meats and sugar-sweetened beverages, are associated with lower risk of age-related cognitive decline, mild cognitive impairment, dementia and/or Alzheimer's disease. This conclusion statement is based on evidence graded as moderate. (Grade: Moderate)
Grade	Moderate
Body of Evidence	83 articles: 1 from intervention (RCT); 82 from observational studies (OBS)
Consistency	Some concerns with minimal variability in direction, but minimal to moderate variability in the magnitude of results.
Precision	Serious concerns regarding only one RCT eligible. Confidence intervals ranged from narrow to wide across reported results from observational studies.
Risk of bias	Serious concerns due to potential confounding, exposure misclassification, and outcome measurement error.
Directness	Few concerns with directness of: populations, intervention/exposure, comparators. Some concerns with directness of outcome assessment.
Generalizability	The dietary patterns, outcomes, and participant characteristics are applicable to the U.S. population.

Assessment of the Evidence

This systematic review update includes 83 articles that met inclusion criteria and examined the relationship between dietary patterns and risk of cognitive decline, dementia, Alzheimer's disease, and mild cognitive impairment. Dietary patterns were assessed using a variety of methods, primarily indices or scores, but also factor/cluster analysis, reduced rank regression, and 1 experimental diet. Outcomes were determined from various methods including domain-specific cognitive tasks, cognitive screeners and/or questionnaires, and linkage to medical/hospital records, death records, and insurance databases. As outlined and described below, the body of evidence was assessed for the following elements used when grading the strength of evidence. This body of evidence includes both large and small studies (with significant as well as null findings) so publication bias may be less likely.

Consistency:
The direction of findings was relatively consistent across observational studies. Out of 82 observational studies, 54 found statistically significant associations between dietary patterns and lower risk of cognitive decline, dementia, Alzheimer's disease, and/or mild cognitive impairment. These dietary patterns were generally characterized by higher intake of vegetables (typically excluding potatoes), fruits, legumes, nuts; and lower intakes of red and processed meats and sugar-sweetened beverages. A small sub-set of evidence supported associations between dietary patterns higher in refined grains, sugar-sweetened beverages, and sweets/desserts and higher risk of cognitive decline/poorer cognitive function, higher risk of cognitive impairment, and higher risk of dementia. However, the RCT did not support these findings, as it found no effect of MIND diet, which emphasized intake of green leafy vegetables, total vegetables, beans, berries, nuts, whole grains, seafood, poultry, olive oil, and wine, and lower intake of red meat, cheese, pastries and sweets, butter and stick margarine, and fried/fast food, on cognitive decline when compared to a control diet, both of which also included a calorie reduction component.

Precision:
This body of evidence included 83 articles, only 1 of which was an RCT. Among the observational studies, sample sizes ranged from 76 up to 180,532, with most including <10,000 participants in analyses. Significance of the results did not seem depended on sample size, although the width of confidence intervals varied across studies, with moderate to large variances.

Risk of bias
Studies had variable risks of bias across domains, which have the potential to influence the results reported. Many articles did not control for several key confounders, leading to a 'high' or 'very high' risk of bias in Domain 1 (confounding) for 42 of 82 observational articles. Many articles also assessed dietary intake at only one time point, leading to 'some concerns' of possible exposure misclassification in Domain 2. Many articles were at 'some concerns' or 'high' risk of bias of the outcome measurement, Domain 6, due to concerns with the validity of measurements and/or only more severe cases being represented (e.g., use of hospital records). Observational studies rarely had a pre-specified analysis plan and/or sometimes conducted multiple exposure and outcome analysis, which also resulted in a higher risk of bias for selection of reported results.

Directness:
Studies and/or analyses were designed to directly examine the relationship between dietary patterns and risk of cognitive outcomes. Few concerns were noted with directness of populations, intervention/exposure, and comparators used to examine this relationship. However, some concerns were noted with the directness of outcomes measured as they relate to the outcomes of interest.

Generalizability:
Many articles (n=29) were published using data collected in the United States, including 1 RCT and observational data from 19 unique cohorts. Other studies are applicable to the U.S. population based on participant characteristics, including racial/ethnic background and health status, intervention/exposure vs. comparators, and/or outcomes. Several observational articles reported *exclusively* enrolling those of racial and/or ethnic minority: Chinese ancestry (n=5);[11, 35, 66, 78, 82] Japanese ancestry (n=2);[25, 79] Hispanic or Puerto Rican descent (n=3).[7, 43, 49] Additionally, 5 articles from 3 unique cohorts in the United States reported enrolling

majority racial and/or ethnic minorities: 42% non-Hispanic White, 11% Chinese, 25% non-Hispanic Black, 21% Hispanic[19]; 60% African-American, 40% White[38]; 63% African-American, 37% White[3]; 60% Black, 40% White in CHAP cohort[71]; 28.23% White, 29.44% Black, 40.36% Hispanic, 1.96% Other.[29] Many participants in this body of evidence were at high-risk for diet-related chronic disease based on cardiometabolic risk factors such as high-BMI and hypertension. However, studies also included those without these risk factors and therefore, results are generalizable to the U.S. population. Most of the dietary patterns examined are applicable to those consumed by Americans, with some exceptions for country-specific dietary patterns that include foods such as seaweed and algae, which are not commonly consumed by many Americans. Outcomes examined were also applicable to the United States population.

Research recommendations

1. Future studies should examine dietary patterns at multiple time points across the lifespan and their relationship to cognitive outcomes and/or dementia. Until the critical time point(s) during which dietary patterns may affect age-related cognitive decline and/or dementia are identified, reliance on a single measure of exposure (dietary patterns) in middle age to older adulthood may have limited validity. For example, dietary patterns may be subject to change as cognitive function declines, leading to concerns with reverse causality. Also, few studies examine dietary patterns during childhood, adolescence, and/or younger adulthood in relationship to cognitive decline in later life.
2. Articles used a variety of outcome assessment methods/tools, some of which may be of limited validity and/or at high risk of bias, limiting the ability to compare findings across publications. Focus should be placed on creating a consensus on the most valid and reliable measures of cognitive outcomes and subsequent research should prioritize using these methods.
3. Many articles controlled only for education, without controlling for other metric(s) of SEP. Because education and SEP are likely independently related to both the exposure (dietary patterns) and outcomes of cognition, future research should control for both of these variables.
4. Future studies should assess and control for genetic risk factors for cognitive outcomes (e.g., Apolipoprotein E genotype), as they may confound the relationship between dietary patterns consumed and cognitive outcomes of interest.
5. In addition to more robust observational studies that address the limitations above, more RCTs are needed in order to determine the relationship between dietary patterns consumed and cognitive outcomes.

Table 6. Evidence examining the relationship between dietary patterns consumed by adults and older adults and risk of cognitive decline, dementia, Alzheimer's disease, and mild cognitive impairment*

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
Randomized Controlled Trial			
Barnes, 2023[1] United States; n/a Analytic N=571 (6 mo); 560 (1 y); 552 (2 y); 564 (3 y) **Participant characteristics:** • Race and/or Ethnicity:~88% White; ~11% Black; ~1% Other • SEP: Education, ~17 y (mean) • Selection: Included those with score of 22+ on Montreal Cognitive Assessment (low or no cognitive impairment); those with BMI ≥25; those with family Hx Alzheimer's dementia; with suboptimal diets (MIND score ≤8); included participants had to agree not to take vitamins (e.g., folate, multivitamins) and to complete a 3-4 wk run-in period. Excluded those with nuts, berries, olive oil, or fish allergies;	**DP Age(s):** 65+ y at baseline (70.4 y mean) **DP Components:** • MIND Diet: Positive: Green leafy vegetables; Vegetables; Beans; Berries; Nuts; Whole Grains; Seafood; Poultry; Olive oil; Wine. Negative: Red Meat; Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food. Slight (~250 kcal/day) energy deficit • Control diet: usual diet + slight (250 kcal/day) energy deficit • **DP Method(s)**: RCT **Comparisons:** MIND diet vs. control diet (higher MIND score mean 11 vs. 8.5 [or by 3.3 vs. 0.7 pt.])	**Follow-Up Duration: 6 mo, 1 y, 2 y, 3 y** **Results:** ΔGlobal cognition, 6 mo MIND diet, 0.125, 95% CI: 0.093, 0.158 Control, 0.117, 95% CI: 0.085, 0.149 Difference, 0.008, 95% CI: -0.037, 0.054 ΔGlobal cognition, 1 y MIND diet, 0.226, 95% CI: 0.188, 0.264 Control, 0.211, 95% CI: 0.173, 0.248 Difference, 0.015, 95% CI: -0.038, 0.069 ΔGlobal cognition, 2 y MIND diet, 0.246, 95% CI: 0.205, 0.287 Control, 0.200, 95% CI: 0.159, 0.240 Difference, 0.046, 95% CI: -0.011, 0.104 ΔGlobal cognition, 3 y	• Small improvements in global cognition in both groups (could be learning effect over time); control group had slightly higher % of participants with APOE-ε4 allele • **Diet assessment:** RCT: adherence to MIND diet assessed via MIND-diet questionnaire & biomarkers • **Outcome measurement**: Raw score from multiple tests (below) converted to z-scores, then z-scores averaged across all tests to create global composite score • Tests used: Episodic memory ((Word List Memory, Word List Recall,

* Abbreviations: AD, Alzheimer's disease; Alz, Alzheimer's disease; BMI, body mass index; CD, cognitive decline; CDT, clock drawing test; CFx, cognitive function; CI, confidence interval; CVD, cardiovascular disease; DASH, Dietary Approaches to Stop Hypertension; Dem, dementia; DG, dietary guidelines ; DM, diabetes mellitus; DP, dietary pattern(s); DSM, Diagnositc and Statistical Manual; Dx, diagnosis; Dz, disease; EF, executive function; f/u, follow-up; FFQ, food frequency questionnaire; Fx, function; GCFx, global cognitive function; h, hour(s); HH, household; HR, hazard ratio; HTN, hypertension; Hx, history; IHD, ischemic heart disease; Kcal, kilocalories; LF, low-fat; LFU, lost to follow-up; MCI, mild cognitive impairment; MIND, Mediterranean-Dash Intervention for Neurodegenerative Delay; MMSE, mini mental state examination; mo, month(s); MUFA, monounsaturated fatty acids; n/a, not available; NH, non-Hispanic; NHANES, National Health and Nutrition Examination Survey; NHS, Nurses' Health Study; NIA, National Institutes of Aging; NIH, National Institutes of Health; NR, not reported; NS, non-significant; OR, odds ratio; PCA, principal component analysis; PUFA, polyunsaturated fatty acids; Q, quartile; RCT, randomized controlled trial; Ref, reference; SD, standard deviation; SE, standard error; SEP, socioeconomic position; SFA, saturated fatty acids; SNAP, supplemental nutrition assistance program; STICS-m, Spanish version of the modified Telephone Interview for Cognitive Status; T, tertile; TEI, total energy intake; TEI, total energy intake; TIA, transient ischemic attack; TICS, Telephone Interview for Cognitive Status; TICS-m, modified Telephone Interview for Cognitive Status; wk, week(s); y, year(s)

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
use of medication to treat Alzheimer's Dz or Parkinson's Dz; with psychosis or bipolar disorder; with depression or other psychiatric disorder that my interfere w participation; psychiatric medication; alcohol or substance abuse, or heavy alcohol consumption; recent CVD, stroke, TIA, cancer; Hx of brain injury, liver Dz, HIV, Hep-C		MIND diet, 0.205, 95% CI: 0.164, 0.246 Cotrol, 0.170, 95% CI: 0.130, 0.210 Difference, 0.035, 95% CI: -0.022, 0.092; p=0.23 **Summary:** Null: MIND diet group vs. control diet & ΔGlobal cognition	Word List Recognition,15 East Boston Story Immediate Recall, & East Boston Story Delayed Recall); Semantic memory (Category Fluency [animals and fruits and vegetables] & Multilingual Naming Test); Executive function (Trail Making Test B & Flanker Inhibitory Control and Attention Test from NIH toolbox); Perceptual speed (Oral Symbol Digit Modality Test, Pattern Comparison Test, & Trail Making Test A) • **Funding:** NIA
Observational Studies			
Agarwal, 2021[3] United States; Chicago Health and Aging Project Analytic N=5001 **Participant characteristics:** • Race and/or Ethnicity:63% 'African-Amercian'; 37% White • SEP: Education, 12.5y mean • Selection: Excluded those with missing FFQ; <2 cognitive assessments; implausible/extreme BMI or TEI; aged <65 y	• **DP Age(s):** ~74y (SD: 6); ≥65y at baseline • **DP(s) examined:** Mediterranean-based Diet Score (MedDietScore) [Panagiotakos 2007]; Western DP • **DP Components:** • MedDietScore, Positive: Vegetables; Potatoes; Legumes; Fruit; Whole Grains; Fish; Olive Oil. Negative: Red and Processed Meat; Poultry; Full-Fat Dairy; Alcohol • Western DP, Higher in fried foods, refined grains, sweets, red and processed meats, full fat dairy, and pizza • **DP Method(s)**: Index/Score; Factor/Cluster **Comparisons:** Categorical, Western DP High (>3.5) vs. Low (<3.5); MedDietScore, tertiles (T1, ref)	**Follow-Up Duration: 6.3 y (SD: 2.8), mean** **Results:** MedDietScore & CD, β (95% CI) T2, 0.003 (−0.004, 0.011) T3, 0.015 (0.006, 0.023) p-trend=0.0006 NS, MedDietScore*Western DP & CD, p=0.13 MedDietScore & CD among those with Low Western DP, β (95% CI) T2, 0.013 (0.02, 0.024) T3, 0.019 (0.007, 0.032) p-trend=0.003 MedDietScore & CD among those with High Western DP, β (95% CI) T2, −0.007 (−0.019, 0.005) T3, 0.010 (−0.002, 0.022) p-trend=0.09 **Summary:** Inverse: MedDietScore & CD	• **Did not account for:** SEP; Anthropometry • Anthropometry not controlled for but BMI seems similar across tertiles • **Diet assessment:** FFQ assessed every cycle (~3y) • **Outcome measurement**: CD: rate of change in global cognitive scores from avg. z-score of combined MMSE; East Boston (immediate; delayed); and Symbol Digit); Episodic memory avg. z-score from East Boston (immediate; delayed); Perceptual memory from z-score of Symbol Digit **Funding:** NIA; NIH

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		Inverse: MedDietScore* Low Western DP & CD NS/Null: MedDietScore* High Western DP & CD	
Andreu-Reinón, 2021[4] Spain; European Prospective Investigation into Cancer and Nutrition (EPIC) Spain Analytic N=16160 **Participant characteristics:** • Race and/or Ethnicity: NR • SEP: Majority with low education level (primary school or less), 71.4% (non-cases), ~88.6% (cases) • Selection: Excluded those pregnant or breastfeeding; not being physically or mentally capable of participating; with major chornic pathology (DM, IHD, stoke, cancer); extreme energy intake;	• **DP Age(s):** 48.3 y (non-cases), ~59-60 y (cases); 30-70 y at baseline; mean at baseline • **DP(s) examined:** relative Mediterranean Diet Score (rMED) [Buckland 2009] • Mediterranean Diet Score (MDS) [Trichopolou 2003] • Alternate Med Diet Score (aMED) [Fung 2005] • adapted relative Mediterranean Diet score (arMED) [Buckland, 2012] • **DP Components:** • rMED, Positive: Vegetables (not potatoes); Legumes; Fruit, Nuts, and Seeds (not juice); Whole Grains, Refined Flour, Pasta, Rice, Bread, Grains; Fish; Olive Oil. Negative: Total and Processed Meat. Neutral: Alcohol • MDS, Positive: Vegetables; Legumes; Fruit, Nuts; Cereals; Fish; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • aMED, Positive: Vegetables (not potatoes); Legumes; Fruit; Nuts; Whole Grains; Fish; MUFA/SFA. Negative: Red and Processed Meat. Neutral: Alcohol • arMED, Positive: Vegetables (not potatoes); Legumes; Fruit, Nuts, and Seeds (not juice); Cereals; Fish; Olive Oil. Negative: Meat; Dairy Products • **DP Method(s)**: Index/Score • **Comparisons:** Categorical, low (0-6pts), medium (7-10pts), high (11-	**Follow-Up Duration: 21.6 y (mean)** **Results:** rMED & Dem, all-cause + Alz; (95% CI) Low, HR: 1, ref Medium, HR: 0.85 (0.66, 1.09) High, HR: 0.80 (0.60, 1.06) Per 2-pt, HR: 0.92 (0.85, 0.99) p-trend (linear)=0.021 p-trend (non-linear)=0.094 arMED & all-cause dementia, similar effects to rMED (data NR) MDS & all-cause dementia, results attentuated compared to rMED (data NR) aMED & all-cause dementia, NS (data NR) rMED & Dem, non-Alz; (95% CI) Low, HR: 1, ref Medium, HR: 0.64 (0.41, 0.99) High, HR: 0.68 (0.42, 1.10) Per 2-pt, HR: 0.87 (0.77, 0.99) p-trend (linear)=0.037 p-trend (non-linear)=0.098 rMED & Alz (95% CI) Low, HR: 1, ref Medium, HR: 0.98 (0.71, 1.33) High, HR: 0.87 (0.61, 1.24) Per 2-pt, HR: 0.94 (0.86, 1.03) p-trend (linear)= 0.196 p-trend (non-linear)=0.353 **Summary:** Inverse: rMED & Dem, non-Alz (low vs. medium, cont.) Inverse: rMED & Dem, all-cause (cont.)	• **Did not account for:** SEP, Race and/or Ethnicity • Data not fully reported for other index/scores (MDS; aMED; arMED); When stratified by sex, rMED & all-cause Dem, non-Alz dementia significant only for women. • **Diet assessment:** Diet Hx once at baseline (interviewer-administed) • **Outcome measurement**: Dementia & Alzheimer's Dz obtained via medical records, hospital discharge databases, and regional mortality registries **Funding:** International Agency for Research on Cancer; European Commission; Health Research Fund (FIS) of the Spanish Ministry of Health; Red Temática de Investigación Cooperativa de Centros de Cáncer; CIBER de Epidemiología y Salud Pública (CIBERESP); Regional Governments of Andalusia, Asturias, Basque Country, Murcia, and Navarra; Catalan Institute of Oncology (ICO)

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
	18pts) Continuous, per 2-pt	NS/Null: rMED & Dem, all-cause (categorical) NS/Null: rMED & Alz (categorical & cont.)	
Ashby-Mitchell, 2015[5] Australia; Australian Diabetes, Obesity and Lifestyle Study (AusDiab) Analytic N=577 **Participant characteristics:** • Race and/or Ethnicity: NR • SEP: Education: 24% secondary, 40% tertiary, 17% technical/primary only • Selection: Excluded those with or who had missing dietary or cognitive data, < 60 y at baseline	• **DP Age(s):** 66 y, mean (60 to 83y, Wave 1 range at baseline) • **DP(s) examined:** n/a • **DP Components:** • 101, DP1, Fruit & Vegetable: Positive loadings: carrots; onion; beetroot; pumpkin; mango; zucchini; avocado; peaches; apricots; crackers; potatoes; peas; broccoli, cabbage, multigrain bread • 101, DP2, Snack & Processed: Positive loadings: potatoes, cakes, jam, ice cream, sweet buscuits, salami, sausages, chocolate, sugar, meat pies, vegemite • 101, DP3, Vegetable: Positive loadings: avocado; lettuce; cucumber; capsicum; celery; tomatoes; yogurt; Negative: sugar; peas; chips; white bread • 101, DP4, Meat: Positive loadings: pork, veal, lamb, beef, chicken, peanut butter, soft cheese • 101, DP5, Fish, Legumes & Vegetable: Positive loadings: Fish, other beans, tofu, spinach, baked beans, tinned fish, ricotta or cottage cheese, musrooms, bean sprouts, strawberries, fried fish, soy milk • 101, DP6, Vegetable, Pasta & Alcohol: Positive: Red wine; pasta; spirits; cornflakes; Negative: cauliflower, broccoli, cabbage • 101, DP7, Dairy, Cereal & Eggs: Positive loadings: Crackers, low-fat	**Follow-Up Duration: ~12 y total** **Results:** DP, 101 items & CD, OR (95% CI) DP1, OR: 1.061 (1.006, 1.118); p=0.030 DP2, OR: 1.051 (0.967, 1.143); p=0.239 DP3, OR: 0.986 (0.916, 1.061); p=0.701 DP4, OR: 1.005 (0.964, 1.048); p=0.806 DP5, OR: 1.032 (1.001, 1.064); p=0.040 DP6, OR: 1.000 (0.965, 1.037); p=0.994 DP7, OR: 1.020 (1.007, 1.033); p=0.003 DP, 32 items & CD, OR (95% CI) DP1, OR: 1.005 (0.994, 1.016); p=0.409 DP2, OR: 0.997 (0.984, 1.010); p=0.643 DP3, OR: 1.008 (0.995, 1.020); p=0.229 DP4, OR: 0.999 (0.992, 1.007), p NR DP, 20 items & CD, OR (95% CI) DP1, OR: 1.006 (0.994, 1.018); p=0.333 DP2, OR: 1.008 (0.986, 1.031); p=0.497 DP3, OR: 1.001 (0.998, 1.005); p=0.383 **Summary:** NS/Null: 101-itemDP2, Snack & Processed & CD NS/Null: 101-item DP3, Vegetable & CD	• **Did not account for:** SEP, Race and/or Ethnicity • Additional outcomes reported include Memory, Vocabulary and Verbal Knowledge and Processing Speed • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: CD based on MMSE <24 (CI or not, 24 to 30) **Funding:** Australian Research Council Centre of Excellence in Population Ageing Research

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
	cheese, tinned fruit, cornflakes, fruit juice, all bran; Negative: full cream milk, eggs, butter/margarine spreads • 32, DP1, Western: Positive: Red Meats; Snacks; Refined Grains; Poultry; Condiments; Meat Pies; Chips/French Fries; Beer; Pizza • 32, DP2, Prudent: Positive: Other Vegetables; Green Leafy Vegetables; Fruit; Garlic and Onions; Fish; Nuts; Tomatoes • 32, DP3, Vegetable, Grain, Wine: Positive: Snacks; Condiments; Dark Yellow Vegetables; Potatoes; Cruciferous Vegetables; Whole Grains. Negative: Wine • 32, DP4, High-Fat: Positive: High Fat Dairy Products; Butter; Butter and Margarine Blends; Eggs. Negative: Low Fat Dairy Products; Margarine • 20, DP1, Variety: Positive: Vegetables; Fish; Fruit; Whole grains; Nuts; Poultry; Condiments; Meat; Fruit Juice • 20, DP2, Western: Positive: Snacks; Sugar; Fats and Oils; Meat Pies; Chips/French Fries. Negative: Legumes • 20, DP3, Dairy, Grain, Alcohol: Positive: Meat, Alcohol, Refined Grains; Negative: Dairy; Whole grains • **DP Method(s)**: Factor/Cluster **Comparisons:** Continuous, each DP per unit increase	NS/Null: 101-item DP4, Meat & CD NS/Null: 101-item DP6, Vegetable, Pasta & Alcohol & CD NS/Null: 32-item DP1, Western & CD NS/Null: 32-item DP2, Prudent & CD NS/Null: 32-item DP3, Vegetable, Grain, Wine & CD NS/Null: 32-item DP4, High-Fat & CD NS/Null: 20-item DP1, Variety & CD NS/Null: 20-item DP2, Western & CD NS/Null: 20-item DP3, Dairy, Grain, Alcohol & CD Inverse: 101-item DP1, Fruit & Vegetable & CD Inverse: 101-item DP5, Fish, Legumes & Vegetable & CD Inverse: 101-item DP7, Dairy, Cereal & Eggs & CD	
Beydoun, 2022[6] United States; NHANES III Analytic N=4592 **Participant characteristics:** • Race and/or Ethnicity:86% NH	• **DP Age(s):** 68-72y, mean (60y+ at baseline) • **DP(s) examined:** Healthy Eating Index (HEI) [Kennedy, 1995] • **DP Components:** • HEI 1995, Positive: Vegetables; Fruit;	**Follow-Up Duration: ~ 26y, max.** **Results:** HEI-1995 & Dem (all cause) in non-White vs. NH White, β: -0.052 (SE: 0.052); p=0.32	• **Did not account for:** Education • Indirect anlayses of Race and/or Ethnicity as primary exposure, and HEI-1995+MAR as one of many

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
White; 8% NH Black; 2% Mexican American, 4% Other • SEP: Education in mean years by Race and/or Ethnicity: ~12y NH White; ~9-10y, NH Black; ~6y Mexican American; ~9-10y Other • PIR, mean, by Race and/or Ethnicity: ~3 NH White; ~2, NH Black; ~2 Mexican American; ~2-3 Other • SES z-score, mean: 0.51 NH White; -0.27 NH Black, -0.59 Mexican American, 0.07 Other; • Majority between groups were Married • Selection: Excluded those without complete/valid diet outcome data	Grains; Variety. Negative: Meat; Milk; Total Fat, SFA, Cholesterol. Neutral: Sodium • **DP Method(s)**: Index/Score **Comparisons:** Continuous, HEI-1995	NH Black v. NH White, ♀ β: 0.001 (SE: 0.063); p=0.99; ♂ β: -0.056 (SE: 0.048); p=0.25 Mexican American v. NH White, ♀ β: 0.0 (SE: 0.068); p=1.00; ♂ β: -0.051 (SE: 0.052); p=0.33 Other v. NH White, ♀ β: 0.054 (SE: 0.07); p=0.42; ♂ β: 0.161 (SE: 0.070); p=0.026 HEI-1995 & Alz in non-White vs. NH White, β: -0.078 (SE: 0.024); p=0.003 NH Black v. NH White, ♀ β: -0.045 (SE: 0.026); p=0.094; ♂ β: -0.159 (SE: 0.101); p=0.12 Mexican American v. NH White, ♀ β: -0.057 (SE: 0.028); p=0.046; ♂ β: -0.175 (SE: 0.106); p=0.11 Other v. NH White, ♀ β: 0.017 (SE: 0.034); p=0.63; ♂ β:-0.042 (SE: 0.112); p=0.71 **Summary:** Inverse/NS: In non-white v. White participants, HEI-1995+MAR & Cognitive performance; NS/Null: Dem	potential mediators to Alz/Dem • **Diet assessment:** 24-h recall • **Outcome measurement**: Alz and Dem incidence based on linkage of NHANES to NDI and ICD codes **Funding:** NIA (NIH)
Boumenna, 2022[7] United States; Boston Puerto Rican Health Study (BPRHS), Analytic N=573 **Participant characteristics:** • Race and/or Ethnicity:100% Puerto Rican descent • SEP: Poverty index under 120%: ~61-73% • Job complexity score: ~40-44 (mean) • <=8th grade education: 47% • Selection: Excluded those with	• **DP Age(s):** 45-75y at baseline; 57.2 y (mean) • **DP(s) examined:** Mediterranean-Dash Intervention for Neurodegenerative Delay diet (MIND) [Morris, 2015] • **DP Components:** • Positive: Green leafy vegetables; Vegetables; Beans; Berries; Nuts; Whole Grains; Seafood; Poultry; Olive oil; Wine. Negative: Red Meat; Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food • **DP Method(s)**: Index/Score • **Comparisons:** Categorical, quintiles	**Follow-Up Duration: 8 y** **Results:** MIND & Global cognitive score (time-varying analyses) Q1, β: 1, ref Q2, β: 0.005, 95% CI: -0.053, 0.064 Q3, β: 0.006, 95% CI: -0.043, 0.055 Q4, β: 0.047, 95% CI: -0.006, 0.099 Q5, β: 0.093, 95% CI: 0.035, 0.152 p-trend=0.0019 Per pt, β: 0.0213, 95% CI: 0.008, 0.034, p-trend=0.0013 MIND (baseline only) & 8-yr global cognitive score, NS (data NR)	• **Did not account for:** None (all) • ~70% female; time varying analyses used rather than calculating cognitive change/decline • **Diet assessment:** FFQ assessed at baseline, 2-yr, and 5-yr • **Outcome measurement**: MMSE; verbal memory; Digit Span forward and backward (attention, working memory); Stroop task; clock drawing;

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
missing dietary or covariate data	Continuous, per 1 pt	**Summary:** Inverse: time-varying MIND & global cognition (continuous, Q5 vs. Q1) Null: baseline MIND & 8-yr global cognition	figure copying. Individual scores tranformed to z-scores and composite score computed as mean of individual z-scores **Funding:** NIH
Charisis, 2021[8] Greece; Hellenic Longitudinal Investigation of Aging and Diet (HELIAD) Analytic N=1046 **Participant characteristics:** • Race and/or Ethnicity: NR (Greek) • SEP: Education: 8.2 (.49)y, mean • Selection: Excluded those with dementia at baseline or no available dietary info or cognitive F/U	• **DP Age(s):** 73.1 (5) y • **DP(s) examined:** Mediterranean-based Diet Score (MedDietScore) [Panagiotakos 2007] • **DP Components:** • MedDietScore, Positive: Vegetables; Potatoes; Legumes; Fruit; Whole Grains; Fish; Olive Oil. Negative: Red and Processed Meat; Poultry; Full-Fat Dairy; Alcohol • **DP Method(s)**: Index/Score **Comparisons:** Categorical, MedDietScore (quartiles, Q1,HR: 1 or β:0 as REF)	**Follow-Up Duration: 3.1 (0.9)y, mean (range: 1.2 to 7.3y)** **Results:** Global Q2, β: 0.021, 95% CI: −0.009, 0.050; p=0.169 Q3, β: 0.026, 95% CI: 0.001, 0.051; p=0.049 Q4, β: 0.04, 95% CI: 0.016, 0.063; p=0.001 p-trend=0.001 Executive Q2, β: 0.035, 95% CI: 0.005, 0.064; p=0.023 Q3, β: 0.033, 95% CI: 0.003, 0.064; p=0.031 Q4, β: 0.053, 95% CI: 0.025, 0.081; p=<0.001 p-trend=0.001 Memory Q2, β: 0.035, 95% CI: −0.002, 0.072; p=0.061 Q3, β: 0.023, 95% CI: −0.012, 0.059; p=0.198 Q4, β: 0.026, 95% CI: −0.008, 0.060; p=0.136 p-trend=0.24 Language Q2, β: 0.013, 95% CI: −0.022, 0.048; p=0.466 Q3, β: 0.024, 95% CI: −0.007, 0.055; p=0.132 Q4, β: 0.026, 95% CI: −0.003, 0.055; p=0.077	• **Did not account for:** SEP, Smoking • n=62 new dementia cases • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: Dementia based on NINCDS/ADRDA criteria; Individual neuropsychological test scores were used to produce an average domain score for memory, language, attention speed, executive, and visual–spatial functioning; Global cognitive score based on the averages of individual scores **Funding:** Alzheimer's Association; European Social Fund; Ministry of Health and Social Solidarity

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		p-trend=0.059 Visuo-spatial Q2, β: 0.01, 95% CI: −0.041, 0.061; p=0.705 Q3, β: −0.001, 95% CI: −0.048, 0.047; p=0.972 Q4, β: 0.016, 95% CI: −0.028, 0.060; p=0.478 p-trend=0.573 Attention-speed Q2, β: 0.022, 95% CI: −0.036, 0.081; p=0.454 Q3, β: 0.038, 95% CI: −0.017, 0.094; p=0.175 Q4, β: 0.058, 95% CI: 0.009, 0.1070; p=0.02 p-trend=0.015 MedDietScore Q2, HR: 0.84, 95% CI: 0.36, 1.97; p=0.686 Q3, HR: 0.66, 95% CI: 0.29, 1.55; p=0.344 Q4, HR: 0.10, 95% CI: 0.01, 0.78; p=0.029 p-trend=0.023 **Summary:** Inverse: MedDietScore & Incident Dementia; CD (Impaired Global Cognition; Executive Function; Attention); NS/Null: Memory; Language; Visuospatial	
Chen, 2017[14] Taiwan; NR Analytic N=475 **Participant characteristics:** • Race and/or Ethnicity: NR (Taiwanese) • SEP: Education, mean ~13-14y; ≤6 y, ~5-10% • Selection: Excluded those using	• **DP Age(s):** 73 y (mean); ≥65 y at baseline • **DP(s) examined:** "Vegetable" DP • **DP Components:** • "Vegetable" pattern: Positive: dark green vegetables; vegetables with oil; light-colored vegetables; tubers • **DP Method(s)**: Factor/cluster • **Comparisons:** Categorical, tertiles,	**Follow-Up Duration: 2 y** **Results:** "Vegetable" DP & CD, NS (data NR) Logical memory-recall I "Vegetable" DP T1, β: ref T2, β: 0.18, 95% CI: 0.03, 0.33 T3, β: 0.16, 95% CI: 0.01, 0.32 p-trend (cont.)=0.005 T1, OR: 1, ref	• **Did not account for:** SEP, Race and/or Ethnicity, Anthropometry, Alcohol, Smoking • "Meat" and "Traditional" DPs also examined but did not meet 3+ food group criteria for inclusion: "Meat" pattern: Positive: meat; poultry;

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
medication for Alzheimer's disease; those with Hx stroke; missing FFQ data; vegetarians; extreme energy intake; extreme physical activity	T1, β and OR: 1 ref Continuous, per 1 pt	T2, OR: 0.48, 95% CI: 0.28, 0.83 T3, OR: 0.42, 95% CI: 0.24, 0.74 p-trend (categorical)=0.002 Logical memory-recall II "Vegetable" DP T1, β: ref T2, β: 0.17, 95% CI: 0.01, 0.32 T3, β: 0.21, 95% CI: 0.04, 0.37 p-trend (cont.)=0.01 T1, OR: 1, ref T2, OR: 0.60, 95% CI: 0.34, 1.06 T3, OR: 0.90, 95% CI: 0.50, 1.60 p-trend (categorical)=0.69 Trail making A "Vegetable" DP T1, β: ref T2, β: 0.04, 95% CI: -0.15, 0.23 T3, β: -0.22, 95% CI: -0.41, -0.02 p-trend (cont.)=0.03 T1, OR: 1, ref T2, OR: 1.16, 95% CI: 0.69, 1.97 T3, OR: 1.22, 95% CI: 0.71, 2.12 p-trend (categorical)=0.47 Verbal fluency-total score "Vegetable" DP & Verbal fluency, NS (data NR) Digit span reverse "Vegetable" DP & Digit span-reverse, NS (data NR) **Summary:** NS/Null: "Vegetable" DP & CD; Inverse/NS: memory decline (continuous) but NS (categorical); Positive/NS: EF decline (continuous) but NS (categorical)	roasted meats; "Traditional" pattern: Positive: pickled vegetables; fermented foods • **Diet assessment:** FFQ once at baseline • **Outcome measurement**: MoCA-T (Montreal Cognitive Assessment-Taiwan version; global cognition); Domain-specific: Wechsler Memory Scale-Third Edition (WMS-III) for logical memory, digit span for attention; Verbal fluency; Trail making tests A & B for executive function **Funding:** Ministry of Science and Technology in Taiwan
Chen, 2021[12] Australia; Sydney Memory and Ageing Study (MAS)	• **DP Age(s):** 70-90y at baseline; mean 78.8 y • **DP(s) examined:** Dietary Guideline Index - Australia (DGI-2013) • **DP Components:**	**Follow-Up Duration: 6 y** **Results:** Global cognition (overall) Q1, β: 1, ref	• **Did not account for:** SEP • Results remained similar (NS) in sensitivity analysis excluding participants in the lowest 10 percentile of

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
Analytic N=1037 **Participant characteristics:** • Race and/or Ethnicity: NR • SEP: Mean education: 11.6 y • Selection: Excluded those with insufficient English to complete assessments; MMSE score of <24 after adjustment for age, education and non-English-speaking background; psychotic symptoms or Dx of schizophrenia or bipolar disorder, multiple sclerosis, motor neuron disease and developmental disability; cancer (excluding prostate or non-malignant skin); other medical or psychological conditions that may prevent assessment	• Positive: Vegetables; Fruit; Grain (cereal) foods, mostly whole grain or high fibre; Lean meat and poultry, fish, eggs, nuts and seeds, and legumes/beans; Milk, yogurt, cheese, and/or their alternatives; Fluids (excluding soft drinks, cordial, fruit drinks, flavored milks, or alcoholic beverages). Negative: Discretionary foods; Saturated fat (including whole milk); Unsaturated spreads and oils; Added salt; Added sugars; Alcohol • **DP Method(s)**: Index/Score • **Comparisons:** Categorical, quintiles Continuous, per 1-pt	Q2, β: 0.16, 95% CI: −0.05, 0.38, p=0.14 Q3, β: 0.09, 95% CI: -0.05, 0.38, p=0.40 Q4, β: 0.03, 95% CI: -0.20, 0.26, p=0.82 Q5, β: 0.03, 95% CI: -0.19, 0.25, p=0.76 Per 1 pt, β: 0.000, 95% CI: −0.007, 0.007, p=0.95 Global cognition (∆) Q1, β: 1, ref Q2, β: 0.03, 95% CI: -0.08, 0.14, p=0.65 Q3, β: 0.06, 95% CI: -0.06, 0.17, p=0.32 Q4, β: 0.03, 95% CI: -0.08, 0.14, p=0.62 Q5, β: 0.04, 95% CI: -0.08, 0.16, p=0.51 Per 1 pt, β: 0.002, 95% CI: −0.002, 0.005, p=0.41 Attention (overall) β: 0.001, 95% CI: −0.006, 0.007, p=0.86 Attention (∆) β: 0.001, 95% CI: −0.003, 0.004, p=0.75 Language (overall) β: 0.000, 95% CI: −0.007, 0.007, p=0.96 Language (∆) β: 0.003, 95% CI: −0.000, 0.007, p=0.09 Executive (overall) β: −0.000, 95% CI: −0.007, 0.007, p=0.96 Executive (∆) β: 0.000, 95% CI: −0.003, 0.004, p=0.80 Visuospatial (overall)	cognitive performance at baseline • **Diet assessment:** FFQ once at baseline • **Outcome measurement**: Global cognition mean of individual domains: attention, language, executive function, visuospatial, memory, verbal **Funding:** National Health & Medical Research Council

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		β: 0.002, 95% CI: −0.003, 0.008, p=0.40 Visuospatial (Δ) β: −0.001, 95% CI: −0.004, 0.002, p=0.51 Memory (overall) β: −0.001, 95% CI: −0.015, 0.003, p=0.68 Memory (Δ) β: 0.002, 95% CI: −0.007, 0.005, p=0.24 Verbal (overall) β: −0.001, 95% CI: −0.007, 0.005, p=0.67 Verbal (Δ) β: 0.002, 95% CI: −0.001, 0.005, p=0.22 **Summary:** Null: DGI-2013 & global cognition, all domains (overall & Δ)	
Chen, 2022[13] Australia; Sydney Memory and Ageing Study (MAS) Analytic N=1037 **Participant characteristics:** • Race and/or Ethnicity:White, 98.0% • Asian, 1.0% • Other, 1.1% • SEP: Mean education, 11.6 yrs • Selection: Excluded those with dementia at baseline/previous Dx of dementia; psychotic Sx or Dx of schizophrenia or bipolar disorder; multiple sclerosis; motor neuron dz; developmental disability; progressive malignancy (active cancer or receiving cancer treatment);	• **DP Age(s):** 78.8 y (mean); 70-90 y at baseline • **DP(s) examined:** Mediterranean Diet Score (MDS) [Trichopolou 2003] • Mediterranean-based Diet Score (MedDietScore) [Panagiotakos 2007] • DASH Score [modified from Fung 2008 by Berendsen 2017] • **DP Components:** • MDS: Positive: Vegetables; Legumes; Fruit, Nuts; Cereals; Fish; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • MedDietScore: Positive: Vegetables; Potatoes; Legumes; Fruit; Whole Grains; Fish; Olive Oil. Negative: Red and Processed Meat; Poultry; Full-Fat Dairy; Alcohol • DASH: Positive: Vegetables (not potatoes and legumes); Nuts and	**Follow-Up Duration: 6 y** **Results:** Overall global cognition (mean over 6 y) MDS Per 1-pt, β: -0.026, 95% CI: -0.093, 0.041, p-trend= 0.446 T1, β: 1, ref T2, β: -0.019, 95% CI: -0.186, 0.148, p-trend= 0.821 T3, β: -0.029, 95% CI: -0.219, 0.161, p-trend= 0.764 MedDietScore Per 1-pt, β: 0.005, 95% CI: -0.018, 0.028, p-trend= 0.690 T1, β: 1, ref T2, β: 0.047, 95% CI: -0.210, 0.303, p-trend= 0.722 T3, β: 0.077, 95% CI: -0.188, 0.343, p-trend= 0.568 DASH	• **Did not account for:** SEP, Alcohol (DASH score only) • Main analyses included imputed data, sensitivity analyses including only those with complete data (n=484) yielded largely similar results • **Diet assessment:** FFQ once at baseline • **Outcome measurement**: Cognitive function at baseline, 2-yr, 4-yr, and 6-yr using face-to-face assessments: Attention/processing speed (Digit Symbol-Coding, Trail Making Test A); Verbal memory (Logical Memory Story A delayed recall, Rey

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
implausible energy intake; MMSE score <24; other medical or psychological conditions that may prevent assessment	Legumes; Fruit; Whole Grains; Low-Fat Dairy. Negative: Red and Processed Meat; Total sugar intake; Sodium • **DP Method(s)**: Index/Score • **Comparisons:** Categorical, tertiles Continuous, per 1 pt	Per 1-pt, β: 0.008, 95% CI: -0.019, 0.035, p-trend= 0.570 T1, β: 1, ref T2, β: 0.091, 95% CI: -0.155, 0.337, p-trend= 0.467 T3, β: 0.029, 95% CI: -0.249, 0.308, p-trend= 0.835 Decline global cognition (slope over 6 y) MDS Per 1-pt, β: 0.010, 95% CI: -0.012, 0.327, p-trend= 0.374 T1, β: 1, ref T2, β: 0.049, 95% CI: -0.035, 0.133, p-trend= 0.254 T3, β: 0.024, 95% CI: -0.072, 0.121, p-trend= 0.621 MedDietScore Per 1-pt, β: 0.001, 95% CI: -0.006, 0.008, p-trend= 0.791 T1, β: 1, ref T2, β: 0.037, 95% CI: -0.045, 0.118, p-trend= 0.376 T3, β: 0.011, 95% CI: -0.075, 0.097, p-trend= 0.807 DASH Per 1-pt, β: -0.001, 95% CI: -0.010, 0.008, p-trend= 0.781 T1, β: 1, ref T2, β: -0.015, 95% CI: -0.100, 0.069, p-trend= 0.727 T3, β: -0.010, 95% CI: -0.099, 0.078, p-trend= 0.817 **Summary:** Null: MDS, MedDietScore, DASH & overall cognition Null: MDS, MedDietScore, DASH & cognitive decline	Auditory Verbal Learning Test of total learning, immediate and delayed recall); Global memory (verbal memory measures, Benton Visual Retention Test recognition); Language tests (Boston Naming Test, Semantic Fluency (Animals)); Visuospatial cognition (Block Design test); Executive function (Controlled Oral Word Association Test, Trail Making Test B) **Funding:** National Health and Medical Research Council Australia

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
Chen, 2023[10] Finland; Cardiovascular Risk in Young Finns Study (YFS) Analytic N=790 **Participant characteristics:** • Race and/or Ethnicity: NR (100% Finnish) • SEP: SES from family income, parent education and employment, mean (SD): 0.01 (0.6) • Selection: Excluded those who had missing dietary, dementia, or risk factor data	• **DP Age(s):** 11y, mean (3- 18y at baseline) • **DP(s) examined:** Youth DPs: "Traditional Finnish" 1980; "High-carbohydrate" 1980; "Vegetables and dairy products 1980"; Adult DPs: "Traditional Finnish and high-carbohydrate" 2011; "Red meat" 2011; "Healthy" 2011 • **DP Components:** • "Traditional Finnish" 1980: high intake of butter, rye, potatoes, coffee, milk, and sausages and a low intake of fruit and berries; • "High-carbohydrate" 1980: high intake of margarine and oils, wheat, sugar, eggs, milk, other meat, other grain products, potatoes, and fruit and berries; • "Vegetables and dairy products 1980": high intake of vegetables, cheese, and other dairy products. • "Traditional Finnish and high-carbohydrate" 2011: high intake of grain products, potatoes, butter, sugar, and margarine and oils; • "Red meat" 2011: high intake of pork, eggs, sausages, offal, other meat, and fish; • "Healthy" 2011: high intake of vegetables, legumes and nuts, fish, fruit and berries, cheese, and tea • **DP Method(s)**: Factor/Cluster **Comparisons:** Continuous, per SD of each DP	**Follow-Up Duration: 31y, mean** **Results:** Each DP & Episodic memory & associative learning, β (95% CI) Traditional Finnish long-term, β: -0.062 (-0.142, 0.018) youth, β: -0.067 (-0.149, 0.016) adult, β: -0.011 (-0.093, 0.071) High-carbohydrate long-term, β: -0.041 (-0.115, 0.032) youth, β: 0.023 (-0.053, 0.098) adult, β: -0.078 (-0.154, -0.001) Vegetables and dairy products long-term, β: 0.111 (0.035, 0.186) youth, β: 0.094 (0.019, 0.169) adult, β: 0.049 (-0.026, 0.125) Traditional Finnish and high-carbohydrate long-term, β:-0.052 (-0.123, 0.020) youth, β: 0.050 (-0.024, 0.124) adult, β:-0.121 (-0.197, -0.045) Healthy long-term, β: 0.080 (0.001, 0.158) youth, β: 0.110 (0.035, 0.185) adult, β: -0.018 (-0.103, 0.066) Red meat long-term, β: 0.020 (-0.054, 0.093) youth, β: -0.018 (-0.090, 0.053) adult, β: 0.046 (-0.030, 0.122) Each DP & Working memory & problem solving, β (95% CI) Traditional Finnish long-term, β: -0.097 (-0.171, -0.022) youth, β: -0.085 (-0.162, -0.007) adult, β: -0.037 (-0.113, 0.039) High-carbohydrate long-term, β: -0.006 (-0.074, 0.062) youth, β: 0.065 (-0.004, 0.135) adult, β: -0.072 (-0.144, -0.001) Vegetables and dairy products long-term, β: 0.034 (-0.036, 0.104)	• **Did not account for:** Alcohol; Race and/or Ethnicity (Finnish) • Indirectly examining CD via cognitive function • **Diet assessment:** 48h-recall (50% of participants at basline) or FFQ (100% at repeat visits) • **Outcome measurement**: CD based on computerized cognitive battery of tests (for episodic memory/learning; working memory/problem solving; reaction/movement time; visual processing and attention) **Funding:** Academy of Finland; Social Insurance Institution of Finland; Competitive State Research Financing of the Expert Responsibility area of Kuopio, Tampere and Turku University Hospitals; Juho Vainio Foundation; Paavo Nurmi Foundation; Finnish Foundation for Cardiovascular Research; Finnish Cultural Foundation; The Sigrid Juselius Foundation; Tampere Tuberculosis Foundation; Emil Aaltonen Foundation; Yrjo Jahnsson Foundation; Signe and Ane Gyllenberg Foundation; Diabetes Research Foundation of Finnish Diabetes Association; EU Horizon 2020; European Research Council; Tampere

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		youth, β: -0.003 (-0.074, 0.068) adult, β: 0.046 (-0.025, 0.117) Traditional Finnish and high-carbohydrate long-term, β: -0.049 (-0.116, 0.018) youth, β: 0.045 (-0.024, 0.114) adult, β: -0.115 (-0.187, -0.043) Healthy long-term, β: -0.032 (-0.106, 0.042) youth, β: 0.026 (-0.045, 0.098) adult, β: -0.075 (-0.156, 0.005) Red meat long-term, β: -0.018 (-0.087, 0.051) youth, β: -0.068 (-0.136, 0.0001) adult, β: 0.049 (-0.024, 0.121) Each DP & Reaction & Movement Time (RTI), β (95% CI) Traditional Finnish long-term, β: -0.059 (-0.141, 0.023) youth, β: -0.038 (-0.123, 0.047) adult, β: -0.035 (-0.120, 0.049) High-carbohydrate long-term, β: -0.046 (-0.121, 0.030) youth, β: -0.007 (-0.084, 0.070) adult, β: -0.055 (-0.133, 0.023) Vegetables and dairy products long-term, β: 0.022 (-0.055, 0.100) youth, β: 0.021 (-0.056, 0.098) adult, β: 0.008 (-0.069, 0.086) Traditional Finnish and high-carbohydrate long-term, β: -0.044 (0.117, 0.030) youth, β: -0.031 (-1.07, 0.045) adult, β: -0.030 (0.108, 0.048) Healthy long-term, β: -0.006 (-0.088, 0.076) youth, β: 0.039 (-0.039, 0.116) adult, β: -0.054 (-0.141, 0.034) Red meat long-term, β: -0.034 (-0.110, 0.042) youth, β: -0.052 (-0.128, 0.024)	University Hospital Supporting Foundation

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		adult, β: 0.008 (-0.070, 0.086) Each DP & Visual processing/attention (RVP), β (95% CI) Traditional Finnish long-term, β: -0.064 (-0.140, 0.012) youth, β: -0.055 (-0.134, 0.024) adult, β: -0.026 (-0.103, 0.052) High-carbohydrate long-term, β: -0.079 (-0.148, -0.010) youth, β: -0.009 (-0.080, 0.062) adult, β: -0.099 (-0.172, -0.027) Vegetables and dairy products long-term, β: 0.073 (0.001, 0.144) youth, β: 0.040 (-0.032, 0.112) adult, β: 0.053 (-0.018, 0.125) Traditional Finnish and high-carbohydrate long-term, β: -0.117 (-0.185, -0.049) youth, β: -0.005 (-0.074, 0.065) adult, β: -0.161 (-0.234, -0.089) Healthy long-term, β: -0.054 (-0.131, 0.022) youth, β: 0.001 (-0.073, 0.074) adult, β: -0.075 (-0.158, 0.007) Red meat long-term, β: 0.079 (0.007, 0.150) youth, β: -0.002 (-0.073, 0.069) adult, β: 0.104 (0.031, 0.178) **Summary:** Inverse: Traditional Finnish in youth and long-term & working memory/problem solving; NS/Null all other analyses Inverse: High Carbohydrate DP in adulthood & episodic memory/associative learning, working memory/problem solving; NS/Null: all other analyses Positive: Vegetables and Dairy DP in youth and long-term & episodic memory/associative learning; in long	

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		term & visual processing/attention; NS/Null: all other analyses Positive: "Healthy" DP in youth and long-term & episodic memory/associative learning and visual processing/attention; NS/Null: all other analyses Inverse: High-carbohydrate DP in adulthood & episodic memory/associative learning and and visual processing/attention; long-term & visual processing/attention; NS/Null: all other analyses Inverse: Traditional Finnish and High Carbohydrate DP in adulthood & episodic memory/associative learning; NS/Null: all other analyses Positive: Red Meat DP in adulthood and long-term & visual processing/attention; NS/Null: all other analyses	
Chen, 2023[11] Taiwan; Taiwan Initiative for Geriatric Epidemiological Research (TIGER) Analytic N=436 **Participant characteristics:** • Race and/or Ethnicity:"100% ethnically Chinese" • SEP: NR • • Selection: Excluded those with Hx stroke, brain tumor, head traums; dementia at baseline; use of medications to treat Alzheimer's disease; incomplete FFQ data; extreme energy intakes or reported physical activity; vegetarians excluded	• **DP Age(s):** 71.6 y, mean (≥65 y) • **DP(s) examined:** modified Alternative Healthy Eating Index (mAHEI) [Dehghan, 2012] • **DP Components:** • mAHEI, Positive: Vegetables; Fruits; Soy Protein; Whole Grains; Fish: Meat: Egg ratio; Negative: Fried foods; Neutral: Alcohol • **DP Method(s)**: Index/Score **Comparisons:** Trajectory: Deteriorating mAHEI; Improving mAHEI; Stable-High mAHEI	**Follow-Up Duration: 6 y** **Results:** Deteriorating vs. Stable-High mAHEI & global CD (MoCA-T), β: -0.00, 95% CI: -1.00, 1.00 Memory, β: -0.15, 95% CI: -0.55, 0.24 Theme Recall, β: -0.14, 95% CI: -0.57, 0.29 Free Recall, β: -0.08, 95% CI: -0.49, 0.33 Delayed Theme Recall, β: -0.24, 95% CI: -0.68, 0.20 Delayed Free Recall, β: -0.15, 95% CI: -0.59, 0.29 EFx, β: -0.07, 95% CI: -0.35, 0.21 TMT-A, β: -0.05, 95% CI: -0.31, 0.21 TMT-B, β: -0.08, 95% CI: -0.46, 0.30	• **Did not account for:** SEP, Smoking • **Diet assessment:** FFQ assessed at baseline, 4th, and 6th year F/U; Nuts excluded from index/score due to low consumption • **Outcome measurement**: Global cognition: MoCA-T (Montreal Cognitive Assessment—Taiwanese version) (once at baseline and once at f/u) • Domain-specific: Wechsler Memory Scale-Third edition (WMS-III) for logical memory and attention; TMT-A & B for EF; verbal fluency included

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		Attn, β: -0.03, 95% CI: -0.32, 0.27 Digit Span-F, β: 0.00, 95% CI: -0.37, 0.37 Digit Span-B, β: -0.06, 95% CI: -0.40, 0.28 VF, β: -0.30, 95% CI: -0.63, 0.02 Improving vs. Stable-High mAHEI & global CD (MoCA-T), β: -0.43, 95% CI: -1.07, 0.20 Memory, β: -0.40, 95% CI: -0.66, -0.15; p<0.01 Immediate Theme Recall, β: -0.32, 95% CI: -0.60, -0.05; p<0.05 Immediate Free Recall, β: -0.43, 95% CI: -0.69, -0.17; p<0.01 Delayed Theme Recall, β: -0.41, 95% CI: -0.69, -0.13; p<0.01 Delayed Free Recall, β: -0.45, 95% CI: -0.73, -0.17; p<0.01 EFx, β: 0.01, 95% CI: -0.17, 0.18 TMT-A, β: 0.01, 95% CI: -0.16, 0.18 TMT-B, β: -0.00, 95% CI: -0.24, 0.24 Attn, β: 0.04, 95% CI: -0.14, 0.23 Digit Span-F, β: 0.11, 95% CI: -0.13, 0.34 Digit Span-B, β: -0.02, 95% CI: -0.23, 0.20 VF, β: -0.07, 95% CI: -0.28, 0.14 **Summary:** NS/Positive: Stable-High mAHEI (v. Deterioriating) & Global MoCA-T; Memory; Recall; EFx; TMT; Attn.; Digit Span; VF) Positive: Stable-High mAHEI (v. Improving) & Memory and Recall performance (NS: global MoCA-T; EFx; TMT; Attn.; Digit Span; VF)	naming fish, vegetables, and fruit within 1 minute **Funding:** Ministry of Science and Technology, Taiwan
Chen, 2023[9] United States, United Kingdom; Whitehall II study (WII - UK), Health and Retirement Study (HRS - US),	• **DP Age(s):** ~64 y at baseline • 62.2 y (WII); 66.5 (HRS); 64.2 (FOS) • **DP(s) examined:** Mediterranean-Dash	**Follow-Up Duration: 5.0-12.9 y** **HRS: 5.0y** **FOS: 10.7y** **WII: 12.9y**	• **Did not account for:** Race and/or Ethnicity ("Western" population of similar cultural and ethnic background)

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
Framingham Heart Study Offspring cohort (FOS - US) Analytic N=18136 (pooled) WII: 8358 HRS: 6758 FOS: 3020 **Participant characteristics:** • Race and/or Ethnicity:WII: 90.9% White; Other n/a • HRS: 70.5% White; 15.4% Black; 10.8% Hispanic; 3.3% Other • FOS: NR • SEP: Education, mean 13.1-15.3y • Low occupation position (WII): 15.1% • HH Income quartiles (HRS & FOS): 1st, 20.3-24.6; 2nd, 23.4-24.5; 3rd, 24.2-28.1; 4th, 26.7-28.2 • Selection: Excluded those with dementia at baseline or within 2 years of follow-up; • WII included civil workers aged 35-55y in 1985; HRS included ages 50y+; FOS included children and spouses of the Framingham Heart Study	Intervention for Neurodegenerative Delay diet (MIND) [Morris, 2015] • **DP Components:** • MIND: Positive: Green leafy vegetables; Vegetables; Beans; Berries; Nuts; Whole Grains; Seafood; Poultry; Olive oil; Wine. Negative: Red Meat; Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food • **DP Method(s)**: Index/Score • **Comparisons:** Categorical, tertiles (T1, HR: 1, ref) Continuous, per 3-pt increase	**Results:** MIND & Dem (95% CI) Pooled WHII, HRS, FOS T1, HR: 1, ref T2, HR: 0.97 (0.81, 1.15) T3, HR: 0.81 (0.67, 0.98) Per 3-pt, HR: 0.83 (0.72, 0.95) p-trend=0.01 WII, HR (95% CI) T1, HR: 1, ref T2, HR: 1.03 (0.73, 1.45) T3, HR: 0.96 (0.66, 1.38) Per 3-pt, HR: 0.97 (0.72, 1.30) p-trend=0.83 HRS, HR (95% CI) T1, HR: 1, ref T2, HR: 0.95 (0.73, 1.25) T3, HR: 0.83 (0.63, 1.09) Per 3-pt, HR: 0.82 (0.68, 0.99) p-trend=0.04 FOS, HR (95% CI) T1, HR: 1, ref T2, HR: 0.96 (0.70, 1.33) T3, HR: 0.69 (0.48, 0.99) Per 3-pt, HR: 0.76 (0.57, 1.00) p-trend=0.04 **Summary:** Inverse: MIND & Dem (Pooled, HRS, FOS) Null: MIND & Dem (WII)	• In subgroup analyses, MIND diet not associated with dementia risk among smokers but was inversely associated among non-smokers • For HRS: "did not directly assess the status of dementia" but Langa-Weir Classification strategy "showed both high specificity a • **Diet assessment:** FFQ (once at baseline for HRS) • **Outcome measurement**: WII: medical record linked to obtain dementia incidence. HRS: Langa-Weir Classification strategy-defined dementia case if participant had a poor objective performance (<=6 out of 27) in self-respondent interview or had a high score in cognitive disability (>=6 out of 11) assessed by a proxy respondent. FOS: a dementia review panel consisting of a neurologist and a neuropsychologist reviewed every possible case of dementia. **Funding:** NR
Chou, 2019[15] Taiwan; Taiwan Initiative for Geriatric Epidemiological Research (TIGER) Analytic N=436 **Participant characteristics:**	• **DP Age(s):** 72.5 y, mean (≥65 y) • **DP(s) examined:** modified Alternative Healthy Eating Index (mAHEI) [Dehghan, 2012] • **DP Components:** • mAHEI, Positive: Vegetables; Fruits;	**Follow-Up Duration: 2 y** **Results:** Global (MoCA-T) T1, OR: 1, ref T2, OR: 0.87, 95% CI: 0.50, 1.51 T3, OR: 0.54, 95% CI: 0.31, 0.95	• **Did not account for:** SEP (except global, memory), Physical Activity, Anthropometry (except verbal fluency), Race and/or Ethnicity (100% Taiwanese),

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
• Race and/or Ethnicity: NR (100% Taiwanese) • SEP: Relatively high education & income: • Mean education, 14.0 yrs • Annual disposable income (converted from TWD to USD): • <$9,252.00, 16% • $9,252.00-24,672.00, 26% • $24,672.00-30,840.00, 15% • $>30,840.00, 43% • • Selection: Excluded those with Hx stroke, brain tumor, head traums; dementia at baseline; use of medications to treat Alzheimer's disease; incomplete FFQ data; extreme energy intakes or reported physical activity; vegetarians excluded	Soy Protein; Whole Grains; Fish: Meat: Egg ratio; Negative: Fried foods; Neutral: Alcohol • **DP Method(s)**: Index/Score **Comparisons:** Categorical, tertiles	p-trend=0.03 Logical memory T1, OR: 1, ref T2, OR: 1.13, 95% CI: 0.62, 2.07 T3, OR: 0.76, 95% CI: 0.42, 1.38 p-trend=0.38 Verbal fluency T1, OR: 1, ref T2, OR: 1.18, 95% CI: 0.69, 2.03 T3, OR: 0.94, 95% CI: 0.53, 1.64 p-trend=0.84 Executive function T1, OR: 1, ref T2, OR: 1.27, 95% CI: 0.75, 2.13 T3, OR: 1.12, 95% CI: 0.65, 1.91 p-trend=0.68 Attention T1, OR: 1, ref T2, OR: 1.03, 95% CI: 0.60, 1.76 T3, OR: 0.56, 95% CI: 0.32, 0.99 p-trend=0.049 **Summary:** Inverse: mAHEI & CD, attention decline; NS: logical memory, verbal fluency, EFx	Smoking • "our participants were recruited from a senior health checkup program in Taipei City, who tended to have higher education level, annual disposable income, and be more health-conscious than the general population" • **Diet assessment:** FFQ assessed once at baseline; Nuts excluded from index/score due to low consumption • **Outcome measurement**: Global cognition: MoCA-T (Montreal Cognitive Assessment—Taiwanese version) (once at baseline and once at f/u) • Domain-specific: Wechsler Memory Scale-Third edition (WMS-III) for logical memory and attention; TMT-A & B for EF; verbal fluency included naming fish, vegetables, and fruit within 1 minute **Funding:** Ministry of Science and Technology, Taiwan
Corley & Deary, 2021[16] Scotland; Lothian Birth Cohort 1936 (LBC1936) Analytic N=364 **Participant characteristics:** • Race and/or Ethnicity: NR • SEP: Mean education, ~10.5-11 years	• **DP Age(s):** 69.5 y (mean) at baseline • **DP(s) examined:** Mediterranean Diet Score (MDS) [Trichopolou 2003] • **DP Components:** • "Mediterranean-style" PCA: Positive: Vegetables (leeks or courgettes, tomatoes, broccoli, spinach, other salad vegetables); Fish; Legumes; Olive oil; Salad dressing; Poultry;	**Follow-Up Duration: 12.5 y (mean)** **Results:** ΔGlobal cognition Mediterranean, Est. -0.002, SE: 0.001, p-trend= 0.17 Traditional, Est. 0.000, SE: 0.001, p-trend= 0.88 MDS, Est. 0.000, SE: 0.001, p-trend= 0.49	• **Did not account for:** Education, Anthropometry, Race and/or Ethnicity, Alcohol (PCA patterns) • Slope (i.e., cognitive change/decline) models included only those with cognitive data through age 82. Results similar when

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
• Married, ~70-75% • SES (professional), ~70-90% (higher in those with higher mediterranean, lower traditional adherence) • Selection: Excluded those with missing/incomplete FFQ; extreme energy intake; Dementia at baseline	Pasta; Rice; Water; Tomato-based sauces • "Traditional" PCA: Positive: Meat; Processed meats (such as pies, pasties and sausage rolls); Mashed potatoes; Tinned vegetables; Peas or beans; Carrots; Baked beans; Bottled sauces' Custard or other sweet sauces; Milk-based puddings. Negative: filter, espresso and cappuccino coffee • MDS: Positive: Vegetables; Legumes; Fruit, Nuts; Cereals; Fish; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • **DP Method(s)**: Factor/Cluster, Index/Score **Comparisons:** Continuous	ΔVisuospatial ability Mediterranean, Est. -0.000, SE: 0.002, p-trend= 0.87 Traditional, Est. -0.003, SE: 0.002, p-trend= 0.14 MDS, Est. 0.001, SE: 0.001, p-trend= 0.40 ΔProcessing speed Mediterranean, Est. -0.003, SE: 0.002, p-trend= 0.09 Traditional, Est. 0.001, SE: 0.002, p-trend= 0.93 MDS, Est. 0.000, SE: 0.001, p-trend= 0.71 ΔMemory Mediterranean, Est. -0.001, SE: 0.002, p-trend= 0.59 Traditional, Est. 0.000, SE: 0.003, p-trend= 0.92 MDS, Est. 0.000, SE: 0.001, p-trend= 0.82 ΔVerbal ability Mediterranean, Est. -0.003, SE: 0.001, p-trend= 0.008 Traditional, Est. -0.001, SE: 0.001, p-trend= 0.29 MDS, Est. 0.001, SE: 0.001, p-trend= 0.63 **Summary:** Inverse: Mediterranean & verbal ability; NS/Null: Mediterranean & Global cognition, visuospatial ability, processing speed, memory NS/Null: Traditional & Global cognition, visuospatial ability, processing speed, memory, verbal ability NS/Null: MDS & Global cognition, visuospatial ability, processing speed, memory, verbal ability	including participants with dementia (N=882) • **Diet assessment:** FFQ once at baseline; PCA previously derived in Mõttus et al. • **Outcome measurement**: Cognitive domains assessed every 3 years from age 73-82y: Visuospatial ability (Matrix Reasoning (WAIS-III), Block Design (WAISIII), Spatial Span (WMS-III), average of Forwards and Backwards); Processing speed (Digit Symbol (WAIS-III), Symbol Search (WAIS-III), Choice Reaction Time, Inspection Time); Memory (Logical Memory Immediate and Delayed Recall (WMSIII), Verbal Pairs Immediate and Delayed Recall (WMSIII), Digits Backwards (WAIS-III)); Verbal ability (National Adult Reading Test, Wechsler Test of Adult Reading, and Verbal Fluency). **Funding:** Age UK (Disconnected Mind project); UK Medical Research Council; NIH

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
Cornelis, 2023[17] United Kingdom; UK Biobank Analytic N=120,661 (CD); 78663 (Dem) **Participant characteristics:** • Race and/or Ethnicity:White, ≥96% • South Asian, ~1% • Black, ~0.8% • Chinese, ~0.2% • Other/Unknown, ~1.4% • SEP: Townsend deprivation index, ~ -1.6 • Household income ≥52,000 euro, ~30% • College/University degree, ~40-50% • Currently employed, ~60% • Selection: Included those who recruited in 2009-10, with at least two FFQs	• **DP Age(s):** 37-73 y at baseline; incident dementia 55+ only; mean age ~57-58 • **DP(s) examined:** Mediterranean-Dash Intervention for Neurodegenerative Delay diet (MIND) [Morris, 2015] • adjusted Alternative HEI (AHEI)-2010 [Chiuve 2012], for UKB cohort used oily fish in lieu of n-3 • **DP Components:** • MIND: Positive: Green leafy vegetables; Vegetables; Beans; Berries; Nuts; Whole Grains; Seafood; Poultry; Olive oil; Wine. Negative: Red Meat; Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food • AHEI-2010: Positive: Vegetables (not potatoes, French fries); Fruit; Legumes and Nuts; Whole Grains; Oily Fish (in lieu of n-3 for UKB cohort). Negative: Red and Processed Meat; Sugar Sweetened Beverages and Fruit Juice; Trans FA; Sodium. Neutral: Alcohol • **DP Method(s)**: Index/Score • **Comparisons:** Categorical, tertiles Continuous, per 1 pt & per SD	**Follow-Up Duration: 10.5 y** **Results:** MIND Fluid Intelligence (higher score = better perfomance) T1, β: 1, ref T2, β: -0.03, 95% CI: -0.07, 0.007, p-trend=0.12 T3, β: -0.14, 95% CI: -0.18, -0.10, p-trend<0.0001 per 1-pt, β: -0.04, 95% CI: -0.05, -0.03 per-SD, β: -0.07, 95% CI: -0.09, -0.06 p-trend (linear)<0.0001 Reaction time (lower score = better performance) T1, β: 1, ref T2, β: -0.47, 95% CI: -1.85, 0.91, p-trend=0.51 T3, β: 0.66, 95% CI: -0.70, 2.02, p-trend=0.34 per 1-pt, β: 0.33, 95% CI: 0.03, 0.62 per-SD, β: 0.63, 95% CI: 0.06, 1.21 p-trend (linear)=0.03 Pairs matching (lower score = better performance) T1, β: 1, ref T2, β: 0.01, 95% CI: 0.001, 0.02, p-trend=0.03 T3, β: 0.03, 95% CI: 0.02, 0.04, p-trend<0.0001 per 1-pt, β: 0.008, 95% CI: 0.006, 0.01 per-SD, β: 0.02, 95% CI: 0.01, 0.02 p-trend (linear)<0.0001 Symbol digital substitution (higher score = better performance) T1, β: 1, ref T2, β: -0.07, 95% CI: -0.15, 0.02, p-trend=0.16	• **Did not account for:** None (all) • No composite measure of cognitive function; no adjustment for multiple testing • **Diet assessment:** At least two WebQ's (24-hr recalls), each asssessed ~3-4 months apart • **Outcome measurement**: CD: Computerized cogntiive function tests developed for UKB: prospective memory (PM), fluid intelligence (FI, verbal-numerical reasoning), pairs matching (Pairs, visual memory) and reaction time (RT) • Dem: all cause dementia derived from hospital admission and death records; ICD-10 codes; further classified as Alzheimer's when possible **Funding:** NIH

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		T3, β: -0.25, 95% CI: -0.33, -0.16, p-trend<0.0001 per 1-pt, β: -0.07, 95% CI: -0.09, -0.05 per-SD, β: -0.14, 95% CI: -0.17, -0.10 p-trend (linear)<0.0001 Trail A (lower score = better performance) T1, β: 1, ref T2, β: 0.005, 95% CI: -0.001, 0.01. p-trend=0.10 T3, β: 0.01, 95% CI: 0.007, 0.02, p-trend<0.0001 per 1-pt, β: 0.003, 95% CI: 0.002, 0.004 per-SD, β: 0.006, 95% CI: 0.003, 0.008 p-trend (linear)<0.0001 Trail B (lower score = better performance) T1, β: 1, ref T2, β: 0.01, 95% CI: 0.005, 0.02, p-trend=0.0002 T3, β: 0.02, 95% CI: 0.02, 0.03, p-trend<0.0001 per 1-pt, β: 0.006, 95% CI: 0.005, 0.008 per-SD, β: 0.012, 95% CI: 0.010, 0.015 p-trend (linear)<0.0001 Prospective memory (higher score = better performance) T1, β: 1, ref T2, β: 1.01, 95% CI: 0.95, 1.07, p-trend=0.78 T3, β: 0.95, 95% CI: 0.90, 1.01, p-trend=0.11 per 1-pt, β: 0.98, 95% CI: 0.97, 0.99 per-SD, β: 0.96, 95% CI: 0.94, 0.99 p-trend (linear)=0.004 AHEI-2010	

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		Fluid intelligence (higher score = better performance) T1, β: 1, ref T2, β: -0.05, 95% CI: -0.09, -0.008, p-trend=0.02 T3, β: -0.17, 95% CI: -0.21, -0.13, p-trend<0.0001 per 1-pt, β: -0.006, 95% CI: -0.007, -0.004 per-SD, β: -0.08, 95% CI: -0.09, -0.06 p-trend (linear)<0.0001 Reaction time (lower score = better performance) T1, β: 1, ref T2, β: 1.23, 95% CI: -0.12, 2.57, p-trend=0.07 T3, β: 2.77, 95% CI: 1.37, 4.16, p-trend<0.0001 per 1-pt, β: 0.10, 95% CI: 0.06, 0.14 per-SD, β: 1.41, 95% CI: 0.83, 1.99 p-trend (linear)<0.0001 Pairs matching (lower score = better performance) T1, β: 1, ref T2, β: 0.03, 95% CI: 0.02, 0.04, p-trend<0.0001 T3, β: 0.04, 95% CI: 0.03, 0.05, p-trend<0.0001 per 1-pt, β: 0.001, 95% CI: 0.0011, 0.0017 per-SD, β: 0.019, 95% CI: 0.016, 0.023 p-trend (linear)<0.0001 Symbol digital substitution (higher score = better performance) T1, β: 1, ref T2, β: -0.19, 95% CI: -0.27, -0.11, p-trend<0.0001 T3, β: -0.40, 95% CI: -0.49, -0.32, p-trend<0.0001	

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		per 1-pt, β: -0.013, 95% CI: -0.016, -0.011 per-SD, β: -0.18, 95% CI: -0.22, -0.15 p-trend (linear)<0.0001 Trail A (lower score = better performance) T1, β: 1, ref T2, β: 0.009, 95% CI: 0.003, 0.01, p-trend=0.002 T3, β: 0.02, 95% CI: 0.01, 0.03, p-trend<0.0001 per 1-pt, β: 0.0006, 95% CI: 0.0004, 0.0008 per-SD, β: 0.008, 95% CI: 0.006, 0.01 p-trend (linear)<0.0001 Trail B (lower score = better performance) T1, β: 1, ref T2, β: 0.015, 95% CI: 0.009, 0.021, p-trend<0.0001 T3, β: 0.034, 95% CI: 0.028, 0.039, p-trend<0.0001 per 1-pt, β: 0.0011, 95% CI: 0.0009, 0.0012 per-SD, β: 0.015, 95% CI: 0.012, 0.017 p-trend (linear)<0.0001 Prospective memory (higher score = better performance) T1, β: 1, ref T2, β: 0.89, 95% CI: 0.84, 0.95, p-trend=0.0003 T3, β: 0.90, 95% CI: 0.85, 0.96, p-trend=0.002 per 1-pt, β: 1.00, 95% CI: 0.99, 1.00 per-SD, β: 0.95, 95% CI: 0.92, 0.97 p-trend (linear)<0.0001 All-cause dementia MIND T1, β: 1, ref	

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		T2, β: 1.06, 95 %CI: 0.90, 1.24, p-trend=0.51 T3, β: 0.90, 95% CI: 0.74, 1.09, p-trend=0.27 Per 1-pt, β: 0.99, 95% CI: 0.95, 1.03 Per-SD, β: 0.97, 95% CI: 0.90, 1.05 p-trend (linear)=0.48 AHEI-2010 T1, β: 1, ref T2, β: 0.93, 95% CI: 0.78, 1.10, p-trend=0.38 T3, β: 0.89, 95% CI: 0.75, 1.06, p-trend=0.20 Per 1-pt, β: 1.00, 95% CI: 0.99, 1.00 Per-SD, β: 0.94, 95% CI: 0.87, 1.01 p-trend (linear)=0.10 MIND T1, β: 1, ref T2, β: 1.00, 95% CI: 0.78, 1.30, p-trend=0.98 T3, β: 0.96, 95% CI: 0.72, 1.28, p-trend=0.76 Per 1-pt, β: 1.01, 95% CI: 0.95, 1.07 Per-SD, β: 1.02, 95% CI: 0.91, 1.14 p-trend (linear)=0.76 AHEI-2010 T1, β: 1, ref T2, β: 0.94, 95% CI: 0.72, 1.23, p-trend=0.66 T3, β: 0.99, 95% CI: 0.75, 1.29, p-trend=0.91 Per 1-pt, β: 1.00, 95% CI: 0.99, 1.01 Per-SD, β: 1.01, 95% CI: 0.90, 1.14 p-trend (linear)=0.82 **Summary:** Positive: MIND score & (worse) cognition (Fluid intelligence, reaction time (linear), pairs matching, symbol digital substitution, Trail A, Trail B, prospective memory (linear)); NS/Inverse: MIND & All-cause Dementia; NS/Null: Alzheimer's	

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		Dementia; cognitive function (reaction time (tertiles), prospective memory (tertiles)) Positive: AHEI-2010 & (worse) cognitive function (Fluid intelligence, reaction time, pairs matching, symbol digital substitution, Trail A, Trail B, prospective memory); NS/Inverse: AHEI-2010 & All-cause Dementia, NS/Null: Alzheimer's Dementia	
D'Amico, 2020[18] Canada; Quebec Longitudinal Study on Nutrition and Successful Aging (NuAge) Analytic N=1045 **Participant characteristics:** • Race and/or Ethnicity:98.7% Caucasian • SEP: Education <12 years, 50.1% • Selection: Excluded those with cerebral vascular Dz, Parkinson's Dz, epilepsy, or muscular dystrophy; those with extreme energy intakes	• **DP Age(s):** 74.2 y (mean); 67-84 y at baseline • **DP(s) examined:** n/a • **DP Components:** • "Prudent" ♂: Positive: fruits, vegetables, fatty fish, legumes, nuts and seeds, rice and rice dishes, poultry, high-fiber cereals, tofu, and lower-fat dairy products • "Western" ♂: Positive: red and processed meats, pork, potatoes, white bread, fried foods, butter, baked goods, sugary foods and drinks, high-fat dairy products, eggs and egg dishes, and salty snacks • "Prudent" ♀: Positive: fruits, vegetables, fatty fish, poultry, rice and rice dishes, legumes, eggs and egg dishes, nuts and seeds, tofu, low-fat dairy products, and cheese • "Western" ♀: Positive: red and processed meats, pork, white bread, potatoes, fried foods, butter, pasta, baked goods, sugary foods and drinks, high-fat dairy products, and salty snacks • **DP Method(s)**: Factor/Cluster **Comparisons:** Continuous	**Follow-Up Duration: 3.0 y** **Results:** "Prudent" ♀, β: −0.03, SE: 0.06, p-trend=0.60 "Western" ♀, β: −0.08, SE: 0.06, p-trend=0.16 "Prudent" ♂, β: 0.04, SE: 0.07, p-trend=0.54 "Western" ♂, β: −0.08, SE: 0.07, p-trend=0.21 **Summary:** NS/Null: "Prudent" DP (♂, ♀) & CD NS/Null: "Western" DP (♂, ♀) & CD	• **Did not account for:** SEP, Physical Activity, Smoking, Alcohol • **Diet assessment:** FFQ once at baseline • **Outcome measurement**: MMSE-modified at baseline & annually for 3 yrs **Funding:** Canadian Institutes of Health Research

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
Daniel, 2021[19] United States; Multi-Ethnic Study of Atherosclerosis (MESA) Analytic N=4169 (Exam 5); 2048 (change data) **Participant characteristics:** • Race and/or Ethnicity:42% non-Hispanic White • 11% Chinese • 25% non-Hispanic Black • 21% Hispanic • SEP: Less than college degree, 59.6% • Household income: • <$20,000, 17.8% • $20,000-34,999, 19.8% • $35,000-50,000, 16.8% • $50,000-99,999, 29.2% • $100,000+, 16.5% • Selection: Excluded those with extreme energy intake; those lost to f/u; those using Alzheimer's medication	• **DP Age(s):** 45-84 y at baseline; mean age 60.4y • **DP(s) examined:** DASH Score [Fung 2008] • **DP Components:** • DASH, Positive: Vegetables (not potatoes and legumes); Nuts and Legumes; Fruit and Fruit Juice; Whole Grains; Low-Fat Dairy. Negative: Red and Processed Meat; Sweetened Beverages; Sodium • **DP Method(s)**: Index/Score **Comparisons:** Categorical, DASH by quintiles (Q1, ref)	**Follow-Up Duration: 10-17 y, ~ total (diet assessed 2000-2002; outcome assessed 2010-2012 & 2016-2019)** **Results:** Global cognition (mean (SE) score) At exam 5 Q1, 84.13 (0.61) Q2, 83.66 (0.63) Q3, 83.59 (0.60) Q4, 83.93 (0.60) Q5, 84.07 (0.62) p-trend=0.41 At exam 6, Q1, 82.15 (1.25) Q2, 82.37 (1.28) Q3, 82.08 (1.24) Q4, 82.35 (1.27) Q5, 82.74 (1.28) p-trend=0.73 Change Q1, -0.24 (0.16) Q2, -0.21 (0.16) Q3, -0.25 (0.16) Q4, -0.29 (0.16) Q5, -0.16 (0.16) p-trend=0.37 Processing speed (mean (SE) score) At exam 5 Q1, 41.38 (1.31) Q2, 40.47 (1.36) Q3, 40.63 (1.29) Q4, 40.55 (1.30) Q5, 40.31 (1.35) p-trend=0.66 At exam 6 Q1, 38.54 (2.82) Q2, 38.51 (2.88) Q3, 39.24 (2.79) Q4, 37.91 (2.84) Q5, 37.02 (2.87)	• **Did not account for:** None (all) • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: CASI (Cognitive Abilities Screening Instrument) for global cognition; DSC (Digit Symbol Coding) for processing speed; Digit Span test for working memory. Assessed twice-Exam 5 (2010-2012) and Exam 6 (2016-2019) **Funding:** NIH (NHLBI; NCATS)

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		p-trend=0.35 Change Q1, -0.30 (0.14) Q2, -0.33 (0.14) Q3, -0.30 (0.14) Q4, -0.36 (0.14) Q5, -0.34 (0.14) p-trend=0.75 Working memory (mean (SE) score) At exam 5 Q1, 14.83 (0.35) Q2, 14.56 (0.37) Q3, 14.55 (0.35) Q4, 14.80 (0.35) Q5, 14.71 (0.37) p-trend=0.52 At exam 6 Q1, 14.51 (0.73) Q2, 14.40 (0.74) Q3, 14.29 (0.72) Q4, 14.72 (0.74) Q5, 14.55 (0.74) p-trend=0.67 Change Q1, -0.05 (0.14) Q2, -0.01 (0.14) Q3, -0.11 (0.14) Q4, -0.06 (0.14) Q5, -0.03 (0.14) p-trend=0.44 **Summary:** Null: DASH & global cognition, processing speed, working memory	
de Crom, 2022[20] Netherlands; Rotterdam Study (RS) Analytic N=8236 **Participant characteristics:** • Race and/or Ethnicity: NR • SEP: Education:	• **DP Age(s):** 67.7-75.3 y at baseline • **DP(s) examined:** Mediterranean-Dash Intervention for Neurodegenerative Delay diet (MIND) [Morris, 2015] • Dutch Dietary Guidelines - 2015 [Voortman 2017]	**Follow-Up Duration: 15.6 y (mean; baseline I), 5.9 y (mean; baseline II)** **Results:** MIND Baseline I, HR: 0.99, 95% CI: 0.94, 1.05	• **Did not account for:** SEP, Race and/or Ethnicity (Dutch) • n=1188 new Dx dementia • **Diet assessment:** FFQ assessed once at baseline

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
• Primary, 20.6% (baseline I), 6.8% (baseline II) • Lower, 42.6 % (baseline I), 43.3% (baseline II) • Intermediate, 28.1% (baseline I), 33.1 (baseline II) • Higher, 8.7% (baseline I), 16.7% (baseline II) • Selection: Excluded those without dietary data or with unreliable dietary data; those with dementia at baseline; no consent form; insufficient cognitive screening to assess dementia	• Mediterranean-based Diet Score (MedDietScore) [Panagiotakos 2007] • **DP Components:** • MIND: Positive: Green leafy vegetables; Vegetables; Beans; Berries; Nuts; Whole Grains; Seafood; Poultry; Olive oil; Wine. Negative: Red Meat; Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food • Dutch-DG: Positive: Vegetables; Legumes; Fruit; Nuts; Whole Grains; Fish; Dairy Products; Unsaturated Fats and Oils; Tea. Negative: Replace Refined with Whole-Grain Products; Red Meat; Processed Meat; Alcohol; Sodium • MedDietScore, Positive: Vegetables; Potatoes; Legumes; Fruit; Whole Grains; Fish; Olive Oil. Negative: Red and Processed Meat; Poultry; Full-Fat Dairy; Alcohol • **DP Method(s)**: Index/Score **Comparisons:** Continuous, per SD	Baseline II, HR: 0.79, 95% CI: 0.70, 0.91 Dutch DG Baseline I, HR: 1.01, 95% CI: 0.96, 1.07 Baseline II, HR: 0.89, 95% CI: 0.78, 1.02 MedDietScore Baseline I, HR: 1.04, 95% CI: 0.97, 1.10 Baseline II, HR: 0.75, 95% CI: 0.66, 0.86 **Summary:** Inverse: MIND score (baseline II) & incident dementia (Null: baseline I) Inverse: MedDietScore (baseline II) & incident dementia (Null: baseline I) Null: Dutch DG (baseline 1 & II) & incident dementia	• **Outcome measurement**: MMSE; Geriatric Mental Schedule (GMS) at baseline for exclusion and every 3-5 y during f/u; incident dementia also obtained through electronic health records from GPs & Regional Institute of Outpatients Mental Health Care; final Dx made by panel led by neurologist based on standard criteria for all-cause dementia (DSM-III-R), sub-Dx for Alzheimer's Dz (NINCDS-ADRDA) **Funding:** Erasmus Medical Center and Erasmus University; Netherlands Organization for the Health Research and Development; the Research Institute for Diseases in the Elderly; the Ministry of Education, Culture and Science; the Ministry for Health, Welfare and Sports; the European Commission; and the Municipality of Rotterdam
de Crom, 2023[21] The Netherlands; Rotterdam Study (RS) Analytic N=9543 **Participant characteristics:** • Race and/or Ethnicity: NR (Dutch) • SEP: Education: 15% primary, 41% lower, 28% intermediate, 15% higher	• **DP Age(s):** 64y, mean • **DP(s) examined:** adapted Plant-based diet index (aPDI; healthful/unhealthful, ahPDI/auPDI) [Satija, 2016, adapted by Chen, 2018] • **DP Components:** • aPDI: Positive: Vegetables; Fruits; Nuts; Legumes; Whole grains; Vegetable oils; Tea/coffee; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets; Negative: Animal	**Follow-Up Duration: 14.5y, mean** **Results:** aPDI & Dem per-10-pt, 0.99 (0.91, 1.08) Q2, HR: 1.01 (0.85, 1.19) Q3, HR: 1.09 (0.92, 1.30) Q4, HR: 1.01 (0.85, 1.20) Q5, HR: 1.04 (0.87, 1.24) ahPDI & Dem per-10-pt, 0.93 (0.75, 1.01) Q2, HR: 0.94 (0.80, 1.12) Q3, HR: 0.84 (0.71, 1.00)	• **Did not account for:** SEP, Race and/or Ethnicity (Dutch) • Results were similar after multiple analyses (i.e., by Alz, excluding first 5y f/U; sex, age, apoE status) • **Diet assessment:** FFQ once at baseline, different for RS-I and II vs. III • **Outcome measurement**:

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
• Selection: Excluded those with or who: missing/unreliable dietary data; Dem at baseline or not screened for Dem at baseline; undocumented reasons; or did not consent	fats; Low-fat milk; Low-fat yogurt; full-fat milk; full-fat yogurt; Cheese; Sugary-Dairy; Eggs, Fish/seafood; Red and Processed Meat; Unprocessed meat; Dessert and sugary dairy • ahPDI: Positive: Vegetables; Fruits; Nuts; Legumes; Whole grains; Vegetable oils; Tea/coffee; Negative: Sugar-sweetened beverages; Refined grains; Potatoes; Sweets; Animal fats; Low-fat milk; Low-fat yogurt; full-fat milk; full-fat yogurt; Cheese; Sugary-Dairy; Eggs, Fish/seafood; Red and Processed Meat; Unprocessed meat; Dessert and sugary dairy • auPDI: Negative: Whole grains; Fruits; Vegetables; Nuts; Legumes; Tea/coffee; Animal fats; Low-fat milk; Low-fat yogurt; full-fat milk; full-fat yogurt; Cheese; Sugary-Dairy; Eggs, Fish/seafood; Red and Processed Meat; Unprocessed meat; Dessert and sugary dairy. Positive: Veg. Oils; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets • • **DP Method(s)**: Index/Score **Comparisons:** Continuous per-10pt increase and categorical by quintiles (QF, HR: 1 REF) for aPDI, ahPDI, auPDI	Q4, HR: 0.77 (0.65, 0.92) Q5, HR: 0.89 (0.74, 1.06) auPDI & Dem per-10-pt, 1.02 (0.94, 1.10) Q2, HR: 1.15 (0.96, 1.37) Q3, HR: 1.13 (0.95, 1.34) Q4, HR: 1.25 (1.05, 1.50) Q5, HR: 1.05 (0.87, 1.26) **Summary:** NS/Null: aPDI & risk of Dem NS/Inverse: ahPDI & risk of Dem NS/Positive: auPDI & risk of Dem	Dem (or Alz) based on MMDS <26 or GMS >0 further screened with Cambridge exam, monitoring with medical records database and final consensus with neurological expert panel using DSM-III-R; cases n=1472 **Funding:** Erasmus Medical Centre and Erasmus University, Rotterdam, Netherlands Organization for the Health Research and Development (ZonMw); the Research Institute for Diseases in the Elderly (RIDE); the Ministry of Education, Culture and Science; the Ministry for Health, Welfare and Sports; the European Commission (DG XII); and the Municipality of Rotterdam
Dhana, 2021[22] United States; Rush Memory and Aging Project (MAP) Analytic N=569 **Participant characteristics:** • Race and/or Ethnicity: NR ("mostly white") • SEP: Education, ~15 y (mean)	• **DP Age(s):** ≥65 y at baseline; • **DP(s) examined:** Mediterranean-Dash Intervention for Neurodegenerative Delay diet (MIND) [Morris, 2015] • **DP Components:** • Positive: Green leafy vegetables; Vegetables; Beans; Berries; Nuts; Whole Grains; Seafood; Poultry; Olive oil; Wine. Negative: Red Meat;	**Follow-Up Duration: NR** **Results:** Global cognition (proximate to death) β: 0.119, SE: 0.040, p-trend=0.003 Results unchanged when including AD pathology in model MIND & AD pathology (post-mortem), β: -0.013, SE: 0.024, p=0.578	• **Did not account for:** SEP, Race and/or Ethnicity, Physical activity, Anthropometry, Smoking • ~70% women; results similar when Alzheimer's Dz pathology included in model • **Diet assessment:** Mean ~3.5 dietary assessments

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
• Selection: Excluded those without valid dietary data, cognitive testing; those with mild cognitive impairment at baseline in sensitivity analyses	Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food • **DP Method(s)**: Index/Score **Comparisons:** Continuous, per SD	**Summary:** Positive: MIND score & (better) global cognition	• **Outcome measurement**: 19 cognitive tests, composite score for global cognition: including 7 episodic memory tests (immediate and delayed recall of the East Boston Story and Story A from Logical Memory, Word List Memory, Word List Recall, Word List Recognition); 3 semantic memory tests (15-item Boston Naming Test, Verbal Fluency, 15-item word reading test); 3 working memory tests (Digit Span Forward, Digit Span Backward, Digit Ordering). **Funding:** NIA/NIH
Flores, 2023[23] United States; Geisinger Rural Aging Study (GRAS) Analytic N=2232 **Participant characteristics:** • Race and/or Ethnicity: Non-Hispanic White, ~99%; Other, 0.1-0.3%; Unknown or missing, 0.4-1.0% • SEP: Education level: • Below college degree, 71-86% • College degree, 8-18% • Graduate degree, 2-6% • Unknown, 4-7% • Selection: Excluded those with missing dietary data; those with missing f/u data; those enrolled after study baseline (2009) or disenrolled before study	• **DP Age(s):** 84 y, mean (≥80 y) • **DP(s) examined:** Dietary Screening Tool (DST) based on HEI-2005 (McCullough 2000) [Bailey 2007] • **DP Components:** • DST, Positive: Vegetables; Whole Fruit and Juice; Total and Whole Grains; Lean Proteins (chicken or turkey; fish or seafood not fried); Dietary Supplement Use. Negative: Added fats, sugars, and sweets (including alcoholic beverages); Processed Meats (cold cuts, hot dogs, lunch/deli meats; bacon or sausage. Neutral: Dairy (milk, cheese, yogurt) • **DP Method(s)**: Index/Score **Comparisons:** Categorical, tertiles	**Follow-Up Duration: 6.9 y (mean); 11.7 y maximum f/u** **Results:** DST & Dem (all-cause) T1, HR: 1, ref T2, HR: 1.05, 95% CI: 0.82, 1.34 T3, HR: 1.01, 95% CI: 0.79, 1.29 p-trend=0.95 DST & Dem (other incl. vascular) T1 vs. T3, HR: 1.00, 95% CI: 0.74, 1.32, p-trend=0.99 DST & Alz T1 vs. T3, HR: 1.04, 95% CI: 0.68, 1.60, p-trend = 0.86 **Summary:** NS/Null: DST & all-cause Dem, other Dem, Alz	• **Did not account for:** None (all) • Study enrollment began in 1994, baseline for the analyses were in 2009 when DST survey sent • **Diet assessment:** DST survey questionnaire (25 items) assessed once at baseline • **Outcome measurement**: Incident dementia collected from EHRs **Funding:** USDA, Agricultural Research Service

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
baseline; those with prevalent dementia at baseline			
Galbete, 2015[24] Spain; SUN (Seguimiento Universidad de Navarra) Study sub-cohort Analytic N=823 **Participant characteristics:** • Race and/or Ethnicity: NR (100% recruited from Spanish universities) • SEP: Education, University: 5.4 y (mean) • Selection: Spanish university graduates; Excluded those with incorrect genotype for APOE; extreme energy intake; missing covariate data	• **DP Age(s):** 61.9 y (mean), 55+ at baseline • **DP(s) examined:** Mediterranean Diet Score (MDS) [Trichopolou 2003] • **DP Components:** • MDS, Positive: Vegetables; Legumes; Fruit, Nuts; Cereals; Fish; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • **DP Method(s)**: Index/Score **Comparisons:** Categorical, low (0-3 pts), moderate (4-6 pts), high (7-9 pts)	**Follow-Up Duration: 2 y** **Results:** TICS-m (range 0-54 pts) Low, mean: 34.39 pts, 95% CI: 34.13, 34.64 Moderate, mean: 34.19, 95% CI: 33.99, 34.39 High, mean: 34.81. 95% CI: 34.41, 35.21 Δ CD (ΔTICS-m) Low, adjusted difference: -0.43, 95% CI: -0.92, 0.05, p-trend=0.080 Moderate, adjusted difference: -0.62, 95% CI: -1.07, -0.18, p-trend=0.006 High, adjusted difference: 0, ref Low + Moderate (vs. high), adjusted difference: -0.56, 95% CI: -0.99, -0.13, p-trend=0.011 **Summary:** Positive: MDS & TICS-m at 2y f/u Inverse: MDS & CD (moderate vs. high; low+moderate vs. high) at 2y f/u NS/Null: MDS & CD (low vs. high) at 2y f/u	• **Did not account for:** SEP, Race and/or Ethnicity • 71% male. Mean difference in TICS-m score at 2 y f/u across MDS adherence <1 pt (i.e., statistically significant but may be less clinically significant) • **Diet assessment:** FFQ once at baseline • **Outcome measurement**: CD and CFx based on TICS-m (Telephone Interview of Cognitive Status-modified), includes five domains: immediate memory, delayed recall, orientation, attention/calculation, language **Funding:** Spanish government; Navarra Regional Government; University of Navarra
Gelber, 2012[25] United States; Honolulu-Asia Aging Study (HAAS) Analytic N=3468 **Participant characteristics:** • Race and/or Ethnicity:100% Japanese ancestry • SEP: NR • Selection: Excluded females; those with missing baseline data (diet, physical acivity, alcohol,	• **DP Age(s):** 52y, mean • **DP(s) examined:** Diet score [Gelber, 2012] • **DP Components:** • Diet score: Highest in (top 60% in Q5 intakes of) fruit, vegetables (not salted Japanese types), fish, cereals (whole and refined), MUFA/SFA; Lowest in meat, dairy; and mild-moderate alcohol [excluded legume due to high Na+ content]	**Follow-Up Duration: 25y, total** **Results:** Low vs. High & Dem, OR: 1.20, 95% CI: 0.88, 1.63 Low vs. High & Vascular Dem, OR: 1.00, 95% CI: 0.62, 1.62 Low vs. High & Alz, OR: 1.36, 95% CI: 0.89, 2.08 **Summary:** NS/Inverse: Diet score & Dem; Alz [Null: Vascular Dem]	• **Did not account for:** Co-exposures: Physical Activity, Smoking • **Diet assessment:** 24h-recall once at baseline, validated against dietary record in subset • **Outcome measurement**: Alz & Dem based on scores < 74 of 100 on the Cognitive Abilities Screening Instrument (CASI), a

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
BMI); those with cognitive impairment at baseline (CASI score <74);	• **DP Method(s)**: Index/Score **Comparisons:** Categorical: "Low-risk" vs. High diet score (top 60% scores, OR: 1 REF)		composite of the MMSE, mMMSE, and Hasegawa Dementia Screener. DMS-III criteria applied for Dx **Funding:** NIA; NHLBI; VA
Glans, 2023[26] Sweden; Malmo Diet and Cancer study (MDCS) Analytic N=28025 **Participant characteristics:** • Race and/or Ethnicity: NR • SEP: Education level: • Elementary school (<8 yrs), 42.0%; 9-12 yrs, 35.1%; >/=13 yrs, 22.9% • Selection: Excluded those with 'language problems and mental incapacity'; with incomplete dietary data; incomplete data on education or time to Dx	• **DP Age(s):** 58.1 y (mean) • **DP(s) examined:** Swedish Dietary Guidelines Score (SDGS) • modified Mediterranean Diet Score (mMDS) [Panagiotakos, 2007 modified by Martinez-Gonzalez, 2012] • **DP Components:** • SDGS: Positive: dietary fiber (from non-alcohol energy); fish and shellfish; fruit and vegetables. Negative: added sugar (from non-alcohol energy); red and processed meat • mMDS: Positive: vegetable oils; vegetables (including legumes); fruits; wine; fish; seafood; nuts and seeds. Negative: red and processed meat; butter, margarine, and cream; soda; pastries; candy. • **DP Method(s)**: Index/Score • **Comparisons:** Categorical, tertiles Continuous, per 1-pt	**Follow-Up Duration: 15.5 y** **Results:** All-cause dementia SDGS T1, HR: 1, ref T2, HR: 1.02, 95% CI: 0.92, 1.12 T3, HR: 0.95, 95% CI: 0.82, 1.10 Per 1-pt, HR: 0.99, 95% CI: 0.95, 1.03 mMDS T1, HR: 1, ref T2, HR: 0.94, 95% CI: 0.83, 1.06 T3, HR: 0.95, 95% CI: 0.76, 1.18 Per 1-pt, HR: 1.00, 95% CI: 0.96, 1.04 Vascular dementia SDGS T1, HR: 1, ref T2, HR: 0.97, 95% CI: 0.79, 1.18 T3, HR: 1.00, 95% CI: 0.73, 1.35 Per 1-pt, HR: 1.00, 95% CI: 0.93, 1.08 mMDS T1, HR: 1, ref T2, HR: 0.95, 95% CI: 0.74, 1.22 T3, HR: 1.09, 95% CI: 0.70, 1.70 Per 1-pt, HR: 1.06, 95% CI: 0.98, 1.15 Abnormal CSF Aβ42 (n=777) SDGS T1, OR: 1, ref T2, OR: 1.37, 95% CI: 0.94, 2.01 T3, OR: 1.34, 95% CI: 0.76, 2.36 Per 1-pt, OR: 1.15, 95% CI: 0.99, 1.33	• **Did not account for:** SEP, Race and/or Ethnicity • CSF Aβ42 presented as exploratory outcome, obtained only from subsample; sensitivty analyses excluding those Dx with dementia <5 yrs from diet assessment (to reduce possible bias of cognitive impairment affecting dietary intake) found similar results to m • **Diet assessment:** Combination of 7-d diary, FFQ, and interview (w/ trained staff) assessed once at baseline • **Outcome measurement**: All-cause dementia, Alzheimer's Dz and vascular dementia diagnosed based on registered Dx from Swedish National Patient Register (covers both inpatient and outpatient). CSF Aβ42 obtained from subsample referred to Memory Clinic at Skane University Hospital, udnerwent lumbar puncture **Funding:** Swedish Research Council, Knut and Alice Wallenberg foundation,

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		mMDS T1, OR: 1, ref T2, OR: 1.01, 95% CI: 0.37, 1.79 T3, OR: 0.82, 95% CI: 0.37, 1.79 Per 1-pt, OR: 0.99, 95% CI: 0.85, 1.15 Alzheimer's Disease SDGS T1, HR: 1, ref T2, HR: 1.06, 95% CI: 0.94, 1.21 T3, HR: 1.01, 95% CI: 0.84, 1.22 Per 1-pt, HR: 0.99, 95% CI: 0.95, 1.04 mMDS T1, HR: 1, ref T2, HR: 0.91, 95% CI: 0.77, 1.07 T3, HR: 0.87, 95% CI: 0.66, 1.16 Per 1-pt, HR: 0.99, 95% CI: 0.94, 1.04 **Summary:** Null: SDGS & Dem (all-cause, vascular), Alzheimer's Dz, abnormal CSF Aβ42 Null: mMDS & Dem (all-cause, vascular), Alzheimer's Dz, abnormal CSF Aβ42	Marianne and Marcus Wallenberg foundation, Strategic Research Area MultiPark, Swedish Alzheimer Foundation, Swedish Brain Foundation, Parkinson foundation of Sweden, Konung Gustaf V:s och Drottning Victorias Frimurarestiftelse, the Skåne University Hospital Foundation, Regionalt Forskningsstod, Swedish federal government
Granic, 2016[27] United Kingdom; Newcastle 85+ Study Analytic N=791 **Participant characteristics:** • Race and/or Ethnicity: NR ("white population of North European descent") • SEP: Education: • 0-9 years, 64.1% • 10-11 years, 23.4% • 12+ years, 12.4% • Marital status:	• **DP Age(s):** 85+ y at baseline • **DP(s) examined:** n/a • **DP Components:** • DP1 (High Red Meat): Positive: red meats/meat dishes; potatoes/potato dishes; gravy; legumes (including baked beans); unsaturated fats spreads; % energy from protein and starch. Negative: butter • DP2 (Low Meat): Positive: fruits; nuts; whole grains and cereal products; fish and seafood; eggs; soups; low and high fat dairy; coffee and alcohol. Negative: meats/meat dishes(red and	**Follow-Up Duration: 3y, 5y** **Results:** Global cognition (MMSE), 5y DP1, β: -0.02, SE: 0.04, p-trend=0.55 DP3, β: 0.01, SE: 0.04, p-trend=0.90 Attention-specific tasks, 3y SRT DP1, β: 0.003, SE: 0.01, p-trend=0.73 DP3, β: 0.004, SE: 0.01, p-trend=0.52 CRT DP1, β: 0.0002, SE: 0.01, p-trend=0.99 DP3, β: 0.01, SE: 0.01, p-trend=0.96	• **Did not account for:** Race and/or Ethnicity (likely White, European-descent) • Results for global cognition did not differ when men & women analyzed separately; cognitive impairment results did not differ when excluding those with dementia/Alzheimer's disease Dx • **Diet assessment:** 24-h recall assessed once at baseline (2 different days)

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
• 69.4% not married • Social class: • Routine/manual professions, 51.1% • Intermediate professions, 14.5% • Higher managerial/administrative, 34.4% • Selection: Included those born in 1921; excluded those with incomplete diet, health assessment, and GP record data	processed meats; bacon and ham; poultry); gravy; potatoes/potato dishes; protein. Moderate: butter • DP3 (High Butter): Positive: butter. Negative: unsaturated and saturated fat spreads and oils (margarine, vegetable oils fat spreads and lard); MUFA, SFA, total fat. Negative: PUFA and MUFA/SFA ratio. Moderate: red meats/meat dishes. • **DP Method(s)**: Factor/Cluster **Comparisons:** Continuous (DP 1 or DP 3 vs. DP 2, ref)	DVT DP1, β: -0.002, SE: 0.01, p-trend=0.61 DP3, β: 0.003, SE: 0.01, p-trend=0.48 PoA DP1, β: 0.004, SE: 0.01, p-trend=0.59 DP3, β: 0.004, SE: 0.01, p-trend=0.60 RTV DP1, β: -0.01, SE: 0.01, p-trend=0.29 DP3, β: -0.01, SE: 0.01, p-trend=0.25 CoA DP1, β: -0.06, SE: 0.10, p-trend=0.54 DP3, β: -0.01, SE: 0.10, p-trend=0.89 Cognitive Impairment DP1, OR: 1.91, 95% CI: 1.22, 3.01, p-trend=0.005 DP3, OR: 1.42, 95% CI: 0.90, 2.26, p-trend=0.13 **Summary:** NS/Null: DP1 or DP3 vs. DP2 & Global cognition, Attention (all measures) Positive: DP1 vs DP2 & CD NS/Null: DP3 vs DP2 & CD	• **Outcome measurement**: CD defined as MMSE score ≤25; Assessments for global cognition were MMSE; attention tasks were CoA (continuity of attention), CRT (choice reaction time), DVT (digit vigilance reaction time), PoA (power of attention), RTV (reaction time variability), SRT (simple reaction time) **Funding:** NR
Gregory, 2022[28] Multiple EU countries (Greece, Spain, Italy, UK, Belgium, UK, France, Sweden, Switzerland, Netherlands); European Prevention of Alzheimer's Dementia Longitudinal Cohort Study (EPAD LCS) Analytic N=1826 **Participant characteristics:** • Race and/or Ethnicity: NR • SEP: Education, ~14.4-14.6y mean	• **DP Age(s):** 65.7, mean • **DP(s) examined:** Mediterranean Diet Adherence Screener (MEDAS) [Schroder 2011; modifications Shannon, 2019 (Dairy included)] • **DP Components:** • mMEDAS, Positive: Vegetables; Pulses; Fruit; Nuts; Fish/Seafood; White Meat Over Red Meat; Olive Oil; Olive Oil as Principal Cooking Fat; Red Wine; Sofritas (dishes with tomato, garlic, onion, leek, olive oil). Negative: Commercial Pastries; Red Meat; Dairy;	**Follow-Up Duration: up to 3y (varied from 1 up to 6 visits)** **Results:** MEDAS & FMT, slope: 0.10, SE: 0.03, t:3.13, 95% CI: 0.04, 0.17, p=0.002 MEDAS & RBANS, slope: -0.03, SE: 0.11, t: -0.30, 95% CI: -0.26, 0.19, p=0.76 longitudinal data between MEDAS & individual domains NR **Summary:** Inverse: MEDAS & FMT NS/Null: MEDAS & RBANS	• **Did not account for:** SEP, Race and/or Ethnicity • **Diet assessment:** Questionnaire at baseline used (also collected at F/U) • **Outcome measurement**: CD based on cognitive battery of tests [Four Montain Test (FMT); MCI/Alz: Repeatable Battery for the Assessment of Neuropsychological Status(RBANS)]

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
• Selection: Excluded those with or who had missing dietary, cognitive, or covariate data, < 50 y at baseline; Those included were more likely to be ApoEe4 carriers, younger, live in Mediterranean region	Animal fat; Sugar-Sweetened Beverages (carbonated); • **DP Method(s)**: Index/Score **Comparisons:** Continuous, MEDAS		**Funding:** EU/EFPIA Innovative Medicines Initiative Joint Undertaking EPAD; Alzheimer's Association Grant; MRC
Guo, 2021[29] United States; Washington Heights-Inwood Columbia Aging Project (WHICAP) Analytic N=1987 **Participant characteristics:** • Race and/or Ethnicity: White, 28.23%; Black, 29.44%; Hispanic, 40.36%; Other, 1.96% • SEP: Mean years of education, 10.94 • Selection: Excluded those with dementia at baseline; those with no f/u data; missing data on variables of interest	• **DP Age(s):** ≥65 y; ~75 y (mean) • **DP(s) examined:** American Heart Association (AHA) Life's Simple 7 (LS7) - dietary component • **DP Components:** • LS7, Positive: Fruits and Vegetables (≥4.5 serv./d); Fish (≥two, 3.5 oz/wk). Negative: Sodium (<1500 mg/d); Sugar-sweetened beverages (<36 oz/wk) • **DP Method(s)**: Index/Score • **Comparisons:** Categorical, poor (0-1 dietary components), intermediate (2-3 components), or optimal (4 components) Continuous, per 1-pt	**Follow-Up Duration: 5.84 y (median); range 0.94 - 17.68 y** **Results:** Poor, HR: 1, ref Intermediate, HR: 0.89, 95% CI: 0.69, 1.14 Optimal, HR: 0.69, 95% CI: 0.33, 1.44 Per 1 pt, 0.87, 95% CI: 0.7, 1.09 p-trend=0.865 **Summary:** Null: LS7 diet & incident dementia	• **Did not account for:** SEP, Physical Activity, Anthropometry, Smoking, Alcohol • Results remained NS when stratified by APOE-e4 carriers vs. non-carriers; Effects of physical activity, smoking, and BMI on incident dementia examined separately but not included as covariates in diet analyses, physical activity significnatly inversely as • **Diet assessment:** FFQ assessed once at baseline; diet was one component of 7-item overall lifestyle score; Whole grains excluded from construction of DP metric due to incomplete data on intake by FFQ • **Outcome measurement**: DSM-IV Dx - consensus of panel of neuologists, psychiatrists, and neuropsychologists based on battery of memory, language, orientation, abstract reasoning, visuospatial ability **Funding:** NIH

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
Hsiao, 2022[30] Taiwan; Taiwan Longitudinal Study on Aging (TLSA) Analytic N=3213 **Participant characteristics:** • Race and/or Ethnicity: NR (Taiwanese) • SEP: Education: 30% none, 47% primary; 24% junior/senior high/college • Married 73%, Widowed 23% • Selection: Excluded those with or who had missing 4y F/U data, emigrated, resided in nursing home, proxy responders, unknown demographic/dietary/outcome data	• **DP Age(s):** 50 to 64y, 40%; 65 to 74y, 38%, 75+, 22% • **DP(s) examined:** modified dietary variety score (DVS) [Kumagai, 2003] • **DP Components:** • DVS Q5 vs. Q1 reflects higher intakes of: Vegetables (dark colored); Fruit; Legumes; Dairy; Meat; Poultry; Fish; Seafood; Tea • **DP Method(s)**: Index/Score **Comparisons:** Categorical, DVS quintiles (Q1, aOR: 1 REF)	**Follow-Up Duration: ~4y** **Results:** DVS & CD Q2, OR: 0.99, 95% CI: 0.73, 1.35 Q3, OR: 0.96, 95% CI: 0.72, 1.29 Q4, OR: 0.92, 95% CI: 0.70, 1.20 Q5, OR: 0.76, 95% CI: 0.57, 1.03 **Summary:** Null: DVS & cognitive decline	• **Did not account for:** Race and/or Ethnicity (all Taiwanese), SEP (marital status), Smoking • Indirect exposure with unclear classification • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: CD derived from Short Portable Mental Status Questionnaire, the Rey Auditory Verbal Learning Test, and the Wechsler Adult Intelligence Scale **Funding:** Ministry of Science and Technology, Taiwan; National Health Research Institutes, Taiwan
Hu, 2020[31] United States; Atherosclerosis Risk in Communities (ARIC) study Analytic N=13630 **Participant characteristics:** • Race and/or Ethnicity:23-28% Black • SEP: 25-46% with college education (higher in higher HEI-2015 adherence) • Selection: Excluded those who were not Black or white; those who were Black from Minneapolis, Minnesota or Washington County (Maryland); those who did not fill out more than 15 FFQ responses; with extreme energy intakes; Hx stroke at baseline; missing data	• **DP Age(s):** 54 y(mean), 45-64 y at baseline • **DP(s) examined:** Healthy Eating Index (HEI-2015) [Krebs-Smith 2018] • Alternative HEI (AHEI)-2010 [Chiuve 2012] • Alternate Med Diet Score (aMED) [Fung 2005] • DASH Score [Fung 2008] • **DP Components:** • HEI-2015: Positive: Total Vegetables; Greens and Beans; Total Fruit; Whole Fruit; Whole Grains; Seafood and Plant Proteins; Total Protein Foods; Dairy; PUFA+MUFA/SFA. Negative: Refined Grains; Added Sugars; SFA; Sodium • AHEI-2010: Positive: Vegetables (not potatoes, French fries); Fruit; Legumes	**Follow-Up Duration: 27 y (median)** **Results:** HEI-2015 & Dem Q1, HR: 1, ref Q2, HR: 0.86, 95% CI: 0.75, 1.00 Q3, HR: 0.89, 95% CI: 0.77, 1.02 Q4, HR: 0.90, 95% CI: 0.78, 1.04 Q5, HR: 0.86, 95% CI: 0.74, 0.99 p-trend=0.1 AHEI-2010 & Dem Q1, HR: 1, ref Q2, HR: 1.06, 95% CI: 0.93, 1.22 Q3, HR: 0.99, 95% CI: 0.86, 1.13 Q4, HR: 0.92, 95% CI: 0.80, 1.06 Q5, HR: 1.04, 95% CI: 0.91, 1.20 p-trend=0.9 aMED & Dem Q1, HR: 1, ref Q2, HR: 1.04, 95% CI: 0.90, 1.20 Q3, HR: 1.02, 95% CI: 0.88, 1.17	• **Did not account for:** SEP • **Diet assessment:** FFQ at visit 1 (1987-1989) and visit 3 (1993-1995). Only visit 1 data used if participants developed dementia between visit 1 and 3 • **Outcome measurement**: Demntia defined/obtained by: 1) adjudicated dementia based on a complete neuropsychological battery, informant interviews and expert review at ARIC Neurocognitive Study visits (visits 5 and 6); 2) dementia determined from telephone interviews with participant or informant; or 3) dementia

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
on covariates; with insufficient data to calculate 4 dietary scores	and Nuts; Whole Grains; Long-Chain Fats (EPA + DHA); PUFA. Negative: Red and Processed Meat; Sugar Sweetened Beverages and Fruit Juice; Trans FA; Sodium. Neutral: Alcohol • aMED: Positive: Vegetables (not potatoes); Legumes; Fruit; Nuts; Whole Grains; Fish; MUFA/SFA. Negative: Red and Processed Meat. Neutral: Alcohol • DASH: Positive: Vegetables (not potatoes and legumes); Nuts and Legumes; Fruit and Fruit Juice; Whole Grains; Low-Fat Dairy. Negative: Red and Processed Meat; Sweetened Beverages; Sodium • **DP Method(s)**: Index/Score **Comparisons:** Categorical, quintiles	Q4, HR: 0.99, 95% CI: 0.86, 1.15 Q5, HR: 1.01, 95% CI: 0.88, 1.16 p-trend=0.9 DASH & Dem Q1, HR: 1, ref Q2, HR: 1.06, 95% CI: 0.93, 1.21 Q3, HR: 1.03, 95% CI: 0.89, 1.20 Q4, HR: 0.97, 95% CI: 0.85, 1.11 Q5, HR: 1.10, 95% CI: 0.96, 1.26 p-trend=0.5 **Summary:** Inverse/NS: HEI-2015 & incident Dementia Null: AHEI-2010, aMED, DASH & incident Dementia	based on a prior hospitalization or death code for dementia. **Funding:** NIH
Jia, 2023[32] China; China Health and Nutrition Survey (CHNS) Analytic N=4173 **Participant characteristics:** • Race and/or Ethnicity: NR (Chinese) • SEP: Education: • Primary school, 54.9% • Middle school, 22.4% • high school, 22.8% • Household income level: • Low, 30.9% • Medium, 33.1% • High, 36.0% • Selection: Excluded those age 55-59 y AND with moderate/vigorous physical activity; with extreme energy intake; outliersin annual change	• **DP Age(s):** 63.7 y (mean); 55+ y at baseline • **DP(s) examined:** China Elderly Dietary Guidelines Index 2022 (CDGI 2022-E) • **DP Components:** • Positive: whole grains and mixed beans (≥100 g/day); vegetables (≥450g/ day for males; ≥350g/day for females); fruits (≥300g/ day for males; ≥200g/day); dairy (≥300g/day); soybeans and nuts (≥30g/day for males; ≥25g/day for females). Negative: cooking oil (<27.5 g/day for males, <25 g/day for females); salt (<5 g/day); alcohol (<15 g/day). Moderate: grains, beans, and tubers (200-300g/day; 50-65% of energy); fish/seafood (50-75g/day for males, 40-50g/day); meat and poultry (50-75g/day for males, 40-50g/day for	**Follow-Up Duration: NR** **Results:** Global cognitive score (All participants) T1, 0, ref T2, β: 0.057, 95% CI: -0.229, 0.344 T3, β: 0.704, 95% CI: 0.394, 1.015 p-trend<0.001 Global cognitive score (<65 y at baseline) T1, 0, ref T2, β: 0.098, 95% CI: -0.265, 0.461 T3, β: 0.969, 95% CI: 0.567, 1.370 p-trend<0.001 Global cognitive score (≥65 y at baseline) T1, 0, ref T2, β: 0.013, 95% CI: -0.453, 0.480 T3, β: 0.402, 95% CI: -0.089, 0.892 p-trend=0.099 Poor cognition (all participants)	• **Did not account for:** Race and/or Ethnicity • "CDGI 2018-E is suitable for old population in years of 60 and above, as well as adults aged more than 18 years with light physical activity"- this seems to be the reason for excluding those ages 55-59 with moderate/vigorous PA • **Diet assessment:** Three consecutive 24-hr recalls (once at baseline?) • **Outcome measurement**: TICS-m; poor cognition defined as first (lowest) quartile of score which corresponds to <9 points **Funding:** Chinese Institute of Food Science and Technology;

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
BMI; those missing covariate data	females); eggs (50g/day for males, 40g/day for females) • **DP Method(s)**: Index/score **Comparisons:** Categorical, tertiles	T1, OR: 1, ref T2, OR: 1.017, 95% CI: 0.884, 1.171 T3, OR: 0.820, 95% CI: 0.698, 0.965 p-trend=0.022 Poor cognition (<65 y at baseline) T1, OR: 1, ref T2, OR: 0.992, 95% CI: 0.823, 1.195 T3, OR: 0.802, 95% CI: 0.641, 1.0 **Summary:** Positive: CDGI 2022-E & Global cognition (all participants; participants <65 y at baseline) Inverse: CDGI 2022-E & poor cognition (all participants) Null: CDGI 2022-E & Global cognition (participants ≥ 65 y at baseline) Null: CDGI 2022-E & poor cognition (participants <65 y at baseline; participants ≥ 65 y at baseline)	NIH; Eunice Kennedy Shriver National Institute of Child Health and Human Development
Keenan, 2020[33] United States; Age-Related Eye Disease Studies 2 Analytic N=4757 **Participant characteristics:** • Race and/or Ethnicity:97% White; 3% Non-White • SEP: Education: 48% at least some college; 30% high-school or less • Selection: Excluded those with age-related macular degeneration at baseline; with conditions that would make follow-up or medication compliance difficult (including dementia)	• **DP Age(s):** ~73y; 55-80 y at baseline • **DP(s) examined:** Alternate Med Diet Score (aMED) [Fung 2005], only RM not R&PM • **DP Components:** • aMED, Positive: Vegetables (not potatoes); Legumes; Fruit; Nuts; Whole Grains; Fish; MUFA/SFA. Negative: Red Meat. Neutral: Alcohol • **DP Method(s)**: Index/Score; Factor/Cluster **Comparisons:** Categorical, aMED tertiles (T1, OR: 1 ref) and linear trend	**Follow-Up Duration: 9y, mean (~6.5y to last cognitive test)** **Results:** aMED tertiles & CD (TICS-m) T2, OR: 0.83, 95% CI: 0.69, 1.00; p=0.047 T3, OR: 0.67, 95% CI: 0.56, 0.81; p<0.001 p-trend<0.001 aMED tertiles & CD (rate of change in TICS-m score), 0.22 aMED T1 vs. T3 & mean rate of change in CD at 2y: 1; at 4y: 0.9; at 10y: 1; p=0. aMED tertiles & MCI (TICS-m) T2, OR: 0.76, 95% CI: 0.63, 0.91; p=0.003 T3, OR: 0.56, 95% CI: 0.47, 0.67; p<0.001 p-trend<0.001 aMED tertiles & MCI (composite)	• **Did not account for:** Education (MCI); SEP; Anthropometry; Physical activity • **Diet assessment:** FFQ assessed once at randomization (baseline of RCT) • **Outcome measurement**: CD at 2y, 4y, 10y defined as rate of change in CFx scores based on TICS-M <30 and composite score in lowest decile; CD based on sum of z-scores from TICS-M (AREDS 2 only) with battery of tests (Buschke recall and word; Logical memory I and II; Animal; Letter fluency); Absolute TICS-M and composite scores also

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		T2, OR: 0.68, 95% CI: 0.53, 0.87; p=0.003 T3, OR: 0.48, 95% CI: 0.37, 0.63; p<0.001 p-trend<0. **Summary:** Inverse: aMED & CD or TICS-m after 2y, 4y, or 10y	reported **Funding:** NEI; NIH, HHS
Kjeldsen, 2022[34] Denmark; Copenhagen General Population Study Analytic N=94184 **Participant characteristics:** • Race and/or Ethnicity:100% White • SEP: HH Income "Low": ~31-52% (defined as <57,520 USD) • Education, 7-18% less than 8y • Selection: Excluded those with or who had: Dem at baseline; incomplete/outlier dietary data; missing all data or date of birth/death, no consent, ethnicity other than Danish, or emigrated; Participants who were excluded were more likely, be women, have low HH income; <8y education, higher BMI, inactive, more tobacco.	• **DP Age(s):** 58y, mean • **DP(s) examined:** Danish DG [Ewers, 2021] • **DP Components:** • Danish DG: Positive: Vegetables; Fruit; Fish; Unsaturated fat Negative: Cold meat (luncheon); Saturated fat; Sugar-sweetened beverages; Fast food; [did not include lean meat, dairy, whole grain, or water] • **DP Method(s)**: Index/Score **Comparisons:** Categorical, Low or Intermediate vs. High (Ref) Danish DG score	**Follow-Up Duration: 9y, median** **Results:** non-Alz Dem, Intermediate, HR: 1.14, 95% CI: 0.92, 1.40 Low, HR: 1.35, 95% CI: 1.03, 1.79 p-trend=0.04 Alz, Intermediate, HR: 1.11, 95% CI: 0.96, 1.27 Low, HR: 1.01, 95% CI: 0.82, 1.25 p-trend=0.63 **Summary:** Inverse: Low Danish DG alignment (vs. High) & Higher risk of Dem (non-Alz); NS/Inverse: Low Danish DG alignment (vs. High) & Higher risk of Alz	• **Did not account for:** None (all) • Results similar in analyses excluding those with less than 2 yrs follow-up • **Diet assessment:** FFQ assessed diet twice; Change in DP assessed in a sub-set (~34%) • **Outcome measurement**: Alz & Dem (all-cause) based on Danish Registries for patients/death; n=2086 cases (Dem, 701; Alz 1385) **Funding:** Lundbeck Foundation; Danish Heart Foundation
Lai, 2023[35] Singapore; Singapore Chinese Health Study Analytic N=861 **Participant characteristics:** • Race and/or Ethnicity:100% Chinese • SEP: Education: 36-46% none,	• **DP Age(s):** 65y, mean (60 to 74y at baseline) • **DP(s) examined:** modified DASH Score [Fung 2008]] • **DP Components:** • mDASH, Positive: Vegetables (not potatoes and legumes); Nuts and Legumes; Fruit and Fruit Juice; Whole	**Follow-Up Duration: ~20y and 23y total (F/U 3 and 4)** **Results:** Consistently high vs. low DASH & CD, OR: 0.71, 95%CI: 0.51, 0.99; p=0.041 **Summary:** Inverse: "Consistently high" DASH & CD	• **Did not account for:** SEP (marital status adjusted); Did not account for Δ in physical activity • **Diet assessment:** FFQ assessed at baseline and screener FFQs at F/U 3 and 4

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
43-47% primary; 11-17% secondary+ • Married 77% • Selection: Excluded those with or who: were blind, deaf or unable to complete cognitive test; incomplete dietary data at SG90 F/U	Grains; Total (not just LF) Dairy. Negative: Red and Processed Meat; Sweetened Beverages. [excluded sodium] • • **DP Method(s)**: Index/Score **Comparisons:** Continuous, "Consistently high" DASH scores at baseline and over time vs. "Consistently low" with modest decline in DASH over time as REF		• **Outcome measurement**: MMSE (Singapore-modified) - CD based on SM-MMSE using education-specific cut-points: ≥18 if no education, ≥21 for primary, or ≥25 for secondary school or higher education **Funding:** Agency for Science, Technology and Research; National University Health System; Singapore National Medical Research Council; NCI/NIH; Saw Swee Hock School of Public Health, National University of Singapore
Larsson & Wolk, 2018[36] Sweden; Swedish Infrastructure for Medical Population-based Life-course Environmental Research (SIMPLER; Previously Swedish Mammography Cohort/Cohort of Swedish Men) Analytic N=28775 **Participant characteristics:** • Race and/or Ethnicity: NR • SEP: Post-secondary education, 8.4% • Selection: Excluded those with incorrect/missing personal identity number; those who died before 1998; with hx dementia, stroke, or cancer; extreme energy intakes; below age 65 y at baseline	• **DP Age(s):** 71.6 y (mean); range 65-83 y • **DP(s) examined:** DASH Score [Fung 2008] • modified Mediterranean (mMED) [Larsson, 2017] • **DP Components:** • DASH, Positive: Vegetables (not potatoes and legumes); Nuts and Legumes; Fruit and Fruit Juice; Whole Grains; Low-Fat Dairy. Negative: Red and Processed Meat; Sweetened Beverages (excluded Sodium) • mMED: Positive: Vegetables; Legumes and Nuts; Fruit; Whole Grains; Fish; Olive Oil; Low-Moderate Alcohol; Negative: Red and Processed Meat; Full-Fat Dairy • **DP Method(s)**: Index/Score **Comparisons:** Categorical, quartiles	**Follow-Up Duration: 12.6 y (mean)** **Results:** DASH & Dem Q1, HR: 1, ref Q2, HR: 0.96, 95% CI: 0.88, 1.06 Q3, HR: 0.94, 95% CI: 0.85, 1.03 Q4, HR: 0.96, 95% CI: 0.87, 1.05 mMED & Dem Q1, HR: 1, ref Q2, HR: 1.03, 95% CI: 0.88, 1.21 Q3, HR: 1.11, 95% CI: 0.95, 1.31 Q4, HR: 1.12, 95% CI: 0.96, 1.31 **Summary:** NS/Null: DASH & Dem NS/Null: mMED & Dem	• **Did not account for:** SEP, Race and/or Ethnicity, • Results similar when stratified by sex • **Diet assessment:** FFQ once at baseline. DASH score was modified to exclude sodium since FFQ did not collect this information. • **Outcome measurement**: Incident dementia identified through linkage to Swedish National Patient Register **Funding:** Swedish Research Council

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
Liang, 2022[37] China; Chinese Longitudinal Healthy Longevity Survey (CLHS) Analytic N=4792 **Participant characteristics:** • Race and/or Ethnicity: NR (100% Chinese) • SEP: ~49% Illiteracy (median) • ~24% financial independence (median) • ~62% agricultural, forestry, animal husbandry, or fishery worker • Selection: Excluded those with missing data (BMI, cognition, diet); aged <65 y; Dx dementia or Alzheimer's Dz at baseline; MMSE score <18 at baseline	• **DP Age(s):** 80.7 y (mean) at baseline; 65+ y at baseline • **DP(s) examined:** Plant-Based Diet Index (PDI) [Satija, 2016] • Healthful PDI (hPDI) [Satija, 2016] • unhealthful PDI (uPDI) [Satija, 2016] • **DP Components:** • PDI: Positive: Vegetables; Fruits; Nuts; Legumes; Whole grains; Vegetable oils; Tea/coffee; Fruit juices; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts; Negative: Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods • hPDI: Positive: Vegetables; Fruits; Nuts; Legumes; Whole grains; Vegetable oils; Tea/coffee; Negative: Fruit juices; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts; Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods • uPDI: Negative: Whole grains; Fruits; Vegetables; Nuts; Legumes; Vegetable oils; Tea/coffee; Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods; Positive: Fruit juices; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts • **DP Method(s)**: Index/Score **Comparisons:** Categorical, lower vs. higher (median split) PDI, hPDI, uPDI (Higher, HR: 1, ref)	**Follow-Up Duration: ~3-6y** **Results:** Lower vs. higher PDI, HR: 1.32, 95% CI: 1.16, 1.50, p-trend<0.001 Lower vs. higher hPDI, HR: 1.46, 95% CI: 1.29, 1.66, p-trend<0.001 Lower vs. higher uPDI, HR: 1.21, 95% CI: 1.21, 95% CI: 1.06, 1.38, p-trend=0.004 **Summary:** Inverse: PDI & cognitive impairment Inverse: hPDI & cognitive impairment Positive: uPDI & cognitive impairment	• **Did not account for:** Anthropometry (stratified analyses by BMI-status), • Race and/or Ethnicity (100% Chinese) • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: MMSE (Chinese version) **Funding:**
Liu, 2022[38] United States; Chicago Health and Aging Project (CHAP)	• **DP Age(s):** ~73.7y (SD: 5.72); ≥65y at baseline • **DP(s) examined:** Plant-based diet	**Follow-Up Duration: NR** **Results:** PDI & CD, β ± SE	• **Did not account for:** SEP; Physical activity; Anthropometry; Alcohol

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
Analytic N=3337 **Participant characteristics:** • Race and/or Ethnicity:60% 'African-Amercian'; 40% White • SEP: Education, 12.9y mean {SD: 3.41) • Selection: Excluded those with missing ApoE measure (n=1416), or FFQ (n=3791); <2 cognitive assessments (n=1174); implausible/extreme BMI or TEI; aged <65 y	index (PDI; healthful/unhealthful) [Satija, 2016] • **DP Components:** • PDI: Positive: Vegetables; Fruits; Nuts; Legumes; Whole grains; Vegetable oils; Tea/coffee; Fruit juices; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts; Negative: Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods • hPDI: Positive: Vegetables; Fruits; Nuts; Legumes; Whole grains; Vegetable oils; Tea/coffee; Negative: Fruit juices; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts; Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods • uPDI: Negative: Whole grains; Fruits; Vegetables; Nuts; Legumes; Tea/coffee; Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods; Positive: Fruit juices & Veg. Oils; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts • **DP Method(s)**: Index/Score **Comparisons:** Categorical, quartiles (Q1 ref) of PDI, hPDI, uPDI	Black Q2; 0.0052 ± 0.0076 Q3; 0.0039 ± 0.0068 Q4; −0.0014 ± 0.0076 Q5; 0.0072 ± 0.0073 P-trend= 0.51 White Q2; 0.0105 ± 0.0099 Q3; −0.0005 ± 0.0091 Q4; −0.0037 ± 0.0097 Q5; 0.0010 ± 0.0095 P-trend= 0.24 hPDI, β ± SE Black Q2; 0.0086 ± 0.0084 Q3; 0.0167 ± 0.0084 Q4; 0.0175 ± 0.0082 Q5; 0.0183 ± 0.0086 P-trend= 0.04 White Q2; −0.0106 ± 0.0084 Q3; −0.0053 ± 0.0093 Q4; −0.0031 ± 0.0088 Q5; −0.0047 ± 0.0098 P-trend= 0.65 uPDI & CD, β ± SE Black Q2; −0.0091 ± 0.0075 Q3; −0.0015 ± 0.0084 Q4; −0.0097 ± 0.0080 Q5; −0.0137 ± 0.0086 P-trend= 0.21 White Q2; −0.0022 ± 0.0083 Q3; −0.0041 ± 0.0090 Q4; −0.0084 ± 0.0094 Q5; −0.0091 ± 0.0096 P-trend= 0.44 **Summary:** NS/Null: PDI & CD among Black or White participants	• n=61 new dementia cases • **Diet assessment:** FFQ assessed every cycle (~3y) • **Outcome measurement**: CD: global cognition score from avg. z-score of combined MMSE; East Boston (immediate; delayed); and Symbol Digit); Episodic memory avg. z-score from East Boston (immediate; delayed); Perceptual memory from z-score of Symbol Digit **Funding:** NIA; NIH

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		Inverse: higher hPDI & slower CD/slower decline in episodic memory, perceptual speed among Black participants; NS, White participants NS/Inverse: uPDI & CD among Black or White participants	
Lohman, 2023[39] United States; Health and Retirement Study (HRS) Analytic N=6968 **Participant characteristics:** • Race and/or Ethnicity:16.3% Black; 7.1% Other; 76.6% White • SEP: HH Income, mean: $70,000/y; Using SNAP, ~9%; Education, mean 13y • Selection: Excluded those with or who: MMSE <17 or baseline cognitive score <7, incomplete/invalid diet or outcome data, were unable to locate or lived in a nursing home	• **DP Age(s):** 67 (10) y; ≥51y at baseline • **DP(s) examined:** Healthy Eating Index (HEI-2015) [Krebs-Smith 2018] • **DP Components:** • HEI-2015, Positive: Total Vegetables; Greens and Beans; Total Fruit; Whole Fruit; Whole Grains; Seafood and Plant Proteins; Total Protein Foods; Dairy; PUFA+MUFA/SFA. Negative: Refined Grains; Added Sugars; SFA; Sodium • **DP Method(s)**: Index/Score **Comparisons:** Categorical, HEI-2015 < 51 "Poor", 51-80 "Need Improvement", >80 "Good" quality	**Follow-Up Duration: 2y, 4y, 6y, and 8y F/U** **Results:** HEI-2015 & CD at 2014 Wave β: -0.02 (-0.11, 0.08) 2016 Wave β: 0.07 (-0.03, 0.17) 2018 Wave β: 0.01 (-0.12, 0.10) 2020 Wave β: 0.17 (0.05, 0.29) **Summary:** Inverse: HEI-2015 & CD (2020, end of f/u) Null: HEI-2015 & CD (2014, 2016, 2018)	• **Did not account for:** Physical Activity, Anthropometry • Results were similar after examining those only age 65y or older; among SNAP users; in only Black or Other vs. White Race and/or Ethnicity group • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: CD defined as TICS-m score of < 7 (alternative scale in 65y+, 0-8) **Funding:** None
Lu, 2021[40] Japan; Ohsaki Cohort Study; Ohsaki Cohort 2006 Study Analytic N=3146 **Participant characteristics:** • Race and/or Ethnicity: NR (100% Japanese) • SEP: Education: Junior high school or lower, ~30% • Selection: Excluded those without valid response data; those who disagreed to release long-term care insurance	• **DP Age(s):** ≥65 y; ~74 y (mean) • **DP(s) examined:** Japanese Dietary Index (JDI) [Abe 2019] • **DP Components:** • Positive: Seaweeds, Pickles, Green, Yellow Vegetables (green vegetables, carrot, pumpkin, tomato); Rice; Fish (rawfish, fish boiled with soy, roast fish, boiled fish paste, dried fish); Beef and Pork (beef, pork, ham, sausage); Miso Soup, Green Tea, Coffee • **DP Method(s)**: Index/Score	**Follow-Up Duration: 5.0 years (mean)** **Results:** Incident Dementia Great decrease, HR: 1.72, 95% CI: 1.13, 2.62 Moderate decrease, HR: 1.10, 95% CI: 0.73,1.66 No change, HR: 1.00, ref Moderate increase, HR: 0.82, 95% CI: 0.54,1.25 Great increase, HR: 0.62, 95% CI: 0.38,1.02 p-trend<0.0001	• **Did not account for:** SEP, Race and/or Ethnicity (100% Japanese), • Results similar when excluding those with worse cognitive function at baseline; results slightly attentuated but still significant when excluding those whose dementia ascertained in first 2 yrs of f/u • **Diet assessment:** FFQ

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
information; those with existing disability before f/u; those with missing data	**Comparisons:** Categorical, by JDI change (great decrease, ≤ -2 points; moderate decrease, = 1 point; no changes, = 0 point; moderate increase (= +1 point), and great increase (≥ +2 points)	**Summary:** Inverse: Increase in JDI & decrease incident dementia Inverse: Decrease in JDI & increase incident dementia	assessed in 1994 and 2006; change score = 2006-1994 score • **Outcome measurement**: Incident dementia defined according to long-term care insurance information **Funding:** Ministry of Health, Labour and Welfare, Japan
Malek, 2022[41] Malyasia; Long Term Research Grant Scheme-Towards Useful Ageing (LRGS-TUA) Analytic N=280 **Participant characteristics:** • Race and/or Ethnicity: Malay, 56%; Chinese, 40%, Indian 4% • SEP: HH income (RM), 1448±1899; 100% lower educational attainment (~6y, mean), 58% urban; 76% married, 91% living with family • Selection: Excluded those who refused to participant, unable to locate, or died	• **DP Age(s):** 67.3y, nean (60y+) • **DP(s) examined:** "Sweet foods-beverages" • "Meat-vegetables-rice and noodles" • "Local snacks-fish and seafoods-high-salt-foods" • "Fruits-legumes" • "Tropical fruits-oats" • **DP Components:** • "Sweet foods-beverages": High intakes of sweetened creamer, granulated sugar, egg jam, and fruit jam; coffee, tea, and malted drink. Low intakes of dairy products including low fat milk and butter. • "Meat-vegetables-rice and noodles": Beef and pork. Vegetables: Brinjal, okra, carrot, cucumber, broccoli, long bean, chili, spinach, mustard leaves, tapioca shoots, ulam rajaa, swamp cabbage, fern shoots, mung bean, cabbage, and kale; rice porridge, white rice, dried noodle, and wet noodle; meat, including beef and pork, various types of vegetables and also rice and noodles. • "Local snacks-fish and seafoods-high-salt-foods": high intakes of local snacks e.g. banana fritters, cucurb, banana ball, curry puff, and cakoic; fish	**Follow-Up Duration: 5y** **Results:** Each DP & odds of Dem (95% CI) Sweet foods-beverages T2, OR: 1.086 (0.198, 5.968); p=0.924 T3, OR: 1.872 (0.325, 10.789); p=0.483 Meat-vegetables-rice and noodles T2, OR: 4.993 (0.432, 57.662); p=0.198 T3, OR: 10.478 (0.931, 117.939); p=0.057 Local snacks-fish and seafoods-high-salt-foods T2, OR: 0.354 (0.034, 3.661); p=0.384 T3, OR: 3.003 (0.479, 18.836); p=0.241 Fruits-legumes T2, OR: 1.629 (0.234, 11.363); p=0.622 T3, OR: 3.852 (0.545, 27.242); p=0.177 Tropical fruits-oats T2, OR: 0.152 (0.026, 0.871); p=0.034 T3, OR: 0.101 (0.011, 0.967); p=0.047 Each DP & odds of MCI (95% CI) Sweet foods-beverages	• **Did not account for:** None (all) (Sex, Smoking, and Physical activity were not adjusted for in analyses and did not differ between comparison groups) • **Diet assessment:** Diet Hx once at baseline • **Outcome measurement**: CDR scale (Clinical dementia rating) assessed by accredited researcher to Dx dementia • MCI based on objective memory complaints (≥ 1.5SD below mean RAVLT) and subjective memory complaints but no ADL issues, no Dx of Dem, and (Malay) MMSE ≥ 19. **Funding:** Ministry of Higher Education Malaysia; Grand Challenge Grant Project 1 and Project 2; Universiti Kebangsaan Malaysia

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
	and seafood: pomfret, tuna, Indian mackerel, round scad, red snapper, hairtail scad, trevally, sea perch, Spanish mackerel, cuttlefish, and prawn; High salt foods: Salted fish, anchovy sauce, fermented durian, and chili shrimp paste; Malaysian snacks, fish and seafood, sauces, and condiments. • "Fruits-legumes": Red apple, green apple, and grapes. Legumes: Soy bean fermented cake, soy bean cake, and yellow dhal. • "Tropical fruits-oats": High loadings for tropical fruits: papaya, orange, banana, duku, and rambutan; Oats. • **DP Method(s)**: Factor/cluster • **Comparisons:** Categorical, tertiles (T1, low, REF) for each DP "Sweet foods-beverages"; • "Meat-vegetables-rice and noodles" • "Local snacks-fish and seafoods-high-salt-foods" • "Fruits-legumes Fruits" "Tropical fruits-oats"	T2, OR: 1.576 (0.631, 3.934); p=0.330 T3, OR: 1.066 (0.329, 3.455); p=0.915 Meat-vegetables-rice and noodles T2, OR: 0.712 (0.258, 1.966); p=0.512 T3, OR: 0.591 (0.219, 1.590); p=0.297 Local snacks-f **Summary:** NS/Null: "Sweet foods-beverages" & MCI or Dem NS/Null: "Meat-vegetables-rice and noodles" & MCI or Dem Positive: "Local snacks-fish and seafoods-high-salt-foods" & MCI; NS/Null: Dem NS/Null: "Fruits-legumes Fruits" & CMI or Dem & MCI or Dem Inverse: "Tropical fruits-oats" & Dem; Ns/Null: MCI	
Mamalaki, 2023[42] Greece; Hellenic Longitudinal Investigation of Aging and Diet (HELIAD) Analytic N=537 **Participant characteristics:** • Race and/or Ethnicity: NR (Greek) • SEP: Education: 7.2 (5)y, mean • Selection: Excluded those with dementia at baseline or no available genetic, dietary, or cognitive data at F/U	• **DP Age(s):** 73.1 (5) y; ≥65y at baseline • **DP(s) examined:** Mediterranean-based Diet Score (MedDietScore) [Panagiotakos 2007] • **DP Components:** • MedDietScore, Positive: Vegetables; Potatoes; Legumes; Fruit; Whole Grains; Fish; Olive Oil. Negative: Red and Processed Meat; Poultry; Full-Fat Dairy; Alcohol (all="Wine") • **DP Method(s)**: Index/Score	**Follow-Up Duration: 2.9 (0.8)y, mean** **Results:** Low vs. High (Ref) MedDietScore & Alz (Table S1 fully adjusted) Low PGI-AD, HR: 9.857, 95% CI: 1.999, 52.475; p=0.025 High PGI-AD, HR: 1.478, 95% CI: 0.356, 5.988; p=0.561 **Summary:** Inverse: MedDietScore & Incident Alz in those at low genetic	• **Did not account for:** SEP, Physical activity • Only examined by genetic-risk status for Alz • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: cases of Alz, n=28; Alz based on NINCDS/ADRDA criteria; Individual cognitive test scores (e.g., MMSE; Greek VL; Complex Figure; Boston; TMT; CDT) used to produce an average domain

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
	Comparisons: Categorical, Low MedDietScore vs. High REF (median split)	risk for Alz; NS in those at high genetic risk for Alz	score for memory, language, attention speed, executive, and visual–spatial functioning; Global cognitive score based on the averages of individual scores **Funding:** Alzheimer's Association; European Social Fund; Ministry of Health and Social Solidarity
Mattei, 2019[43] United States; Boston Puerto Rican Health Study Analytic N=913 **Participant characteristics:** • Race and/or Ethnicity: NR (100% Puerto Rican) • SEP: Education at 8th grade or less, ~45%-54% • Selection: Excluded those with or who had: implausible TEI; incomplete cognitive evals; missing glucose values for T2D status	• **DP Age(s):** ~56-59y, mean; 45-75 y at baseline • **DP(s) examined:** Mediterranean Diet Score (MDS) [Trichopolou 2003] • Healthy Eating Index (HEI-2005) [Guenther 2008] • Alternative HEI (AHEI)-2010 [Chiuve 2012] • DASH Score [Fung 2008] • **DP Components:** • MDS, Positive: Vegetables; Legumes; Fruit, Nuts; Cereals; Fish; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • HEI-2005, Positive: Total Vegetables; Dark Green/Orange Vegetables, Legumes; Total Fruit; Whole Fruit; Whole Grains; Total Grains; Meat and Beans; Milk, Yogurt, Cheese, and Soy Beverages; Healthy Oils. Negative: SFA; Solid fats, Alcohol, and Added Sugars; Sodium • AHEI-2010, Positive: Vegetables (not potatoes); Fruit; Legumes and Nuts; Whole Grains; Long-Chain Fats (EPA + DHA); PUFA. Negative: Red and Processed Meat; Sugar Sweetened Beverages and Fruit Juice; Trans FA;	**Follow-Up Duration: ~2y** **Results:** MDS, β ± SE, in those w/ T2D (data NR for those w/o T2D) Global CFx, 0.027 ± 0.011; P=0.016 MMSE, 0.156 ± 0.072; P=0.031 Word recognition 0.365 ± 0.152; P=0.017 Figit span forward 0.106 ± 0.046; P=0.023 Clock drawing 0.066 ± 0.028; P=0.022 Data NR for other tests (NS) HEI-2005, β ± SE, in those w/o T2D; w/ T2D Global CFx, 0.001 ± 0.001; p=0.74; 0.003 ± 0.002; p=0.18 Executive Fx, −0.287 ± 0.030; p=0.39; 0.001 ± 0.004; p=0.74 Memory Fx, 0.011 ± 0.003; p=0.002; 0.007 ± 0.005; p=0.19 MMSE, −0.012 ± 0.010; p=0.24; 0.023 ± 0.014; p=0.09 Word list learning, 0.049 ± 0.042; p=0.25; 0.012 ± 0.054; p=0.82 Word recognition, 0.063 ± 0.020; p=0.002; 0.074 ± 0.030; p=0.014 Stroop, −0.004 ± 0.039; p=0.92; −0.052 ± 0.046; p=0.26	• **Did not account for:** None (all); Alcohol not in DASH • Primary exposure was MDS and primary outcome was CD stratified by T2D status • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: CD based on composite of z-scores from battery of CFx tests (MMSE; Stroop) **Funding:** NIH (NHLBI; NIA); Harvard University (Catalyst of the Harvard University Clinical and Translational Science Center)

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
	Sodium. Neutral: Alcohol • DASH, Positive: Vegetables (not potatoes and legumes); Nuts and Legumes; Fruit and Fruit Juice; Whole Grains; Total dairy; Negative: Red and Processed Meat; Sweetened beverages; Sodium; • **DP Method(s)**: Index/Score • **Comparisons:** Continuous, MDS • HEI-2005 • AHEI-2010 DASH	Letter fluency, 0.002 ± 0.039; p=0.95; 0.018 ± 0.041; p=0.67 Digit span forward, −0.011 ± 0.007; p=0.11; 0.014 ± 0.009; p=0.13 Digit span backward, −0.003 ± 0.005; p=0.56; -0.016 ± 0.007; p=0.023 Clock drawing, −0.001 ± 0.003; p=0.76; 0.007 ± 0.006; p=0.2 Figure copying, 0.017 ± 0.025; p=0.5; −0.010 ± 0.031; p=0.74 AHEI-2010, β ± SE, in those w/o T2D; w/ T2D Global CFx, 0.002 ± 0.002; p=0.25; 0.001 ± 0.002; p=0.57 Executive Fx, 0.002 ± 0.003; p=0.42; 0.002 ± 0.004; p=0.54 Memory Fx, 0.012 ± 0.004; p=0.001; 0.007 ± 0.005; p=0.17 MMSE, 0.001 ± 0.011; p=0.94; 0.003 ± 0.014; p=0.85 Word list learning, 0.066 ± 0.043; p=0.13; 0.080 ± 0.054; p=0.14 Word recognition, 0.062 ± 0.021; p=0.004; 0.033 ± 0.030; p=0.27 Stroop, 0.078 ± 0.041; p=0.06; −0.021 ± 0.045; p=0.64 Letter fluency, −0.034 ± 0.042; p=0.42; −0.019 ± 0.042; p=0.65 Digit span forward, 0.001 ± 0.007; p=0.89; 0.008 ± 0.009; p=0.36 Digit span backward, 0.002 ± 0.006; p=0.73; 0.0001 ± 0.007; p=0.98 Clock drawing, 0.002 ± 0.004; p=0.51; 0.004 ± 0.006; p=0.5 Figure copying, 0.026 ± 0.025; p=0.32; −0.040 ± 0.031; p=0.2 DASH, β ± SE, in those w/o T2D; w/ T2D	

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		Global CFx, 0.002 ± 0.004; p=0.53; 0.002 ± 0.005; p=0.65 Executive Fx, 0.003 ± 0.006; p=0.68; −0.001 ± 0.008; p=0.9 Memory Fx, 0.024 ± 0.008; p=0.003; 0.020 ± 0.012; p=0.09 MMSE, 0.003 ± 0.024; p=0.91; 0.047 ± 0.032; p=0.14 Word list learning, 0.224 ± 0.097; p=0.021; 0.128 ± 0.119; p=0.25 Word recognition, 0.081 ± 0.048; p=0.09; 0.039 ± 0.067; p=0.56 Stroop, 0.271 ± 0.091; p=0.003; 0.029 ± 0.100; p=0.78 Letter fluency, −0.064 ± 0.092; p=0.48; −0.100 ± 0.092; p=0.28 Digit span forward, −0.012 ± 0.015; p=0.44; −0.024 ± 0.020; p=0.23 Digit span backward, 0.012 ± 0.013; p=0.34; 0.007 ± 0.016; p=0.65 Clock drawing, 0.001 ± 0.008; p=0.92; 0.006 ± 0.013; p=0.62 Figure copying, 0.059 ± 0.058; p=0.31; −0.049 ± 0.071; p=0.49 **Summary:** Positive: MDS if with T2D & Global CFx; MMSE; Word recognition; Digit span fwd.; Clock draw; NS/Null: Executive Fx; Memory Fx; Word list learning; Stroop; Letter fluency; Digit span back; Figure copy Positive: HEI-2005 if w/o T2D & Memory Fx; Word Recognition; NS/Null: Global CFx; Executive Fx; MMSE; Word list or recognition; Stroop; Letter fluency; Digit span fwd. or back; Clock draw; Figure copy (Mostly NS in w/ T2D) Positive: AHEI-2010 if w/o T2D & Memory Fx; Word Recognition; NS/Null: Global CFx; Executive Fx; MMSE; Word list or recognition;	

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		Stroop; Letter fluency; Digit span fwd. or back; Clock draw; Figure copy (NS in w/ T2D) Positive: DASH if w/o T2D & Memory Fx; Word Recognition; NS/Null: Global CFx; Executive Fx; MMSE; Word list or recognition; Stroop; Letter fluency; Digit span fwd. or back; Clock draw; Figure copy (NS in w/ T2D)	
Melo van Lent, 2021[44] United States; Framingham Heart Study (FHS) Offspring Cohort Analytic N=1584 **Participant characteristics:** • Race and/or Ethnicity: NR ("Mainly white individuals of European ancestry") • SEP: Education: • 31.4% up to high school degree • 29.5% some years of college • 39.2% college degree • Selection: Excluded those with extreme energy intake; >13 missing FFQ items; no cognitive data;	• **DP Age(s):** 61.9 y (mean) • **DP(s) examined:** Mediterranean-Dash Intervention for Neurodegenerative Delay diet (MIND) [Morris, 2015, modified to encompass more items] • **DP Components:** • mMIND, Positive: Green leafy vegetables; Other Vegetables; Beans; Berries; Nuts; Whole Grains; Fish (not fried); Poultry (not fried); Olive oil; Wine. Negative: Red Meat and products (e.g., bacon, hot dogs, processed meats); Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food • **DP Method(s)**: Index/Score **Comparisons:** Continuous, per 1-pt	**Follow-Up Duration: 6.6 y (mean)** **Results:** ΔGlobal cognition (cognitive decline) β: -0.002, SE: 0.02, p-trend=0.87 Total brain volume, β: 0.02, SE: 0.01, p-trend=0.02 Lateral Ventricular volume, β: -0.007, SE: 0.01, p-trend=0.59 Hippocampal volume, β: 0.02, SE: 0.01, p-trend=0.20 White-matter hyperintensity volume, β: -0.20, SE: 0.01, p-trend=0.15 Silent brain infarcts, OR: 0.99, 95% CI: 0.91, 1.09, p-trend=0.89 **Summary:** Null: MIND & cognitive decline Positive: MIND & total brain volume Null: MIND & other MRI markers (lateral ventricular volume, hippocampal volume, white-matter hyperintensity volume, silent brain infarcts)	• **Did not account for:** SEP, Race and/or Ethnicity • Individual domains of cognition also showed no association with MIND score • **Diet assessment:** FFQ assessed at least twice (cycle 7 & 5 and/or 6); 86% of sample had all 3 assessments • **Outcome measurement**: Global cognitive decline: composite of visual/meaningful memory (Visual Reproductions Delayed Recall; Logical Memory Delayed Recall from the Wechsler Memory Scale); verbal comprehension/reading (Similarities from the Wechsler Adult Intelligence Scale; processing speed & EF (Trail Making Test A; Trail Making Test B minus A); closure/visual integration and mental rotation (Hooper Visual Organization Test) • Total brain volume (TBV),

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
			lateral ventricular volume (LVV), hippocampal volume (HPV)), silent brain infarcts (SBIs), and white matter injury (white matter hyperintensity volume (WMHV) assessed via MRI at cycle 7 **Funding:** NIH
Melo van Lent, 2022[45] United States; NHS Analytic N=16058 **Participant characteristics:** • Race and/or Ethnicity: NR; primarily white • SEP: Education: • Registered nurse, ~73-80% • Bachelor's degree, ~13-19% • Master's or doctorate, ~5.6-8% • Selection: Excluded those with missing 1 or more FFQ; without at least 1 cognitive assessment; incomplete data for physical activity	• **DP Age(s):** 74 (2)y, mean (30-55y) at baseline • **DP(s) examined:** Empirical dietary inflammatory pattern (EDIP) [Tabung, 2016] • **DP Components:** • Anti-inflammatory group: tea, coffee, dark yellow vegetables (carrots, or squash), leafy green vegetables (cabbage, spinach, or lettuce), snacks (cracker, or potato chips), fruit juice (apple juice, cantaloupe juice, orange juice, or other fruit juice), pizza • Pro-inflammatory group: processed meat (sausage), red meat (beef, or lamb), organ meat (beef, calf, or chicken liver), other fish (canned tuna, or fish), other vegetables (mixed vegetables, green pepper, cooked mushroom, eggplant, zucchini, or cucumber), refined grains (white bread, biscuit, white rice, pasta, or vermicelli), high-energy and low energy beverages (cola with sugar, carbonated beverages with sugar, fruit punch drinks), and tomatoes • **DP Method(s)**: Index/Score **Comparisons:** Categorical, quintiles	**Follow-Up Duration: 6 y** **Results:** Cognitive Function (mean of 4 measures) Global Q1, β: 1, ref Q2, β: −0.004, 95% CI: −0.03, 0.03 Q3, β: 0.01, 95% CI: −0.02, 0.04 Q4, β: −0.04, 95% CI: −0.07, −0.01 Q5, β: −0.01, 95% CI: −0.04, 0.02 p-trend=0.230 Verbal memory Q1, β: 1, ref Q2, β: 0.003, 95% CI: −0.03, 0.03 Q3, β: 0.02, 95% CI: −0.01, 0.05 Q4, β: −0.01, 95% CI: −0.04, 0.02 Q5, β: 0.02, 95% CI: −0.01, 0.06 p-trend=0.326 TICS Q1, β: 1, ref Q2, β: 0.01, 95% CI: −0.03, 0.06 Q3, β: 0.03, 95% CI: −0.02, 0.07 Q4, β: −0.03, 95% CI: −0.08, 0.02 Q5, β: −0.02, 95% CI: −0.07, 0.02 p-trend=0.124 Cognitive Decline Global Q1, β: 1, ref Q2, β: −0.001, 95% CI: −0.01, 0.01 Q3, β: 0.003, 95% CI: −0.01, 0.01 Q4, β: 0.01, 95% CI: 0.001, 0.02	• **Did not account for:** SEP, Race and/or Ethnicity (mostly white), Alcohol • Mean age 74 at first cognitive exam • **Diet assessment:** FFQ (once or twice) • **Outcome measurement**: TICS (Telephone Interview for Cognitive Status) including 10-word list for delayed recall; EBMT (East Boston Memory Test) for immediate & delayed recalls; category fluency; digit span backward test. **Funding:** NCI, NIH

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		Q5, β: 0.01, 95% CI: -0.003, 0.01 p-trend=0.036 Verbal memory Q1, β: 1, ref Q2, β: − 0.002, 95% CI: −0.01, 0.01 Q3, β: 0.004, 95% CI: −0.01, 0.01 Q4, β: 0.01, 95% CI: 0.004, 0.02 Q5, β: 0.01, 95% CI: −0.002, 0.02 p-trend=0.008 TICS Q1, β: 1, ref Q2, β: 0.01, 95% CI: −0.002, 0.02 Q3, β: 0.01, 95% CI: −0.01, 0.02 Q4, β: 0.01, 95% CI: −0.004, 0.02 Q5, β: 0.01, 95% CI: −0.01, 0.02 p-trend=0.542 **Summary:** Inverse: Higher EDIP & less CD (Global, verbal memory); NS/Null: CD (TICS) or Cognitive function (mean of repeated measures)	
Milte, 2019[46] Australia; Wellbeing, Eating and Exercise for a Long Life (WELL) study Analytic N=617 **Participant characteristics:** • Race and/or Ethnicity: NR • Country of birth: • Australia, 76.5% • UK: 7.94% • Other, 15.5% • SEP: Education: University degree, 45%; Up to 10 y, 22%; 12 y/trade/certificate: 33% • Retired: 35% • Urban: 97% • Married: 77%; Separated 13%	• **DP Age(s):** 55-65y at baseline; mean 60.2 y • **DP(s) examined:** Dietary Guideline Index - Australia (DGI-2013) [NHMRC, 2013] • **DP Components:** • DGI, 2013, Positive: Vegetables; Fruit; Grain (cereal) foods, mostly whole grain or high fibre; Lean meat and poultry, fish, eggs, nuts and seeds, and legumes/beans; Milk, yogurt, cheese, and/or their alternatives; Fluids (excluding soft drinks, cordial, fruit drinks, flavored milks, or alcoholic beverages); Variety. Negative: Discretionary foods; Saturated fat (including whole milk); Unsaturated spreads and oils; Added salt; Added	**Follow-Up Duration: 4 y** **Results:** TICS-m score (linear) Per 1-pt, β: 0.00, 95% CI: -0.01, 0.03 **Summary:** Null: DGI-2013 & cognitive function	• **Did not account for:** Race and/or Ethnicity, Anthropometry, Smoking • Analyses looked at linear relationship between DGI-2013 & TICS-m to assess cognitive function but did not look by cutoff values to assess cognitive impairment, dementia; results similar for men and women separately, and when excluding participants with CV • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: TICS-m; ≥32=normal cog function, 28-31=mild cog

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
• Selection: Excluded those missing >10% responses on FFQ, one or more responses to dietary habits questions, TICS-m score or covariates.	sugars; Alcohol • **DP Method(s)**: Index/Score **Comparisons:** Continuous, per 1-pt		impairment, ≤ 27=dementia **Funding:** Medibank Health Research Fund, Diabetes Australia Research Trust, Australian Research Council
Morris, 2015[47] United States; Rush Memory and Aging Project (MAP) Analytic N=960 **Participant characteristics:** • Race and/or Ethnicity:95% white; 98.5% non-Hispanic • SEP: Education level, 14.9 y (mean) • Selection: Excluded those w dementia at baseline; those who died or withdrew	• **DP Age(s):** ≥65 y at baseline; 81.4 [7.2] y (mean) • **DP(s) examined:** Mediterranean-Dash Intervention for Neurodegenerative Delay diet (MIND) [Morris, 2015] • **DP Components:** • Positive: Green leafy vegetables; Vegetables; Beans; Berries; Nuts; Whole Grains; Seafood; Poultry; Olive oil; Wine. Negative: Red Meat; Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food • **DP Method(s)**: Index/Score • **Comparisons:** Continuous, per pt Categorical, tertiles	**Follow-Up Duration: 4.7y (mean)** **Results:** Global cognition, β (SE) Linear, 0.0106 (0.0023) p-trend<0.0001 T3, 0.0366 (0.0101), p-trend=0.003 T2, 0.0243 (0.0099), p-trend=0.01 Episodic memory, β (SE) Linear, 0.0090 (0.0028) p-trend=0.001 Semantic Memory, β (SE) Linear, 0.0113 (0.0027) p-trend<0.0001 Pereptual Organization, β (SE) Linear, 0.0077 (0.0025) p-trend=0.002 Perceptual Speed, β (SE) Linear, 0.0097 (0.0023) p-trend<0.0001 Working memory, β (SE) Linear, 0.0060 (0.0024) p-trend=0.01 **Summary:** Inverse: MIND score (cont. & categorical) & (less decline/rate of change in) global cognition; Inverse: MIND score (cont.) & (less decline/rate of change in) episodic memory, semantic memory, perceptual organization, perceptual speed, working memory	• **Did not account for:** SEP, Anthropometry (BMI across tertiles: 27.5, 27.1, 26.7) • Primarily female (75%); separate model incorporating low weight (BMI≤20) and obesity (BMI≥30) found " there was no statistical evidence that the diet effect on the global or individual domain cognitive scores differed by level or presence of" these variab • **Diet assessment:** FFQ assessed at each annual visit but baseline only used after testing change (very small) • **Outcome measurement**: MMSE; Annual structured clinical evaluations including cognitive testing by technicians (trained & certified); 52% of sample had 5+ cognitive assessments **Funding:** NIA
Morris, 2015[48] United States; Rush Memory and Aging Project (MAP)	• **DP Age(s):** ~81.4 y (mean); ≥65 y at baseline • **DP(s) examined:** Mediterranean-Dash	**Follow-Up Duration: 4.5 y** **Results:** MIND, HR (95% CI)	• **Did not account for:** SEP, Anthropometry, Race and/or Ethnicity, Smoking

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
Analytic N=789 **Participant characteristics:** • Race and/or Ethnicity: NR • (likely similar to Morris, 2015_slows, which is primarily non-Hispanic White) • SEP: Mean years of education, ~14.3-15.6y • Selection: Excluded those w dementia at baseline; those who died or withdrew	Intervention for Neurodegenerative Delay diet (MIND) [Morris, 2015] • Mediterranean-based Diet Score (MedDietScore) [Panagiotakos 2007] • DASH diet score [Folsom, 2007] • **DP Components:** • MIND: Positive: Green leafy vegetables; Vegetables; Beans; Berries; Nuts; Whole Grains; Seafood; Poultry; Olive oil; Wine. Negative: Red Meat; Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food • MedDietScore: Positive: Vegetables; Potatoes; Legumes; Fruit; Whole Grains; Fish; Olive Oil. Negative: Red and Processed Meat; Poultry; Full-Fat Dairy; Alcohol • DASH: Positive: Vegetables; Nuts and Legumes; Fruit; Total Grains; Low-Fat Dairy; Negative: Fish; Meat; Poultry; Sweets; Total fat; Saturated fat ; Sodium; • **DP Method(s)**: Index/Score • **Comparisons:** Categorical, tertiles Continuous, per pt	T1, HR: 1, ref T2, HR: 0.64 (0.42, 0.97) T3, HR: 0.48 (0.29, 0.79) p-trend (linear)=0.003 DASH T1, HR: 1, ref T2, HR: 0.98 (0.64, 1.46) T3, HR: 0.60 (0.37, 0.96) p-trend (linear)=0.06 MedDietScore T1, HR: 1, ref T2, HR: 0.81 (0.53, 1.21) T3, HR: 0.49 (0.29, 0.85) p-trend (linear)=0.01 **Summary:** Inverse: MIND, MedDietScore & Alz NS/Inverse: DASH & Alz	• Primarily female (~74-78%) • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: Alzheimer's disease Dx by an experienced clinician using data from a structured neurological examination and medical history, cognitive performance testing, and with the assistance of an algorithmically-based rating of cognitive impairment. Dx criteria based on National Institute of Neurological and Communicative Disorders and Stroke and the Alzheimer's Disease and Related Disorders Association **Funding:** NIA/NIH
Moustafa, 2022[49] United States; Hispanic Community Health Study/Study of Latinos (HCHS/SOL) Analytic N=6321 **Participant characteristics:** • Race and/or Ethnicity:100% Hispanic/Latino (living in US) • US-born, 4-14% • SEP: Household income: • <$20,000, ~43-47% • 20,000-50,000, ~32-38%	• **DP Age(s):** 56.1 y (mean); 18-74 y at baseline (those over 45 y oversampled) • **DP(s) examined:** Mediterranean Diet Score (MDS) [Trichopolou 2003] • modified MDS (mMDS) [Mattei 2007] • **DP Components:** • MDS: Positive: Vegetables; Legumes; Fruit, Nuts; Cereals; Fish; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • mMDS: Positive: Vegetables; Legumes; Fruit, Nuts; Whole grains;	**Follow-Up Duration: 7 y** **Results:** MDS & ΔGlobal cognition Low, mean: 0.01, 95% CI: -0.008, 0.10 Moderate, mean: 0.03, 95% CI: -0.06, 0.12 High, mean: 0.05, 95% CI: -0.05, 0.15 p-trend=0.32 Low vs. moderate, mean difference: 0.02, 95% CI: -0.02, 0.06	• **Did not account for:** None (all) • **Diet assessment:** Diet recall once at baseline • **Outcome measurement**: Learning (Brief Spanish-English Verbal Learning Test (B-SEVLT) Sum, which includes 3 learning trials; B-SEVLT Recall, a delayed verbal episodic and memory trial; word fluency (verbal) for speech production; Digit

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
• >50,000, ~9-13% • NR, ~6-10% • Education level: • <High school, ~35-44% • High school, ~39-41% • >High school, ~39-43% • Health insurance (yes), ~52-63% • Selection: Included those with at least 1 24-hr dietary recall at baseline;	Fish; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • **DP Method(s)**: Index/Score **Comparisons:** Categorical, low (0-4pts), medium (5-6pts), high (7-9pts)	Low vs. high, mean difference: 0.04, 95% CI: -0.01, 0.09 mMDS & ΔGlobal cognition Low, mean: 0.01, 95% CI: -0.008, 0.10 Moderate, mean: 0.04, 95% CI: -0.05, 0.13 High, mean: 0.04, 95% CI: -0.06, 0.14 p-trend=0.25 Low vs. moderate, mean difference: 0.03, 95% CI: -0.01, 0.07 Low vs. high, mean difference: 0.03, 95% CI: -0.02, 0.08 **Summary:** Null: MDS, mMDS & ΔGlobal cognition	Symbol Substitution Test (DSST) for sustained attention, psychomotor speed, and executive function **Funding:** NIH (NIA & NHLBI)
Mueller, 2020[50] United States; Wisconsin Registry for Alzheimer's Prevention (WRAP) Analytic N=828 **Participant characteristics:** • Race and/or Ethnicity:98.2% non-Hispanic White • SEP: 16.2 y education (mean) • Selection: All free of dementia at baseline. Excluded those with <2 visits; with MCI at baseline; with Hx stroke, Parkinson's Dz, MS, epilepsy; without complete data on diet, PA, cognitive activities	• **DP Age(s):** 53.7y (mean) at baseline • **DP(s) examined:** Mediterranean-Dash Intervention for Neurodegenerative Delay diet (MIND) [Morris, 2015] • **DP Components:** • MIND, Positive: Green leafy vegetables; Vegetables; Beans; Berries; Nuts; Whole Grains; Seafood; Poultry; Olive oil; Wine. Negative: Red Meat; Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food • **DP Method(s)**: Index/Score **Comparisons:** Continuous	**Follow-Up Duration: 6.3 (1.9) y, mean (7y median; range: 2-10)** **Results:** MIND & PACC4 (global cognition) Model average β: 0.018, 95% CI: -0.66, 0.54 MIND & Executive Function Model average β: -0.252, 95% CI: -1.04, -0.02 Immediate memory, NS, data NR Delayed memory, NS, data NR **Summary:** Null: MIND & PACC-4, EF, immediate & delayed memory	• **Did not account for:** SEP, Physical Activity, Anthropometry, Smoking • Significant age * MIND interaction reported: those w/ greater MIND adherence showed slower decline in EFx over time; no main effect of diet. Participants were relatively young at both diet assessment (~57y) and outcome assessment (65y), so it is possible • **Diet assessment:** 15-item FFQ to assess MIND diet adherence • **Outcome measurement**: Global function similar to PACC4 (Preclinical Alzheimer's Cognitive Composite 4)- composite score of available measures: MMSE, RAVLT, WMS-R,

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
			and WAIS-R; secondary outcomes of domain-specific cognitive tests: immediate recall, delayed recall, executive function **Funding:** NIH
Muñoz-García, 2020[52] Spain; SUN Analytic N=806 **Participant characteristics:** • Race and/or Ethnicity: NR (Spanish) • SEP: All 5-6 y university education • Selection: Excluded those with missing 6-y STICS-m or saliva or implausible TEI	• **DP Age(s):** 66-68y across DP extremes; ≥55 y at study baseline • **DP(s) examined:** Mediterranean Diet Adherence Screener (MEDAS) [Schroder 2011] • Mediterranean Diet Score (MDS) [Trichopolou 2003] • DASH Score [Fung 2008] • Mediterranean-Dash Intervention for Neurodegenerative Delay diet (MIND) [Morris, 2015] • Alternative HEI (AHEI)-2010 [Chiu • **DP Components:** • MEDAS, Positive: Vegetables; Pulses; Fruit; Nuts; Fish; White Meat Over Red Meat; Olive Oil; Olive Oil as Principal Cooking Fat; Red Wine; Sofritas (dishes with tomato, garlic, onion, leek, olive oil). Negative: Commercial Pastries; Red Meat or Sausages; Animal fat; Sugar-Sweetened Beverages • MDS, Positive: Vegetables; Legumes; Fruit, Nuts; Cereals; Fish; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • DASH, Positive: Vegetables (not potatoes and legumes); Nuts and Legumes; Fruit and Fruit Juice; Whole Grains; Total dairy; Negative: Red and Processed Meat; Sweetened beverages; Sodium; • MIND, Positive: Green leafy	**Follow-Up Duration: 6y, mean to 1st cognitive eval** **Results:** STICS-m scores β (95% CI) MEDAS Med., 0.28 (-0.25, 0.80); High, 0.43 (-0.40, 1.26); p-trend=0.28 per 2pt, 0.15 (–0.08, 0.40) MDS Med., 0.23 (-0.24, 0.69); High, 0.32 (-0.23, 0.88); p-trend=0.26 per 1.5pt, 0.05 (–0.13, 0.23) DASH Q2, -0.01 (-0.63, 0.60); Q3, -0.23 (-0.84, 0.38); Q4, -0.07 (-0.72, 0.58); Q5, 0.30 (-0.35, 0.96); p-trend=0.43 per 5pt, 0.11 (–0.10, 0.32) MIND T2, 0.17 (-0.28, 0.62); T3, 0.47 (-0.07, 1.02); p-trend=0.09 per 1.5pt, 0.27 (0.05, 0.48) AHEI-2010 Q2, 0.43 (-0.18, 1.04); Q3, 0.42 (-0.23, 1.07); Q4, 0.30 (-0.33, 0.93); Q5, 0.81 (0.17, 1.45); p-trend=0.03 per 9pt, 0.25 (0.04, 0.45) Pro-Veg Very Low, -0.19 (-0.87, 0.48); Low, -0.09 (-0.74, 0.56); Mod., 0.22 (-0.49, 0.93); High, 0.41 (-0.56, 1.38); p-trend=0.22 per 6pt, 0.19 (–0.03, 0.40)	• **Did not account for:** SEP; Race and/or Ethnicity (Spanish) • **Diet assessment:** FFQ assessed repeatedly; but only baseline used for DP • **Outcome measurement**: modified Spanish Telephone Interview for Cognitive Status, STICS-m **Funding:** Spanish Government-Instituto de Salud Carlos III, European Regional Development Fund, Navarra Regional Government, University of Navarra

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
	vegetables; Vegetables; Beans; Berries; Nuts; Whole Grains; Seafood; Poultry; Olive oil; Wine. Negative: Red Meat; Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food • AHEI-2010, Positive: Vegetables (not potatoes); Fruit; Legumes and Nuts; Whole Grains; Long-Chain Fats (EPA + DHA); PUFA. Negative: Red and Processed Meat; Sugar Sweetened Beverages and Fruit Juice; Trans FA; Sodium. Neutral: Alcohol • Pro-veg, Positive: Vegetables; Potatoes; Legumes; Fruit; Nuts; Cereals; (no data on olive oil). Negative: Fish and Other Seafood; Meats and Meat Products; Eggs; Dairy Products; Animal Fats • **DP Method(s)**: Index/Score **Comparisons:** Categorically (quintiles; tertiles; medium/moderate or high vs. Q1/T1/Low (β: 0 as REF); linear trend; Continuous, per pts of each MDS, MEDAS, DASH, MIND, AHEI-2010, Pro-veg	**Summary:** NS/Null: MDS & STICS-m NS/Null: MEDAS & STICS-m NS/Null: DASH & STICS-m Positive: MIND (per 1.5 pt) & STICS-m (NS/Positive: T2, T3 vs. T1) Positive: AHEI-2010 & STICS-m NS/Null: Pro-veg & STICS-m	
Muñoz-García, 2022[51] Spain; SUN Analytic N=806 **Participant characteristics:** • Race and/or Ethnicity: NR (Spanish) • SEP: All 5-6 y university education • Selection: Excluded those with missing 6-y STICS-m or saliva or implausible TEI	• **DP Age(s):** ~67y across DP tertiles; ≥55 y at study baseline • **DP(s) examined:** Western, WDP • Mediterranean, MDP • **DP Components:** • Western, WDP: positive loadings for refined cereals; whole-fat dairy products; eggs; sweets (cookies, cakes, nougat, chocolate, and marzipan); sugar sweetened beverages; commercial bakery; sauces; red meat; processed/precooked meat; processed red meat; fast food	**Follow-Up Duration: 6y, mean** **Results:** STICS-m scores, Adj. differences (95% CI) WDP T2, –0.49 (–1.03, 0.05) T3, –0.80 (–1.51,–0.08) p-trend=0.03 MDP T2, 0.16 (–0.34, 0.66) T3, 0.71 (0.15, 1.26) p-trend=0.01 **Summary:** Positive: MDP & STICS-m	• **Did not account for:** SEP; Race and/or Ethnicity (Spanish) • **Diet assessment:** FFQ assessed repeatedly; but only baseline used for DP • **Outcome measurement**: modified Spanish Telephone Interview for Cognitive Status, STICS-m **Funding:** Spanish Government-Instituto de Salud Carlos III, European Regional Development Fund, Navarra

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
	• Mediterranean, MDP: positive loadings for vegetables, fruit, nuts, fish, olive oil, natural fruit juices, and other fruits (canned, dried, avocado, olives). • **DP Method(s)**: Factor/Cluster **Comparisons:** Categorical, tertiles (T1 ref)	Inverse: WDP & STICS-m	Regional Government, University of Navarra
Nicoli, 2021[53] Italy; Monzino 80-plus study Analytic N=512 **Participant characteristics:** • Race and/or Ethnicity: NR • SEP: Education, mean ~5 y • 90-93% living at home • Selection: Participants 80+ years in Varese province, Italy; Excluded those with no FFQ data; with dementia at baseline; those lost to f/u	• **DP Age(s):** ~92 y; 80+ y at enrollment • Mean age at baseline: • 80-84y, ~7% • 85-89y, ~33% • 90-94y, ~27% • 95-99y, ~19% • 100+y, ~12% • **DP(s) examined:** Mediterranean Diet Score (MDS) [Trichopolou 2003] • **DP Components:** • MDS, Positive: Vegetables; Legumes; Fruit, Nuts; Cereals; Fish; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • **DP Method(s)**: Index/Score **Comparisons:** Categorical, tertiles	**Follow-Up Duration: 3.6 y (mean); 2.8 y (median); 12y (total)** **Results:** T1, HR: 1, ref T2, HR: 1.17, 95% CI: 0.82, 1.66 T3, HR: 1.20, 95% CI: 0.82, 1.76 p-trend=0.369 **Summary:** NS/Positive: MDS & incident Dementia	• **Did not account for:** SEP, Race and/or Ethnicity, • "Re-performed" the analyses including BMI in the fully-adjusted model" led to similar results but data NR. Baseline for these analyses in 2005 when FFQ collected; participants were enrolled prior. • **Diet assessment:** FFQ once at baseline (2005) • **Outcome measurement**: MMSE (imputation used when MMSE n/a): incident cases of dementia identified by team of a neurologist, neuropsychologist, and psychologist using DSM-IV criteria **Funding:** Italo Monzino Foundation, Milano, Italy
Nishi, 2021[54] Spain; PREDIMED-Plus secondary analysis Analytic N=6647 **Participant characteristics:** • Race and/or Ethnicity: NR (100% Spanish) • SEP: Education: 49% primary; 29% high school; 22% college;	• **DP Age(s):** 65y, mean (55 to 75y at baseine) • **DP(s) examined:** Mediterranean Diet Adherence Screener (MEDAS) [Schroder 2011] • DASH Score [Fung 2008] • Mediterranean-Dash Intervention for Neurodegenerative Delay diet (MIND) [Morris, 2015] • **DP Components:**	**Follow-Up Duration: 2y** **Results:** MEDAS & GCFx, β (95% CI) Mod, 0.031 (-0.005, 0.067) High, 0.033 (-0.009, 0.075) p-trend=0.095 MEDAS & MMSE Mod, 0.053 (0.002, 0.104) High, 0.068 (0.017, 0.125) p-trend=0.014	• **Did not account for:** Race and/or Ethnicity (Spanish), SEP (marital status) • Indirect: primary intent of trial was weight loss and CVD-prevention • **Diet assessment:** FFQ once at baseline • **Outcome measurement**: CD based on cognitive

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
77% Married • Selection: Excluded those with or who: missing dietary data at baseline and follow-up or outcome data	• MEDAS, Positive: Vegetables; Pulses; Fruit; Nuts; Fish; White Meat Over Red Meat; Olive Oil; Olive Oil as Principal Cooking Fat; Red Wine; Sofritas (dishes with tomato, garlic, onion, leek, olive oil). Negative: Commercial Pastries; Red Meat or Sausages; Animal fat; Sugar-Sweetened Beverages • DASH, Positive: Vegetables (not potatoes and legumes); Nuts and Legumes; Fruit and Fruit Juice; Whole Grains; Total dairy; Negative: Red and Processed Meat; Sweetened beverages; Sodium; • MIND, Positive: Green leafy vegetables; Vegetables; Beans; Berries; Nuts; Whole Grains; Seafood; Poultry; Olive oil; Wine. Negative: Red Meat; Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food • **DP Method(s)**: Index/Score **Comparisons:** Categorical (Low, Ref) and linear trend for each DP (MEDAS; MIND; DASH)	MEDAS & CDT Mod, -0.015 (-0.071, 0.040) High, 0.011 (-0.052, 0.074) p-trend=0.808 DASH & GCFx Mod, -0.042 (-0.080, -0.004) High, -0.027 (-0.067, 0.014) p-trend=0.154 DASH & MMSE Mod, 0.013 (-0.039, 0.065) High, -0.002 (-0.058, 0.054) p-trend=0.941 DASH & CDT Mod, -0.026 (-0.085, 0.032) High, -0.029 (-0.090, 0.032) p-trend=0.351 MIND & GCFx Mod, -0.020 (-0.057, 0.016) High, 0.023 (-0.017, 0.063) p-trend=0.367 MIND & MMSE Mod, 0.044 (-0.007, 0.095) High, 0.039 (-0.014, 0.092) p-trend=0.139 MIND & CDT Mod, 0.002 (-0.056, 0.060) High, 0.030 (-0.030, 0.090) p-trend=0.329 Additional results reported for trail-making test part A and B, verbal fluency tasks (semantic; phonologic), and digit-span forward and backward **Summary:** Positive: MEDAS & MMSE; Inverse: MEDAS & TMT-A or TMT-B; NS: GCFx; CDT; DST; VFT NS/Null: MIND & all (GCFx; MMSE; CDT; TMT; DST; VFT) Positive: DASH & TMT-A; NS/Null: GCFx; CDT; TMT; DST; VFT	battery of tests [Global cognitive function, GCFx; MMSE; Clock drawing test (CDT); Trail Making (TMT A and B); Digit Span (DST-F; DST-B); Verbal fluency tests (VFT-a; VFT-p] **Funding:** Spanish Institutions for funding scientific biomedical research, CIBER Fisiopatología de la Obesidad y Nutrición (CIBEROBN) and Instituto de Salud Carlos III (ISCIII), through the Fondo de Investigación parala Salud (FIS), which was co-funded by the European Regional Development Fund; Especial Action Project

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
Nooyens, 2021[55] The Netherlands; Doetinchem Cohort Study Analytic N=3644 **Participant characteristics:** • Race and/or Ethnicity: NR (Dutch) • SEP: Education: 23-41% Low; Married: 83-84% • Selection: Excluded those with <1 diet/CD assessment	• **DP Age(s):** 56y, mean; 45 to 75y at baseline • **DP(s) examined:** modified Mediterranean Diet Score (mMDS) [Trichopolou 2005 modified Trichopolou 2003] • modified DHD15-index (mDHD15), Looman, 2017); excluded sodium, coffee • **DP Components:** • mMDS, Positive: Vegetables; Legumes; Fruit; Cereals; Fish; MUFA+PUFA/SFA. Negative: Meat; Dairy Products. Neutral: Alcohol • mDHD-15, Positive: Vegetables; Legumes; Fruit; Nuts; Whole Grains; Fish; Dairy Products; Tea. Negative: Fats and Oils; Red Meat; Processed Meat; Sweetened Beverages; Fruit juices; Alcohol • **DP Method(s)**: Index/Score **Comparisons:** Categorical, tertiles	**Follow-Up Duration: 20y total (5y intervals)** **Results:** mean diff. (95% CI) mMDS, T3 v. T1 & CD based on CFx, 7.4% (1.0, 14.9) CD based on Processing, 9.5% (2.1, 18.4) Global CFx, 2.0 (0.8, 3.4); change β: 0.00 (0.00, 0.01) Memory, 2.3 (0.7, 3.9) Processing, 1.7 (0.3, 3.4) Cog. Flexibility, 1.1 (0.0, 2.2) mDHD15 , T3 v. T1 & CD based on CFx, 6.5% (0.6, 13.6) CD based on Processing, 12.4% (5.5, 20.8) CD based on Cog. Flexibility, 10.3% (3.7, 18.3) Global CFx, 2.0 (0.8, 3.4); change β: 0.00 (-0.00, 0.01) Memory, 2.3 (0.7, 3.9) Processing, 1.7 (0.3, 3.4) Cog. Flexibility, 1.1 (0.0, 2.2) **Summary:** Inverse: mMDS & CD (NR: Memory, Cognitive flexibility) Inverse: mDHD15 & CD (NR: Memory)	• **Did not account for:** Race and/or Ethnicity but all Dutch, SEP but did adjust for marital status • Sensitivity analyses by excluding lowest 2.5% global CF, those who had a CVA, or those who only had baseline cognitive eval. showed similar associations • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: Cognitive function, CF (Stroop; 15-word verbal learning (VLT); Animal naming fluency; Letter-digit); Memory (VLT; Animal naming fluency); Processing speed (Letter-digit; Stroop); Cognitive flexibility (Stroop)) **Funding:** Ministry of Health, Welfare and Sport of The Netherlands and the National Institute for Public Health and the Environment
Olsson, 2015[56] Sweden; Uppsala Longitudinal Study of Adult Men (ULSAM) Analytic N=1038 **Participant characteristics:** • Race and/or Ethnicity: NR (Swedish) • SEP: Single household, 16% • Low educational attainment, 56%	• **DP Age(s):** 71 y (mean) • **DP(s) examined:** Mediterranean Diet Score (MDS) [Trichopolou 2003] • **DP Components:** • MDS: Positive: Vegetables; Legumes; Fruit, Nuts; Cereals; Fish; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • **DP Method(s)**: Index/Score • **Comparisons:** Categorical, tertiles (medium, high vs. low HR: 1 REF)	**Follow-Up Duration: ~13 y (12-14y)** **Results:** MDS & Dementia (all-type) Per SD, HR: 0.94, 95% CI: 0.75, 1.18 Low, HR: 1, ref Medium, HR: 1.05, 95% CI: 0.67, 1.66 High, HR: 0.85, 95% CI: 0.44, 1.62 p-trend=0.70 MDS & Alzheimer's Dz Per SD, HR: 1.00, 95% CI: 0.75, 1.33 Low, HR: 1, ref	• **Did not account for:** SEP, Anthropometry, Race and/or Ethnicity, Alcohol (HDI) • Data were reported by authors but not included in this review for mHDI score, which only has 2 food groups (fish and combined fruits with veg) and a LCHP (low-carb/high-protein) score, which was not based

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
• • Selection: Excluded those with T2D before baseline; extreme energy intake; dementia Dx before baseline; weight loss >10% between 60-70 yrs old	• Continuous, per 1 SD	Medium, HR: 1.16, 95% CI: 0.64, 2.10 High, HR: 0.99, 95% CI: 0.44, 2.26 p-trend=0.95 MDS & Cognitive impairment (all-type) Per SD, OR: 0.82, 95% CI: 0.65, 1.05 Low, OR: 1, ref Medium, OR: 1.32, 95% CI: 0.82, 2.15 High, OR: 0.64, 95% CI: 0.31, 1.30 p-trend=0.41 **Summary:** NS/Null: MDS & Alzheimer's Dz, Dementia, Cognitive impairment	on food groups only g/d of macronutrients • **Diet assessment:** 7-day food record once at baseline • **Outcome measurement**: MMSE for cognitive impairment (defined as all-type dementia and/or≥3 points decline in MMSE over the 12-y period and/or MMSE <25 points at follow up). Dementia & cognitive impairment: primary care & nursing home records. AD defined according to National Institute of Neurological and Communication Disorders and Stroke-Alzheimer's Disease and Related Disorders Association criteria (NINCDS-ADRDA) & the Diagnostic and Statistical DSM-IV criteria **Funding:** Swedish Research Council, The Foundation Tornspiran, The Swedish Dementia Association
Parrott, 2021[57] Canada; Quebec Longitudinal Study on Nutrition and Successful Aging (NuAge): Nutrition and Cognition Substudy Analytic N=350 **Participant characteristics:** • Race and/or Ethnicity: NR • SEP: NR • Selection: Included those with	• **DP Age(s):** ~73 y (mean); 67-84 y at baseline • **DP(s) examined:** n/a • **DP Components:** • "Prudent": Positive: vegetables, salad dressing, fruits, legumes, nuts and seeds, whole-grain bread, fish and seafood, poultry, and lower-fat dairy • "Western": red and processed meats, white bread, potatoes, sugary drinks, candy, butter, and baked goods	**Follow-Up Duration: 3.0 y (mean)** **Results:** "Western" DP & Global cognition, β: -0.16, SE: 0.06, p-trend=0.009 Executive function, β: -0.60, SE: 0.27, p-trend= 0.027 Episodic memory, β: -0.02, SE: 0.05, p-trend= 0.705 "Prudent" DP:	• **Did not account for:** Race and/or Ethnicity • Based on embedded subsample who underwent additional cognitive testing (Nutrition and Cognition Substudy) • **Diet assessment:** FFQ assessed once at baseline; DPs derived via PCA • **Outcome measurement**:

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
MMSE score >85 at baseline; complete dietary data; free of self-reported health conditions that could impair cognition	• **DP Method(s)**: Factor/Cluster **Comparisons:** Continuous	Global cognition, β: -0.06, SE: 0.06, p-trend=0.339 Executive function, β: -0.01, SE: 0.27, p-trend= 984 Episodic memory, β: 0.01, SE: 0.05, p-trend= 0.819 **Summary:** Positive: Western & (faster) rate of CD (global cognition, executive function); NS/Null: Decline of episodic memory Null: Prudent & rate of CD (global cognition, executive function, episodic memory)	MMSE (Global cognition) assessed three times during f/u, annually. Verbal episodic memory: RL/RI-16 Free and Cued Recall Task. Executive function: Stroop task **Funding:** Canadian Institutes of Health Research
Razquin, 2022[58] Spain; SUN Project (sub-study) Analytic N=764 **Participant characteristics:** • Race and/or Ethnicity: NR • SEP: All with University education; ~32-37% with degree; ~44-49% with Master's degree; ~20% with PhD • Selection: Excluded those with missing baseline or 6-yr cognition data; implausible TICS-m score (n=1); with missing saliva sample or for whom ApoeE alleles could not be determined; with extreme energy intakes	• **DP Age(s):** 55+ y at baseline; ~60-61 y (mean) • **DP(s) examined:** Mediterranean Diet Score (MDS) [Trichopolou 2003] • **DP Components:** • MDS, Positive: Vegetables; Legumes; Fruit, Nuts; Cereals; Fish; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • **DP Method(s)**: Index/Score **Comparisons:** Categorical, high (5-9) vs. low (0-4)	**Follow-Up Duration: 6 y** **Results:** ΔCognitive function (adjusted difference, 95% CI) Low MDS-no HTN, 0, ref Low MDS-w/ HTN, -0.62, 95% CI: -1.09, -0.15 p-trend=0.010 R2=30% High MDS-no HTN, 0, ref High MDS- w/HTN, -0.11, 95% CI: -0.61, 0.38 p-trend=0.660 R2=38% Significant difference between low adherence-w/ HTN vs. other groups (low adherence-no HTN; high adherence (no & w/ HTN) **Summary:** Inverse: low MDS & greater Δcognitive function in those with HTN (vs. low MDS-no HTN, high MDS-w/ HTN, high Med-no HTN)	• **Did not account for:** SEP, Race and/or Ethnicity (Spanish), Physical activity,Smoking • MDS was treated as stratification variable, not main effect; direct comparison of low vs. high MDS not conducted • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: TICS-m; assessed at baseline and 6y **Funding:** Instituto de Salud Carlos III, European Regional Development Fund
Rodrigues, 2020[59] Portugal; SWITCHBOX consortium	• **DP Age(s):** 66.4 (7.8) y • **DP(s) examined:** Mediterranean Diet Adherence Screener (MEDAS)	**Follow-Up Duration: 18 mos. (range: 16 to 25)** **Results:**	• **Did not account for:** Race and/or Ethnicity • Also measured total gray

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
Analytic N=76 **Participant characteristics:** • Race and/or Ethnicity: NR • SEP: Education, mean 5.8 (4.1) y • Occupation: 18% employed; 74% retired; 8% unemployed • Selection: Excluded those with or who: had inability/incapacity to understand informed consent or attend visits, choosen to withdraw, with dementia or other neuro-related disorder (via medical records)	[Schroder 2011] • **DP Components:** • MEDAS, Positive: Vegetables; Pulses; Fruit; Nuts; Fish; White Meat Over Red Meat; Olive Oil; Olive Oil as Principal Cooking Fat; Red Wine; Sofritas (dishes with tomato, garlic, onion, leek, olive oil). Negative: Commercial Pastries; Red Meat or Sausages; Animal fat; Sugar-Sweetened Beverages • **DP Method(s)**: Index/Score **Comparisons:** Categorical, Low MEDAS (<10) vs. High (≥10) REF	MEDAS & Executive functioning, β: 0.232 (95% CI: 0.020, 0.215);p=0.02 MEDAS & Memory scores, β: 0.213 (95% CI: 0.006, 0.247);p=0.06 **Summary:** Positive: MEDAS & Executive Fx; NS/Positive: MEDAS & Memory	matter volume, total white matter volume, total brain volume • **Diet assessment:** 24-h recall once at baseline • **Outcome measurement**: Composite scores transformed/scaled from a cognitive battery of tests (MMSE; SRT, multi-trial verbal learning and selective reminding; STROOP) **Funding:** European Regional Development Fund (FEDER) and the Operational Programme Competitiveness Factors (COMPETE)
Samuelsson, 2022[60] Sweden; Gothenburg H70 Birth Cohort Studies Analytic N=602 **Participant characteristics:** • Race and/or Ethnicity:100% Swedish • SEP: Education > 6 or 7y: 40% • Selection: Excluded those who had missing dietary, dementia, or genotype data	• **DP Age(s):** 70.6y, mean • **DP(s) examined:** "Western"; "Healthy" • **DP Components:** • "Healthy": Positive: fish and seafood; meat and processed meat; eggs; potatoes; vegetables, pulses, nuts, and seeds; fruits and berries; cheese; fiber-rich bread; cereals; sweet bakery; desserts; sweet condiments; margarine; vegetable oil; juice; alcoholic beverages (higher intakes of vitamins C and E, folate, fiber, PUFA) • "Western": Meat and processed meat; potatoes; higher fat milk products; cream and creme fraiche; cheese; refined bread; sweet bakery; margarine; alcoholic beverages. Negative: vegetables, pulses, nuts, and seeds; fruits and berries; low-fat and non-fat (low-sugar) milk products (and lower intakes of vitamin C, folate, fiber)	**Follow-Up Duration: 12.8y, mean** **Results:** "Healthy" & incident Dem, HR: 0.83, 95% CI: 0.67, 1.03; p=0.09 "Western" & incident Dem, HR: 1.06, 95% CI: 0.90, 1.25; p=0.48 **Summary:** NS/Inverse: "Healthy" DP & Dem NS/Positive: "Western" DP & Dem	• **Did not account for:** Race and/or Ethnicity (Swedish birth cohort), SEP • **Diet assessment:** Diet Hx at baseline • **Outcome measurement**: Dem based on Dx at exams via DSM-III (same method 1992 through 2016) **Funding:** University of Gothenburg

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
	• **DP Method(s)**: RRR **Comparisons:** Continuous, "Healthy" or "Western" DP		
Shang, 2021[61] China; Chinese Longitudinal Healthy Longevity Survey (CLHS) Analytic N=2307 **Participant characteristics:** • Race and/or Ethnicity: NR (Chinese) • SEP: Education: 80% with <5y; Rural 55-73% • Selection: Excluced those: <55y, missing diet/sleep data, cognitive evals, or only had 1 cognitive eval; who had stroke, heart Dz, Cx, or psychiatric condition at baseline	• **DP Age(s):** 63.3y (SD: 7); 55-89y at baseline • **DP(s) examined:** "Dairy-fruits-fast foods"; "Grains-vegetables-pork"; "Plant-based"; "Beans-mushroom"; "Beverages-nuts" DP • **DP Components:** • "Dairy-fruits-fast foods"; Positive: dairy, fruits, fast foods, eggs • "Grains-vegetables-pork"; Positive: low-fiber grains, vegetables, pork • "Plant-based"; deep fried grains, higher-fiber grains, fruits, beans. Negative: low-fiber grains, candies, sugar • "Beans-mushroom"; Positive: beans, edible fungi & algae (mainly mushrooms), snacks • "Beverages-nuts"; Positive: beverages, nuts, poultry • **DP Method(s)**: Factor/Cluster **Comparisons:** Categorical, quintiles (Q1, OR: 1 ref;) and linear trend for each DP	**Follow-Up Duration: 7y median (age 70y)** **Results:** Dairy-Fruit-Fast foods DP & CD, OR (95% CI) Q2, 1.17 (0.78, 1.77) Q3, 0.90 (0.59, 1.37) Q4, 0.70 (0.45, 1.07) Q5, 0.71 (0.45, 1.12) p-trend=0.0197 Grains-Veg DP & CD, OR (95% CI) Q2, 1.54 (1.01, 2.34) Q3, 1.40 (0.91, 2.17) Q4, 1.21 (0.79, 1.87) Q5, 1.03 (0.66, 1.61) p-trend=0.66 Plant-based & CD, OR (95% CI) Q2, 0.80 (0.53, 1.22) Q3, 0.83 (0.55, 1.23) Q4, 0.61 (0.40, 0.95) Q5, 1.09 (0.73, 1.62) p-trend=0.88 Beans-Mushroom & CD, OR (95% CI) Q2, 1.17 (0.77, 1.76) Q3, 1.02 (0.68, 1.56) Q4, 0.97 (0.57, 1.56) Q5, 0.75 (0.49, 1.16) p-trend=0.0295 Beverages-Nuts & CD, OR (95% CI) Q2, 1.38 (0.91, 2.09) Q3, 1.03 (0.66, 1.59) Q4, 0.83 (0.54, 1.26) Q5, 0.65 (0.42, 1.01) p-trend=0.0050 Results for change in cognitition (β (95% CI)) were similar to above	• **Did not account for:** Race and/or Ethnicity (all Chinese), SEP although adjusted for living area • Main goal seems to be role of sleep duration (lack of clear reporting for all DP & CD/MCI in results section) • **Diet assessment:** 24h-recall (3 consecutive days) at each wave • **Outcome measurement**: CD odds based on change in global cognitive z-score <1SD below mean **Funding:** National Institute for Nutrition and Health, China CDC; Carolina Population Center; UNC-CH; NIH; Fundamental Research Funds of the State Key Laboratory of Ophthalmology

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		"Beans-Mushroom" DP & MCI, OR: 0.49, 95% CI: 0.30, 0.81; Other DPS, NS (Supplementary Table 9) **Summary:** NS/Inverse: "Dairy-fruits-fast foods" DP & CD, Δ cognition NS/Null: "Grains-vegetables-pork" DP & CD, Δ cognition NS/Null: "Plant-based" DP & CD, Δ cognition Inverse: "Beans-mushroom" DP & CD, Δ cognition, MCI Inverse: "Beverages-nuts" DP & CD, Δ cognition	
Shannon, 2023[62] United Kingdom; UK Biobank Analytic N=60298 **Participant characteristics:** • Race and/or Ethnicity:100% White (British, Irish, or other white) • SEP: Education: Higher 55.2%; Vocational 10.2%; Uppder secondary 5.6%; Lower secondary 15.4%; Other 13.6% • SES: 1 (least deprived) 23.8%; 2-4 63.3%; 5 (most deprived) 12.9% • Selection: Excluded those <60 y at baseline; those self-reporting race other than white; without genetic data; missing dietary or covariate data	• **DP Age(s):** 63.8 y (mean); ≥60 y at baseline • **DP(s) examined:** Mediterranean Diet Adherence Screener (MEDAS) [Estruch, 2013; Papadaki, 2018] • Pyramid Mediterranean Diet Score (PyrMDS) [Tong 2016] • **DP Components:** • MEDAS: Positive: Vegetables; Fruit; Legumes; Nuts; Fish; White Meat Over Red Meat; Olive Oil; Olive Oil as Principal Cooking Fat; Wine; Sofritas [pasta/vegetable dishes with Tomato Sauce (tomato, garlic, onion, leek, olive oil)]; Negative: Sweets or Pastries; Red Meat or Sausages; Butter, maragarine; Sugar-Sweetened Beverages • PyrMDS: Positive: Vegetables; Legumes; Fruit; Nuts; Cereals; Fish; White Meat; Eggs; Dairy; Olive Oil. Negative: Potato; Red Meat; Processed Meat; Sweets; Alcohol • **DP Method(s)**: Index/Score • **Comparisons:** Categorical, tertiles	**Follow-Up Duration: 9.1 y (mean)** **Results:** MEDAS T1, HR: 1, ref T2, HR: 0.922, 95% CI: 0.788, 1.079, p-trend=0.314 T3, HR: 0.770, HR: 0.650, 0.912, p-trend=0.003 Per 1 pt, HR: 0.931, 95% CI: 0.895, 0.969, p-trend<0.001 PyrMDS T1, HR: 1, ref T2, HR: 0.993, 95% CI: 0.849, 1.162, p-trend=0.931 T3, HR: 0.859, 95% CI: 0.726, 1.018, p-trend=0.079 Per 1 pt, HR: 0.958, 95% CI: 0.9222, 0.996, p-trend<0.031 **Summary:** Inverse: MEDAS & dementia (continuous; T1 vs. T3) Inverse: PyrMDS & dementia (continuous; NS/Null Tertiles)	• **Did not account for:** Anthropometry • **Diet assessment:** Diet assessed once at baseline using ≥1 24-hr recall (sensitivity analyses conduPNcted using ≥2 24-hr recall showed similar results except that PyrMDS by tertiles showed significant inverse relationship for T1 vs. T3) • **Outcome measurement**: Dementia derived from hospital admission and death records **Funding:** UK Nutrition Research Partnership (UK NRP)

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
	Continuous, per 1 pt		
Tanaka, 2018[63] Italy; InCHIANTI Analytic N=832 **Participant characteristics:** • Race and/or Ethnicity: NR (Italian) • SEP: Education 5.3y ± 3.3 • Selection: Excluded those with cognitive impairment, <65y;	• **DP Age(s):** ~75 y (SD: ~7); 65+y at baseline • **DP(s) examined:** Mediterranean Diet Score (MDS) [Trichopolou 2003] • **DP Components:** • MDS, Positive: Vegetables; Legumes; Fruit, Nuts; Cereals; Fish; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • **DP Method(s)**: Index/Score; Factor/Cluster **Comparisons:** Categorical, Medium (Med.) 4-5, High ≥ 6; Low ≤3, REF; continuous per 1 unit MDS	**Follow-Up Duration: 10.1y, mean (every 2-3y up to 18y)** **Results:** MDS & CD, HR (95% CI) per-1pt, 0.88 (0.80, 0.97); p-trend=0.009 Med., 0.75 (0.53, 1.05); p-trend=0.089 High, 0.59 (0.39, 0.88); p-trend=0.011 MDS & Slope in CD 0.4/y, β (SE) per-1pt, 0.081 (0.018);p<0.001 Med., 0.158 (0.072);p=0.028 High, 0.346 (0.077);p<0.001 **Summary:** Inverse: MDS & CD, ∆ CD	• **Did not account for:** SEP, Race and/or Ethnicity (all Italian and adjusted for study site) • Age range of cohort is 21 to 102y, these analyses restricted to those 65+y • Baseline MMSE score higher in those with higher MDS adherence • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: MMSE: CD defined as ≥ 5-pt MMSE decrease; MCI w/o DEM based on MMSE<23 with ADL due to CFx; Dem defined by MMSE <23 **Funding:** Italian Ministry of Health; NIH
Tangney, 2014[64] United States; Rush Memory and Aging Project (MAP) Analytic N=826 **Participant characteristics:** • Race and/or Ethnicity: NR • SEP: Education, 14.9y mean • Selection: Excluded those with dementia at baseline; LFU; invalid FFQ; <2 cognitive evals. Note 74% female	• **DP Age(s):** 81.5y ± 7.1y • **DP(s) examined:** Mediterranean-based Diet Score (MedDietScore) [Panagiotakos 2007] • adjusted DASH Score (aDASH) [Folsom, 2007] • **DP Components:** • MedDietScore, Positive: Vegetables; Potatoes; Legumes; Fruit; Whole Grains; Fish; Olive Oil. Negative: Red and Processed Meat; Poultry; Full-Fat Dairy; Alcohol • aDASH, Positive: Vegetables; Nuts and Legumes; Fruit; Grains; Dairy; Negative: Fat; Saturated Fat; Meat, Poultry, Fish; Sweets; Sodium	**Follow-Up Duration: 4.1y, mean (range 1-10y)** **Results:** aDASH & CD/Global CFx, β (SEE): 0.007(0.003),p=0.03; T3 v. T1, 0.022(0.011),p=0.04 Episodic, β (SEE): 0.008(0.004),p=0.04; T3 v. T1, 0.024(0.013),p=0.07 (T2, NS) Visuospatial, β (SEE): 0.007(0.004),p=0.07; T3 v. T1, 0.018(0.013),p=0.17 Perceptual, β (SEE): 0.007(0.004),p=0.06; T3 v. T1, 0.021(0.012),p=0.08	• **Did not account for:** SEP; Race and/or Ethnicity; Physical activity; Smoking; Anthropometry • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: CD based on composite of average z-scores from battery of 19 CFx tests (episodic memory; semantic memory; working memory; perceptual speed; visuospatial ability) **Funding:** NIA

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
	• **DP Method(s)**: Index/Score; Factor/Cluster **Comparisons:** Continuous, per unit DASH, MedDietScore; Categorical, T3 v. T1 (ref)	Semantic, β (SEE): 0.009(0.004),p=0.02; T3 v. T1, 0.023(0.012),p=0.05 Working, β (SEE): 0.005(0.004),p=0.15; T3 v. T1, 0.016(0.012),p=0.2 MedDietScore & CD/Global CFx, β (SEE): 0.002(0.001),p=0.01; T3 v. T1, 0.034(0.012),p=0.003 (T2, NS) Episodic, β (SEE): 0.003(0.001),p=0.02; T3 v. T1, 0.04(0.015),p=0.007 Visuospatial, β (SEE): 0.002(0.001),p=0.08; T3 v. T1, 0.022(0.014),p=0.12 Perceptual, β (SEE): 0.002(0.001),p=0.07; T3 v. T1, 0.024(0.013),p=0.07 Semantic, β (SEE): 0.003(0.001),p=0.02; T3 v. T1, 0.033(0.013),p=0.01 Working, β (SEE): 0.002(0.001),p=0.14; T3 v. T1, 0.033(0.013),p=0.01 **Summary:** Inverse: aDASH & CD (Positive: DASH & Global CFx; per-unit & Episodic, Semantic; NS: Perceptual; Visuospatial) Inverse: MedDietScore & CD (Positive: MedDietScore & Global CFx; per-unit & Episodic, Semantic, Perceptual Memory; NS: Visuospatial)	
Thomas, 2024[65] United States; Framingham Offspring Cohort Analytic N=1644 **Participant characteristics:**	• **DP Age(s):** 69.7 (6.8) y • **DP(s) examined:** Mediterranean-Dash Intervention for Neurodegenerative Delay diet (MIND) [Morris, 2015] • 2010/2005 Dietary Guidelines for	**Follow-Up Duration: 6.9y, median (max: 13.6)** **Results:** Total effect: MIND & Dem, β: -28.9, 95% CI: -52.5, -5.2 (supplementary table 2)	• **Did not account for:** SEP (MDS; DGAI; adjusted for marital status in MIND); Race and/or Ethnicity, Physical activity (MDS, DGAI), Anthropometry

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
• Race and/or Ethnicity: NR • SEP: Education: 45% college grad; 28% some college; 24% high school; 4% less than high school • Marital status: 70% cohabitating • Selection: Excluded those with Dementia at visit 8, younger than 60 y, missing DNA data, Dem status at F/U, or FFQ at visits 5, 7, and/or 8	American Index [(DAGI) Fogley-Cawley, 2006](DGAI) • Mediterranean Diet Score (MDS) [Trichopolou 2003] • **DP Components:** • MIND: Positive: Green leafy vegetables; Vegetables; Beans; Berries; Nuts; Whole Grains; Seafood; Poultry; Olive oil; Wine. Negative: Red Meat; Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food • DGAI, Positive: Dark Green Vegetables; Orange Vegetables; Starchy Vegetables; Other Vegetables; Variety of Vegetables and Fruits; Legumes; Fruit; Total Grains; Whole Grains; Fish and Seafood; Meat and Legumes; Milk and Milk Products; Low-Fat choices; Dietary Fiber. Neutral: Total Fat; SFA; Trans FA; Cholesterol; Sodium. Negative: Added sugar; Alcohol • MDS, Positive: Vegetables; Legumes; Fruit and Nuts; Cereals; Fish; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • **DP Method(s)**: Index/Score **Comparisons:** Continuous per-1 SD increase	Total effect: MDS & Dem, β: -33.3, 95% CI: -54.5, -12.1 (supplementary table 1) Total effect: DGAI & Dem, β: -32.7, 95% CI: -56.0, -9.6 (supplementary table 1) **Summary:** Inverse: MIND & Dem Inverse: DGAI & Dem Inverse: MDS & Dem	(MDS, DGA), Education (MDS, DGAI), Smoking (MDS, DGAI) • Effect of DGAI & Dem was mediated ~15% by DunedinPACE; Additional adjustment for blood cell count did not impact main results • **Diet assessment:** FFQ assessed every 4-6y; DP averaged from FFQ at 5th, 7th and 8th visits • **Outcome measurement**: cases of Dem, n=140; Dem Dx based on: DSM-IV from committee review after neuro-exam preceded by low MMSE; physical referral; medical record; or subjective report of cognitive impairment **Funding:** NIA
Tong, 2021[66] Singapore; Singapore Chinese Health Study (SCHS) Analytic N=14683 **Participant characteristics:** • Race and/or Ethnicity:100% Chinese	• **DP Age(s):** 45-74 y at baseline • **DP(s) examined:** DASH Score [Fung 2008] - Modified for this study • **DP Components:** • Positive: Vegetables (not potatoes and legumes); Nuts and Legumes; Fruit and Fruit Juice; Whole Grains; Total Dairy. Negative: Red and Processed	**Follow-Up Duration: 19.7 y (mean); age ~72.7 y , mean at visit 3** **Results:** Baseline DASH & cognitive impairment Q1, OR: 1, ref Q2, OR: 0.82, 95% CI: 0.70, 0.96 Q3, OR: 0.65, 95% CI: 0.55, 0.76	• **Did not account for:** SEP • **Diet assessment:** FFQ at baseline, interviewer-administered dietary screener at 3 yr f/u. Modifactions made to index/score by Fung, 2008 based on data available from

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
• SEP: Highest education at baseline: • No formal, 18% • Primary school, 44.5% • Secondary or above, 24.5% • Selection: Excluded those who did not complete dietary assessments at baseline & f/u; missing cognitive assessment at f/u; those who were mute, blind, or deaf	Meat; Sweetened Beverages • **DP Method(s)**: Index/Score • **Comparisons:** Categorical, quintiles at basline Categorical, change group (consistently low, score of -1 to 1; moderate-large decrease, -20 to -4; small decrease, -3 to -2; small increase, 2-3; moderate-large increase, 4-20; consistently high, -1 to 1)	Q4, OR: 0.67, 95% CI: 0.56, 0.80 Q5, OR: 0.50, 95% CI: 0.42, 0.59 p-trend<0.0001 ∆ DASH & cognitive impairment Consistently low, OR: 1 **Summary:** Inverse: baseline DASH & cognitive impairment Inverse: Increase DASH & lower cognitive impairment Null: Decrease DASH & cognitive impairment	dietary assessment: total dairy rather than low-fat dairy, sodium excluded • **Outcome measurement**: MMSE - Singapore-modified **Funding:** National Medical Research Council, Singapore; Saw Swee Hock School of Public Health, National University of Singapore
Trichopoulou, 2015[67] Greece; European Prospective Investigation into Cancer and Nutrition (EPIC) Greece Analytic N=401 **Participant characteristics:** • Race and/or Ethnicity: NR • SEP: Education: • 0-5 years, 11.1% (men), 24.9% (women) • 6-11, 53.5% (men), 33.1% (women) • 12, 10.4% (men), 26.8% (women) • ≥13, 25% (men), 15.2% (women) • Selection: Excluded those missing 1 or both cognitive assessments; those lost to f/u (death, moved outside of Attica, not able to contact)	• **DP Age(s):** 65+ y at baseline (40-50% age 70-74y; 30-46% age 75y+) • **DP(s) examined:** Mediterranean Diet Score (MDS) [Trichopolou 2003] • **DP Components:** • Positive: Vegetables; Legumes; Fruit, Nuts; Cereals; Fish; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • **DP Method(s)**: Index/Score **Comparisons:** Categorical, low (0-3 pts), moderate (4-5 pts), high (6-9 pts)	**Follow-Up Duration: ~20 y** **FFQ 1994-1999; first MMSE 2004-2006; second MMSE 2011-2012** **Results:** MDS & ΔMMSE -4 to -1 vs ≥0 (mild CD) Low, OR: 1, ref Moderate, OR: 0.75, 95% CI: 0.41, 1.37, p-trend=0.348 High, OR: 0.46, 95% CI: 0.25, 0.87, p-trend=0.017 p-trend (all 3 categories)=0.012 MDS & ΔMMSE ≤ −5 vs ≥0 (substantial CD) Low, OR: 1, ref Moderate, OR: 0.72, 95% CI: 0.31, 1.65, p-trend=0.441 High, OR: 0.34, 95% CI: 0.13, 0.89, p-trend=0.029 p-trend (all 3 categories)=0.025 **Summary:** Inverse: MDS & CD (mild, substantial)	• **Did not account for:** SEP, Race and/or Ethnicity • Mean age 74 at first cognitive exam. Results similar when examining participants ≥75 years old at first MMSE evaluation • **Diet assessment:** FFQ once at baseline • **Outcome measurement**: CD determined by MMSE score: mild performance decline defined as change in MMSE −4 to −1 vs ≥0; substantial performance decline defined as change in MMSE ≤ −5 vs ≥0 **Funding:** Hellenic Health Foundation, the European Union CHANCES project, Stavros Niarchos Foundation
van Soest, 2023[68] The Netherlands; B-Proof trial, Control group only	• **DP Age(s):** 72.1 (5) y; ≥65y at baseline • **DP(s) examined:** adapted Plant-Based Diet Index (PDI),	**Follow-Up Duration: 2y** **Results:** aPDI & CD	• **Did not account for:** SEP • Participants from a B-vitamin supplementation trial to reduce fracture risk,

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
Analytic N=314 **Participant characteristics:** • Race and/or Ethnicity: White 95%: Asian 4%: Other 1% • SEP: Education: 43% Low; 24% Mid; 34% High • • Selection: Excluded those without complete data (cognitive tests, FFQ); with unreliable TEI; aged <65 y	healthful/unhealthful: ahPDI/auPDI [Satija, 2016, modified Kim 2018 (no alcohol or margarine)] • **DP Components:** • aPDI: Positive: Vegetables; Fruits; Nuts; Legumes; Whole grains; Vegetable oils; Tea/coffee; Fruit juices; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts; Negative: Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods • ahPDI: Positive: Vegetables; Fruits; Nuts; Legumes; Whole grains; Vegetable oils; Tea/coffee; Negative: Fruit juices; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts; Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods • auPDI: Negative: Whole grains; Fruits; Vegetables; Nuts; Legumes; Vegetable oils; Tea/coffee; Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods; Positive: Fruit juices; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts • **DP Method(s)**: Index/Score **Comparisons:** Continuous per-10pt increase and categorical by tertiles (T1, HR: 1 REF) for PDI, hPDI, uPDI	per-10-pt, β: – 0.03 , 95% CI: – 0.08, 0.02; p= 0.30 T2, β: – 0.08 , 95% CI: – 0.16,– 0.01; p= 0.03 T3, β: – 0.04 , 95% CI: – 0.11, 0.04; p= 0.35 ahPDI & CD per-10-pt, β: 0.03 , 95% CI: -0.01, 0.08; p=0.17 T2, β: 0.00 , 95% CI: – 0.07, 0.07; p= 0.92 T3, β: 0.05 , 95% CI: – 0.03, 0.12; p= 0.21 auPDI & CD per-10-pt, β: – 0.05 , 95% CI: – 0.09, 0.00; p= 0.04 T2, β: – 0.03 , 95% CI: – 0.10, 0.05; p= 0.47 T3, β: – 0.04 , 95% CI: – 0.11, 0.04; p= 0.33 Additional results mostly NS as reported by outcome domains (episodic memory, information processing; executive Fx) per CD except: hPDI significantly associated with better/improved working memory/attention and auPDI significantly associated with worse (steeper decline) in attention/working memory **Summary:** NS/Null: aPDI & CD NS/Null: ahPDI & CD (trend for preserved attention) NS/Null: auPDI & CD (trend for steeper decline in attention)	cognition was secondary interest • Credit given for Race and/or Ethnicity KC but there is a trending (p=0.06) difference between tertiles of PDI • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: Composite scores transformed/scaled from a cognitive battery of tests (MMSE; RAVLT; Digit Span; TMT; STROOP; Digit Modality; Letter Fluency) **Funding:** The Netherlands Organization for Health Research and Development; Hauge; Dutch Dairy Association; Netherlands Consortium for Healthy Ageing; Ministry of Economic Affairs; Wageningen University; VU Medical Center; Erasmus Medical Centre
Vercambre, 2012[69] United States; Women's Antioxidant Cardiovascular Study (WACS)	• **DP Age(s):** 72-73y, mean (range: 66-91y) • **DP(s) examined:** Mediterranean Diet Score (MDS) [Trichopolou 2003]	**Follow-Up Duration: 5.4y, mean total (range 4.1-6.1)** **Results:** mean differences (95% CI) Global CF	• **Did not account for:** None (all); Race and/or Ethnicity (94% White) • Sample comprised

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
Analytic N=2504 **Participant characteristics:** • Race and/or Ethnicity:94% White; 3% "African-American" • SEP: All health professionals; Education: 8-15% Advanced degree (MS/PhD); ~58-64% Married • Selection: Excluded those with incomplete dietary info, or age younger than 40 for the parent trial and younger than 65 for this analysis; Included only female health professionals with CVD or 3+ risk factors with complete dietary data and cognitive function tests	• Mediterranean-based Diet Score (MedDietScore) [Panagiotakos 2007] • **DP Components:** • MDS, Positive: Vegetables; Legumes; Fruit, Nuts; Cereals; Fish; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • MedDietScore, Positive: Vegetables; Potatoes; Legumes; Fruit; Whole Grains; Fish; Olive Oil. Negative: Red and Processed Meat; Poultry; Full-Fat Dairy; Alcohol (all="Wine") • **DP Method(s)**: Index/Score **Comparisons:** Catergorical High or Mid vs. Low MDS (0, ref) or continuous, per 1-pt; MedDietScore NR	Mid-MDS, 0.01 (-0.01, 0.02) High MDS, 0.00 (-0.02, 0.01) p=0.88 per-1pt MDS, -0.001; p=0.40 MedDietScore, p=0.58 (data NR) TICS-m Mid-MDS, 0.02 (-0.05, 0.08) High MDS,-0.03 (-0.11, 0.05) p=0.53 MedDietScore, p=0.25 (data NR) Verbal Memory Mid-MDS, 0.00 (-0.01, 0.02) High MDS,0.00 (-0.02, 0.02) p=0.97 MedDietScore, p=0.39 (data NR) Category Fluency Mid-MDS, 0.01 (-0.08, 0.11) High MDS,-0.03 (-0.14, 0.08) p=0.64 MedDietScore, p=0.52 (data NR) **Summary:** NS/Null: MDS & CD (global CFx, TICS; verbal memory; category fluency) NS/Null: MedDietScore & CD (global CFx, TICS; verbal memory; category fluency)	predominantly of women with CVD (or 3+ risk factors) • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: TICS-m +Telephone adaptation of MMSE (not mention if validated) **Funding:** NIH; AHA; Bettencourt-Schueller Foundation
Vlachos, 2022[70] Greece; Hellenic Longitudinal Investigation of Aging and Diet (HELIAD) Analytic N=910 **Participant characteristics:** • Race and/or Ethnicity: NR (Greek) • SEP: Education: 8.3 (4.9)y, mean (SD) (range: 0-21y) • Selection: Excluded those with dementia at baseline or no available dietary info or cognitive	• **DP Age(s):** ~73y; ≥65y at baseline • **DP(s) examined:** Mediterranean-based Diet Score (MedDietScore) [Panagiotakos 2007] • **DP Components:** • MedDietScore, Positive: Vegetables; Potatoes; Legumes; Fruit; Whole Grains; Fish; Olive Oil. Negative: Red and Processed Meat; Poultry; Full-Fat Dairy; Alcohol • **DP Method(s)**: Index/Score	**Follow-Up Duration: 3.1 (0.8)y, mean (range: 1.2 to 7.3y)** **Results:** MDS per 10pt & SCD, β: -0.007; p=0.005 (ie, 7% reduction in CD) **Summary:** Inverse: MDS & SCD	• **Did not account for:** SEP, Race and/or Ethnicity (Greek), Smoking; Anthropometry, • Study had high LFU • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: SCD as a surrogate for preclinical Dem, defined as a positive response for memory, naming, orientation and calculation decline

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
F/U	**Comparisons:** Continuous, MedDietScore per 10pt		domains [based on structured list of Jessen et al. 2014] **Funding:** Alzheimer's Association; European Social Fund; Ministry of Health and Social Solidarity
Vu, 2022[71] United States; Chicago Health and Aging Project (CHAP), Rush Memory and Aging Project (MAP), and Women's Health Initiative Memory Study (WHIMS) Analytic N=8482 (MAP n=725; CHAP n=2449; WHIMS n=5308) **Participant characteristics:** • Race and/or Ethnicity: CHAP: 60% Black; 40% White; MAP: NR; WHIMS: included only those of European ancestry (89% of original sample) • SEP: Education: • University degree, ~21-40% in WHIMS (n/a in MAP, CHAP) • Total years, ~11-15 in MAP, CHAP (n/a in WHIMS) • Selection: CHAP: excluded those missing genetic or dietary data • MAP: Recruited from individual homes. retirement communities, and senior public housing; included those free of dementia at aseline and agreed to annual clincial evaluations/organ donation at death • WHIMS: excluded those with dementia at basline; only	• **DP Age(s):** ≥ 65 y at baseline; mean ~70-82 • **DP(s) examined:** Mediterranean-Dash Intervention for Neurodegenerative Delay diet (MIND) [Morris, 2015] • **DP Components:** • MIND, Positive: Green leafy vegetables; Vegetables; Beans; Berries; Nuts; Whole Grains; Seafood; Poultry; Olive oil; Wine. Negative: Red Meat; Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food • **DP Method(s)**: Index/Score • **Comparisons:** Categorical, tertiles Continuous, per 1-pt	**Follow-Up Duration: NR** **Results:** MIND & CD MAP T1, β: 1, ref T2, β: 0.006, 95% CI: −0.01, 0.02, p-trend=0.50 T3, β: 0.03, 95% CI: 0.01, 0.05, p-trend=0.001 Per 1-pt, β: 0.006, 95% CI: 0.003, 0.01, p-trend=0.002 CHAP (White) T1, β: 1, ref T2, β: 0.0001, 95% CI: −0.01, 0.01, p-trend=0.99 T3, β: −0.0008, 95% CI: −0.01, 0.01, p-trend=0.89 Per 1-pt, β: −0.0004, 95% CI: −0.003, 0.002, p-trend=0.78 CHAP (Black) T1, β: 1, ref T2, β: 0.0003, 95% CI: −0.01, 0.01, p-trend=0.95 T3, β: −0.003, 95% CI: −0.01, 0.01, p-trend=0.51 Per 1-pt, β: −0.00002, 95% CI: −0.003, 0.003, p-trend=0.99 MIND & All-cause Dem MAP T1, HR: 1, ref T2, HR: 0.85, 95% CI: 0.62, 1.16, p-trend=0.31	• **Did not account for:** Race and/or Ethnicity (MAP only) • Exposure, outcome, and covariate assessments different between cohorts • **Diet assessment:** FFQ assessed once for this analysis in each cohort • **Outcome measurement**: WHIMS: modified MMSE prior to 2008; TICS-m after 2008 • MAP & CHAP: clinical evaluations in random sample for dementia and Alzheimer's Dz; Dx based on NIH (NINCD) and Alzheimer's Dz and Related Disorders Assoc **Funding:** NIH (NIA)

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
included those of European ancestry with genetic data •		T3, HR: 0.63, 95% CI: 0.42, 0.92, p-trend=0.02 Per 1-pt, HR: 0.91, 95% CI: 0.83, 1.00, p-trend=0.06 WHIMS T1, HR: 1, ref T2, HR: 0.87, 95% CI: 0.79, 0.97, p-trend=0.008 T3, HR: 0.80, 95% CI: 0.72, 0.89, p-trend<0.0001 Per 1-pt, HR: 0.95, 95% CI: 0.92, 0.97, p-trend<0.0001 CHAPS (White) T1, OR: 1, ref T2, OR: 0.87, 95% CI: 0.30, 2.54, p-trend=0.80 T3, OR: 1.23, 95% CI: 0.47, 3.18, p-trend=0.68 Per 1-pt, OR: 1.00, 95% CI: 0.81, 1.25, p-trend=0.97 CHAPS (Black) T1, OR: 1, ref T2, OR: 0.86, 95% CI: 0.36, 2.05, p-trend=0.74 T3, OR: 1.48, 95% CI: 0.51, 4.27, p-trend=0.47 Per 1-pt, , OR: 1.08, 95% CI: 0.79, 1.48, p-trend=0.61 MAP, MIND & Alz, T1, HR: 1, ref T2, NR T3, HR: 0.62, 95% CI: 0.42, 0.92 CHAP, MIND & Alz, data NR, p-trend>0.05 **Summary:** Null: MIND & Dem, CHAP (White, Black) Inverse: MIND & Dem, MAP & WHIMS Null: MIND & CD CHAP Inverse: MIND & CD, MAP Null: MIND & Alz, CHAP	

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		Inverse: MIND & Alz, MAP	
Wade, 2019[72] United States; Maine-Syracuse Longitudinal Study (MSLS) Analytic N=530 (≥70y, n=139; <70y, n=391) **Participant characteristics:** • Race and/or Ethnicity: Non-African-American, 94%; African-American, 6% • SEP: Education, 14.7y mean • Selection: Excluded those with or who had: missing data; stroke, Dem, renal dialysis; inability to read English; prior alcohol abuse; moved > 100 mi	• **DP Age(s):** 61.6y ± 11.8y • **DP(s) examined:** literature Mediterranean Diet Score (LitMDS) [Sofi 2014] • **DP Components:** • LitMDS, Positive: Vegetables; Legumes; Fruit and Nuts; Cereals; Fish; Olive Oil. Negative: Meat; Dairy Products. Neutral: Alcohol • **DP Method(s)**: Index/Score **Comparisons:** Continuous, per SD LitMDS	**Follow-Up Duration: ~5y** **Results:** Age ≥70y, linear models, perSD LitMDS & ΔSD CFx, unstandardized β (95% CI), p-trend, standardized β global CFx, 0.26 (0.07, 0.45); p=0.01; Std. β 0.71 Visual Spatial memory, 0.28 (0.04, 0.53); p=0.02; Std. β 0.72 Verbal memory, 0.18 (-0.13, 0.49); p=0.26; Std. β 0.42 Working memory, 0.25 (-0.03, 0.53); p=0.08; Std. β 0.67 Scanning tracking, 0.23 (0.03, 0.44); p=0.02; Std. β 0.62 Abstract reasoning, 0.03 (-0.33, 0.39); p=0.88; Std. β 0.07 Similar results reported for quadratic models Age <70y, linear models, perSD LitMDS & ΔSD CFx, unstandardized β (95% CI), p-trend, standardized β global CFx, 0.01 (-0.06, 0.09); p=0.72; Std. β 0.04 Visual Spatial memory, -0.01 (-0.10, 0.10); p=0.97; Std. β -0.01 Verbal memory, -0.01 (-0.14, 0.12); p=0.87; Std. β -0.03 Working memory, 0.03 (-0.10, 0.15); p=0.66; Std. β 0.07 Scanning tracking, -0.02 (-0.11, -0.07); p=0.67; Std. β -0.06 Abstract reasoning, 0.05 (-0.09, 0.18); p=0.50; Std. β 0.14 Similar results reported for quadratic models **Summary:** Inverse: LitMDS in age ≥70y & CD (Positive: LitMDS & CFx,	• **Did not account for:** SEP; Anthropometry • **Diet assessment:** Nutrition and Health Questionnaire once at Wave 6 • **Outcome measurement**: CD based on composite of z-scores from battery of CFx tests (Visual Spatial Organisation and Memory, Verbal Episodic Memory, Scanning and Tracking, Working Memory and Abstract Reasoning) **Funding:** NIH (NHLBI; NIA)

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		Visual Spatial Org. & Memory; Scanning & Tracking); NS/Null: LitMDS in age < 70y & CD; CFx	
Wagner, 2020[2] United States; NHS Analytic N=14956 **Participant characteristics:** • Race and/or Ethnicity: NR • (other NHS studies primarily (>90%) white) • SEP: Educational level: • RN, ~77=78% • Bachelor's degree, ~16-17% • Master's or doctoral degree, ~6% • Selection: Excluded those w cognitive impairment at first cognitive interview; those without f/u measure of cognitive function; those without at least one measure of lifestyle factor during f/u	• **DP Age(s):** 61 y, mean • **DP(s) examined:** Alternate Med Diet Score (aMED) [Fung 2005] • **DP Components:** • Positive: Vegetables (not potatoes); Legumes; Fruit; Nuts; Whole Grains; Fish; MUFA/SFA. Negative: Red and Processed Meat. Neutral: Alcohol • **DP Method(s)**: Index/Score **Comparisons:** Continuous, mean difference	**Follow-Up Duration: 5.7 y (mean)** **Results:** Case vs. control 11y, mean difference: -0.18 points, 95% CI: -0.27, -0.09 7y, mean difference: -0.19 points, 95% CI: -0.28, -0.10 3y, mean difference: -0.19 points, 95% CI: -0.28, -0.11 **Summary:** Inverse: Lower aMED for those with vs. without CD (cases vs. controls)	• **Did not account for:** SEP, Anthropometry, Physical activity, Race and/or Ethnicity, Smoking • Also examined differences by case vs. control in BMI, physical activity (primary aim of study was not just focused on DPs) • **Diet assessment:** FFQ every ~4 y • **Outcome measurement**: CD cases defined as those with 10% worst cognitive slopes, controls defined as those with cognitive slope above the median based on TICS **Funding:** NIH, France Alzheimer DATALINk, Académie Française, University of Bordeaux
Wagner, 2023[73] United States; Rush Memory and Aging Project (MAP) Analytic N=569 **Participant characteristics:** • Race and/or Ethnicity:98% Non-Hispanic White (NHW) • SEP: Education, ~15 y (mean) • Selection: Excluded those without valid dietary data, cognitive testing; those with mild	• **DP Age(s):** 84.1y (5.8) • **DP(s) examined:** Mediterranean-Dash Intervention for Neurodegenerative Delay diet (MIND) [Morris, 2015] • **DP Components:** • MIND, Positive: Green leafy vegetables; Vegetables; Beans; Berries; Nuts; Whole Grains; Seafood; Poultry; Olive oil; Wine. Negative: Red Meat; Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food	**Follow-Up Duration: 9y, mean (range: 1 to 23y)** **Results:** MIND & CR-slope, mean diff (95% CI) T2, 0.20 (0.01, 0.39); p=0.04 T3, 0.27 (0.05, 0.48); p=0.01 perSD, 0.05 (–0.003, 0.10); p-trend = 0.06 **Summary:** Positive: MIND & CR	• **Did not account for:** SEP, Physical activity, Anthropometry • **Diet assessment:** FFQ assessed at each annual visit but baseline only used after testing change (very small) • **Outcome measurement**: CR-slope calculated from global cognition (17 tests from annual cognitive evals)

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
cognitive impairment at baseline in sensitivity analyses	• **DP Method(s)**: Index/Score **Comparisons:** Categorical, tertiles (T1 ref, mean diff.)		and 9 measures of post mortem neuropathology and reflects estimated residual slope of cognitive change [during F/U] **Funding:**
Wang, 2021[74] China; Chinese Longitudinal Healthy Longevity Survey (CLHS) Analytic N=5716 **Participant characteristics:** • Race and/or Ethnicity: NR (100% Chinese) • SEP: Estimated across DP quantiles: • Income: 16-30% poor, 55-59% low, 8-30% middle+; • Education: ~2-4y of schooling; • Marital status: 47-59% widowed; 37-51% living with spouse • Rural: ~41-61% • Selection: Excluded those with missing data (MMSE, diet, or life habit scorse)	• **DP Age(s):** 82 y (mean); 47 to 114 y at baseline • **DP(s) examined:** DP score [Wang, 2021] • **DP Components:** • DP, Positive: Vegetables (fresh), Fruit (fresh); ; Nuts; Staple food (corn, rice, wheat); Fish; Milk. Negative: Meat; Sugar • **DP Method(s)**: Index/Score **Comparisons:** Categorical, quartiles (Q1, HR: 1 ref); continuous	**Follow-Up Duration: ~3-6y** **Results:** DP & Odds of MMSE <24, Q1, OR: 1 ref Q2, OR: 0.95, 95% CI: 0.77, 1.18 Q3, OR: 0.71, 95% CI: 0.56, 0.90 Q4, OR: 0.65, 95% CI: 0.51, 0.81 P<0.001 (p-intx: 0.018) β: 0.43, SE: 0.10; 95% CI: 0.24, 0.63;p<0.001 Stratifications by sex yielded similar results **Summary:** Inverse: DP & odds of impaired cognitive function	• **Did not account for:** Alcohol; TEI • Alcohol not controlled for in dietary pattern analyses but did not have main effect on cognitive function status when examined separately • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: MMSE (Chinese version); "Impaired" Cog F(x) based on MMSE <24 **Funding:** National Key Research and Development Project; Peking University Start-up Grant; Beijing Technology and Business University Grant; China-Canada Joint Lab of Food Nutrition and Health
Wu, 2023[75] UK; UK Biobank Analytic N=180532 **Participant characteristics:** • Race and/or Ethnicity: White: 94.8 % - 96.8% • SEP: Townsend deprivation index: - 2.08 ~ - 2.41 • Education level: 40.8 - 45.0% college or higher • Living alone: 15.8 -19.1%	• **DP Age(s):** ~56y (mean); 39-72 y • **DP(s) examined:** Plant-Based Diet Index (PDI) [Satija, 2016] • Healthful PDI (hPDI) [Satija, 2016] • unhealthful PDI (uPDI) [Satija, 2016] • **DP Components:** • PDI: Positive: Vegetables; Fruits; Nuts; Legumes; Whole grains; Vegetable oils; Tea/coffee; Fruit juices; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts; Negative: Animal fats; Dairy; Eggs, Fish/seafood;	**Follow-Up Duration: 10 y (median)** **Results:** PDI Q1: HR 1, ref Q2: HR 0.94, 95% CI: 0.79, 1.12 Q3: HR 0.98, 95% CI: 0.83, 1.17 Q4: HR 0.89, 95% CI: 0.74, 1.06 Q5: HR 1.03, 95% CI: 0.87, 1.23 P for trend=0.99 Per 10-point increase: HR 0.99, 95% CI: 0.90, 1.11 hPDI Q1: HR 1, ref Q2: HR 0.98, 95% CI: 0.83, 1.17	• **Did not account for:** None (all) • There is no interaction between hPDI, uPDI and strata defined by age, sex, BMI, PA, smoking status, HTN and DM. • Excluding dementia in the first 3 years of follow-up did not change the results. • Might miss milder dementia cases due to only hospital

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
• Selection: Excluded those with incomplete information on covariates, implausible energy intake, a history of cardiovascular disease, cancer, and dementia or depression at baseline	Meat (poultry and red meat); Miscellaneous animal-based foods • hPDI: Positive: Vegetables; Fruits; Nuts; Legumes; Whole grains; Vegetable oils; Tea/coffee; Negative: Fruit juices; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts; Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods • uPDI: Negative: Whole grains; Fruits; Vegetables; Nuts; Legumes; Vegetable oils; Tea/coffee; Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods; Positive: Fruit juices; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts • **DP Method(s)**: Index/Score • **Comparisons:** Categorical: Quintiles Continuous: per 10-point increase	Q3: HR 0.88, 95% CI: 0.73, 1.05 Q4: HR 0.80, 95% CI: 0.67, 0.96 Q5: HR 0.82, 95% CI: 0.68, 0.98 P for trend<0.01 Per 10-point increase: HR 0.87, 95% CI: 0.79, 0.96 uPDI Q1: HR 1, ref Q2: HR 0.96, 95% CI: 0.81, 1.16 Q3: HR 1.05, 95% CI: 0.89, 1.23 Q4: HR 1.21, 95% CI: 1.02, 1.45 Q5: HR 1.29, 95% CI: 1.08, 1.53 P for trend < 0.001 Per 10-point increase: HR 1.18, 95% CI: 1.07, 1.29 **Summary:** Inverse: hPDI & Dementia Positive: uPDI & dementia Null: PDI & Dementia	inpatien • **Diet assessment:** web-based self-administered 24-h dietary assessment questionnaire; only the earliest intake data was used • **Outcome measurement**: Hospital inpatient data on admissions and diagnoses **Funding:** the Study of Diet and Nutrition Assessment and Intervention Technology; Study on Intervention Strategies of Main Nutrition Problems in China; National Natural Science Foundation of China, Tianjin Major Public Health Science and Technology Project, National Health Commission of China, Food Science and Technology Foundation of Chinese Institute of Food Science and Technolocy, 2014 and 2016 Chinese Nutrition Society Nutrition Research Foundation - DSM Research Fund
Yuan, 2022[76] United States; NHS Analytic N=49493 **Participant characteristics:** • Race and/or Ethnicity:97.9% White • SEP: Education level (1992) • RN: 63.4% • College degree: 20.2% • Graduate degree: 10.4% • Missing: 6.0%	• **DP Age(s):** 30-55y at baseline; mean age 48y • **DP(s) examined:** alternative Mediterranean Diet Score (aMed) [Fung, 2018 modified Trichopolou, 2003] • DASH Score [Fung 2008] • Alternative HEI (AHEI)-2010 [Chiuve 2012] • **DP Components:** • aMED: Positive: Vegetables (not potatoes); Legumes; Fruit; Nuts;	**Follow-Up Duration: 28y, ~ total** **Results:** Moderate Subjective CD aMED Q1, OR: 1, ref Q2, OR: 0.97, 95% CI: 0.92, 1.04 Q3, OR: 0.94, 95% CI: 0.89, 1.01 Q4, OR: 0.93, 95% CI: 0.87, 1.00 Q5, OR: 0.81, 95% CI: 0.75, 0.87 p-trend<0.001 DASH Q1, OR: 1, ref	• **Did not account for:** None (all) • Study enrolled 100% female, mostly white (may not translate to other populations) participants; results were similar when adjusted for living arrangement & marital status and when excluding those missing diet scores at each assessment in sensitivity

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
• Partner's education level (1992) • High school or below: 34.6% • College: 24.1% • Graduate degree: 21.0% • Missing: 20.3% • Selection: Excluded those with extreme energy intake; without SCD assessment in 2012 or 2014; with Parkinson Dz before 2012	Whole Grains; Fish; MUFA/SFA; Neutral: Red and Processed Meat; Neutral: Alcohol • DASH: Positive: Vegetables (not potatoes and legumes); Nuts and Legumes; Fruit and Fruit Juice; Whole Grains; Low-Fat Dairy. Negative: Red and Processed Meat; Sweetened Beverages; Sodium • AHEI-2010: Positive: Vegetables (not potatoes, French fries); Fruit; Legumes and Nuts; Whole Grains; Long-Chain Fats (EPA + DHA); PUFA. Negative: Red and Processed Meat; Sugar Sweetened Beverages and Fruit Juice; Trans FA; Sodium. Neutral: Alcohol • **DP Method(s)**: Index/Score **Comparisons:** Categorical, quintiles	Q2, OR: 1.00, 95% CI: 0.94, 1.06 Q3, OR: 0.91, 95% CI: 0.86, 0.97 Q4, OR: 0.92, 95% CI: 0.86, 0.98 Q5, OR: 0.76, 95% CI: 0.71, 0.82 p-trend<0.001 AHEI-2010 Q1, OR: 1, ref Q2, OR: 0.97, 95% CI: 0.92, 1.04 Q3, OR: 0.99, 95% CI: 0.93, 1.06 Q4, OR: 0.93, 95% CI: 0.87, 0.99 Q5, OR: 0.93, 95% CI: 0.87, 0.99 p-trend=0.015 Severe Subjective CD aMED Q1, OR: 1, ref Q2, OR: 0.87, 95% CI: 0.79, 0.96 Q3, OR: 0.82, 95% CI: 0.74, 0.90 Q4, OR: 0.74, 95% CI: 0.67, 0.83 Q5, OR: 0.57, 95% CI: 0.51, 0.64 p-trend<0.001 DASH Q1, OR: 1, ref Q2, OR: 0.93, 95% CI: 0.84, 1.02 Q3, OR: 0.76, 95% CI: 0.68, 0.84 Q4, OR: 0.77, 95% CI: 0.69, 0.85 Q5, OR: 0.61, 95% CI: 0.55, 0.68 p-trend<0.001 AHEI-2010 Q1, OR: 1, ref Q2, OR: 0.88, 95% CI: 0.80, 0.96 Q3, OR: 0.90, 95% CI: 0.82, 0.99 Q4, OR: 0.84, 95% CI: 0.76, 0.93 Q5, OR: 0.81, 95% CI: 0.73, 0.90 p-trend<0.001 **Summary:** Inverse: aMED, DASH, and AHEI-2010 & moderate or severe CD (subjective)	analyses • **Diet assessment:** FFQ collected every 4 years • **Outcome measurement**: Subjective CD based on seven questions across four domains (memory, executive function, attention, visuospacial skills). Higher score=greater decline. Moderate decline=0.5-2.5 points; severe=3-7 points **Funding:** NIH, Zhejiang University Education Foundation Global Partnership Fund, VoLo Foundation
Zhang, 2021[81] China; Effects and Mechanism Investigation of Cholesterol and	• **DP Age(s):** 58.8 (4.7) y, mean (50-70 y) at baseline	**Follow-Up Duration: 2.3 y (median)** **Results:** MCI (MoCA)	• **Did not account for:** SEP, Race and/or Ethnicity

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
Oxysterol on Alzheimer's disease (EMCOA) study Analytic N=2239 **Participant characteristics:** • Race and/or Ethnicity: NR (Chinese) • SEP: Education: • ≤6 y, 16.0% • 7-9y, 37.6% • >9y, 46.4% • Selection: Excluded those w/ severe disease (e.g., Hxof heart or respiratory failure, renal failure, liver failure, cancer); with neuropsychiatric disorders (e.g., depression and schizophrenia); with conditions known to affect cognitive function (e.g., malignant tumors, a history of traumatic brain injury); long-term frequent intake of drugs and medications; those taking dietary supplements to improve cognitive function	• **DP(s) examined:** Chinese Dietary Guidelines Index 2018 (CDGI-2018) [Wang, 2019] • **DP Components:** • CDGI-2018: Positive: Cereals & tubers; Fruit; Vegetables (total, dark); Soybean and nuts; dairy products. Negative: oil; salt; wine. Moderate: meat & poultry; eggs; "aquatic" products • **DP Method(s)**: Index/Score **Comparisons:** Categorical, quartiles	Q1, RR: 1, ref Q2, RR: 0.84, 95% CI: 0.66, 1.07 Q3, RR: 0.68, 95% CI: 0.53, 0.87 Q4, RR: 0.75, 95% CI: 0.58, 0.98 p-trend=0.006 **Summary:** Inverse: CDGI-2018 & MCI	• **Diet assessment:** FFQ once at baseline • **Outcome measurement**: MoCA (Montreal Cognitive Assessment; 30 point maximum). MCI diagnosed if score= 13/14 for illiterate individuals, 19/20 for those with 1 to 6 years of education, and 24/25 for those with 7 or more years of education. Those suspected of having MCI based on their MoCA scores were secondarily examined by neurologists for final diagnosis **Funding:** State Key Program of the National Natural Science Foundation of China; National Natural Science Foundation of China
Zhang, 2023[78] Singapore; Singapore Chinese Health Study Analytic N=16736 **Participant characteristics:** • Race and/or Ethnicity:100% Chinese • SEP: Education: 19% none; 45% primary, 37% high school or above; • 89% Married • Selection: Excluded those with	• **DP Age(s):** 53.5 (6.2) y, mean • **DP(s) examined:** Planetary Health Diet (PHD) [Zhang, 2023 adapted from EAT-Lancet and DHD-15 scores] • **DP Components:** • PHD, Positive: Vegetables; Legumes; Fruit; Nuts; Whole Grains; Fish; Unsaturated Fatty acids. Negative: Saturated Fats; Meat (beef, lamb, pork); Added sugar; Grains (All, Refined). Neutral: Eggs; Poultry; Whole milk (or derivatives); Potatoes • **DP Method(s)**: Index/Score	**Follow-Up Duration: 20 y, median (age 73.1 (6.4) y mean)** **Results:** PHD & odds of CD Q2, OR: 0.91 (0.79, 1.05) Q3, OR: 0.94 (0.81, 1.08) Q4, OR: 0.80 (0.70, 0.93) Q5, OR: 0.72 (0.62, 0.83) p<0.001 per SD, OR: 0.89 (0.85, 0.93) **Summary:** Inverse: PHD & CD	• **Did not account for:** None (all) • Results stratified by ApoE e4 status showed stronger association between PHD & CD in non-carriers, not among those at higher genetic risk. • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: CD based on poor CFx via MMSE using

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
or who had missing/incomplete diet/cognitive data	**Comparisons:** Continuous per-1 SD increase and by quintiles, Q1, OR: 1 REF		education=specific cutoffs of <18, <21, or <25 if no/primary/secondary education levels (cases, n=2397, 14%) **Funding:** The National Key Research and Development Program of China; The National Natural Science Foundation of China; The National Medical Research Council, Singapore; The Singapore National Medical Research Council
Zhang, 2023[80] China; The China Health and Nutrition Survey Analytic N=6308 **Participant characteristics:** • Race and/or Ethnicity: Chinese • SEP: Family Income: Low, 18-27%; Med. 29-33%; High 35-49%; Majority unemployed (~63-65%) with low/elementary education (~48-67%) • Selection: Excluded those with abnormal or incomplete data (Diet, BMI, TEI); aged <55 y	• **DP Age(s):** ≥55y at baseline • **DP(s) examined:** "Vegetable-pork" • **DP Components:** • "Vegetable-pork": high intakes of legume products, vegetables, fruits, nuts, pork, fish, and plant oil • **DP Method(s)**: RRR **Comparisons:** Categorical by quintiles (Q1, OR: 1 REF) for "Vegetable-Pork" DP score	**Follow-Up Duration: 21y** **Results:** "Vegetable-pork" DP & odds of (poor) global CFx, (95% CI) Q2, OR: 0.82 (0.73, 0.93) Q3, OR: 0.79 (0.69, 0.91) Q4, OR: 0.74 (0.63, 0.86) Regression coefficients (p value) Global Cognitive Score Q2, β: 0.27 (p=0.030) Q3, β: 0.45 (p<0.001) Q4, β: 0.5 (p<0.001) Verbal memory score Q2, β: 0.11 (p=0.291) Q3, β: 0.13 (p=0.228) Q4, β: 0.12 (p=0.336) Global Cognitive z-score Q2, β: 0.05 (p=0.002) Q3, β: 0.08 (p<0.001) Q4, β: 0.09 (p<0.001) Verbal memory z-score Q2, β: 0.04 (p=0.288) Q3, β: 0.05 (p=0.230) Q4, β: 0.05 (p=0.340)	• **Did not account for:** None (all) • **Diet assessment:** 24-h recall once at baseline • **Outcome measurement**: CD defined as TICS-m score of < 9 **Funding:** Abbott Research Fund for Food Nutrition and Safety from Chinese Institute of Food Science and Technology; NIH, NICHD, NIA, NIDDK

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
		Summary: Inverse: "Vegetable-Pork" DP & CD (odds of poor CFx); Positive: CFx; NS: Verbal memory	
Zhang, 2023[77] United Kingdom; BIOBANK Analytic N=114684 **Participant characteristics:** • Race and/or Ethnicity:100% White • SEP: SEP: -1.73 (2.78), mean (SD) Townsend; Education: 47% high, 33% intermediate, 20% low; • Selection: Excluded those self-reporting as non-white (Mixed, South Asian, Black, Chinese, and Others); with Dem at baseline; implausible TEI; missing covariates; without APOE genotype	• **DP Age(s):** 56.8y, mean (40 to 69y at baseline) • **DP(s) examined:** healthful Plant-based diet index (hPDI) [Satija, 2016; cited Heianza, 2021] • Mediterranean Diet Score (MDS) [Trichopolou 2003; cited 2005] • adapted RFS (aRFS) [Zhang adapted Kant, 2004] • Mediterranean-Dash Intervention for Neurodegenerative Delay diet (MIND) • **DP Components:** • hPDI: Positive: Vegetables; Fruits; Nuts; Legumes; Whole grains; Vegetable oils; Tea/coffee; Negative: Fruit juices; Refined grains; Potatoes; Sugar-sweetened beverages; Sweets/desserts; Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods • MDS: Positive: Vegetables; Legumes; Fruit, Nuts; Cereals; Fish/seafood; MUFA/SFA. Negative: Red and Processed Meat; Dairy Products. Neutral: Alcohol • aRFS: Positive: Vegetables: 1) Tomatoes; 2) Green (Broccoli; Spinach; Mustard, Turnip, Collard Greens); 3) Carrots or Root Vegetables: Green Salad; Sweet Potatoes; Baked or Boiled Potatoes; 4) Other Veg.; Legumes; Fruits (Pome: Apples or Applesauce; Citrus: Oranges; Grapefruits; Cantaloupe; Orange or Grapefruit Juice; Grapefruit;	**Follow-Up Duration: 9.4y** **Results:** Each DP & Dem, HR(95% CI) hPDI T2, 1.02(0.81, 1.27); p=0.888 T3, 0.97(0.77, 1.22); p=0.788 MDS T2, 0.99(0.81, 1.22); p=0.937 T3, 0.94(0.74, 1.19); p=0.609 aRFS T2, 0.94(0.74, 1.18); p=0.577 T3, 0.99(0.79, 1.25); p=0.948 MIND T2, 0.91(0.73, 1.14); p=0.432 T3, 0.89(0.71, 1.12); p=0.32 Main results retained after most sensitivity analysis: Stratification by sex yielded stronger inverse association between MDS, RFS, MIND & Dem among females **Summary:** NS/Inverse: hPDI & Dem NS/Inverse: MDS & Dem NS/Inverse: aRFS & Dem NS/Inverse: MIND & Dem	• **Did not account for:** None (all) • Also reported data on DP & brain volume from MRI in subset • **Diet assessment:** 24h-recall, web-based; at least 2x from 5 rounds 2009-2012 • **Outcome measurement**: Dem based on hospital records and death registry data **Funding:** National Natural Science Foundation of China, the Fundamental Research Funds for the Central Universities, the Key Laboratory of Intelligent Preventive Medicine of Zhejiang Province, and the Zhejiang University Global Partnership Fund

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
	Tropical (Banana, Mango, Pineapple); Stone (Cherry, Prune); Other Fruit Juices; Whole grains (cooked cereals such as oatmeal); High-Fiber Cereals, Dark Breads (whole wheat, rye, pumpernickel), Corn Tortillas and Breads; Lean Meats/Poultry [adaptions removed fish, dairy, and fat] • MIND (w/o EVOO): Positive: Green leafy vegetables; Vegetables; Beans; Berries; Nuts; Whole Grains; Seafood; Poultry; Wine. Negative: Red Meat; Cheese; Pastries and sweets; Butter and stick margarine; Fried/fast food • **DP Method(s)**: Index/Score **Comparisons:** Categorical, hPDI, MDS, aRFS, MIND tertiles (T1, HR: 1 ref)		
Zhang, 2023[79] Japan; National Institute for Longevity Sciences-Longitudinal Study of Aging (NILS-LSA) project Analytic N=1504 **Participant characteristics:** • Race and/or Ethnicity:100% Japanese • SEP: Education ≥ 13y, 38-54%; ≤ 9y ~28-44% • Married: ~78-84% • Selection: Excluded those with or who had missing dietary data, missing Dem status or self-reported Dem, MMSE <24, missing covariates, incident Dem in first 5y of F/U	• **DP Age(s):** ~71 (mean); 65 to 82y at baseline • **DP(s) examined:** weighted Japanese Diet Index, 9-item (wJDI9) [Zhang, 2019] • Japanese Diet Index, 8-items (JDI8) [Lu, 2021] • Japanese Diet Index (JDI) [Tomato, 2016; Zhang, 2019] • Japanese Diet Index, 12 item (mJDI12) [Zhang, 2019] • **DP Components:** • wJ19, Positive: Vegetables (green and yellow); Mushrooms; Seaweeds; Fruit; Soybeans and soy foods; Fish and shellfish; Green tea. Negative: Beef and pork. Neutral/Moderate: Rice • JDI, Positive: Vegetables (green and yellow); Pickles; Seaweeds; Miso soup; Rice; Fish and shellfish; Green tea. Negative: Beef and pork; Coffee • JDI8, Positive: Vegetables (green and	**Follow-Up Duration: 11.4y, median (7.8-15.1 range)** **Results:** wJDI9 per SD, HR: 0.95, 95% CI: 0.90, 0.995; p=0.033; 11th PDs(mos): 3.9, 95% CI: 0.3, 7.6; p=0.035 T2, HR: 0.97, 95% CI: 0.72, 1.31; p=0.848; 11th PDs(mos): 7.9, 95% CI: -7.6, 23.4; p=0.316 T3, HR: 0.58, 95% CI: 0.40, 0.86; p=0.006; 11th PDs(mos): 36.7, 95% CI: 9.9, 63.4; p=0.007 JDI8 per SD, HR: 1.01, 95% CI: 0.92, 1.10; p=0.919 T2, HR: 1.45, 95% CI: 1.01, 2.09; p=0.044 T3, HR: 1.07, 95% CI: 0.78, 1.47; p=0.688 JDI per SD, HR: 1.00, 95% CI: 0.92, 1.09; p=0.975 T2, HR: 1.27, 95% CI: 0.90, 1.78; p=0.178	• **Did not account for:** SEP (marital status); Race and/or Ethnicity (Japanese) • Results for wJD19 & Dem similar when excluding a) participants Dx with Dem within first 10 yrs of f/u, b) only participants w MMSE score ≥28 at baseline • **Diet assessment:** 3-d diet record - baseline only • **Outcome measurement**: Dem based on Long-term Care Insurance System certifcate; n=225 cases; (excluded Dem cases in first 5y of F/U) **Funding:** Food Science Institute Foundation, Research Funding for Longevity Sciences from the National Center for Geriatrics and Gerontology, Japan; Grant-

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
	yellow); Pickles; Seaweeds; Miso soup; Rice; Fish and shellfish; Green tea. Negative: Beef and pork • mJDI12, Positive: Vegetables (green and yellow); Pickles; Mushrooms; Seaweeds; Miso soup; Fruit; Soybeans and soy foods; Rice; Fish and shellfish; Green tea. Negative: Beef and pork; Coffee • **DP Method(s)**: Index/Score **Comparisons:** Continuous and categorical, JDI tertiles, T1, HR: 1 REF or 11th PD 0 as REF	T3, HR: 1.20, 95% CI: 0.83, 1.74; p=0.339 JDI12 per SD, HR: 0.96, 95% CI: 0.90, 1.03; p=0.287 T2, HR: 1.04, 95% CI: 0.71, 1.52; p=0.838 T3, HR: 0.88, 95% CI: 0.59, 1.30; p=0.521 **Summary:** Inverse: wJDI9 & Dem (cont. or T3 v. T1; NS, T2) NS/Null: JDI8 & Dem NS/Null: JDI & Dem NS/Null: mJDI12 & Dem	in-Aid for Early-Career Scientists of JSPS KAK-ENHI
Zhou, 2021[82] Singapore; Singapore Chinese Health Study Analytic N=14159 **Participant characteristics:** • Race and/or Ethnicity:100% Chinese: 48% Cantonese; 52% Hokkien dialect • SEP: Education: 20% none, 46% primary; 35% secondary+ • Married 89% • Selection: Excluded those with or who had: Cx, CVD, DM at baseline, extreme TEI, missing outcome data, younger than 65y.	• **DP Age(s):** 53.3y, mean (45 to 74y at baseline) • **DP(s) examined:** Alternate Med Diet Score (aMED) [Fung 2005] • DASH Score [Fung 2008] • Alternative HEI (AHEI)-2010 [Chiuve 2012] • Plant-based diet index (PDI; healthful PDI, hPDI) [Satija, 2016] • **DP Components:** • aMED, Positive: Vegetables (not potatoes); Legumes; Fruit; Nuts; Whole Grains; Fish; MUFA/SFA. Negative: Red and Processed Meat. Neutral: Alcohol • DASH, Positive: Vegetables (not potatoes and legumes); Nuts and Legumes; Fruit and Fruit Juice; Whole Grains; Low-Fat Dairy. Negative: Red and Processed Meat; Sweetened Beverages; Sodium • AHEI-2010, Positive: Vegetables (not potatoes); Fruit; Legumes and Nuts; Whole Grains; Long-Chain Fats (EPA + DHA); PUFA. Negative: Red and Processed Meat; Sugar Sweetened	**Follow-Up Duration: 20y (mean age 73.7y)** **Results:** each DP & odds of not having CD aMED Q2, OR: 1.23 (1.07, 1.41) Q3, OR: 1.44 (1.23, 1.70) Q4, OR: 1.62 (1.37, 1.92) p-trend<0.001 perSD, OR: 1.18 (1.12, 1.25) DASH Q2, OR: 1.18 (1.03, 1.36) Q3, OR: 1.39 (1.21, 1.61) Q4, OR: 1.46 (1.27, 1.69) p-trend<0.001 perSD, OR: 1.14 (1.09, 1.21) AHEI-2010 Q2, OR: 1.13 (0.99, 1.30) Q3, OR: 1.24 (1.08, 1.43) Q4, OR: 1.36 (1.18, 1.57) p-trend<0.001 perSD, OR: 1.13 (1.08, 1.19) PDI Q2, OR: 1.13 (0.99, 1.30) Q3, OR: 1.33 (1.15, 1.53) Q4, OR: 1.15 (0.99, 1.33)	• **Did not account for:** SEP (marital status adjusted) • **Diet assessment:** FFQ assessed once at baseline • **Outcome measurement**: MMSE (Singapore-modified) - No CD based on SM-MMSE using education-specific cut-points: ≥18 if no education, ≥21 for primary, or ≥25 for secondary school or higher education **Funding:** Singapore National Medical Research Council; NCI/NIH; Saw Swee Hock School of Public Health, National University of Singapore

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
	Beverages and Fruit Juice; Trans FA; Sodium. Neutral: Alcohol • PDI, Positive: Vegetables; Fruits; Nuts; Legumes; Whole grains; Vegetable oils; Tea/coffee; Fruit juices; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts; Negative: Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods • hPDI, Positive: Vegetables; Fruits; Nuts; Legumes; Whole grains; Vegetable oils; Tea/coffee; Negative: Fruit juices; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts; Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods • **DP Method(s)**: Index/Score **Comparisons:** Continuous per-SD and categorical for each DP in quartiles, Q1, OR: 1 REF	p-trend=0.02 per SD, OR: 1.06 (1.00, 1.12) hPDI Q2, OR: 1.11 (0.96, 1.27) Q3, OR: 1.16 (1.01, 1.34) Q4, OR: 1.23 (1.06, 1.43) p-trend=0.007 per SD, OR: 1.07 (1.02, 1.13) **Summary:** Positive: aMED & odds of no CD Positive: DASH & odds of no CD Positive: AHEI-2010 & odds of no CD Positive: PDI & odds of no CD Positive: hPDI & odds of no CD	
Zhu, 2022[83] China; Chinese Longitudinal Healthy Longevity Survey (CLHS) Analytic N=6136 **Participant characteristics:** • Race and/or Ethnicity: NR (majority Han Chinese); 19% Central, 36% Eastern, 7% Northeastern, 4% northern, 1% northwestern, 24% southern, 10% southwestern China • SEP: 83% Rural; 47% no formal education; 90% non-professional work; 60% finanancially dependent; 51%	• **DP Age(s):** 80 y (SD: 9.83) at baseline • **DP(s) examined:** Plant-based diet index (PDI; healthful/unhealthful) [Satija, 2016] • **DP Components:** • PDI: Positive: Vegetables; Fruits; Nuts; Legumes; Whole grains; Vegetable oils; Tea/coffee; Fruit juices; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts; Negative: Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods • hPDI: Positive: Vegetables; Fruits; Nuts; Legumes; Whole grains; Vegetable oils; Tea/coffee; Negative:	**Follow-Up Duration: ~10y** **Results:** PDI Q2, HR: 0.90, 95% CI: 0.81, 1.01; p=0.064 Q3, HR: 0.64, 95% CI: 0.57, 0.72; p<0.001 Q4, HR: 0.45, 95% CI: 0.39, 0.52; p<0.001 p-trend<0.001 hPDI Q2, HR: 0.90, 95% CI: 0.81, 1.00; p=0.044 Q3, HR: 0.76, 95% CI: 0.67, 0.85; p<0.001	• **Did not account for:** None (all) • **Diet assessment:** FFQ assessed once • **Outcome measurement**: MMSE (<24 impairment; <18 for sensitivity test) **Funding:** National Natural Sciences Foundation of China; National Key R&D Program of China

Article Information	Intervention/exposure and comparator	Results	Methodological considerations
married • Selection: Excluded those with baseline MMSE score <24 (abnormal CF)	Fruit juices; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts; Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods • uPDI: Negative: Whole grains; Fruits; Vegetables; Nuts; Legumes; Tea/coffee; Animal fats; Dairy; Eggs, Fish/seafood; Meat (poultry and red meat); Miscellaneous animal-based foods; Positive: Fruit juices & Veg. Oils; Sugar-sweetened beverages; Refined grains; Potatoes; Sweets/desserts • **DP Method(s)**: Index/Score **Comparisons:** Categorical, quartiles (Q1, HR: 1 ref); linear trend of PDI, hPDI, uPDI	Q4, HR: 0.61, 95% CI: 0.54, 0.70; p<0.001 p-trend<0.001 uPDI Q2, HR: 1.17, 95% CI: 1.03, 1.33; p=0.014 Q3, HR: 1.47, 95% CI: 1.30, 1.66; p<0.001 Q4, HR: 2.03, 95% CI: 1.79, 2.31; p<0.001 p-trend<0.001 **Summary:** Inverse: PDI & CD (odds of MMSE <24) Inverse: hPDI & CD (odds of MMSE <24) Positive: uPDI & CD (odds of MMSE <24)	

Table 7. Risk of bias for randomized controlled trials examining dietary patterns consumed by adults and older adults and risk of cognitive decline, dementia, Alzheimer's disease, and mild cognitive impairment[a]

Article	Randomization	Deviations from intended interventions (effect of assignment) or (per-protocol)	Missing outcome data	Outcome measurement	Selection of the reported result	Overall risk of bias
Barnes, 2023[1]	LOW	LOW	LOW	LOW	LOW	LOW

[a] Possible ratings of low, some concerns, or high determined using the "Cochrane Risk-of-bias 2.0" (RoB 2.0) (August 2019 version)" (Sterne JAC, Savović J, Page MJ, et al. RoB 2: a revised tool for assessing risk of bias in randomised trials. *BMJ* 2019; **366**: l4898.)

Table 8. Risk of bias for observational studies examining dietary patterns consumed by adults and older adults and risk of cognitive decline, dementia, Alzheimer's disease, and mild cognitive impairment[*]

	Confounding	Exposure measurement	Selection of participants	Post-exposure interventions	Missing data	Outcome measurement	Selection of the reported result	Overall
Agarwal, 2021[3]	High	Some concerns	Low	Low	Low	Some concerns	Some concerns	High
Andreu-Reinón, 2021[4]	High	High	Low	Low	Low	Some concerns	Some concerns	High
Ashby-Mitchell 2015[5]	High	Some concerns	Low	Low	High	Some concerns	High	High
Beydoun 2022[6]	Some concerns	Some concerns	Low	Low	Some concerns	High	High	High
Boumenna, 2022[7]	Low	Low	Low	Low	Low	Some concerns	Some concerns	Some concerns

[*] Possible ratings of low, some concerns, high, very high, not applicable, or no information were determined using the "Risk of Bias in Non-randomized Studies of Exposures (ROBINS-E)" tool (ROBINS-E Development Group, Higgins J, Morgan R, Rooney A et al. Risk Of Bias In Non-randomized Studies - of Exposure (ROBINS-E). Launch version, 1 June 2022. Available from: https://www.riskofbias.info/welcome/robins-e-tool.)

Charisis, 2021[8]	High	Some concerns	Low	Low	Some concerns	Low	Some concerns	High
Chen, 2017[14]	Very high	Some concerns	Low	Low	Some concerns	Low	High	Very high
Chen, 2021[12]	Some Concerns	Some concerns	Low	Low	High	Some concerns	Some concerns	High
Chen, 2022[13]	Some concerns	Some concerns	Low	Low	Some concerns	Some concerns	Some concerns	High
Chen 2023[10]	Some concerns	Low	Low	Low	High	Some concerns	Some concerns	High
Chen, 2023[11]	High	Some concerns	Some concerns	Low	Some concerns	Low	Some concerns	High
Chen, 2023[9]	Some concerns	Some concerns	Low	Low	Low	High	Some concerns	High
Chou, 2019[15]	High	Some concerns	Some concerns	Low	Some concerns	Low	Some concerns	High
Corley & Deary, 2021[16]	Very high	Some concerns	Low	Low	Low	Some concerns	Low	Very high
Cornelis, 2023[17]	Low	Low	Low	Low	Some concerns	High	High	High
D'Amico, 2020[18]	Very high	Some concerns	Some concerns	Low	High	Some concerns	Some concerns	Very high
Daniel, 2021[19]	Low	Some concerns	Some concerns	Low	Some concerns	Some concerns	High	High
de Crom, 2022[20]	Some concerns	Some concerns	Low	Low	High	Low	Some concerns	High
de Crom 2023[21]	High	High	Low	Low	Low	Low	Some concerns	High
Dhana, 2021[22]	High	Low	Some concerns	Low	High	Some concerns	Some concerns	High
Flores, 2023[23]	Low	Low	Low	Low	Some concerns	Low	Some concerns	Some concerns
Galbete, 2015[24]	High	Some concerns	Some concerns	Low	Some concerns	High	Some concerns	High
Gelber 2012[25]	High	Some concerns	Low	Low	Low	Low	Low	High
Glans, 2023[26]	High	Some concerns	Low	Low	Low	Low	Some concerns	High

Granic, 2016[27]	Some concerns	Some concerns	Low	Low	Some concerns	Low	Some concerns	High
Gregory 2022[28]	High	Some concerns	Low	Low	High	High	Some concerns	High
Guo, 2021[29]	Very high	High	Low	Low	High	Low	Some concerns	Very high
Hsiao, 2022[30]	High	High	Low	Low	Low	Some concerns	Low	High
Hu, 2020[31]	Some concerns	Some concerns	Some concerns	Low	Low	Some concerns	Some concerns	High
Jia, 2023[32]	Some concerns	Some concerns	Low	Low	High	High	Some concerns	High
Keenan 2020[33]	Very high	Some concerns	Low	Some concerns	Low	Some concerns	Low	Very high
Kjeldsen 2022[34]	Low	Low	Low	Low	Low	High	Some concerns	High
Lai, 2023[35]	Some concerns	Some concerns	Low	Low	Low	Some concerns	Some concerns	High
Larsson & Wolk, 2018[36]	High	High	Low	Low	High	Low	Some concerns	High
Liang, 2022[37]	High	Some concerns	Low	Low	Some concerns	Some concerns	Some concerns	High
Liu, 2022[38]	Very high	Low	Low	Low	High	Some concerns	Some concerns	Very high
Lohman, 2023[39]	High	Some concerns	Low	Low	Low	High	Low	High
Lu, 2021[40]	High	Low	Low	Low	High	Some concerns	High	High
Malek, 2022[41]	Low	Some concerns	Low	Low	Some concerns	Some concerns	Low	Some concerns
Mamalaki 2023[42]	High	Some concerns	Low	Low	Low	Some concerns	High	High
Mattei, 2019[43]	Low	Some concerns	Low	Low	Some concerns	Low	Some concerns	Some concerns
Melo van Lent, 2021[44]	Some concerns	Low	Low	Low	High	Some concerns	Some concerns	High
Melo van Lent, 2022[45]	Some concerns	Some concerns	Low	Low	Low	High	Some concerns	High

Milte, 2019[46]	High	Some concerns	Low	Low	High	High	Some concerns	High
Morris, 2015[47]	High	Low	Low	Low	Some concerns	Some concerns	Low	High
Morris, 2015[48]	Very high	Some concerns	Low	Low	Some concerns	Low	Some concerns	Very high
Moustafa, 2022[49]	Low	Some concerns	Low	Low	Low	Some concerns	Some concerns	Some concerns
Mueller, 2020[50]	Very high	Some concerns	Low	Low	Some concerns	Some concerns	Low	Very high
Muñoz-García, 2020[52]	High	Some concerns	Low	Low	Low	High	Some concerns	High
Muñoz-García, 2022[51]	High	Some concerns	Low	Low	Low	High	Some concerns	High
Nicoli, 2021[53]	High	Some concerns	Some concerns	Low	High	Low	Some concerns	High
Nishi 2021[54]	Some concerns	Some concerns	Low	Low	Low	Some concerns	High	High
Nooyens, 2021[55]	Some concerns	Some concerns	Low	Low	Low	Some concerns	Some concerns	High
Olsson, 2015[56]	Very high	Some concerns	Low	Low	Low	Low	Low	Very high
Parrott, 2021[57]	High	Some concerns	Low	Low	Some concerns	Some concerns	Some concerns	High
Razquin, 2022[58]	Very high	Some concerns	Low	Low	Low	High	Some concerns	Very high
Rodrigues, 2020[59]	Some concerns	Some concerns	Low	Low	Some concerns	Some concerns	Some concerns	High
Sameulsson, 2021[60]	Some concerns	Some concerns	Low	Low	Some concerns	Low	Some concerns	High
Shang, 2021[61]	Some concerns	Low	Low	Low	Low	Some concerns	High	High
Shannon, 2023[62]	Some concerns	High	Low	Low	Some concerns	High	Some concerns	High
Tanaka, 2018[63]	High	Some concerns	Low	Low	Some concerns	Some concerns	Some concerns	High
Tangney, 2014[64]	Very high	Some concerns	Low	Low	Low	Some concerns	Some concerns	Very high
Thomas, 2024[65]	Very high	Low	Low	Low	Low	Low	Low	Very high

Tong, 2021[66]	Some concerns	Some concerns	Some concerns	Low	High	Some concerns	Some concerns	High
Trichopoulou, 2015[67]	Some concerns	Some concerns	Low	Low	High	Some concerns	Some concerns	High
van Soest 2023[68]	Some concerns	Some concerns	Low	Some concerns	Some concerns	Some concerns	Some concerns	High
Vercambre, 2012[69]	Low	Some concerns	Low	Some concerns	Low	Some concerns	Low	Some concerns
Vlachos, 2022[70]	Very high	Some concerns	Some concerns	Low	Very high	Some concerns	Some concerns	Very high
Vu, 2022[71]	Some concerns	High	Low	Low	High	High	High	High
Wade, 2021[72]	High	Some concerns	Low	Low	Some concerns	Some concerns	Some concerns	High
Wagner, 2020[2]	Very high	Low	Low	Low	Some concerns	High	Some concerns	Very high
Wagner, 2023[73]	Very high	Some concerns	Low	Low	Some concerns	Some concerns	Some concerns	Very high
Wang, 2021[74]	Low	Some concerns	Low	Low	Low	Some concerns	Some concerns	Some concerns
Wu, 2023[75]	Low	Some concerns	Low	Low	Low	High	Some concerns	Some concerns
Yuan, 2022[76]	Low	Low	Low	Low	Low	Some concerns	High	High
Zhang, 2021[81]	Some concerns	Some concerns	Low	Low	High	Some concerns	High	High
Zhang 2023[78]	Low	Some concerns	Low	Low	Low	Some concerns	Some concerns	Some concerns
Zhang 2023[80]	Low	Some concerns	Low	Low	Some concerns	High	High	High
Zhang 2023[77]	Low	Low	Low	Low	Low	High	Some concerns	High
Zhang 2023[79]	Some concerns	Some concerns	Low	Low	Low	Some concerns	Low	Some concerns
Zhou 2021[82]	Some concerns	Some concerns	Some concerns	Low	Low	Some concerns	Some concerns	High
Zhu, 2022[83]	Low	Some concerns	Low	Low	Some concerns	Some concerns	Some concerns	High

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75. Wu H, Gu Y, Meng G, et al. Quality of plant-based diet and the risk of dementia and depression among middle-aged and older population. *Age Ageing*. May 1 2023;52(5)doi:10.1093/ageing/afad070.
76. Yuan C, Cao Y, Ascherio A, et al. Long-term diet quality and its change in relation to late-life subjective cognitive decline. *Am J Clin Nutr*. Jan 11 2022;115(1):232-243. doi:10.1093/ajcn/nqab326.
77. Zhang J, Cao X, Li X, et al. Associations of Midlife Dietary Patterns with Incident Dementia and Brain Structure: Findings from the UK Biobank Study. *Am J Clin Nutr*. Jul 2023;118(1):218-227. doi:10.1016/j.ajcnut.2023.05.007
78. Zhang JJ, Ye YX, Dorajoo R, et al. APOE genotype modifies the association between midlife adherence to the planetary healthy diet and cognitive function in later life among Chinese adults in Singapore. *The Journal of nutrition.* Nov 2023 2023;doi:10.1016/j.tjnut.2023.11.024
79. Zhang S, Otsuka R, Nishita Y, et al. Twenty-year prospective cohort study of the association between a Japanese dietary pattern and incident dementia: the NILS-LSA project. *Eur J Nutr*. Jun 2023;62(4):1719-1729. doi:10.1007/s00394-023-03107-x
80. Zhang X, Huang F, Zhang J, et al. Association between Micronutrient-Related Dietary Pattern and Cognitive Function among Persons 55 Years and Older in China: A Longitudinal Study. Article. *Nutrients*. 2023;15(3)
81. Zhang X, Wang Y, Liu W, et al. Diet quality, gut microbiota, and microRNAs associated with mild cognitive impairment in middle-aged and elderly Chinese population. *Am J Clin Nutr.* Aug 2 2021;114(2):429-440. doi:10.1093/ajcn/nqab078.
82. Zhou YF, Song XY, Wu J, et al. Association Between Dietary Patterns in Midlife and Healthy Ageing in Chinese Adults: The Singapore Chinese Health Study. *J Am Med Dir Assoc*. Jun 2021;22(6):1279-1286. doi:10.1016/j.jamda.2020.09.045. Epub 2020 Nov 18.
83. Zhu A, Yuan C, Pretty J, Ji JS. Plant-based dietary patterns and cognitive function: A prospective cohort analysis of elderly individuals in China (2008-2018). *Brain Behav*. Aug 2022;12(8):e2670. doi:10.1002/brb3.2670

Appendices

Appendix 1: Abbreviations

Table A 1. List of abbreviations

Abbreviation	Full name
BMI	Body mass index
CVD	Cardiovascular disease
DASH	Dietary Approaches to Stop Hypertension
FFQ	Food frequency questionnaire
HDI	Human Development Index
HHS	United States Department of Health and Human Services
HTN	Hypertension
MIND	Mediterranean-Dash Intervention for Neurodegenerative Delay
MMSE	Mini Mental State Examination
NCC	Nested case-control study
NESR	Nutrition Evidence Systematic Review
PCS	Prospective cohort study
RCT	Randomized controlled trial
SEP	Socioeconomic position
SES	Socioeconomic status
TICS-M	Modified Telephone Interview for Cognitive Status
USDA	United States Department of Agriculture

Appendix 2: Conclusion statements from the existing systematic reviews

Table A 2. Conclusion statements from the existing systematic reviews for the research question: What is the relationship between dietary patterns consumed by adults and older adults and neurocognitive outcomes?

Citation	Conclusion statement and grade
2015 Dietary Guidelines Advisory Committee: Systematic Reviews of the Dietary Patterns, Foods and Nutrients, and Health Outcomes Subcommittee. February 2015. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: https://nesr.usda.gov/sites/default/files/2019-04/2015DGAC-SR-DietaryPatterns.pdf	Limited evidence suggests that a dietary pattern containing an array of vegetables, fruits, nuts, legumes and seafood consumed during adulthood is associated with lower risk of age-related cognitive impairment, dementia and Alzheimer's disease. (Grade: Limited)
Bouchey C, Ard J, Bazzano L, Heymsfield S, Mayer-Davis E, Sabaté J, Snetselaar L, Van Horn L, Schneeman B, English LK, Bates M, Callahan E, Venkatramanan S, Butera G, Terry N, Obbagy J. Dietary Patterns and Neurocognitive Health: A Systematic Review. July 2020. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: https://doi.org/10.52570/NESR.DGAC2020.SR0106	Limited evidence suggests that dietary patterns containing vegetables, fruits, unsaturated vegetable oils and/or nuts, legumes, and fish or seafood consumed during adulthood are associated with lower risk of age-related cognitive impairment and/or dementia. (Grade: Limited)

Appendix 3: Inclusion and exclusion criteria comparison between existing* and updated systematic reviews

Table A 3. Inclusion and exclusion criteria comparison between existing and updated systematic reviews for the research question: What is the relationship between dietary patterns consumed by adults and older adults and neurocognitive outcomes?

Category	Existing Review	Updated Review	Change and Rationale
Study design	Included: • Randomized controlled trials • Non-randomized controlled trials (including quasi-experimental and controlled before and after studies) • Quasi-experimental studies (i.e., prospective cohort studies) Excluded: • Nested case-control studies • Case-control studies • Uncontrolled trials • Case-control studies • Cross-sectional studies • Uncontrolled before-and-after studies • Narrative reviews • Systematic reviews • Meta-analyses	Included: • Randomized controlled trials • Non-randomized controlled trials† • Prospective cohort studies • Retrospective cohort studies • Nested case-control studies Excluded: • Uncontrolled trials‡ • Case-control studies • Cross-sectional studies • Ecological studies • Narrative reviews • Systematic reviews • Meta-analyses • Modeling and simulation studies • Mendelian randomization studies	Study design criteria were modified to enable focus on a stronger body of evidence and to align with current NESR standards.

* Bouchey C, Ard J, Bazzano L, Heymsfield S, Mayer-Davis E, Sabaté J, Snetselaar L, Van Horn L, Schneeman B, English LK, Bates M, Callahan E, Venkatramanan S, Butera G, Terry N, Obbagy J. Dietary Patterns and Neurocognitive Health: A Systematic Review. July 2020. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: https://doi.org/10.52570/NESR.DGAC2020.SR0106

† Including quasi-experimental and controlled before-and-after studies

‡ Including uncontrolled before-and-after studies

Category	Existing Review	Updated Review	Change and Rationale
Publication date	Included: • January 1980-January 2014 Excluded: • Before January 1980	Included: • January 1980- January 2024* Excluded: • Before January 1980, after January 2024	End of the date range is updated to extend from the end of search in the existing review to present
Population: Study participants	Included: • Human Excluded: • Non-human	Included: • Human Excluded: • Non-human	No change
Population: Life stage	Included: • At intervention/exposure and outcome: o Children, adolescents, adults, and older adults aged 2 years and older Excluded: • At intervention/exposure and outcome: • Infants and toddlers (birth up to 24 months)	Included: • At intervention/exposure: o Children and adolescents (2 up to 19 years) o Adults and older adults (19 years and older) • At outcome: o Adults and older adults (19 years and older) Excluded: • At intervention/exposure and outcome: o Infants and toddlers (birth up to 24 months) o Individuals during pregnancy o Individuals during postpartum • At outcome: o Children and adolescents (2 up to 19 years) o Individuals during pregnancy	Population life stage was narrowed to focus on the most relevant populations of interest

* This review update date range encompasses the original systematic review date range, which included articles published from January 1980 to January 2014

Category	Existing Review	Updated Review	Change and Rationale

Population: Health Status	Included:
	• Subjects who were healthy or at elevated chronic disease risk
	Excluded:
	• Low-calorie intervention (defined as <1,600 kcal/day for women and <2,000 kcal/day for men)
	• Subjects who were hospitalized, diagnosed with disease, and/or receiving medical treatment
		Included:
		• Studies that exclusively enroll participants not diagnosed with a disease*
		• Studies that enroll some participants:
		  ○ diagnosed with a disease;
		  ○ and/or hospitalized for an illness, injury, or surgery
		  ○ with severe undernutrition, failure to thrive/underweight, stunting, or wasting;
		  ○ and/or with the outcome of interest
		Excluded:
		• Interventions designed to induce weight loss or treat overweight and obesity through energy-restriction/hypocaloric diets for the purposes of treating additional or other medical conditions
		• Studies that exclusively enroll participants:
		  ○ diagnosed with a disease;†
		  ○ hospitalized for an illness, injury, or surgery;‡
		  ○ with severe undernutrition, failure to thrive/underweight, stunting, or wasting;
		  ○ and/or with the outcome of interest
			No change other than to clarify intent

* Studies that enroll participants who are at risk for chronic disease will be included

† Studies that exclusively enroll participants with obesity will be included

‡ Studies that exclusively enroll participants post-cesarean section will be included

Category	Existing Review	Updated Review	Change and Rationale
Intervention/exposure	Included: • A description of the dietary pattern(s) consumed by subjects (i.e., the quantities, proportions, variety, or combination of different foods, drinks, and nutrients (when available) in diets, and the frequency with which they are habitually consumed), including, at a minimum, a description of the foods and beverages in the pattern) • Dietary patterns may be measured or derived using a variety of approaches, such as adherence to a priori patterns (indices/scores), data driven patterns (factor or cluster analysis), reduced rank regression, or other methods, including clinical trials. Excluded: • Studies that do not provide a description of the dietary pattern, which at minimum, must include the foods and beverages in the pattern (i.e., studies that examine a labeled dietary pattern, but do not describe the foods and beverages consumed).	Included: • Studies that examine consumption of and/or adherence to a dietary pattern [i.e., the quantities, proportions, variety, or combination of different foods, drinks, and nutrients (when available) in diets, and the frequency with which they are habitually consumed], including, at a minimum, a description of the foods and beverages in the pattern of each intervention/exposure and comparator group ○ Dietary patterns may be measured or derived using a variety of approaches, such as adherence to *a priori* patterns (indices/scores), data driven patterns (factor or cluster analysis), reduced rank regression, or other methods, including clinical trials • Multi-component intervention in which the isolated effect of the dietary pattern on the outcome(s) of interest is provided or can be determined Excluded: • Studies that do not provide a description of the dietary pattern, which at minimum, must include the foods and beverages in the pattern (i.e., studies that examine a labeled dietary pattern, but do not describe the foods and beverages consumed in each intervention/exposure and comparator group). • Multi-component intervention in which the isolated effect of the dietary pattern on the outcome(s) of interest is not analyzed or cannot be determined (e.g., due to multiple intervention components within groups).	Revisions were made to clarify the intent of the intervention/exposure and comparator criteria, but do not represent a change in how the criteria were applied

Category	Existing Review	Updated Review	Change and Rationale
Comparator	Included: • Adherence to a different dietary pattern • Different levels of adherence to a dietary pattern Excluded: • N/A	Included: • Consumption of and/or adherence to a different dietary pattern • Different levels of consumption and/or adherence to a dietary pattern Excluded: • Consumption of and/or adherence to a similar dietary pattern of which only a specific component or food source is different between groups	No change other than to clarify the intent
Outcome(s)	Included: • Dementia • Cognitive impairment • Alzheimer's disease Excluded: • N/A	Included: • Cognitive decline • Mild cognitive impairment • Dementia • Alzheimer's disease Excluded: • N/A	No change other than to clarify outcomes
Confounders	Included: • n/a Excluded: • n/a	Included: • Studies that control for one or more of the key confounders listed in the analytic framework Excluded: • Studies that do not control for any of the key confounders listed in the analytic framework	• Criteria were added to enable focus on a stronger body of evidence
Study duration (not applied to pregnancy and postpartum studies)	Included • N/A Excluded • N/A	Included • Intervention length ≥12 weeks Excluded • Intervention length <12 weeks	• Study duration criteria were modified to enable focus on a stronger body of evidence

Category	Existing Review	Updated Review	Change and Rationale
Size of study groups	Included • 30 participants per arm for interventions, or • A power calculation included for interventions • n≥ 1,000 for observational studies Excluded • Fewer than 30 participants per arm for interventions, and • No power calculation reported for interventions Fewer than 1,000 participants for observational studies	Included • 30 participants per arm for interventions, or • A power calculation included for interventions Excluded • Fewer than 30 participants per arm for interventions, and No power calculation reported for interventions	• Sample size criteria for observational studies removed in order to expand the available body of evidence
Publication status	Included • Peer-reviewed articles published in research journals Excluded • Non-peer reviewed articles, unpublished data or manuscripts, pre-prints, reports, and conference abstracts or proceedings	Included • Peer-reviewed articles published in research journals Excluded • Non-peer reviewed articles, unpublished data or manuscripts, pre-prints, reports, and conference abstracts or proceedings	• No change
Language	Included • Published in English Excluded • Not published in English	Included • Published in English Excluded • Not published in English	• No change

Category	Existing Review	Updated Review	Change and Rationale
Country*	Included • Subject populations from countries with high or very high human development, according to the 2011 Human Development Index Excluded Studies conducted in countries classified as medium or low on the 2011 Human Development Index.	Included • Studies conducted in countries classified as high or very high on the Human Development Index the year(s) the intervention/exposure data were collected Excluded Studies conducted in countries classified as medium or low on the Human Development Index the year(s) the intervention/exposure data were collected	• NESR now applies the Human Development Index classification from the year in which the intervention/exposure data were collected

* In order to determine the inclusion exclusion criteria for country, the Human Development classification was used. This classification is based on the Human Development Index (HDI) ranking from the year the study intervention occurred or data were collected (UN Development Program. HDI 1990-2017 HDRO calculations based on data from UNDESA (2017a), UNESCO Institute for Statistics (2018), United Nations Statistics Division (2018b), World Bank (2018b), Barro and Lee (2016) and IMF (2018). Available from: http://hdr.undp.org/en/data). If the study did not report the year in which the intervention occurred or data were collected, the HDI classification for the year of publication was applied. HDI values are available from 1980, and then from 1990 to present. If a study was conducted prior to 1990, the HDI classification from 1990 was applied. If a study was conducted in 2018 or 2019, the most current HDI classification was applied. When a country was not included in the HDI ranking, the current country classification from the World Bank was used instead (The World Bank. World Bank country and lending groups. Available from: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-country-and-lending-groups)

Appendix 4: Literature search strategy

Searches from existing reviews

The search conducted for an existing review identified articles published between January 1980 and February 2020. For the complete search documentation, refer to:

Boushey C, Ard J, Bazzano L, et al. Dietary Patterns and Neurocognitive Health: A Systematic Review. July 2020. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: https://doi.org/10.52570/NESR.DGAC2020.SR0106

Search for the current review:

This search was first run on November 29, 2023, and then periodically run using NESR's continuous evidence monitoring methods.[*]

Database: PubMed

Provider: U.S. National Library of Medicine
Date(s) Searched: November 29, 2023 (initial search); November 29, 2023 – January 9, 2024 (continuous evidence monitoring)
Dates Covered: January 1, 1980 – January 9, 2024

Table A 4. Search for PubMed

Search #	Concept	String
#1	Dietary Patterns	("dietary pattern*"[tiab] OR "diet pattern*"[tiab] OR "eating pattern*"[tiab] OR "food pattern*"[tiab] OR "diet quality"[tiab] OR "dietary quality"[tiab] OR "diet variety"[tiab] OR "dietary variety"[tiab] OR "varied diet"[tiab] OR "dietary guideline*"[tiab] OR "dietary recommendation*"[tiab] OR "dietary intake*"[tiab] OR "eating style*"[tiab] OR "Diet, Mediterranean"[Mesh] OR "Mediterranean Diet*"[tiab] OR "Dietary Approaches To Stop Hypertension"[Mesh] OR "Dietary Approaches To Stop Hypertension Diet*"[tiab] OR "DASH diet*"[tiab] OR "Diet, Gluten-Free"[Mesh] OR "Gluten Free diet*"[tiab] OR "prudent diet*"[tiab] OR "Diet, Paleolithic"[Mesh] OR "Paleolithic Diet*"[tiab] OR "Diet, Vegetarian"[Mesh] OR "vegetarian diet*"[tiab] OR "vegan diet*"[tiab] OR "Diet, Healthy"[Mesh] OR "healthy diet*"[tiab] OR "plant based diet*"[tiab] OR "Diet, Western"[Mesh] OR "western diet*"[tiab] OR "Nordic Diet*"[tiab] OR "Okinawan diet*"[tiab] OR "Diet, Fat-Restricted"[Mesh] OR "Diet, High-Fat"[Mesh] OR "high-fat diet*"[tiab] OR "low fat diet*"[tiab] OR "Diet, Sodium-Restricted"[Mesh] OR "low-sodium diet*"[tiab] OR "low salt diet*"[tiab] OR "diet

[*] USDA Nutrition Evidence Systematic Review Branch. Chapter 10: Continuous Evidence Monitoring. In: *USDA Nutrition Evidence Systematic Review: Methodology Manual*. February 2023. U.S. Department of Agriculture, Food and Nutrition Service, Center for Nutrition Policy and Promotion, Nutrition Evidence Systematic Review. Available at: https://nesr.usda.gov/methodology-overview.

		score*"[tiab] OR "diet quality score*"[tiab] OR "diet quality index*"[tiab] OR "diet quality indices"[tiab] OR kidmed[tiab] OR "diet index*"[tiab] OR "diet indices"[tiab] OR "dietary index*"[tiab] OR "dietary indices"[tiab] OR "food score*"[tiab] OR MedDietScore[tiab] OR "healthy eating index*"[tiab] OR "healthy eating indices"[tiab]) OR (guideline adherence*[tiab] AND (diet[tiab] OR dietary[tiab] OR food[tiab] OR beverage*[tiab] OR nutrition*[tiab]))
#2	Cognitive Decline	"Cognition Disorders"[Mesh] OR "Cognition"[Mesh] OR cognition[tiab] OR metacognit*[tiab] OR meta-cognit*[tiab] OR neurocognit*[tiab] OR neuro-cognit*[tiab] OR "Dementia"[Mesh] OR dementia*[tiab] OR Alzheimer*[tiab] OR senility[tiab] OR senile[tiab] OR presenile[tiab] OR (cognit*[tiab] AND (function*[tiab] OR dysfunction*[tiab] OR declin*[tiab] OR deteriorat*[tiab] OR degenerat*[tiab] OR disorder*[tiab] OR dysfunction*[tiab] OR reduct*[tiab] OR impair*[tiab] OR deficit*[tiab] OR deficien*[tiab] OR progress*[tiab] OR perform*[tiab] OR abilit*[tiab]))
#3		#1 AND #2
#4	Limits	#3 NOT ("Animals"[Mesh] NOT ("Animals"[Mesh] AND "Humans"[Mesh])) NOT (editorial[ptyp] OR comment[ptyp] OR commentary[tiab] OR news[ptyp] OR letter[ptyp] OR review[ptyp] OR systematic review[ptyp] OR systematic review[ti] OR meta-analysis[ptyp] OR meta-analysis[ti] OR meta-analyses[ti] OR protocol[ti] OR protocols[ti] OR retracted publication[ptyp] OR retraction of publication[ptyp] OR retraction of publication[tiab] OR retraction notice[ti] OR “retracted publication”[ti] OR "Congress"[Publication Type] OR "Consensus Development Conference"[Publication Type] OR “conference abstract*”[tiab] OR “conference proceeding*”[tiab] OR “conference paper*”[tiab] OR "practice guideline"[ptyp] OR "practice guideline"[ti]) Filters applied: English, from 1980/1/1 - 3000/12/12.

Database: Embase

Provider: Elsevier
Date(s) Searched: November 29, 2023 (initial search); November 29, 2023 – January 9, 2024 (continuous evidence monitoring)
Dates Covered: January 1, 1980 – January 9, 2024

Table A 5. Search for Embase

Search #	Concept	String
#1	Dietary Patterns	'dietary pattern'/exp OR 'mediterranean diet'/exp OR 'dash diet'/exp OR 'gluten free diet'/exp OR 'paleolithic diet'/de OR 'vegetarian diet'/exp OR 'healthy diet'/exp OR 'western diet'/de OR 'low carbohydrate diet'/exp OR 'low fat diet'/de OR 'lipid diet'/exp OR 'protein restriction'/exp OR 'sodium restriction'/exp OR 'nordic diet'/de OR 'protein diet'/exp OR 'dietary pattern*':ab,ti OR 'diet pattern*':ab,ti OR 'eating pattern*':ab,ti OR 'food pattern*':ab,ti OR 'diet quality':ab,ti OR 'dietary quality':ab,ti OR 'diet variety':ab,ti OR 'dietary variety':ab,ti OR 'varied diet':ab,ti OR 'dietary guideline*':ab,ti OR 'dietary recommendation*':ab,ti OR 'dietary intake*':ab,ti OR 'eating style*':ab,ti OR 'mediterranean diet*':ab,ti OR 'dietary approaches to stop hypertension diet*':ab,ti OR 'dash diet*':ab,ti OR 'gluten free diet*':ab,ti OR 'prudent diet*':ab,ti OR 'paleolithic diet*':ab,ti OR 'vegetarian diet*':ab,ti OR 'vegan diet*':ab,ti OR 'healthy diet*':ab,ti OR 'plant based diet*':ab,ti OR 'western diet*':ab,ti OR 'nordic diet*':ab,ti OR 'okinawan diet*':ab,ti OR 'high-fat diet*':ab,ti OR 'low fat diet*':ab,ti OR 'low-sodium diet*':ab,ti OR 'low salt diet*':ab,ti OR 'diet score*':ab,ti OR 'diet quality score*':ab,ti OR 'diet quality index*':ab,ti OR 'diet quality indices':ab,ti OR kidmed:ab,ti OR 'diet index*':ab,ti OR 'diet indices':ab,ti OR 'dietary index*':ab,ti OR 'dietary indices':ab,ti OR 'food score*':ab,ti OR meddietscore:ab,ti OR 'healthy eating index*':ab,ti OR 'healthy eating indices':ab,ti OR (('guideline adherence*' NEAR/2 (diet OR dietary OR food OR beverage* OR nutrition*)):ab,ti)
#2	Cognitive Decline	'Cognition Defect'/exp OR 'Cognition'/exp OR cognition:ab,ti OR metacognit*:ab,ti OR meta-cognit*:ab,ti OR neurocognit*:ab,ti OR neuro-cognit*:ab,ti OR dementia*:ab,ti OR Alzheimer*:ab,ti OR senility:ab,ti OR senile:ab,ti OR presenile:ab,ti OR (cognit*:ab,ti AND (function*:ab,ti OR dysfunction*:ab,ti OR declin*:ab,ti OR deteriorat*:ab,ti OR degenerat*:ab,ti OR disorder*:ab,ti OR dysfunction*:ab,ti OR reduct*:ab,ti OR impair*:ab,ti OR deficit*:ab,ti OR deficien*:ab,ti OR progress*:ab,ti OR perform*:ab,ti OR abilit*:ab,ti))
#3		#1 AND #2
#4	Limits	#3 AND ([article]/lim OR [article in press]/lim) NOT ([animals]/lim NOT ([animals]/lim AND [humans]/lim)) AND [english]/lim NOT ([conference abstract]/lim OR [conference paper]/lim OR [conference review]/lim OR [editorial]/lim OR [erratum]/lim OR

		[letter]/lim OR [note]/lim OR 'retraction of publication':ab,ti OR 'retraction notice':ti OR 'retracted publication':ab,ti OR [review]/lim OR [systematic review]/lim OR [meta analysis]/lim OR protocol:ti OR protocols:ti OR 'practice guideline':ti) AND [1980-2024]/py

Database: Cochrane Central Register of Controlled Trials (CENTRAL)

Provider: John Wiley & Sons
Date(s) Searched: November 29, 2023 (initial search); November 29, 2023 – January 9, 2024 (continuous evidence monitoring)
Dates Covered: January 1, 1980 – January 9, 2024

Table A 6. Search for Cochrane CENTRAL

Search #	Concept	String
#1	Dietary Patterns	[mh "Diet, Mediterranean"] OR [mh "Dietary Approaches To Stop Hypertension"] OR [mh "Diet, Gluten-Free"] OR [mh "Diet, Paleolithic"] OR [mh "Diet, Vegetarian"] OR [mh "Diet, Healthy"] OR [mh "Diet, Western"] OR [mh "Diet, Fat-Restricted"] OR [mh "Diet, High-Fat"] OR [mh "Diet, Sodium-Restricted"] OR [mh "Guideline Adherence"] OR ("dietary pattern" OR "dietary patterns" OR "diet pattern" OR "diet patterns" OR "eating pattern" OR "eating patterns" OR "food pattern" OR "food patterns" OR "diet quality" OR "dietary quality" OR "diet variety" OR "dietary variety" OR "varied diet" OR "dietary guideline" OR "dietary guidelines" OR "dietary recommendation" OR "dietary recommendations" OR "dietary intake" OR "dietary intakes" OR "eating style" OR "eating styles" OR "Mediterranean Diet" OR "Mediterranean Diets" OR "Dietary Approaches To Stop Hypertension Diet" OR "Dietary Approaches To Stop Hypertension Diets" OR "DASH diet" OR "DASH diets" OR "Gluten Free diet" OR "Gluten Free diets" OR "prudent diet" OR "prudent diets" OR "Paleolithic Diet" OR "Paleolithic Diets" OR "vegetarian diet" OR "vegetarian diets" OR "vegan diet" OR "vegan diets" OR "healthy diet" OR "healthy diets" OR "plant based diet" OR "plant based diets" OR "Western diet" OR "Western diets" OR "Nordic Diet" OR "Nordic Diets" OR "Okinawan Diet" OR "Okinawan Diets" OR "high-fat diet" OR "high-fat diets" OR "low fat diet" OR "low fat diets" OR "low-sodium diet" OR "low-sodium diets" OR "low salt diet" OR "low salt diets" OR "diet score" OR "diet scores" OR "diet quality score" OR "diet quality scores" OR "diet quality index" OR "diet quality indexes" OR "diet quality indices" OR kidmed OR "diet index" OR "diet indexes" OR "diet indices" OR "dietary index" OR "dietary indexes" OR "dietary indices" OR "food score" OR "food scores" OR MedDietScore OR "healthy eating index" OR "healthy eating indexes" OR "healthy eating indices"):ti,ab,kw

		OR ("guideline adherence" NEAR/2 (diet OR dietary OR food OR beverage* OR nutrition*)):ti,ab,kw
#2	Cognitive Decline	[mh "Cognition Disorders"] OR [mh "Cognition"] OR [mh "Dementia"] OR (cognition OR metacognit* OR meta-cognit* OR neurocognit* OR neuro-cognit* OR dementia* OR Alzheimer* OR senility OR senile OR presenile OR (cognit* AND (function* OR dysfunction* OR declin* OR deteriorat* OR degenerat* OR disorder* OR dysfunction* OR reduct* OR impair* OR deficit* OR deficien* OR progress* OR perform* OR abilit*))):ti,ab,kw
#3		#1 AND #2 In Trials. Word variations searched. Publication Year from 1980 to 2024

Appendix 5: Excluded articles

The following table lists the articles excluded after full-text screening for this systematic review question. At least one reason for exclusion is provided for each article, though this may not reflect all possible reasons. Information about articles excluded after title and abstract screening is available upon request.

Table A 7. List of excluded articles with rationale

Number	Citation	Rationale
1	Adjibade, M.,Assmann, K. E.,Julia, C.,Galan, P.,Hercberg, S.,Kesse-Guyot, E. Prospective association between adherence to the MIND diet and subjective memory complaints in the French NutriNet-Santé cohort. J Neurol. 2019. 266:942-952. doi: 10.1007/s00415-019-09218-y	Data overlap
2	Agarwal, P.,Leurgans, S. E.,Agrawal, S.,Aggarwal, N. T.,Cherian, L. J.,James, B. D.,Dhana, K.,Barnes, L. L.,Bennett, D. A.,Schneider, J. A. Association of Mediterranean-DASH Intervention for Neurodegenerative Delay and Mediterranean Diets With Alzheimer Disease Pathology. Neurology. 2023. 100:e2259-e2268. doi: 10.1212/WNL.0000000000207176	Data overlap
3	Akbaraly, T. N.,Singh-Manoux, A.,Dugravot, A.,Brunner, E. J.,Kivimäki, M.,Sabia, S. Association of Midlife Diet With Subsequent Risk for Dementia. Jama. 2019. 321:957-968. doi: 10.1001/jama.2019.1432	Data overlap
4	Akbaraly, T. N.,Singh-Manoux, A.,Marmot, M. G.,Brunner, E. J. Education attenuates the association between dietary patterns and cognition. Dement Geriatr Cogn Disord. 2009. 27:147-54. doi: 10.1159/000199235	Study design
5	Akbaraly, T.,Sabia, S.,Hagger-Johnson, G.,Tabak, A. G.,Shipley, M. J.,Jokela, M.,Brunner, E. J.,Hamer, M.,Batty, G. D.,Singh-Manoux, A.,Kivimaki, M. Does overall diet in midlife predict future aging phenotypes? A cohort study. Am J Med. 2013. 126:411-419.e3. doi: 10.1016/j.amjmed.2012.10.028	Outcome
6	Allès, B.,Samieri, C.,Jutand, M. A.,Carmichael, P. H.,Shatenstein, B.,Gaudreau, P.,Ferland, G.,Barberger-Gateau, P.,Laurin, D. Nutrient Patterns, Cognitive Function, and Decline in Older Persons: Results from the Three-City and NuAge Studies. Nutrients. 2019. 11(8):1808. doi: 10.3390/nu11081808	Intervention/Exposure
7	Almendrales Rangel, C.,Noble, Y.,Radd-Vagenas, S.,Mavros, Y.,Flood, V. M.,O'Leary, F.,Brodaty, H.,Sachdev, P. S.,Heffernan, M.,Valenzuela, M.,Anstey, K. J.,Daniel, K.,Ginige, J. A.,San Jose, J. C.,Chau, T.,Garnés Rancurello, S.,Fiatarone Singh, M. A.. Nutrition Module design in Maintain Your Brain: an internet-based randomised controlled trial to prevent cognitive decline and dementia. Br J Nutr. 2022. 127:1259-1268. doi: 10.1017/S0007114521001859	Study design, Publication status
8	An, Y.,Zhang, X.,Wang, Y.,Wang, Y.,Liu, W.,Wang, T.,Qin, Z.,Xiao, R. Longitudinal and nonlinear relations of dietary and Serum cholesterol in midlife with cognitive decline: results from EMCOA study. Mol Neurodegener. 2019. 14:51. doi: 10.1186/s13024-019-0353-1	Intervention/Exposure
9	Anastasiou, C. A.,Yannakoulia, M.,Kontogianni, M. D.,Kosmidis, M. H.,Mamalaki, E.,Dardiotis, E.,Hadjigeorgiou, G.,Sakka, P.,Tsapanou, A.,Lykou, A.,Scarmeas, N. Mediterranean Lifestyle in Relation to Cognitive Health: Results from the HELIAD Study. Nutrients. 2018. 10(10):1557. doi: 10.3390/nu10101557	Data overlap
10	Anastasiou, C. A.,Yannakoulia, M.,Kosmidis, M. H.,Dardiotis, E.,Hadjigeorgiou, G. M.,Sakka, P.,Arampatzi, X.,Bougea, A.,Labropoulos, I.,Scarmeas, N. Mediterranean diet and cognitive health: Initial results from the Hellenic Longitudinal Investigation of Ageing and Diet. PLoS One. 2017. 12:e0182048. doi: 10.1371/journal.pone.0182048	Data overlap
11	Arjmand, G.,Abbas-Zadeh, M.,Eftekhari, M. H. Effect of MIND diet intervention on cognitive performance and brain structure in healthy obese women: a randomized controlled trial. Sci Rep. 2022. 12:2871. doi: 10.1038/s41598-021-04258-9	Outcome, Size of study groups

Number	Citation	Rationale
12	Assmann, K. E.,Adjibade, M.,Adriouch, S.,Andreeva, V. A.,Julia, C.,Hercberg, S.,Galan, P.,Kesse-Guyot, E. Association of diet quality and physical activity with healthy ageing in the French NutriNet-Santé cohort. Br J Nutr. 2019. 122:93-102. doi: 10.1017/S0007114519000898	Outcome
13	Assmann, K. E.,Adjibade, M.,Andreeva, V. A.,Hercberg, S.,Galan, P.,Kesse-Guyot, E. Association Between Adherence to the Mediterranean Diet at Midlife and Healthy Aging in a Cohort of French Adults. J Gerontol A Biol Sci Med Sci. 2018. 73:347-354. doi: 10.1093/gerona/glx066	Outcome
14	Assmann, K. E.,Andreeva, V. A.,Camilleri, G. M.,Verger, E. O.,Jeandel, C.,Hercberg, S.,Galan, P.,Kesse-Guyot, E. Dietary scores at midlife and healthy ageing in a French prospective cohort. Br J Nutr. 2016. 116:666-76. doi: 10.1017/S0007114516002233	Outcome
15	Assmann, K. E.,Lassale, C.,Andreeva, V. A.,Jeandel, C.,Hercberg, S.,Galan, P.,Kesse-Guyot, E. A Healthy Dietary Pattern at Midlife, Combined with a Regulated Energy Intake, Is Related to Increased Odds for Healthy Aging. J Nutr. 2015. 145:2139-45. doi: 10.3945/jn.115.210740	Outcome
16	Assmann, K. E.,Ruhunuhewa, I.,Adjibade, M.,Li, Z.,Varraso, R.,Hercberg, S.,Galan, P.,Kesse-Guyot, E. The Mediating Role of Overweight and Obesity in the Prospective Association between Overall Dietary Quality and Healthy Aging. Nutrients. 2018. 10(4):515. doi: 10.3390/nu10040515	Outcome
17	Bajerska, J.,Woźniewicz, M.,Suwalska, A.,Jeszka, J. Eating patterns are associated with cognitive function in the elderly at risk of metabolic syndrome from rural areas. Eur Rev Med Pharmacol Sci. 2014. 18:3234-45	Study design
18	Barberger-Gateau, P.,Raffaitin, C.,Letenneur, L.,Berr, C.,Tzourio, C.,Dartigues, J. F.,Alpérovitch, A. Dietary patterns and risk of dementia: the Three-City cohort study. Neurology. 2007. 69:1921-30. doi: 10.1212/01.wnl.0000278116.37320.52	Study design
19	Bartlett, L.,Brady, J. J. R.,Farrow, M.,Kim, S.,Bindoff, A.,Fair, H.,Vickers, J. C.,Sinclair, D. Change in modifiable dementia risk factors during COVID-19 lockdown: The experience of over 50s in Tasmania, Australia. Alzheimers Dement (NY). 2021. 7:e12169. doi: 10.1002/trc2.12169	Outcome
20	Berendsen, A. A. M.,Kang, J. H.,van de Rest, O.,Feskens, E. J. M.,de Groot, Lcpgm,Grodstein, F.. The Dietary Approaches to Stop Hypertension Diet, Cognitive Function, and Cognitive Decline in American Older Women. J Am Med Dir Assoc. 2017. 18:427-432. doi: 10.1016/j.jamda.2016.11.026	Data overlap
21	Berendsen, A. A. M.,Kang, J. H.,Van De Rest, O.,Jankovic, N.,Kampman, E.,Kiefte-De Jong, J. C.,Franco, O. H.,Ikram, M. A.,Pikhart, H.,Nilsson, L. M.,Brenner, H.,Boffetta, P.,Rafnsson, S. B.,Gustafson, D.,Kyrozis, A.,Trichopoulou, A.,Feskens, E. J. M.,Grodstein, F.,De Groot, L. C. P. G. M.. Association of Adherence to a Healthy Diet with Cognitive Decline in European and American Older Adults: A Meta-Analysis within the CHANCES Consortium. Dementia and Geriatric Cognitive Disorders. 2017. 43:215-227. doi: 10.1159/000464269	Study design
22	Berendsen, A. M.,Kang, J. H.,Feskens, E. J. M.,de Groot, Cpgm,Grodstein, F.,van de Rest, O.. Association of Long-Term Adherence to the MIND Diet with Cognitive Function and Cognitive Decline in American Women. J Nutr Health Aging. 2018. 22:222-229. doi: 10.1007/s12603-017-0909-0.	Data overlap
23	Berti, V.,Walters, M.,Sterling, J.,Quinn, C. G.,Logue, M.,Andrews, R.,Matthews, D. C.,Osorio, R. S.,Pupi, A.,Vallabhajosula, S.,Isaacson, R. S.,de Leon, M. J.,Mosconi, L. Mediterranean diet and 3-year Alzheimer brain biomarker changes in middle-aged adults. Neurology. 2018. 90:e1789-e1798. doi: 10.1212/WNL.0000000000005527	Outcome
24	Beydoun, H. A.,Beydoun, M. A.,Maldonado, A. I.,Fanelli-Kuczmarski, M. T.,Weiss, J.,Evans, M. K.,Zonderman, A. B. Allostatic Load and Cognitive Function Among Urban Adults in the Healthy Aging in Neighborhoods of Diversity across the Life Span Study. J Alzheimers Dis. 2023. 92:425-443. doi: 10.3233/JAD-220888	Intervention/Exposure

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25	Bhushan, A.,Fondell, E.,Ascherio, A.,Yuan, C.,Grodstein, F.,Willett, W. Adherence to Mediterranean diet and subjective cognitive function in men. Eur J Epidemiol. 2018. 33:223-234. doi: 10.1007/s10654-017-0330-3	Data overlap
26	Blondal, B. S.,Geirsdottir, O. G.,Halldorsson, T. I.,Beck, A. M.,Jonsson, P. V.,Ramel, A. HOMEFOOD randomised trial - Six-month nutrition therapy improves quality of life, self-rated health, cognitive function, and depression in older adults after hospital discharge. Clin Nutr ESPEN. 2022. 48:74-81. doi: 10.1016/j.clnesp.2022.01.010.	Intervention/Exposure
27	Blumenthal, J. A.,Smith, P. J.,Mabe, S.,Hinderliter, A.,Lin, P. H.,Liao, L.,Welsh-Bohmer, K. A.,Browndyke, J. N.,Kraus, W. E.,Doraiswamy, P. M.,Burke, J. R.,Sherwood, A. Lifestyle and neurocognition in older adults with cognitive impairments: A randomized trial. Neurology. 2019. 92:e212-e223. doi: 10.1212/WNL.0000000000006784.	Participant health status
28	Blumenthal, J. A.,Smith, P. J.,Mabe, S.,Hinderliter, A.,Welsh-Bohmer, K.,Browndyke, J. N.,Doraiswamy, P. M.,Lin, P. H.,Kraus, W. E.,Burke, J. R.,Sherwood, A. Longer Term Effects of Diet and Exercise on Neurocognition: 1-Year Follow-up of the ENLIGHTEN Trial. J Am Geriatr Soc. 2020. 68:559-568. doi: 10.1111/jgs.16252	Participant health status
29	Bojar, I.,Wierzbińska-Stępniak, A.,Witczak, M.,Raczkiewicz, D.,Owoc, A. Are cognitive functions in post-menopausal women related with the contents of macro- and micro-components in the diet?. Ann Agric Environ Med. 2015. 22:178-84. doi: 10.5604/12321966.1141391	Intervention/Exposure
30	Borda, M.G., Br?nnick, K.K., Garcia-Cifuentes, E., Jaramillo-Jimenez, A., Reyes-Ortiz, C., Patricio-Baldera, J., Soennesyn, H., P?rez-Zepeda, M.U., Vik-Mo, A.O., Aarsland, D.. Specific neuropsychiatric symptoms are associated with functional decline trajectories in Alzheimer?s disease and Lewy body dementia: a five-year follow-up study. Frontiers in Medicine. 2023. 10:1267060. doi: 10.3389/fmed.2023.1267060	Intervention/Exposure, Outcome
31	Bramorska, A.,Zarzycka, W.,Podolecka, W.,Kuc, K.,Brzezicka, A. Age-Related Cognitive Decline May Be Moderated by Frequency of Specific Food Products Consumption. Nutrients. 2021. 13(8):2504. doi: 10.3390/nu13082504	Study design
32	Brinkley, T. E.,Leng, I.,Register, T. C.,Neth, B. J.,Zetterberg, H.,Blennow, K.,Craft, S. Changes in Adiposity and Cerebrospinal Fluid Biomarkers Following a Modified Mediterranean Ketogenic Diet in Older Adults at Risk for Alzheimer's Disease. Frontiers in Neuroscience. 2022. 16:906539. doi: 10.3389/fnins.2022.906539	Study duration 4-8 wk
33	Cadar, D.,Pikhart, H.,Mishra, G.,Stephen, A.,Kuh, D.,Richards, M. The role of lifestyle behaviors on 20-year cognitive decline. J Aging Res. 2012. 2012:304014. doi: 10.1155/2012/304014	Intervention/exposure
34	Capurso, A.,Solfrizzi, V.,Panza, F.,Torres, F.,Mastroianni, F.,Grassi, A.,Del Parigi, A.,Capurso, C.,Pirozzi, M. R.,Centonze, S.,Misciagna, G. Dietary patterns and cognitive functions in elderly subjects. Aging (Milano). 1997. 9:45-7.	Publication status
35	Chan, R.,Chan, D.,Woo, J.. A cross sectional study to examine the association between dietary patterns and cognitive impairment in older Chinese people in Hong Kong. J Nutr Health Aging. 2013. 17:757-65. doi: 10.1007/s12603-013-0348-5	Study design, Country
36	Chan, R.,Yau, F.,Yu, B.,Woo, J.. The Role of Dietary Patterns in the Contribution of Cardiorespiratory Fitness in Community-Dwelling Older Chinese Adults in Hong Kong. J Am Med Dir Assoc. 2019. 20:558-563. doi: 10.1016/j.jamda.2018.12.009	Outcome
37	Charisis, S.,Ntanasi, E.,Yannakoulia, M.,Anastasiou, C. A.,Kosmidis, M. H.,Dardiotis, E.,Gargalionis, A. N.,Patas, K.,Chatzipanagiotou, S.,Mourtzinos, I.,Tzima, K.,Hadjigeorgiou, G.,Sakka, P.,Kapogiannis, D.,Scarmeas, N. Diet Inflammatory Index and Dementia Incidence: A Population-Based Study. Neurology. 2021. 97:e2381-e2391. doi: 10.1212/WNL.0000000000012973	Intervention/exposure

Number	Citation	Rationale
38	Chen, C.,Hayden, K. M.,Kaufman, J. D.,Espeland, M. A.,Whitsel, E. A.,Serre, M. L.,Vizuete, W.,Orchard, T. S.,Wang, X.,Chui, H. C.,D'Alton, M. E.,Chen, J. C.,Kahe, K.. Adherence to a MIND-Like Dietary Pattern, Long-Term Exposure to Fine Particulate Matter Air Pollution, and MRI-Based Measures of Brain Volume: The Women's Health Initiative Memory Study-MRI. Environ Health Perspect. 2021. 129:127008. doi: 10.1289/EHP8036	Outcome
29	Chen, H., Dunk, M.M., Wang, B., Zhao, M., Shen, J., Zong, G., Pan, Y., Tong, L., Xu, W., Yuan, C.. Associations of the Mediterranean-DASH Intervention for Neurodegenerative Delay diet with brain structural markers and their changes. Alzheimer's and Dementia. 2023. 20(2):1190-1200. doi: 10.1002/alz.13521	Outcome
40	Chen, R. C.,Chang, Y. H.,Lee, M. S.,Wahlqvist, M. L.. Dietary quality may enhance survival related to cognitive impairment in Taiwanese elderly. Food Nutr Res. 2011. 55. doi: 10.3402/fnr.v55i0.7387	Study design, Country
41	Chen, X.,Huang, Y.,Cheng, H. G.. Lower intake of vegetables and legumes associated with cognitive decline among illiterate elderly Chinese: a 3-year cohort study. J Nutr Health Aging. 2012. 16:549-52. doi: 10.1007/s12603-012-0023-2	Country
42	Cherbuin, N.,Anstey, K. J. The Mediterranean diet is not related to cognitive change in a large prospective investigation: the PATH Through Life study. Am J Geriatr Psychiatry. 2012. 20:635-9. doi: 10.1097/JGP.0b013e31823032a9	Data overlap
43	Cherian, L.,Wang, Y.,Fakuda, K.,Leurgans, S.,Aggarwal, N.,Morris, M. Mediterranean-Dash Intervention for Neurodegenerative Delay (MIND) Diet Slows Cognitive Decline After Stroke. J Prev Alzheimers Dis. 2019. 6:267-273. doi: 10.14283/jpad.2019.28	Participant health status
44	Chlebowski, R. T.,Rapp, S.,Aragaki, A. K.,Pan, K.,Neuhouser, M. L.,Snetselaar, L. G.,Manson, J. E.,Wactawski-Wende, J.,Johnson, K. C.,Hayden, K.,Baker, L. D.,Henderson, V. W.,Garcia, L.,Qi, L.,Prentice, R. L.. Low-fat dietary pattern and global cognitive function: Exploratory analyses of the Women's Health Initiative (WHI) randomized Dietary Modification trial. EClinicalMedicine. 2020. 18:100240. doi: 10.1016/j.eclinm.2019.100240	Data overlap
45	Choo, J. M.,Murphy, K. J.,Wade, A. T.,Wang, Y.,Bracci, E. L.,Davis, C. R.,Dyer, K. A.,Woodman, R. J.,Hodgson, J. M.,Rogers, G. B. Interactions between Mediterranean Diet Supplemented with Dairy Foods and the Gut Microbiota Influence Cardiovascular Health in an Australian Population. Nutrients. 2023. 15(16):3645. doi: 10.3390/nu15163645	Study duration 8-12 wk
46	Chou, C. C.,Li, Y. J.,Wang, C. J.,Lyu, L. C.. A mini-flipped, game-based Mediterranean diet learning program on dietary behavior and cognitive function among community-dwelling older adults in Taiwan: A cluster-randomized controlled trial. Geriatr Nurs. 2022. 45:160-168. doi: 10.1016/j.gerinurse.2022.03.009	Study duration 8-12 wk
47	Chuang, S. Y.,Lo, Y. L.,Wu, S. Y.,Wang, P. N.,Pan, W. H. Dietary Patterns and Foods Associated With Cognitive Function in Taiwanese Older Adults: The Cross-sectional and Longitudinal Studies. J Am Med Dir Assoc. 2019. 20:544-550.e4. doi: 10.1016/j.jamda.2018.10.017	Country
48	Corley, J.,Starr, J. M.,McNeill, G.,Deary, I. J.. Do dietary patterns influence cognitive function in old age?. Int Psychogeriatr. 2013. 25:1393-407. doi: 10.1017/S1041610213000793	Study design
49	D Yuan, H Tang, P Yang, C Guo. Taste preferences, cardiometabolic diseases, and mild cognitive impairment: A prospective cohort analysis of older Chinese adults. The British journal of nutrition. 2023. 131(6):1064-1073. doi: 10.1017/S0007114523002593	Intervention/exposure
50	D'Anci, K. E.,Watts, K. L.,Kanarek, R. B.,Taylor, H. A. Low-carbohydrate weight-loss diets. Effects on cognition and mood. Appetite. 2009. 52:96-103. doi: 10.1016/j.appet.2008.08.009	Study duration <4 wk, Study design
51	DE Jensen, KP Ebmeier, T Akbaraly, MG Jansen, A Singh-Manoux, M Kivimäki, E Zsoldos, MC Klein-Flügge, S Suri. The association of longitudinal diet and waist-to-hip ratio from midlife to old age with hippocampus connectivity and memory in old age: a cohort study. bioRxiv: the preprint server for biology. 2023. 12.12.570778. doi: 10.1101/2023.12.12.570778	Publication status

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52	Dearborn-Tomazos, J. L.,Wu, A.,Steffen, L. M.,Anderson, C. A. M.,Hu, E. A.,Knopman, D.,Mosley, T. H.,Gottesman, R. F.. Association of Dietary Patterns in Midlife and Cognitive Function in Later Life in US Adults Without Dementia. JAMA Netw Open. 2019. 2:e1916641. doi: 10.1001/jamanetworkopen.2019.16641	Data overlap
53	Deschamps, V.,Astier, X.,Ferry, M.,Rainfray, M.,Emeriau, J. P.,Barberger-Gateau, P.. Nutritional status of healthy elderly persons living in Dordogne, France, and relation with mortality and cognitive or functional decline. Eur J Clin Nutr. 2002. 56:305-12. doi: 10.1038/sj.ejcn.1601311	Intervention/exposure
54	Dhana, K.,Evans, D. A.,Rajan, K. B.,Bennett, D. A.,Morris, M. C.. Healthy lifestyle and the risk of Alzheimer dementia: Findings from 2 longitudinal studies. Neurology. 2020. 95:e374-e383. doi: 10.1212/WNL.0000000000009816	Intervention/exposure
55	Dhana, K.,Franco, O. H.,Ritz, E. M.,Ford, C. N.,Desai, P.,Krueger, K. R.,Holland, T. M.,Dhana, A.,Liu, X.,Aggarwal, N. T.,Evans, D. A.,Rajan, K. B.. Healthy lifestyle and life expectancy with and without Alzheimer's dementia: population based cohort study. Bmj. 2022. 377:e068390. doi: 10.1136/bmj-2021-068390	Intervention/exposure
56	Dilmore, A. H.,Martino, C.,Neth, B. J.,West, K. A.,Zemlin, J.,Rahman, G.,Panitchpakdi, M.,Meehan, M. J.,Weldon, K. C.,Blach, C.,Schimmel, L.,Kaddurah-Daouk, R.,Dorrestein, P. C.,Knight, R.,Craft, S.. Effects of a ketogenic and low-fat diet on the human metabolome, microbiome, and foodome in adults at risk for Alzheimer's disease. Alzheimers Dement. 2023. 19:4805-4816. doi: 10.1002/alz.13007	Study duration 4-8 wk
57	Ding, K.,Zeng, J.,Zhang, X.,Wang, Y.,Liang, F.,Wang, L.,Guo, T.,Moore, J. B.,Li, R.. Changes in Plant-Based Dietary Quality and Subsequent Risk of Cognitive Impairment Among Older Chinese Adults: a National Community-Based Cohort Study. Am J Clin Nutr. 2023. 118:201-208. doi: 10.1016/j.ajcnut.2023.05.018	Country
58	Dobreva, I.,Marston, L.,Mukadam, N.. Which components of the Mediterranean diet are associated with dementia? A UK Biobank cohort study. GeroScience. 2022. 44:2541-2554. doi: 10.1007/s11357-022-00615-2	Intervention/exposure
59	Doorduijn, A. S.,de van der Schueren, M. A. E.,van de Rest, O.,de Leeuw, F. A.,Hendriksen, H. M. A.,Teunissen, C. E.,Scheltens, P.,van der Flier, W. M.,Visser, M.. Nutritional Status Is Associated With Clinical Progression in Alzheimer's Disease: The NUDAD Project. J Am Med Dir Assoc. 2023. 24:638-644.e1. doi: 10.1016/j.jamda.2020.10.020	Study design
60	Duan, H.,Zhou, D.,Xu, N.,Yang, T.,Wu, Q.,Wang, Z.,Sun, Y.,Li, Z.,Li, W.,Ma, F.,Chen, Y.,Du, Y.,Zhang, M.,Yan, J.,Sun, C.,Wang, G.,Huang, G.. Association of Unhealthy Lifestyle and Genetic Risk Factors With Mild Cognitive Impairment in Chinese Older Adults. JAMA Netw Open. 2023. 6:e2324031. doi: 10.1001/jamanetworkopen.2023.24031	Intervention/exposure
61	Duggan, M. R.,Butler, L.,Peng, Z.,Daya, G. N.,Moghekar, A.,An, Y.,Rapp, S. R.,Hayden, K. M.,Shadyab, A. H.,Natale, G.,Liu, L.,Snetselaar, L.,Moaddel, R.,Rebholz, C. M.,Sullivan, K.,Ballantyne, C. M.,Resnick, S. M.,Ferrucci, L.,Walker, K. A.. Plasma proteins related to inflammatory diet predict future cognitive impairment. Mol Psychiatry. 2023. 28:1599-1609. doi: 10.1038/s41380-023-01975-7	Intervention/exposure
62	Edwards, L. M.,Murray, A. J.,Holloway, C. J.,Carter, E. E.,Kemp, G. J.,Codreanu, I.,Brooker, H.,Tyler, D. J.,Robbins, P. A.,Clarke, K.. Short-term consumption of a high-fat diet impairs whole-body efficiency and cognitive function in sedentary men. Faseb j. 2011. 25:1088-96. doi: 10.1096/fj.10-171983	Study duration, <4 wk
63	Eskelinen, M. H.,Ngandu, T.,Tuomilehto, J.,Soininen, H.,Kivipelto, M.. Midlife healthy-diet index and late-life dementia and Alzheimer's disease. Dement Geriatr Cogn Dis Extra. 2011. 1:103-12. doi: 10.1159/000327518	Data overlap
64	Estrella, M. L.,Durazo-Arvizu, R. A.,Mattei, J.,Mossavar-Rahmani, Y.,Perreira, K. M.,Siega-Riz, A. M.,Sotres-Alvarez, D.,González, H. M.,Gallo, L. C.,Daviglus, M. L.,Lamar, M.. Alternate Healthy Eating Index is Positively Associated with Cognitive Function Among Middle-Aged and Older Hispanics/Latinos in the HCHS/SOL. J Nutr. 2020. 150:1478-1487. doi: 10.1093/jn/nxaa023	Study design

Number	Citation	Rationale
65	Fan, S. M.,Chiu, P. Y.,Liu, C. H.,Liao, Y. C.,Chang, H. T.. Predictive value of hypercholesterolemia, vegetarian diet, and hypertension for incident dementia among elderly Taiwanese individuals with low educational levels. Ther Adv Chronic Dis. 2023. 14:20406223231171549. doi: 10.1177/20406223231171549	Intervention/exposure
66	Féart, C.,Samieri, C.,Rondeau, V.,Amieva, H.,Portet, F.,Dartigues, J. F.,Scarmeas, N.,Barberger-Gateau, P.. Adherence to a Mediterranean diet, cognitive decline, and risk of dementia. Jama. 2009. 302:638-48. doi: 10.1001/jama.2009.1146	Data overlap
67	Feng, Z.,Cramm, J. M.,Nieboer, A. P.. A healthy diet and physical activity are important to promote healthy ageing among older Chinese people. J Int Med Res. 2019. 47:6061-6081. doi: 10.1177/0300060519882590	Study design, Country
68	Ferrand, C.,Féart, C.,Martinent, G.,Albinet, C.,André, N.,Audiffren, M.. Dietary patterns in French home-living older adults: Results from the PRAUSE study. Arch Gerontol Geriatr. 2017. 70:180-185. doi: 10.1016/j.archger.2017.01.015	Study design
69	Ferreira, N. V.,Lotufo, P. A.,Marchioni, D. M. L.,Barreto, S. M.,Viana, M. C.,Caramelli, P.,Bensenor, I. J. M.,Suemoto, C. K.. Association Between Adherence to the MIND Diet and Cognitive Performance is Affected by Income: The ELSA-Brasil Study. Alzheimer Dis Assoc Disord. 2022. 36:133-139. doi: 10.1097/WAD.0000000000000491	Study design
70	Fieldhouse, J. L. P.,Doorduijn, A. S.,de Leeuw, F. A.,Verhaar, B. J. H.,Koene, T.,Wesselman, L. M. P.,Schueren, M. V.,Visser, M.,Rest, O. V.,Scheltens, P.,Kester, M. I.,Flier, W. M. V.. A Suboptimal Diet is Associated with Poorer Cognition: The NUDAD Project. Nutrients. 2020. 12(3);703. doi: 10.3390/nu12030703	Study design
71	Fortune, N. C.,Harville, E. W.,Guralnik, J. M.,Gustat, J.,Chen, W.,Qi, L.,Bazzano, L. A.. Dietary intake and cognitive function: evidence from the Bogalusa Heart Study. Am J Clin Nutr. 2019. 109:1656-1663. doi: 10.1093/ajcn/nqz026	Data overlap
72	Fostinelli, S.,Ferrari, C.,De Amicis, R.,Giustizieri, V.,Leone, A.,Bertoli, S.,Battezzati, A.,Binetti, G.,Cappa, S. F.. The Impact of Nutrition on Cognitive Performance in a Frail Elderly Population Living in Northern Italy. J Am Nutr Assoc. 2023. 42:484-494. doi: 10.1080/27697061.2022.2084180	Study design, Intervention/exposure
73	Franzon, K.,Byberg, L.,Sjögren, P.,Zethelius, B.,Cederholm, T.,Kilander, L.. Predictors of Independent Aging and Survival: A 16-Year Follow-Up Report in Octogenarian Men. J Am Geriatr Soc. 2017. 65:1953-1960. doi: 10.1111/jgs.14971	Outcome
74	Gallucci, M.,Mazzuco, S.,Ongaro, F.,Di Giorgi, E.,Mecocci, P.,Cesari, M.,Albani, D.,Forloni, G. L.,Durante, E.,Gajo, G. B.,Zanardo, A.,Siculi, M.,Caberlotto, L.,Regini, C.. Body mass index, lifestyles, physical performance and cognitive decline: the "Treviso Longeva (TRELONG)" study. J Nutr Health Aging. 2013. 17:378-84. doi: 10.1007/s12603-012-0397-1	Intervention/exposure
75	Gallucci, M.,Pallucca, C.,Di Battista, M. E.,Fougère, B.,Grossi, E.. Artificial Neural Networks Help to Better Understand the Interplay Between Cognition, Mediterranean Diet, and Physical Performance: Clues from TRELONG Study. J Alzheimers Dis. 2019. 71:1321-1330. doi: 10.3233/JAD-190609	Study design, Outcome
76	Gardener, S. L.,Rainey-Smith, S. R.,Barnes, M. B.,Sohrabi, H. R.,Weinborn, M.,Lim, Y. Y.,Harrington, K.,Taddei, K.,Gu, Y.,Rembach, A.,Szoeke, C.,Ellis, K. A.,Masters, C. L.,Macaulay, S. L.,Rowe, C. C.,Ames, D.,Keogh, J. B.,Scarmeas, N.,Martins, R. N. Dietary patterns and cognitive decline in an Australian study of ageing. Mol Psychiatry. 2015. 20:860-6. doi: 10.1038/mp.2014.79	Data overlap
77	Gariballa, S.,Forster, S.. Effects of dietary supplements on depressive symptoms in older patients: a randomised double-blind placebo-controlled trial. Clinical nutrition (Edinburgh, Scotland). 2007. 26:545-551. doi: 10.1016/j.clnu.2007.06.007	Intervention/exposure, Study duration 4-8 wk
78	Gatto, N. M.,Garcia-Cano, J.,Irani, C.,Jaceldo-Siegl, K.,Liu, T.,Chen, Z.,Paul, J.,Fraser, G.,Wang, C.,Lee, G. J.. Vegetarian Dietary Patterns and Cognitive Function among Older Adults: The Adventist Health Study-2. J Nutr Gerontol Geriatr. 2021. 40:197-214. doi: 10.1080/21551197.2021.1965939	Study design

Number	Citation	Rationale
79	Gauci, S.,Young, L. M.,White, D. J.,Reddan, J. M.,Lassemillante, A. C.,Meyer, D.,Pipingas, A.,Scholey, A.Diet May Moderate the Relationship Between Arterial Stiffness and Cognitive Performance in Older Adults. J Alzheimers Dis. 2022. 85:815-828. doi: 10.3233/JAD-210567	Study design
80	Gaynor, A. M.,Varangis, E.,Song, S.,Gazes, Y.,Habeck, C.,Stern, Y.,Gu, Y. Longitudinal association between changes in resting-state network connectivity and cognition trajectories: The moderation role of a healthy diet. Front Hum Neurosci. 2022. 16:1043423. doi: 10.3233/JAD-210567	Intervention/exposure
81	Gaynor, A. M.,Varangis, E.,Song, S.,Gazes, Y.,Noofoory, D.,Babukutty, R. S.,Habeck, C.,Stern, Y.,Gu, Y.. Diet moderates the effect of resting state functional connectivity on cognitive function. Sci Rep. 2022. 12:16080. doi: 10.1038/s41598-022-20047-4	Study design
82	Gentreau, M.,Chuy, V.,Féart, C.,Samieri, C.,Ritchie, K.,Raymond, M.,Berticat, C.,Artero, S.. Refined carbohydrate-rich diet is associated with long-term risk of dementia and Alzheimer's disease in apolipoprotein E ε4 allele carriers. Alzheimer's and Dementia. 2020. 16:1043-1053. doi: 10.1002/alz.12114	Intervention/exposure
83	Gkotzamanis, V.,Panagiotakos, D.,Yannakoulia, M.,Kosmidis, M.,Dardiotis, E.,Hadjigeorgiou, G.,Sakka, P.,Scarmeas, N.. Trajectories of healthy aging and their association with the Mediterranean diet: The HELIAD Study. Maturitas. 2022. 159:33-39. doi: 10.1016/j.maturitas.2022.01.003	Outcome
84	Godos, J.,Grosso, G.,Ferri, R.,Caraci, F.,Lanza, G.,Al-Qahtani, W. H.,Caruso, G.,Castellano, S.. Mediterranean diet, mental health, cognitive status, quality of life, and successful aging in southern Italian older adults. Exp Gerontol. 2023. 175:112143. doi: 10.1016/j.exger.2023.112143	Study design
85	Gopinath, B.,Russell, J.,Kifley, A.,Flood, V. M.,Mitchell, P.. Adherence to Dietary Guidelines and Successful Aging Over 10 Years. J Gerontol A Biol Sci Med Sci. 2016. 71:349-55. doi: 10.1093/gerona/glv189	Outcome
86	Goshen, A., Goldbourt, U., Benyamini, Y., Shimony, T., Keinan-Boker, L., Gerber, Y.. Diet Quality and Incident Frailty in Adults 65 Years or Older: The Israeli Longitudinal Study on Aging. Mayo Clinic Proceedings. 2023. 98:1774. doi: 10.1016/j.mayocp.2023.08.015	Publication status, Outcome
87	Goshen, A.,Goldbourt, U.,Benyamini, Y.,Shimony, T.,Keinan-Boker, L.,Gerber, Y.. Association of Diet Quality With Longevity and Successful Aging in Israeli Adults 65 Years or Older. JAMA Netw Open. 2022. 5:e2214916. doi: 10.1001/jamanetworkopen.2022.14916	No key confounders accounted for
88	Gu, Q.,Sable, C. M.,Brooks-Wilson, A.,Murphy, R. A.. Dietary patterns in the healthy oldest old in the healthy aging study and the Canadian longitudinal study of aging: a cohort study. BMC Geriatr. 2020. 20:106. doi: 10.1186/s12877-020-01507-w	Outcome
89	Gu, Y.,Guo, J.,Moshfegh, A. J.. Race/ethnicity and gender modify the association between diet and cognition in U.S. older adults: National Health and Nutrition Examination Survey 2011-2014. Alzheimer's and Dementia: Translational Research and Clinical Interventions. 2021. 7(1);e12128. doi: 10.1002/trc2.12128	Study design
90	Gu, Y.,Luchsinger, J. A.,Stern, Y.,Scarmeas, N.. Mediterranean diet, inflammatory and metabolic biomarkers, and risk of Alzheimer's disease. J Alzheimers Dis. 2010. 22:483-92. doi: 10.3233/JAD-2010-100897	Data overlap
91	Guan, Y., Cheng, C.H., Bellomo, L.I., Narain, S., Bigornia, S.J., Garelnabi, M.O., Scott, T., Ordov?s, J.M., Tucker, K.L., Bhadelia, R., Koo, B.-B.. APOE4 allele-specific associations between diet, multimodal biomarkers, and cognition among Puerto Rican adults in Massachusetts. Frontiers in Aging Neuroscience. 2023. 15:15:1285333. doi: 10.3389/fnagi.2023.1285333	Intervention/exposure
92	Gyorkos, A.,Baker, M. H.,Miutz, L. N.,Lown, D. A.,Jones, M. A.,Houghton-Rahrig, L. D.. Carbohydrate-restricted Diet and Exercise Increase Brain-derived Neurotrophic Factor and Cognitive Function: A Randomized Crossover Trial. Cureus. 2019. 11:e5604. doi: 10.7759/cureus.5604	Study duration <4 wk

Number	Citation	Rationale
93	Halloway, S.,Wagner, M.,Tangney, C.,Lange-Maia, B. S.,Bennett, D. A.,Arvanitakis, Z.,Schoeny, M. E.. Profiles of lifestyle health behaviors and cognitive decline in older adults. Alzheimers Dement. 2023. 20(1):472-482. doi: 10.1002/alz.13459	Intervention/exposure
94	Halyburton, A. K.,Brinkworth, G. D.,Wilson, C. J.,Noakes, M.,Buckley, J. D.,Keogh, J. B.,Clifton, P. M.. Low- and high-carbohydrate weight-loss diets have similar effects on mood but not cognitive performance. Am J Clin Nutr. 2007. 86:580-7. doi: 10.1093/ajcn/86.3.580	Study duration 8-12 wk, Intervention/exposure
95	Hardman, R. J.,Meyer, D.,Kennedy, G.,Macpherson, H.,Scholey, A. B.,Pipingas, A.. Findings of a Pilot Study Investigating the Effects of Mediterranean Diet and Aerobic Exercise on Cognition in Cognitively Healthy Older People Living Independently within Aged-Care Facilities: The Lifestyle Intervention in Independent Living Aged Care (LIILAC) Study. Curr Dev Nutr. 2020. 4:nzaa077. doi: 10.1093/cdn/nzaa077	Size of study groups
96	Hardman, R. J.,Meyer, D.,Kennedy, G.,Macpherson, H.,Scholey, A. B.,Pipingas, A.. The association between adherence to a Mediterranean style diet and cognition in older people: The impact of medication. Clin Nutr. 2018. 37:2156-2165. doi: 10.1016/j.clnu.2017.10.015	Study design
97	Haring, B.,Wu, C.,Mossavar-Rahmani, Y.,Snetselaar, L.,Brunner, R.,Wallace, R. B.,Neuhouser, M. L.,Wassertheil-Smoller, S.. No Association between Dietary Patterns and Risk for Cognitive Decline in Older Women with 9-Year Follow-Up: Data from the Women's Health Initiative Memory Study. J Acad Nutr Diet. 2016. 116:921-930.e1. doi: 10.1016/j.jand.2015.12.017	Data overlap
98	Harris, E.. MIND Diet No Better Than Control for Adults at Risk of Dementia. Jama. 2023. 330:585. doi: 10.1001/jama.2023.13134	Publication status
99	Hassan, S.,Aguirre, E.,Betz, A.,Robertson, S.,Sankhla, D.,Cooper, C.. Evaluating the effect of Brainfood groups for people with mild cognitive impairment and mild dementia: preliminary mixed-methodology study. BJPsych Open. 2018. 4:208-214. doi: 10.1192/bjo.2018.29	Study design, study duration 4-8 wk
100	Hayden, K. M.,Beavers, D. P.,Steck, S. E.,Hebert, J. R.,Tabung, F. K.,Shivappa, N.,Casanova, R.,Manson, J. E.,Padula, C. B.,Salmoirago-Blotcher, E.,Snetselaar, L. G.,Zaslavsky, O.,Rapp, S. R.. The association between an inflammatory diet and global cognitive function and incident dementia in older women: The Women's Health Initiative Memory Study. Alzheimer's and Dementia. 2017. 13:1187-1196. doi: 10.1016/j.jalz.2017.04.004	Intervention/exposure
101	Holloway, C. J.,Cochlin, L. E.,Emmanuel, Y.,Murray, A.,Codreanu, I.,Edwards, L. M.,Szmigielski, C.,Tyler, D. J.,Knight, N. S.,Saxby, B. K.,Lambert, B.,Thompson, C.,Neubauer, S.,Clarke, K.. A high-fat diet impairs cardiac high-energy phosphate metabolism and cognitive function in healthy human subjects. Am J Clin Nutr. 2011. 93:748-55. doi: 10.3945/ajcn.110.002758	Study duration <4 wk
102	Hoscheidt, S.,Sanderlin, A. H.,Baker, L. D.,Jung, Y.,Lockhart, S.,Kellar, D.,Whitlow, C. T.,Hanson, A. J.,Friedman, S.,Register, T.,Leverenz, J. B.,Craft, S.. Mediterranean and Western diet effects on Alzheimer's disease biomarkers, cerebral perfusion, and cognition in mid-life: A randomized trial. Alzheimers Dement. 2022. 18:457-468. doi: 10.1002/alz.12421	Study duration <4 wk
103	Hosking, D. E.,Nettelbeck, T.,Wilson, C.,Danthiir, V.. Retrospective lifetime dietary patterns predict cognitive performance in community-dwelling older Australians. Br J Nutr. 2014. 112:228-37. doi: 10.1017/S0007114514000646	Study design
104	Hossain, S.,Beydoun, M. A.,Weiss, J.,Kuczmarski, M. F.,Evans, M. K.,Zonderman, A. B.. Longitudinal associations between dietary quality and Alzheimer's disease genetic risk on cognitive performance among African American adults. Br J Nutr. 2020. 124:1264-1276. doi: 10.1017/S0007114520001269	Intervention/exposure
105	Hou, C.,Lin, Y.,Zimmer, Z.,Fang, X.. The association of healthy behaviors with cognitive health expectancy in Chinese older adults: a population-based cohort study. Aging (Albany NY). 2020. 12:16999-17021. doi: 10.18632/aging.103617	Intervention/exposure

Number	Citation	Rationale
106	Hu, W.,Zhang, H.,Ni, R.,Cao, Y.,Fang, W.,Chen, Y.,Pan, G.. Interaction between the animal-based dietary pattern and green space on cognitive function among Chinese older adults: A prospective cohort study. Int J Hyg Environ Health. 2023. 250:114147. doi: 10.1016/j.ijheh.2023.114147	Country
107	Huang, L.,Tao, Y.,Chen, H.,Chen, X.,Shen, J.,Zhao, C.,Xu, X.,He, M.,Zhu, D.,Zhang, R.,Yang, M.,Zheng, Y.,Yuan, C.. Mediterranean-Dietary Approaches to Stop Hypertension Intervention for Neurodegenerative Delay (MIND) Diet and Cognitive Function and its Decline: A Prospective Study and Meta-analysis of Cohort Studies. American Journal of Clinical Nutrition. 2023. 118:174-182. doi: 10.1016/j.ajcnut.2023.04.025	Country
108	Huang, Q.,Jiang, H.,Zhang, J.,Jia, X.,Huang, F.,Wang, H.,Zhang, B.,Wang, L.,Gu, M.,Huang, Y.,Shi, W.,Ma, Y.,Zhang, X.,Wang, Z.. Dietary Patterns Are Associated With Multi-Dimensional Cognitive Functions Among Adults Aged 55 and Older in China. Front Nutr. 2022. 9:806871. doi: 10.3389/fnut.2022.806871	Study design
109	I Domínguez-López, R Casas, G Chiva-Blanch, MÁ Martínez-González, M Fitó, E Ros, RM Lamuela-Raventós, R Estruch. Serum vitamin B12 concentration is associated with improved memory in older individuals with higher adherence to the Mediterranean diet. Clinical nutrition (Edinburgh, Scotland). 2023. 42(12):2562-2568. doi: 10.1016/j.clnu.2023.10.025	Intervention/exposure
110	Jakobsen, L. H.,Kondrup, J.,Zellner, M.,Tetens, I.,Roth, E. Effect of a high protein meat diet on muscle and cognitive functions: A randomised controlled dietary intervention trial in healthy men. Clinical Nutrition. 2011. 30:303-311. doi: 10.1016/j.clnu.2010.12.010	Study duration <4 wk
111	Jeong EH., E Kim, CH Hong, SY Moon, HK Park, JH Jeong, HR Na, SH Choi, YK Park. Practicability of Six Weeks of Korean-Style Mediterranean Diet for Elderly Koreans with High Risk for Dementia. J korean diet assoc. 2019. 25:237-256.	Study duration 4-8 wk
112	Jia, F.,Liu, F.,Li, X.,Shi, X.,Liu, Y.,Cao, F. Cognitive reserve, modifiable-risk-factor profile and incidence of dementia: results from a longitudinal study of CFAS Wales. Aging Ment Health. 2021. 25:2286-2292. doi: 10.1080/13607863.2020.1828270	Intervention/exposure
113	Jia, J.,Zhao, T.,Liu, Z.,Liang, Y.,Li, F.,Li, Y.,Liu, W.,Li, F.,Shi, S.,Zhou, C.,Yang, H.,Liao, Z.,Li, Y.,Zhao, H.,Zhang, J.,Zhang, K.,Kan, M.,Yang, S.,Li, H.,Liu, Z.,Ma, R.,Lv, J.,Wang, Y.,Yan, X.,Liang, F.,Yuan, X.,Zhang, J.,Gauthier, S.,Cummings, J.. Association between healthy lifestyle and memory decline in older adults: 10 year, population based, prospective cohort study. Bmj. 2023. 380:e072691. doi: 10.1136/bmj-2022-072691	Intervention/exposure
114	Kackley, M. L.,Brownlow, M. L.,Buga, A.,Crabtree, C. D.,Sapper, T. N.,O'Connor, A.,Volek, J. S.. The effects of a 6-week controlled, hypocaloric ketogenic diet, with and without exogenous ketone salts, on cognitive performance and mood states in overweight and obese adults. Front Neurosci. 2022. 16:971144. doi: 10.3389/fnins.2022.971144	Study duration 4-8 wk
115	Kaplan, A.,Zelicha, H.,Yaskolka Meir, A.,Rinott, E.,Tsaban, G.,Levakov, G.,Prager, O.,Salti, M.,Yovell, Y.,Ofer, J.,Huhn, S.,Beyer, F.,Witte, V.,Villringer, A.,Meiran, N.,Emesh, T. B.,Kovacs, P.,Von Bergen, M.,Ceglarek, U.,Blüher, M.,Stumvoll, M.,Hu, F. B.,Stampfer, M. J.,Friedman, A.,Shelef, I.,Avidan, G.,Shai, I.. The effect of a high-polyphenol Mediterranean diet (Green-MED) combined with physical activity on age-related brain atrophy: the Dietary Intervention Randomized Controlled Trial Polyphenols Unprocessed Study (DIRECT PLUS). American Journal of Clinical Nutrition. 2022. 115:1270-1281. doi: 10.1093/ajcn/nqac001	Outcome
116	Katsiardanis, K.,Diamantaras, A. A.,Dessypris, N.,Michelakos, T.,Anastasiou, A.,Katsiardani, K. P.,Kanavidis, P.,Papadopoulos, F. C.,Stefanadis, C.,Panagiotakos, D. B.,Petridou, E. T.. Cognitive impairment and dietary habits among elders: the Velestino Study. J Med Food. 2013. 16:343-50. doi: 10.1089/jmf.2012.0225	Study design
117	Kesse-Guyot, E.,Amieva, H.,Castetbon, K.,Henegar, A.,Ferry, M.,Jeandel, C.,Hercberg, S.,Galan, P.. Adherence to nutritional recommendations and subsequent cognitive performance: findings from the prospective Supplementation with Antioxidant Vitamins and Minerals 2 (SU.VI.MAX 2) study. American journal of clinical nutrition. 2011. 93:200-210. doi: 10.3945/ajcn.2010.29761	Data overlap

Number	Citation	Rationale
118	Kesse-Guyot, E.,Andreeva, V. A.,Ducros, V.,Jeandel, C.,Julia, C.,Hercberg, S.,Galan, P.. Carotenoid-rich dietary patterns during midlife and subsequent cognitive function. Br J Nutr. 2014. 111:915-23. doi: 10.1017/S0007114513003188	Data overlap
119	Kesse-Guyot, E.,Andreeva, V. A.,Jeandel, C.,Ferry, M.,Hercberg, S.,Galan, P. A healthy dietary pattern at midlife is associated with subsequent cognitive performance. J Nutr. 2012. 142:909-15. doi: 10.3945/jn.111.156257	Data overlap
120	Kesse-Guyot, E.,Andreeva, V. A.,Lassale, C.,Ferry, M.,Jeandel, C.,Hercberg, S.,Galan, P. Mediterranean diet and cognitive function: a French study. Am J Clin Nutr. 2013. 97:369-76. doi: 10.3945/ajcn.112.047993	Data overlap
121	Kesse-Guyot, E.,Assmann, K. E.,Andreeva, V. A.,Touvier, M.,Neufcourt, L.,Shivappa, N.,Hébert, J. R.,Wirth, M. D.,Hercberg, S.,Galan, P.,Julia, C. Long-term association between the dietary inflammatory index and cognitive functioning: findings from the SU.VI.MAX study. Eur J Nutr. 2017. 56:1647-1655. doi: 10.1007/s00394-016-1211-3	Intervention/exposure
122	Kim, K. Y.,Yun, J. M. Association between diets and mild cognitive impairment in adults aged 50 years or older. Nutr Res Pract. 2018. 12:415-425. doi: 10.4162/nrp.2018.12.5.415	Study design
123	Klinedinst, B. S.,Le, S. T.,Larsen, B.,Pappas, C.,Hoth, N. J.,Pollpeter, A.,Wang, Q.,Wang, Y.,Yu, S.,Wang, L.,Allenspach, K.,Mochel, J. P.,Bennett, D. A.,Willette, A. A. Genetic Factors of Alzheimer's Disease Modulate How Diet is Associated with Long-Term Cognitive Trajectories: A UK Biobank Study. J Alzheimers Dis. 2020. 78:1245-1257. doi: 10.3233/JAD-201058	Intervention/exposure
124	Knight, A.,Bryan, J.,Wilson, C.,Hodgson, J. M.,Davis, C. R.,Murphy, K. J. The Mediterranean Diet and Cognitive Function among Healthy Older Adults in a 6-Month Randomised Controlled Trial: The MedLey Study. Nutrients. 2016. 8(9):579. doi: 10.3390/nu8090579	Data overlap
125	Knight, A.,Bryan, J.,Wilson, C.,Hodgson, J.,Murphy, K. A randomised controlled intervention trial evaluating the efficacy of a Mediterranean dietary pattern on cognitive function and psychological wellbeing in healthy older adults: the MedLey study. BMC Geriatr. 2015. 15:55. doi: 10.1186/s12877-015-0054-8	Study design, Publication status
126	Koblinsky, N. D.,Anderson, N. D.,Ajwani, F.,Parrott, M. D.,Dawson, D.,Marzolini, S.,Oh, P.,MacIntosh, B.,Middleton, L.,Ferland, G.,Greenwood, C. E. Feasibility and preliminary efficacy of the LEAD trial: a cluster randomized controlled lifestyle intervention to improve hippocampal volume in older adults at-risk for dementia. Pilot Feasibility Stud. 2022. 8:37. doi: 10.1186/s40814-022-00977-6	Size of study groups
127	Koyama, A.,Houston, D. K.,Simonsick, E. M.,Lee, J. S.,Ayonayon, H. N.,Shahar, D. R.,Rosano, C.,Satterfield, S.,Yaffe, K. Association between the Mediterranean diet and cognitive decline in a biracial population. J Gerontol A Biol Sci Med Sci. 2015. 70:354-9. doi: 10.1093/gerona/glu097	Data overlap
128	Kühn, L.,MacIntyre, U. E.,Kotzé, C.,Becker, P. J.,Wenhold, F. A. M. Twelve Weeks of Additional Fish Intake Improves the Cognition of Cognitively Intact, Resource-Limited Elderly People: A Randomized Control Trial. Journal of Nutrition, Health and Aging. 2022. 26:119-126. doi: 10.1007/s12603-021-1723-2	Size of study groups
129	Kwok, T. C.,Lam, L. C.,Sea, M. M.,Goggins, W.,Woo, J. A randomized controlled trial of dietetic interventions to prevent cognitive decline in old age hostel residents. Eur J Clin Nutr. 2012. 66:1135-40. doi: 10.1038/ejcn.2012.117	Intervention/exposure, Country
130	L Huang, H Chen, M Gao, J Shen, Y Tao, Y Huang, R Lv, R Xie, X Lv, X Xu, X Xu, C Yuan. Dietary factors in relation to the risk of cognitive impairment and physical frailty in Chinese older adults: a prospective cohort study. European journal of nutrition. 2023. 63(1): 267-277. doi: 10.1007/s00394-023-03260-3	Country
131	Lee, A. T. C.,Richards, M.,Chan, W. C.,Chiu, H. F. K.,Lee, R. S. Y.,Lam, L. C. W. Lower risk of incident dementia among Chinese older adults having three servings of vegetables and two servings of fruits a day. Age Ageing. 2017. 46:773-779. doi: 10.1093/ageing/afx018	Intervention/exposure

Number	Citation	Rationale
132	Lee, J.,Pase, M.,Pipingas, A.,Raubenheimer, J.,Thurgood, M.,Villalon, L.,Macpherson, H.,Gibbs, A.,Scholey, A. Switching to a 10-day Mediterranean-style diet improves mood and cardiovascular function in a controlled crossover study. Nutrition. 2015. 31:647-52. doi:	Study duration <4 wk
133	Lehtisalo, J.,Levälahti, E.,Lindström, J.,Hänninen, T.,Paajanen, T.,Peltonen, M.,Antikainen, R.,Laatikainen, T.,Strandberg, T.,Soininen, H.,Tuomilehto, J.,Kivipelto, M.,Ngandu, T.. Dietary changes and cognition over 2 years within a multidomain intervention trial-The Finnish Geriatric Intervention Study to Prevent Cognitive Impairment and Disability (FINGER). Alzheimers Dement. 2019. 15:410-417. doi: 10.1093/ageing/afx018	Intervention/exposure
134	Lehtisalo, J.,Ngandu, T.,Valve, P.,Antikainen, R.,Laatikainen, T.,Strandberg, T.,Soininen, H.,Tuomilehto, J.,Kivipelto, M.,Lindström, J. Nutrient intake and dietary changes during a 2-year multi-domain lifestyle intervention among older adults: secondary analysis of the Finnish Geriatric Intervention Study to Prevent Cognitive Impairment and Disability (FINGER) randomised controlled trial. Br J Nutr. 2017. 118:291-302. doi: 10.1017/S0007114517001982	Intervention/exposure
135	Leidy, H. J.,Todd, C. B.,Zino, A. Z.,Immel, J. E.,Mukherjea, R.,Shafer, R. S.,Ortinau, L. C.,Braun, M. Consuming High-Protein Soy Snacks Affects Appetite Control, Satiety, and Diet Quality in Young People and Influences Select Aspects of Mood and Cognition. J Nutr. 2015. 145:1614-22. doi: 10.3945/jn.115.212092	Study duration <4 wk
136	Li, J.,Capuano, A. W.,Agarwal, P.,Arvanitakis, Z.,Wang, Y.,De Jager, P. L.,Schneider, J. A.,Tasaki, S.,de Paiva Lopes, K.,Hu, F. B.,Bennett, D. A.,Liang, L.,Grodstein, F. The MIND diet, brain transcriptomic alterations, and dementia. medRxiv. 2023. Preprint. doi: 10.1101/2023.06.12.23291263	Publication status
137	Li, J.,Ogrodnik, M.,Kolachalama, V. B.,Lin, H.,Au, R. Assessment of the Mid-Life Demographic and Lifestyle Risk Factors of Dementia Using Data from the Framingham Heart Study Offspring Cohort. Journal of Alzheimer's Disease. 2018. 63:1119-1127. doi: 10.3233/JAD-170917	Intervention/exposure, Data overlap
138	Liebson, P. R. Diet, lifestyle, and hypertension and mediterranean diet and risk of dementia. Preventive Cardiology. 2010. 13:94-96. doi: 10.1111/j.1751-7141.2009.00064.x	Study design, Data overlap
139	Liu, D.,Zhang, W. T.,Wang, J. H.,Shen, D.,Zhang, P. D.,Li, Z. H.,Chen, P. L.,Zhang, X. R.,Huang, Q. M.,Zhong, W. F.,Shi, X. M.,Mao, C. Association between Dietary Diversity Changes and Cognitive Impairment among Older People: Findings from a Nationwide Cohort Study. Nutrients. 2022. 14(6):1251. doi: 10.3390/nu14061251	Country
140	Liu, X.,Morris, M. C.,Dhana, K.,Ventrelle, J.,Johnson, K.,Bishop, L.,Hollings, C. S.,Boulin, A.,Laranjo, N.,Stubbs, B. J.,Reilly, X.,Carey, V. J.,Wang, Y.,Furtado, J. D.,Marcovina, S. M.,Tangney, C.,Aggarwal, N. T.,Arfanakis, K.,Sacks, F. M.,Barnes, L. L. Mediterranean-DASH Intervention for Neurodegenerative Delay (MIND) study: Rationale, design and baseline characteristics of a randomized control trial of the MIND diet on cognitive decline. Contemp Clin Trials. 2021. 102:106270. doi: 10.1016/j.cct.2021.106270	Publication Status
141	Lourida, I.,Hannon, E.,Littlejohns, T. J.,Langa, K. M.,Hyppönen, E.,Kuzma, E.,Llewellyn, D. J. Association of Lifestyle and Genetic Risk With Incidence of Dementia. Jama. 2019. 322:430-437. doi: 10.1001/jama.2019.9879	Intervention/exposure
142	Lu, Y.,Gwee, X.,Chua, D. Q.,Lee, T. S.,Lim, W. S.,Chong, M. S.,Yap, P.,Yap, K. B.,Rawtaer, I.,Liew, T. M.,Pan, F.,Ng, T. P. Nutritional Status and Risks of Cognitive Decline and Incident Neurocognitive Disorders: Singapore Longitudinal Ageing Studies. J Nutr Health Aging. 2021. 25:660-667. doi: 10.1007/s12603-021-1603-9	Intervention/exposure
143	M McMaster, S Kim, L Clare, SJ Torres, N Cherbuin, KJ Anstey. The feasibility of a multidomain dementia risk reduction randomised controlled trial for people experiencing cognitive decline: the Body, Brain, Life for Cognitive Decline (BBL-CD). Aging & mental health. 2023. 27(11):2111-2119. doi: 10.1080/13607863.2023.2190083	Study duration 8-12 wk
144	Mahmoudzadeh, S., Mohammadifard, M., Khorasanchi, Z., Karbasi, S., Ferns, G.A., Bahrami, A. Adherence to a Mediterranean diet style and psychological distress and quality of life in young women. Psychiatria. 2023. 20:89. doi: 10.5603/PSYCH.a2023.0013	Study design

Number	Citation	Rationale
145	Mamalaki, E.,Charisis, S.,Anastasiou, C. A.,Ntanasi, E.,Georgiadi, K.,Balomenos, V.,Kosmidis, M. H.,Dardiotis, E.,Hadjigeorgiou, G.,Sakka, P.,Scarmeas, N.,Yannakoulia, M. The Longitudinal Association of Lifestyle with Cognitive Health and Dementia Risk: Findings from the HELIAD Study. Nutrients. 2022. 14(14):2818. doi: 10.3390/nu14142818	Data overlap
146	Mamalaki, E.,Ntanasi, E.,Hatzimanolis, A.,Basta, M.,Kosmidis, M. H.,Dardiotis, E.,Hadjigeorgiou, G. M.,Sakka, P.,Scarmeas, N.,Yannakoulia, M. The Association of Adherence to the Mediterranean Diet with Depression in Older Adults Longitudinally Taking into Account Cognitive Status: Results from the HELIAD Study. Nutrients. 2023. 15(2):359. doi: 10.3390/nu15020359	Outcome
147	Männikkö, R.,Komulainen, P.,Schwab, U.,Heikkilä, H. M.,Savonen, K.,Hassinen, M.,Hänninen, T.,Kivipelto, M.,Rauramaa, R. The Nordic diet and cognition--The DR's EXTRA Study. Br J Nutr. 2015. 114:231-9. doi: 10.1017/S0007114515001890	Data overlap
148	Mantzorou, M.,Vadikolias, K.,Pavlidou, E.,Tryfonos, C.,Vasios, G.,Serdari, A.,Giaginis, C. Mediterranean diet adherence is associated with better cognitive status and less depressive symptoms in a Greek elderly population. Aging Clin Exp Res. 2021. 33:1033-1040. doi: 10.1007/s40520-020-01608-x	Study design
149	Marcason, W. What Are the Components to the MIND Diet? J Acad Nutr Diet. 2015. 115:1744. doi: 10.1016/j.jand.2015.08.002	Study design
150	Margara-Escudero, H. J.,Zamora-Ros, R.,de Villasante, I.,Crous-Bou, M.,Chirlaque, M. D.,Amiano, P.,Mar, J.,Barricarte, A.,Ardanaz, E.,Huerta, J. M. Association Between Egg Consumption and Dementia Risk in the EPIC-Spain Dementia Cohort. Front Nutr. 2022. 9:827307. doi: 10.3389/fnut.2022.827307	Intervention/exposure
151	Marseglia, A.,Xu, W.,Fratiglioni, L.,Fabbri, C.,Berendsen, A. A. M.,Bialecka-Debek, A.,Jennings, A.,Gillings, R.,Meunier, N.,Caumon, E.,Fairweather-Tait, S.,Pietruszka, B.,De Groot, Lcpgm,Santoro, A.,Franceschi, C. Effect of the NU-AGE Diet on Cognitive Functioning in Older Adults: A Randomized Controlled Trial. Front Physiol. 2018. 9:349. doi: 10.3389/fphys.2018.00349	Data overlap
152	Martínez-Lapiscina, E. H.,Clavero, P.,Toledo, E.,Estruch, R.,Salas-Salvadó, J.,San Julián, B.,Sanchez-Tainta, A.,Ros, E.,Valls-Pedret, C.,Martinez-Gonzalez, MÁ. Mediterranean diet improves cognition: the PREDIMED-NAVARRA randomised trial. J Neurol Neurosurg Psychiatry. 2013. 84:1318-25. doi: 10.1136/jnnp-2012-304792	Data overlap
153	Martínez-Lapiscina, E. H.,Clavero, P.,Toledo, E.,San Julián, B.,Sanchez-Tainta, A.,Corella, D.,Lamuela-Raventós, R. M.,Martínez, J. A.,Martínez-Gonzalez, MÁ. Virgin olive oil supplementation and long-term cognition: the PREDIMED-NAVARRA randomized, trial. J Nutr Health Aging. 2013. 17:544-52. doi: 10.1007/s12603-013-0027-6	Data overlap
154	Martínez-Lapiscina, E. H.,Galbete, C.,Corella, D.,Toledo, E.,Buil-Cosiales, P.,Salas-Salvado, J.,Ros, E.,Martinez-Gonzalez, M. A. Genotype patterns at CLU, CR1, PICALM and APOE, cognition and Mediterranean diet: the PREDIMED-NAVARRA trial. Genes Nutr. 2014. 9:393. doi: 10.1007/s12263-014-0393-7	Intervention/exposure
155	Matthews, D. C.,Davies, M.,Murray, J.,Williams, S.,Tsui, W. H.,Li, Y.,Andrews, R. D.,Lukic, A.,McHugh, P.,Vallabhajosula, S.,de Leon, M. J.,Mosconi, L. Physical Activity, Mediterranean Diet and Biomarkers-Assessed Risk of Alzheimer's: A Multi-Modality Brain Imaging Study. Adv J Mol Imaging. 2014. 4:43-57. doi: 10.4236/ami.2014.44006	Study design, Outcome
156	Mazza, E.,Fava, A.,Ferro, Y.,Moraca, M.,Rotundo, S.,Colica, C.,Provenzano, F.,Terracciano, R.,Greco, M.,Foti, D.,Gulletta, E.,Russo, D.,Bosco, D.,Pujia, A.,Montalcini, T. Impact of legumes and plant proteins consumption on cognitive performances in the elderly. J Transl Med. 2017. 15:109. doi: 10.1186/s12967-017-1209-5	Intervention/exposure
157	Mazza, E.,Fava, A.,Ferro, Y.,Rotundo, S.,Romeo, S.,Bosco, D.,Pujia, A.,Montalcini, T. Effect of the replacement of dietary vegetable oils with a low dose of extra virgin olive oil in the Mediterranean Diet on cognitive functions in the elderly. J Transl Med. 2018. 16:10. doi: 10.1186/s12967-018-1386-x	Intervention/exposure

Number	Citation	Rationale
158	McEvoy, C. T.,Hoang, T.,Sidney, S.,Steffen, L. M.,Jacobs, D. R., Jr.,Shikany, J. M.,Wilkins, J. T.,Yaffe, K. Dietary patterns during adulthood and cognitive performance in midlife: The CARDIA study. Neurology. 2019. 92:e1589-e1599. doi: 10.1212/WNL.0000000000007243	Data overlap
159	McLeod, A.,Bernabe, B. P.,Xia, Y.,Sanchez-Flack, J.,Lamar, M.,Schiffer, L.,Hemphill, N. O.,Fantuzzi, G.,Maki, P.,Fitzgibbon, M.,Tussing-Humphreys, L. Exploring the Effects of a Mediterranean Diet and Weight Loss on the Gut Microbiome and Cognitive Performance in Older, African American Obese Adults: A Post Hoc Analysis. Nutrients. 2023. 15(15):3322. doi: 10.3390/nu15153332	Intervention/exposure
160	McMaster, M.,Kim, S.,Clare, L.,Torres, S. J.,Cherbuin, N.,D'Este, C.,Anstey, K. J. Lifestyle Risk Factors and Cognitive Outcomes from the Multidomain Dementia Risk Reduction Randomized Controlled Trial, Body Brain Life for Cognitive Decline (BBL-CD). J Am Geriatr Soc. 2020. 68:2629-2637. doi: 10.1111/jgs.16762	Study duration 8-12 wk
161	McMillan, L.,Owen, L.,Kras, M.,Scholey, A. Behavioural effects of a 10-day Mediterranean diet. Results from a pilot study evaluating mood and cognitive performance. Appetite. 2011. 56:143-7. doi: 10.1016/j.appet.2010.11.149	Study duration <4 wk
162	Morris, M. C.,Tangney, C. C.,Wang, Y.,Sacks, F. M.,Bennett, D. A.,Aggarwal, N. T. MIND diet associated with reduced incidence of Alzheimer's disease. Alzheimers Dement. 2015. 11:1007-14. doi: 10.1016/j.jalz.2014.11.009	Data overlap
163	Nagpal, R.,Neth, B. J.,Wang, S.,Craft, S.,Yadav, H. Modified Mediterranean-ketogenic diet modulates gut microbiome and short-chain fatty acids in association with Alzheimer's disease markers in subjects with mild cognitive impairment. EBioMedicine. 2019. 47:529-542. doi: 10.1016/j.ebiom.2019.08.032	Study duration 4-8 wk
164	Nagpal, R.,Neth, B. J.,Wang, S.,Mishra, S. P.,Craft, S.,Yadav, H. Gut mycobiome and its interaction with diet, gut bacteria and alzheimer's disease markers in subjects with mild cognitive impairment: A pilot study. EBioMedicine. 2020. 59:102950. doi: 10.1016/j.ebiom.2020.102950	Study duration 4-8 wk
165	Nicolas, A. S.,Faisant, C.,Nourhashemi, F.,Lanzmann-Petithory, D.,Vellas, B. Associations between nutritional intake and cognitive function in a healthy ageing sample: A 4-year reassessment. European Journal of Geriatrics. 2000. 2:114-119.	Data overlap
166	Nicole, W. Food for Thought: Exploring the Relationship between PM2:5 Exposure, Dietary Patterns, and Changes in Brain Volume. Environmental Health Perspectives. 2022. 130(4):044001. doi: 10.1289/EHP11017	Publication status
167	Nilsson, A.,Tovar, J.,Johansson, M.,Radeborg, K.,Björck, I. A diet based on multiple functional concepts improves cognitive performance in healthy subjects. Nutr Metab (Lond). 2013. 10:49. doi: 10.1186/1743-7075-10-49	Study duration <4 wk
168	Nooyens, A. C.,Bueno-de-Mesquita, H. B.,van Boxtel, M. P.,van Gelder, B. M.,Verhagen, H.,Verschuren, W. M. Fruit and vegetable intake and cognitive decline in middle-aged men and women: the Doetinchem Cohort Study. Br J Nutr. 2011. 106:752-61. doi: 10.1017/S0007114511001024	Study design
169	Ntanasi, E.,Charisis, S.,Yannakoulia, M.,Georgiadi, K.,Balomenos, V.,Kosmidis, M. H.,Dardiotis, E,Hadjigeorgiou, G.,Sakka, P.,Maraki, M.,Scarmeas, N. Adherence to the Mediterranean diet and incident frailty: Results from a longitudinal study. Maturitas. 2022. 162:44-51. doi: 10.1016/j.maturitas.2022.05.001	Outcome
170	Osawa, Y.,Arai, Y.,Takayama, M.,Hirata, T.,Kawasaki, M.,Abe, Y.,Iinuma, T.,Sasaki, S.,Hirose, N. Identification of dietary patterns and their relationships with general and oral health in the very old. Asia Pac J Clin Nutr. 2017. 26:262-270. doi: 10.6133/apjcn.022016.02	Study design
171	Otsuka, R.,Kato, Y.,Nishita, Y.,Tange, C.,Nakamoto, M.,Tomida, M.,Imai, T.,Ando, F.,Shimokata, H.,Suzuki, T. Dietary diversity and 14-year decline in higher-level functional capacity among middle-aged and elderly Japanese. Nutrition. 2016. 32:784-9. doi: 10.1016/j.nut.2016.01.022	Intervention/exposure

Number	Citation	Rationale
172	Ozawa, M.,Ninomiya, T.,Ohara, T.,Doi, Y.,Uchida, K.,Shirota, T.,Yonemoto, K.,Kitazono, T.,Kiyohara, Y. Dietary patterns and risk of dementia in an elderly Japanese population: the Hisayama Study. Am J Clin Nutr. 2013. 97:1076-82. doi: 10.3945/ajcn.112.045575	Data overlap
173	Ozawa, M.,Shipley, M.,Kivimaki, M.,Singh-Manoux, A.,Brunner, E. J. Dietary pattern, inflammation and cognitive decline: The Whitehall II prospective cohort study. Clin Nutr. 2017. 36:506-512. doi: 10.1016/j.clnu.2016.01.013	Data overlap
174	Park, J. E.,Jeon, S. Y.,Kim, S. A.,Kim, J. H.,Kim, S. H.,Lee, K. W.,Hwang, Y. J.,Jung, G.,Suk, H. W.,Park, S.,et al. A Multidomain Intervention for Modifying Lifestyle Habits Reduces the Dementia Risk in Community-Dwelling Older Adults: a Single-Blinded Randomized Controlled Pilot Study. Journal of Alzheimer's disease. 2019. 70:51-60. doi: 10.3233/JAD-190016	Intervention/exposure, Study duration <4 wk
175	Parrott, M. D.,Shatenstein, B.,Ferland, G.,Payette, H.,Morais, J. A.,Belleville, S.,Kergoat, M. J.,Gaudreau, P.,Greenwood, C. E. Relationship between diet quality and cognition depends on socioeconomic position in healthy older adults. J Nutr. 2013. 143:1767-73. doi: 10.3945/jn.113.181115	Data overlap
176	Pase, M. P.,Beiser, A.,Enserro, D.,Xanthakis, V.,Aparicio, H.,Satizabal, C. L.,Himali, J. J.,Kase, C. S.,Vasan, R. S.,DeCarli, C.,Seshadri, S. Association of Ideal Cardiovascular Health With Vascular Brain Injury and Incident Dementia. Stroke. 2016. 47:1201-6. doi: 10.1161/STROKEAHA.115.012608	Intervention/exposure
177	Pearson, K. E.,Wadley, V. G.,McClure, L. A.,Shikany, J. M.,Unverzagt, F. W.,Judd, S. E.. Dietary patterns are associated with cognitive function in the REasons for Geographic And Racial Differences in Stroke (REGARDS) cohort. J Nutr Sci. 2016. 5:e38. doi: 10.1017/jns.2016.27	Data overlap
178	Power, S. E.,O'Connor, E. M.,Ross, R. P.,Stanton, C.,O'Toole, P. W.,Fitzgerald, G. F.,Jeffery, I. B. Dietary glycaemic load associated with cognitive performance in elderly subjects. Eur J Nutr. 2015. 54:557-68. doi: 10.1007/s00394-014-0737-5	Study design
179	Prinelli, F.,Fratiglioni, L.,Musicco, M.,Johansson, I.,Adorni, F.,Shakersain, B.,Rizzuto, D.,Xu, W. The impact of nutrient-based dietary patterns on cognitive decline in older adults. Clin Nutr. 2019. 38:2813-2820. doi: 10.1016/j.clnu.2018.12.012	Intervention/exposure
180	Psaltopoulou, T.,Kyrozis, A.,Stathopoulos, P.,Trichopoulos, D.,Vassilopoulos, D.,Trichopoulou, A. Diet, physical activity and cognitive impairment among elders: the EPIC-Greece cohort (European Prospective Investigation into Cancer and Nutrition). Public Health Nutr. 2008. 11:1054-62. doi: 10.1017/S1368980007001607	Data overlap
181	Psaltopoulou, T.,Sergentanis, T. N. Mediterranean diet may reduce Alzheimer's risk. Evidence based medicine. 2015. 20:202-202. doi: 10.1136/ebmed-2015-110237	Publication status
182	Qin, B.,Adair, L. S.,Plassman, B. L.,Batis, C.,Edwards, L. J.,Popkin, B. M.,Mendez, M. A. Dietary Patterns and Cognitive Decline Among Chinese Older Adults. Epidemiology. 2015. 26:758-68. doi: 10.1097/EDE.0000000000000338	Country
183	R Li, R Li, J Xie, J Chen, S Liu, A Pan, G Liu. Associations of socioeconomic status and healthy lifestyle with incident early-onset and late-onset dementia: a prospective cohort study. The lancet. Healthy longevity. 2023. 4(12):e693-e702. doi: 10.1016/S2666-7568(23)00211-8	Intervention/exposure
184	Rainey-Smith, S. R.,Gu, Y.,Gardener, S. L.,Doecke, J. D.,Villemagne, V. L.,Brown, B. M.,Taddei, K.,Laws, S. M.,Sohrabi, H. R.,Weinborn, M.,Ames, D.,Fowler, C.,Macaulay, S. L.,Maruff, P.,Masters, C. L.,Salvado, O.,Rowe, C. C.,Scarmeas, N.,Martins, R. N.. Mediterranean diet adherence and rate of cerebral Aβ-amyloid accumulation: Data from the Australian Imaging, Biomarkers and Lifestyle Study of Ageing. Transl Psychiatry. 2018. 8:238. doi: 10.1038/s41398-018-0293-5	Outcome
185	Richard, E. L.,Laughlin, G. A.,Kritz-Silverstein, D.,Reas, E. T.,Barrett-Connor, E.,McEvoy, L. K. Dietary Patterns and Cognitive Function among Older Community-Dwelling Adults. Nutrients. 2018. 10:#pages#. doi: 10.3390/nu10081088	Data overlap

Number	Citation	Rationale
186	Rizza, W.,De Gara, L.,Antonelli Incalzi, R.,Pedone, C. Prototypical versus contemporary Mediterranean Diet. Clin Nutr ESPEN. 2016. 15:44-48. doi: 10.1016/j.clnesp.2016.06.007	Study design, Outcome
187	Roberts, R. O.,Geda, Y. E.,Cerhan, J. R.,Knopman, D. S.,Cha, R. H.,Christianson, T. J.,Pankratz, V. S.,Ivnik, R. J.,Boeve, B. F.,O'Connor, H. M.,Petersen, R. C. Vegetables, unsaturated fats, moderate alcohol intake, and mild cognitive impairment. Dement Geriatr Cogn Disord. 2010. 29:413-23. doi: 10.1159/000305099	Data overlap
188	Rodriguez-Espinosa, N.,Moro Miguel, A.,Rodriguez-Perez, M. D. C.,Almeida-Gonzalez, D.,Cabrera de Leon, A. Adherence to the Mediterranean diet and waist-to-hip ratio in middle-aged postmenopausal women are the main factors associated with semantic verbal fluency 12 years later. Front Nutr. 2023. 10:1106629. doi: 10.3389/fnut.2023.1106629	Intervention/exposure
189	Rubin, R. Fish-Rich Mediterranean Diet Associated With Higher Cognition. Jama. 2020. 323:1998. doi: 10.1001/jama.2020.7061	Study design
190	Ruffman, T.,Zhang, J.,Taumoepeau, M.,Skeaff, S. Your Way to a Better Theory of Mind: A Healthy Diet Relates to Better Faux Pas Recognition in Older Adults. Exp Aging Res. 2016. 42:279-88. doi: 10.1080/0361073X.2016.1156974	Study design
191	Russin, K. J.,Nair, K. S.,Montine, T. J.,Baker, L. D.,Craft, S. Diet Effects on Cerebrospinal Fluid Amino Acids Levels in Adults with Normal Cognition and Mild Cognitive Impairment. J Alzheimers Dis. 2021. 84:843-853. doi: 10.3233/JAD-210471	Study duration <4 wk
192	S Gregory, K Blennow, CW Ritchie, OM Shannon, EJ Stevenson, G Muniz-Terrera. Mediterranean diet is associated with lower white matter lesion volume in Mediterranean cities and lower cerebrospinal fluid Aβ in non-Mediterranean cities in the EPAD LCS cohort. Neurobiology of aging. 2023. 131:29-38. doi: 10.1016/j.neurobiolaging.2023.07.012	Study design
193	Sakurai, K.,Okada, E.,Anzai, S.,Tamura, R.,Shiraishi, I.,Inamura, N.,Kobayashi, S.,Sato, M.,Matsumoto, T.,Kudo, K.,Sugawara, Y.,Hisatsune, T. Protein-Balanced Dietary Habits Benefit Cognitive Function in Japanese Older Adults. Nutrients. 2023. 15(3):770. doi: 10.3390/nu15030770	Study design
194	Samieri, C.,Grodstein, F.,Rosner, B. A.,Kang, J. H.,Cook, N. R.,Manson, J. E.,Buring, J. E.,Willett, W. C.,Okereke, O. I. Mediterranean diet and cognitive function in older age. Epidemiology. 2013. 24:490-9. doi: 10.1097/EDE.0b013e318294a065	Data overlap
195	Samieri, C.,Okereke, O. I.,E. Devore E,Grodstein, F. Long-term adherence to the Mediterranean diet is associated with overall cognitive status, but not cognitive decline, in women. J Nutr. 2013. 143:493-9. doi: 10.3945/jn.112.169896	Data overlap
196	Samieri, C.,Perier, M. C.,Gaye, B.,Proust-Lima, C.,Helmer, C.,Dartigues, J. F.,Berr, C.,Tzourio, C.,Empana, J. P. Association of cardiovascular health level in older age with cognitive decline and incident dementia. JAMA - Journal of the American Medical Association. 2018. 320:657-664. doi: 10.1001/jama.2018.11499	Intervention/exposure
197	Sandison, H.,Callan, N. G. L.,Rao, R. V.,Phipps, J.,Bradley, R. Observed Improvement in Cognition During a Personalized Lifestyle Intervention in People with Cognitive Decline. J Alzheimers Dis. 2023. 94:993-1004. doi: 10.3233/JAD-230004	Participant health status
198	Scarmeas, N.,Luchsinger, J. A.,Stern, Y.,Gu, Y.,He, J.,DeCarli, C.,Brown, T.,Brickman, A. M. Mediterranean diet and magnetic resonance imaging-assessed cerebrovascular disease. Ann Neurol. 2011. 69:257-68. doi: 10.1002/ana.22317	Outcome
199	Scarmeas, N.,Mayeux, R.,Stern, Y.,Luchsinger, J. A. Mediterranean diet and Alzheimer's disease. 2007. 12:105-110.	Study design
200	Scarmeas, N.,Stern, Y.,Mayeux, R.,Manly, J. J.,Schupf, N.,Luchsinger, J. A. Mediterranean diet and mild cognitive impairment. Arch Neurol. 2009. 66:216-25. doi: 10.1001/archneurol.2008.536	Data overlap
201	Scarmeas, N.,Stern, Y.,Tang, M. X.,Mayeux, R.,Luchsinger, J. A. Mediterranean diet and risk for Alzheimer's disease. Ann Neurol. 2006. 59:912-21. doi: 10.1002/ana.20854	Data overlap

Number	Citation	Rationale
202	Schulz, C. A.,Weinhold, L.,Schmid, M.,Nöthen, M. M.,Nöthlings, U. Analysis of associations between dietary patterns, genetic disposition, and cognitive function in data from UK Biobank. Eur J Nutr. 2023. 62:511-521. doi: 10.1007/s00394-022-02976-y	Outcome
203	Shakersain, B.,Rizzuto, D.,Larsson, S. C.,Faxén-Irving, G.,Fratiglioni, L.,Xu, W. L. The Nordic Prudent Diet Reduces Risk of Cognitive Decline in the Swedish Older Adults: A Population-Based Cohort Study. Nutrients. 2018. 10(2):229. doi: 10.3390/nu10020229	Data overlap
204	Shakersain, B.,Rizzuto, D.,Wang, H. X.,Faxén-Irving, G.,Prinelli, F.,Fratiglioni, L.,Xu, W. An Active Lifestyle Reinforces the Effect of a Healthy Diet on Cognitive Function: A Population-Based Longitudinal Study. Nutrients. 2018. 10(9):1297. doi: 10.3390/nu10091297	Data overlap
205	Shakersain, B.,Santoni, G.,Larsson, S. C.,Faxén-Irving, G.,Fastbom, J.,Fratiglioni, L.,Xu, W. Prudent diet may attenuate the adverse effects of Western diet on cognitive decline. Alzheimers Dement. 2016. 12:100-109. doi: 10.1016/j.jalz.2015.08.002	Data overlap
206	Shannon, O. M.,Stephan, B. C. M.,Granic, A.,Lentjes, M.,Hayat, S.,Mulligan, A.,Brayne, C.,Khaw, K. T.,Bundy, R.,Aldred, S.,Hornberger, M.,Paddick, S. M.,Muniz-Tererra, G.,Minihane, A. M.,Mathers, J. C.,Siervo, M. Mediterranean diet adherence and cognitive function in older UK adults: the European Prospective Investigation into Cancer and Nutrition-Norfolk (EPIC-Norfolk) Study. Am J Clin Nutr. 2019. 110:938-948. doi: 10.1093/ajcn/nqz114	Data overlap
207	Shatenstein, B.,Ferland, G.,Belleville, S.,Gray-Donald, K.,Kergoat, M. J.,Morais, J.,Gaudreau, P.,Payette, H.,Greenwood, C. Diet quality and cognition among older adults from the NuAge study. Exp Gerontol. 2012. 47:353-60. doi: 10.1016/j.exger.2012.02.002	Data overlap
208	Sheng, L. T.,Jiang, Y. W.,Feng, L.,Pan, A.,Koh, W. P. Dietary Total Antioxidant Capacity and Late-Life Cognitive Impairment: The Singapore Chinese Health Study. J Gerontol A Biol Sci Med Sci. 2022. 77:561-569. doi: 10.1093/gerona/glab100	Intervention/exposure
209	Shimizu, K.,Takeda, S.,Noji, H.,Hirose, N.,Ebihara, Y.,Arai, Y.,Hamamatsu, M.,Nakazawa, S.,Gondo, Y.,Konishi, K. Dietary patterns and further survival in Japanese centenarians. J Nutr Sci Vitaminol (Tokyo). 2003. 49:133-8. doi: 10.3177/jnsv.49.133	Outcome
210	Shin, D.,Lee, K. W.,Kim, M. H.,Kim, H. J.,An, Y. S.,Chung, H. K. Identifying Dietary Patterns Associated with Mild Cognitive Impairment in Older Korean Adults Using Reduced Rank Regression. Int J Environ Res Public Health. 2018. 15(1):100. doi: 10.3390/ijerph15010100	Study design
211	Shiri, R.,Väänänen, A.,Mattila-Holappa, P.,Kauppi, K.,Borg, P. The Effect of Healthy Lifestyle Changes on Work Ability and Mental Health Symptoms: A Randomized Controlled Trial. International Journal of Environmental Research and Public Health. 2022. 19(20):13206. doi: 10.3390/ijerph192013206	Study duration 8-12 wk
212	Sindi, S.,Kåreholt, I.,Eskelinen, M.,Hooshmand, B.,Lehtisalo, J.,Soininen, H.,Ngandu, T.,Kivipelto, M. Healthy Dietary Changes in Midlife Are Associated with Reduced Dementia Risk Later in Life. Nutrients. 2018. 10(11):1649. doi: 10.3390/nu10111649	Intervention/exposure
213	Skoczek-Rubińska, A.,Muzsik-Kazimierska, A.,Chmurzynska, A.,Jamka, M.,Walkowiak, J.,Bajerska, J. Inflammatory Potential of Diet Is Associated with Biomarkers Levels of Inflammation and Cognitive Function among Postmenopausal Women. Nutrients. 2021. 13(7):2323. doi: 10.3390/nu13072323	Study design
214	Small, G. W.,Silverman, D. H.,Siddarth, P.,Ercoli, L. M.,Miller, K. J.,Lavretsky, H.,Wright, B. C.,Bookheimer, S. Y.,Barrio, J. R.,Phelps, M. E Effects of a 14-day healthy longevity lifestyle program on cognition and brain function. Am J Geriatr Psychiatry. 2006. 14:538-45. doi: 10.1097/01.JGP.0000219279.72210.ca	Study duration <4 wk
215	Smith, P. J.,Mabe, S. M.,Sherwood, A.,Doraiswamy, P. M.,Welsh-Bohmer, K. A.,Burke, J. R.,Kraus, W. E.,Lin, P. H.,Browndyke, J. N.,Babyak, M. A.,Hinderliter, A. L.,Blumenthal, J. A. Metabolic and Neurocognitive Changes Following Lifestyle Modification: Examination of Biomarkers from the ENLIGHTEN Randomized Clinical Trial. J Alzheimers Dis. 2020. 77:1793-1803. doi: 10.3233/JAD-200374	Intervention/exposure, Outcome

Number	Citation	Rationale
216	Smyth, A.,Dehghan, M.,O'Donnell, M.,Anderson, C.,Teo, K.,Gao, P.,Sleight, P.,Dagenais, G.,Probstfield, J. L.,Mente, A.,Yusuf, S. Healthy eating and reduced risk of cognitive decline: A cohort from 40 countries. Neurology. 2015. 84:2258-65. doi: 10.1212/WNL.0000000000001638	Data overlap
217	Soldevila-Domenech, N.,Forcano, L.,Vintró-Alcaraz, C.,Cuenca-Royo, A.,Pintó, X.,Jiménez-Murcia, S.,García-Gavilán, J. F.,Nishi, S. K.,Babio, N.,Gomis-González, M.,Corella, D.,Sorlí, J. V.,Fernandez-Carrión, R.,Martínez-González, MÁ,Marti, A.,Salas-Salvadó, J.,Castañer, O.,Fernández-Aranda, F.,Torre, R. Interplay between cognition and weight reduction in individuals following a Mediterranean Diet: Three-year follow-up of the PREDIMED-Plus trial. Clin Nutr. 2021. 40:5221-5237. doi: 10.1016/j.clnu.2021.07.020	No key confounders accounted for
218	Solfrizzi, V.,Frisardi, V.,Seripa, D.,Logroscino, G.,Imbimbo, B. P.,D'Onofrio, G.,Addante, F.,Sancarlo, D.,Cascavilla, L.,Pilotto, A.,Panza, F. Mediterranean diet in predementia and dementia syndromes. Current Alzheimer Research. 2011. 8:520-542. doi: 10.2174/156720511796391809	Study design
219	Solomon, A.,Turunen, H.,Ngandu, T.,Peltonen, M.,Levalahti, E.,Helisalmi, S.,Antikainen, R.,Backman, L.,Hanninen, T.,Jula, A.,et al.,. Effect of the apolipoprotein e genotype on cognitive change during a multidomain lifestyle intervention a subgroup analysis of a randomized clinical trial. JAMA neurology. 2018. 75:462-470. doi: 10.1001/jamaneurol.2017.4365	Intervention/exposure
220	Song, Y.,Cheng, F.,Du, Y.,Zheng, J.,An, Y.,Lu, Y. Higher Adherence to the AMED, DASH, and CHFP Dietary Patterns Is Associated with Better Cognition among Chinese Middle-Aged and Elderly Adults. Nutrients. 2023. 15(18):3974. doi: 10.3390/nu15183974	Country
221	Sotos-Prieto, M.,Ortolá, R.,López-García, E.,Rodríguez-Artalejo, F.,García-Esquinas, E. Adherence to the Mediterranean Diet and Physical Resilience in Older Adults: The Seniors-ENRICA Cohort. J Gerontol A Biol Sci Med Sci. 2021. 76:505-512. doi: 10.1093/gerona/glaa277	Outcome
222	Spanaki, C.,Rodopaios, N. E.,Koulouri, A.,Pliakas, T.,Papadopoulou, S. K.,Vasara, E.,Skepastianos, P.,Serafeim, T.,Boura, I.,Dermitzakis, E.,Kafatos, A. The Christian Orthodox Church Fasting Diet Is Associated with Lower Levels of Depression and Anxiety and a Better Cognitive Performance in Middle Life. Nutrients. 2021. 13(2):627. doi: 10.3390/nu13020627	Intervention/exposure
223	Sugawara, N.,Yasui-Furukori, N.,Umeda, T.,Tsuchimine, S.,Kaneda, A.,Tsuruga, K.,Iwane, K.,Okubo, N.,Takahashi, I.,Kaneko, S.. Relationship between dietary patterns and cognitive function in a community-dwelling population in Japan. Asia Pac J Public Health. 2015. 27:Np2651-60. doi: 10.1177/1010539513490194	Study design
224	Sun, K.,Hu, H.,Yang, C.,Wang, L.,Ai, Y.,Dong, X.,Shi, Y.,Li, M.,Yao, Q.,Zhang, Y. Dietary Intake is Positively Associated with Cognitive Function of a Chinese Older Adults Sample. J Nutr Health Aging. 2018. 22:805-810. doi: 10.1007/s12603-018-1048-y	Study design
225	Takeuchi, H.,Kawashima, R. Diet and Dementia: A Prospective Study. Nutrients. 2021. 13(12):4500. doi: 10.3390/nu13124500	Intervention/exposure
226	Tangney, C. C.,Kwasny, M. J.,Li, H.,Wilson, R. S.,Evans, D. A.,Morris, M. C. Adherence to a Mediterranean-type dietary pattern and cognitive decline in a community population. Am J Clin Nutr. 2011. 93:601-7. doi: 10.3945/ajcn.110.007369	Data overlap
227	Tanprasertsuk, J.,Scott, T. M.,Barbey, A. K.,Barger, K.,Wang, X. D.,Johnson, M. A.,Poon, L. W.,Vishwanathan, R.,Matthan, N. R.,Lichtenstein, A. H.,Ferland, G.,Johnson, E. J. Carotenoid-Rich Brain Nutrient Pattern Is Positively Correlated With Higher Cognition and Lower Depression in the Oldest Old With No Dementia. Front Nutr. 2021. 8:704691. doi: 10.3389/fnut.2021.704691	Intervention/exposure
228	Tate Chinara, M. Examining the effect of a high quality dietary intervention on cognitive function in early adolescence. Dissertation abstracts international: section B: the sciences and engineering. 2017. 78:No Pagination Specified. doi: 10.7916/D8TQ61T5	Outcome

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229	Thomas, A.,Lefèvre-Arbogast, S.,Féart, C.,Foubert-Samier, A.,Helmer, C.,Catheline, G.,Samieri, C. Association of a MIND Diet with Brain Structure and Dementia in a French Population. J Prev Alzheimers Dis. 2022. 9:655-664. doi: 10.14283/jpad.2022.67	Publication status
230	Titova, O. E.,Ax, E.,Brooks, S. J.,Sjögren, P.,Cederholm, T.,Kilander, L.,Kullberg, J.,Larsson, E. M.,Johansson, L.,Ahlström, H.,Lind, L.,Schiöth, H. B.,Benedict, C. Mediterranean diet habits in older individuals: associations with cognitive functioning and brain volumes. Exp Gerontol. 2013. 48:1443-8. doi: 10.1016/j.exger.2013.10.002	Data overlap
231	Tomata, Y.,Sugiyama, K.,Kaiho, Y.,Honkura, K.,Watanabe, T.,Zhang, S.,Sugawara, Y.,Tsuji, I.. Dietary Patterns and Incident Dementia in Elderly Japanese: The Ohsaki Cohort 2006 Study. J Gerontol A Biol Sci Med Sci. 2016. 71:1322-8. doi: 10.1093/gerona/glw117	Data overlap
232	Tor-Roca, A., S?nchez-Pla, A., Korosi, A., Pall?s, M., Lucassen, P.J., Castellano-Escuder, P., Aigner, L., Gonz?lez-Dom?nguez, R., Manach, C., Carmona, F., Vegas, E., Helmer, C., Feart, C., Lefevre-Arbogast, S., Neuffer, J., Lee, H., Thuret, S., Andres-Lacueva, C., Samieri, C., Urpi-Sarda, M. A Mediterranean Diet-Based Metabolomic Score and Cognitive Decline in Older Adults: A Case-Control Analysis Nested within the Three-City Cohort Study. Molecular nutrition & food research. 2023. 68(13):e2300271. doi: 10.1002/mnfr.202300271	Intervention/exposure
233	Tsai, H. J. Dietary patterns and cognitive decline in Taiwanese aged 65 years and older. Int J Geriatr Psychiatry. 2015. 30:523-30. doi: 10.1002/gps.4176	Country
234	Tsai, J. H.,Huang, C. F.,Lin, M. N.,Chang, C. E.,Chang, C. C.,Lin, C. L. Taiwanese Vegetarians Are Associated with Lower Dementia Risk: A Prospective Cohort Study. Nutrients. 2022. 14(3):588. doi: 10.3390/nu14030588	Intervention/exposure
235	Tsivgoulis, G.,Judd, S.,Letter, A. J.,Alexandrov, A. V.,Howard, G.,Nahab, F.,Unverzagt, F. W.,Moy, C.,Howard, V. J.,Kissela, B.,Wadley, V. G. Adherence to a Mediterranean diet and risk of incident cognitive impairment. Neurology. 2013. 80:1684-92. doi: 10.1212/WNL.0b013e3182904f69	Data overlap
236	Tsolaki, M.,Lazarou, E.,Kozori, M.,Petridou, N.,Tabakis, I.,Lazarou, I.,Karakota, M.,Saoulidis, I.,Melliou, E.,Magiatis, P. A Randomized Clinical Trial of Greek High Phenolic Early Harvest Extra Virgin Olive Oil in Mild Cognitive Impairment: The MICOIL Pilot Study. J Alzheimers Dis. 2020. 78:801-817. doi: 10.3233/JAD-200405	Intervention/exposure
237	Tussing-Humphreys, L.,Lamar, M.,McLeod, A.,Schiffer, L.,Blumstein, L.,Dakers, R.,Karstens, A.,Hemphill, N. O. N.,Strahan, D.,Siegel, L.,Flack, J. S.,Antonic, M.,Restrepo, L.,Berbaum, M.,Fitzgibbon, M. Effect of Mediterranean diet and Mediterranean diet plus calorie restriction on cognition, lifestyle, and cardiometabolic health: A randomized clinical trial. Prev Med Rep. 2022. 29:101955. doi: 10.1016/j.pmedr.2022.101955	Outcome
238	Valls-Pedret, C.,Lamuela-Raventós, R. M.,Medina-Remón, A.,Quintana, M.,Corella, D.,Pintó, X.,Martínez-González, MÁ,Estruch, R.,Ros, E. Polyphenol-rich foods in the Mediterranean diet are associated with better cognitive function in elderly subjects at high cardiovascular risk. J Alzheimers Dis. 2012. 29:773-82. doi: 10.3233/JAD-2012-111799	Intervention/exposure
239	Valls-Pedret, C.,Sala-Vila, A.,Serra-Mir, M.,Corella, D.,de la Torre, R.,Martínez-González, MÁ,Martínez-Lapiscina, E. H.,Fitó, M.,Pérez-Heras, A.,Salas-Salvadó, J.,Estruch, R.,Ros, E. Mediterranean Diet and Age-Related Cognitive Decline: A Randomized Clinical Trial. JAMA Intern Med. 2015. 175:1094-1103. doi: 10.1001/jamainternmed.2015.1668	Data overlap
240	van Soest, A. P. M.,Hermes, G. D. A.,Berendsen, A. A. M.,van de Rest, O.,Zoetendal, E. G.,Fuentes, S.,Santoro, A.,Franceschi, C.,de Groot, Lcpgm,de Vos, W. M. Associations between Pro- and Anti-Inflammatory Gastro-Intestinal Microbiota, Diet, and Cognitive Functioning in Dutch Healthy Older Adults: The NU-AGE Study. Nutrients. 2020. 12(11):3471. doi: 10.3390/nu12113471	Intervention/exposure
241	Vercambre, M. N.,Boutron-Ruault, M. C.,Ritchie, K.,Clavel-Chapelon, F.,Berr, C. Long-term association of food and nutrient intakes with cognitive and functional decline: a 13-year follow-up study of elderly French women. Br J Nutr. 2009. 102:419-27. doi: 10.1017/S0007114508201959	Intervention/exposure

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242	Vicinanza, R.,Bersani, F. S.,D'Ottavio, E.,Murphy, M.,Bernardini, S.,Crisciotti, F.,Frizza, A.,Mazza, V.,Biondi, M.,Troisi, G.,Cacciafesta, M. Adherence to Mediterranean diet moderates the association between multimorbidity and depressive symptoms in older adults. Archives of Gerontology and Geriatrics. 2020. 88:104022. doi: 10.1016/j.archger.2020.104022	Study design
243	Voortman, T.,Kiefte-de Jong, J. C.,Ikram, M. A.,Stricker, B. H.,van Rooij, F. J. A.,Lahousse, L.,Tiemeier, H.,Brusselle, G. G.,Franco, O. H.,Schoufour, J. D. Adherence to the 2015 Dutch dietary guidelines and risk of non-communicable diseases and mortality in the Rotterdam Study. Eur J Epidemiol. 2017. 32:993-1005. doi: 10.1007/s10654-017-0295-2	Data overlap
244	Wade, A. T.,Davis, C. R.,Dyer, K. A.,Hodgson, J. M.,Woodman, R. J.,Keage, H. A. D.,Murphy, K. J. A Mediterranean Diet with Fresh, Lean Pork Improves Processing Speed and Mood: Cognitive Findings from the MedPork Randomised Controlled Trial. Nutrients. 2019. 11(7):1521. doi: 10.3390/nu11071521	Outcome
245	Wade, A. T.,Davis, C. R.,Dyer, K. A.,Hodgson, J. M.,Woodman, R. J.,Keage, H. A. D.,Murphy, K. J. A Mediterranean diet supplemented with dairy foods improves mood and processing speed in an Australian sample: results from the MedDairy randomized controlled trial. Nutr Neurosci. 2020. 23:646-658. doi: 10.1080/1028415X.2018.1543148	Study duration 8-12 wk
246	Wagner, M.,Grodstein, F. Patterns of lifestyle behaviours from mid- through later-life in relation to exceptional episodic memory performance in older women: the Nurses' Health Study. Age Ageing. 2022. 51(5):afac102. doi: 10.1093/ageing/afac102	Outcome
247	Wang, B.,Wang, N.,Sun, Y.,Tan, X.,Zhang, J.,Lu, Y. Association of Combined Healthy Lifestyle Factors With Incident Dementia in Patients With Type 2 Diabetes. Neurology. 2022. 99:e2336-e2345. doi: 10.1212/WNL.0000000000201231	Intervention/exposure
248	Wang, K.,Tang, W.,Hao, X.,Zhao, J. Ultra-processed food consumption and risk of dementia and Alzheimer's disease: Long-term results from the Framingham Offspring Study. Alzheimer's and Dementia. 2023. 19(12):5988. doi: 10.1002/alz.13351	Publication status
249	Wang, T.,Cao, S.,Li, D.,Chen, F.,Jiang, Q.,Zeng, J. Association between dietary patterns and cognitive ability in Chinese children aged 10-15 years: evidence from the 2010 China Family Panel Studies. BMC Public Health. 2021. 21:2212. doi: 10.1186/s12889-021-12209	Study design
250	Wang, X.,Li, T.,Ding, H.,Liu, Y.,Liu, X.,Yu, K.,Xiao, R.,Xi, Y. The role of dietary patterns and erythrocyte membrane fatty acid patterns on mild cognitive impairment. Front Nutr. 2022. 9:1005857. doi: 10.3389/fnut.2022.1005857	Study design, Country
251	Ward, N.A., Reid-McCann, R., Brennan, L., Cardwell, C.R., de Groot, C., Maggi, S., McCaffrey, N., McGuinness, B., McKinley, M.C., Noale, M., O'Neill, R.F., Prinelli, F., Sergi, G., Trevisan, C., Volkert, D., Woodside, J.V., McEvoy, C.T. Effects of PROtein enriched MEDiterranean Diet and EXercise on nutritional status and cognition in adults at risk of undernutrition and cognitive decline: the PROMED-EX Randomised Controlled Trial. BMJ open. 2023. 13:e070689. doi: 10.1136/bmjopen-2022-070689	Study design, Publication status
252	Wardle, J.,Rogers, P.,Judd, P.,Taylor, M. A.,Rapoport, L.,Green, M.,Nicholson Perry, K. Randomized trial of the effects of cholesterol-lowering dietary treatment on psychological function. Am J Med. 2000. 108:547-53. doi: 10.1016/s0002-9343(00)00330-2	Intervention/exposure
253	Wei, K.,Yang, J.,Lin, S.,Mei, Y.,An, N.,Cao, X.,Jiang, L.,Liu, C.,Li, C. Dietary Habits Modify the Association of Physical Exercise with Cognitive Impairment in Community-Dwelling Older Adults. J Clin Med. 2022. 11(17):5122. doi: 10.3390/jcm11175122	Country
254	Wengreen, H. J.,Neilson, C.,Munger, R.,Corcoran, C. Diet quality is associated with better cognitive test performance among aging men and women. J Nutr. 2009. 139:1944-9. doi: 10.3945/jn.109.106427	Data overlap
255	Wengreen, H.,Munger, R. G.,Cutler, A.,Quach, A.,Bowles, A.,Corcoran, C.,Tschanz, J. T.,Norton, M. C.,Welsh-Bohmer, K. A. Prospective study of Dietary Approaches to Stop Hypertension- and Mediterranean-style dietary patterns and age-related cognitive change: the Cache County Study on Memory, Health and Aging. Am J Clin Nutr. 2013. 98:1263-71. doi: 10.3945/ajcn.112.051276	Data overlap

Number	Citation	Rationale
256	Wesselman, L. M. P.,Doorduijn, A. S.,de Leeuw, F. A.,Verfaillie, S. C. J.,van Leeuwenstijn-Koopman, M.,Slot, R. E. R.,Kester, M. I.,Prins, N. D.,van de Rest, O.,de van der Schueren, M. A. E.,Scheltens, P.,Sikkes, S. A. M.,van der Flier, W. M. Dietary Patterns Are Related to Clinical Characteristics in Memory Clinic Patients with Subjective Cognitive Decline: The SCIENCe Project. Nutrients. 2019. 11(5):1057. doi: 10.3390/nu11051057	Study design, Participant health status
257	Wright, K. D.,Klatt, M. D.,Adams, I. R.,Nguyen, C. M.,Mion, L. C.,Tan, A.,Monroe, T. B.,Rose, K. M.,Scharre, D. W. Mindfulness in Motion and Dietary Approaches to Stop Hypertension (DASH) in Hypertensive African Americans. J Am Geriatr Soc. 2021. 69:773-778. doi: 10.1111/jgs.16947	Study duration 8-12 wk
258	Wu, J.,Song, X.,Chen, G. C.,Neelakantan, N.,van Dam, R. M.,Feng, L.,Yuan, J. M.,Pan, A.,Koh, W. P. Dietary pattern in midlife and cognitive impairment in late life: a prospective study in Chinese adults. Am J Clin Nutr. 2019. 110:912-920. doi: 10.1093/ajcn/nqz150	Data overlap
259	Wu, W.,Shang, Y.,Dove, A.,Guo, J.,Calderón-Larrañaga, A.,Rizzuto, D.,Xu, W. The Nordic prudent diet prolongs survival with good mental and physical functioning among older adults: The role of healthy lifestyle. Clin Nutr. 2021. 40:4838-4844. doi: 10.1016/j.clnu.2021.06.027	Outcome
260	X Xing, X Yang, J Chen, J Wang, B Zhang, Y Zhao, S Wang. Multimorbidity, healthy lifestyle, and the risk of cognitive impairment in Chinese older adults: a longitudinal cohort study. BMC public health. 2024. 24(1):46. doi: 10.1186/s12889-023-17551-1	No key confounders accounted for
261	Xia, X.,Qiu, C.,Rizzuto, D.,Grande, G.,Laukka, E. J.,Fratiglioni, L.,Guo, J.,Vetrano, D. L. The age-dependent association of Life's Simple 7 with transitions across cognitive states after age 60. Journal of Internal Medicine. 2023. 294:191-202. doi: 10.1111/joim.13657	Intervention/exposure
262	Xiu, L. L.,Wahlqvist, M. L.,Lee, M. S.,Chen, R. C. Cognitive impairment and limited dietary diversity or physical inactivity are conjoint precursors of incident diabetes more so in elderly women than men. Asia Pac J Clin Nutr. 2013. 22:635-45. doi: 10.6133/apjcn.2013.22.4.20	Intervention/exposure, Outcome
263	Xu, C.,Cao, Z.,Huang, X.,Wang, X. Associations of healthy lifestyle with depression and post-depression dementia: A prospective cohort study. J Affect Disord. 2023. 327:87-92. doi: 10.1016/j.jad.2023.01.111	Comparator
264	Xu, F.,Delmonico, M. J.,Lofgren, I. E.,Uy, K. M.,Maris, S. A.,Quintanilla, D.,Taetzsch, A. G.,Letendre, J.,Mahler, L. Effect of a Combined Tai Chi, Resistance Training and Dietary Intervention on Cognitive Function in Obese Older Women. J Frailty Aging. 2017. 6:167-171. doi: 10.14283/jfa.2017.16	Intervention/exposure
265	Xu, X.,Parker, D.,Shi, Z.,Byles, J.,Hall, J.,Hickman, L. Dietary Pattern, Hypertension and Cognitive Function in an Older Population: 10-Year Longitudinal Survey. Front Public Health. 2018. 6:201. doi: 10.3389/fpubh.2018.00201	Country
266	Ye, X.,Scott, T.,Gao, X.,Maras, J. E.,Bakun, P. J.,Tucker, K. L. Mediterranean diet, healthy eating index 2005, and cognitive function in middle-aged and older Puerto Rican adults. J Acad Nutr Diet. 2013. 113:276-81.e1-3. doi: 10.1016/j.jand.2012.10.014	Study design
267	Yokoyama, Y., Nofuji, Y., Seino, S., Abe, T., Murayama, H., Narita, M., Shinkai, S., Kitamura, A., Fujiwara, Y. Association of dietary variety with the risk for dementia: the Yabu cohort study. Public health nutrition. 2023. 26:2314. doi: 10.1017/S1368980023000824	Intervention/exposure
268	Young, H. A.,Freegard, G.,Benton, D. Mediterranean diet, interoception and mental health: Is it time to look beyond the 'Gut-brain axis'?. Physiol Behav. 2022. 257:113964. doi: 10.1016/j.physbeh.2022.113964	Outcome
269	Yu, F. N.,Hu, N. Q.,Huang, X. L.,Shi, Y. X.,Zhao, H. Z.,Cheng, H. Y. Dietary patterns derived by factor analysis are associated with cognitive function among a middle-aged and elder Chinese population. Psychiatry Res. 2018. 269:640-645. doi: 10.1016/j.psychres.2018.09.004	Study design
270	Zbeida, M.,Goldsmith, R.,Shimony, T.,Vardi, H.,Naggan, L.,Shahar, D. R. Mediterranean diet and functional indicators among older adults in non-Mediterranean and Mediterranean countries. J Nutr Health Aging. 2014. 18:411-8. doi: 10.1007/s12603-014-0003-9	Study design

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271	Zellner, M.,Babeluk, R.,Jakobsen, L. H.,Gerner, C.,Umlauf, E.,Volf, I.,Roth, E.,Kondrup, J. A proteomics study reveals a predominant change in MaoB expression in platelets of healthy volunteers after high protein meat diet: Relationship to the methylation cycle. Journal of Neural Transmission. 2011. 118:653-662. doi: 10.1007/s00702-011-0617-6	Intervention/exposure
272	Zheng, J.,Zhou, R.,Li, F.,Chen, L.,Wu, K.,Huang, J.,Liu, H.,Huang, Z.,Xu, L.,Yuan, Z.,Mao, C.,Wu, X. Association between dietary diversity and cognitive impairment among the oldest-old: Findings from a nationwide cohort study. Clin Nutr. 2021. 40:1452-1462. doi: 10.1016/j.clnu.2021.02.041	Country
273	Zhong, W. F.,Song, W. Q.,Wang, X. M.,Li, Z. H.,Shen, D.,Liu, D.,Zhang, P. D.,Shen, Q. Q.,Liang, F.,Nan, Y.,Xiang, J. X.,Chen, Z. T.,Li, C.,Li, S. T.,Lv, X. G.,Lin, X. R.,Lv, Y. B.,Gao, X.,Kraus, V. B.,Shi, X. M.,Mao, C. Dietary Diversity Changes and Cognitive Frailty in Chinese Older Adults: A Prospective Community-Based Cohort Study. Nutrients. 2023. 15(17):3784. doi: 10.3390/nu15173784	Country
274	Zhu, A.,Chen, H.,Shen, J.,Wang, X.,Li, Z.,Zhao, A.,Shi, X.,Yan, L.,Zeng, Y.,Yuan, C.,Ji, J. S. Interaction between plant-based dietary pattern and air pollution on cognitive function: a prospective cohort analysis of Chinese older adults. Lancet Reg Health West Pac. 2022. 20:100372. doi: 10.1016/j.lanwpc.2021.100372	Country
275	Zhu, N.,Jacobs, D. R.,Meyer, K. A.,He, K.,Launer, L.,Reis, J. P.,Yaffe, K.,Sidney, S.,Whitmer, R. A.,Steffen, L. M. Cognitive function in a middle aged cohort is related to higher quality dietary pattern 5 and 25 years earlier: the CARDIA study. J Nutr Health Aging. 2015. 19:33-8. doi: 10.1007/s12603-014-0491-7	Data overlap
276	Zupo, R.,Griseta, C.,Battista, P.,Donghia, R.,Guerra, V.,Castellana, F.,Lampignano, L.,Bortone, I.,Lozupone, M.,Giannelli, G.,De Pergola, G.,Boeing, H.,Sardone, R.,Panza, F. Role of plant-based diet in late-life cognitive decline: results from the Salus in Apulia Study. Nutr Neurosci. 2022. 25:1300-1309. doi: 10.1080/1028415X.2020.1853416	Study design

Appendix 6: Dietary pattern visualization

The Committee's synthesis was facilitated by data visualization tables that presented the dietary pattern components in each of the dietary patterns examined in the body of evidence. During evidence synthesis, these tables were used in conjunction with other materials to compare and contrast the components between and within the dietary patterns studied along with the direction, magnitude, and statistical significance of reported results. Detailed information about the body of evidence, including study and population characteristics, reported results for all relevant outcomes, key confounders accounted for, study limitations, and funding sources, are summarized in the evidence tables of this report (**Table 6**).

Each column represents the most commonly reported foods/food groups or nutrients across dietary patterns in this body of evidence. Two additional columns, "Other, A" and "Other, B" , captured a variety of other components less frequently reported across dietary patterns that did not fit into one of the preceding columns or categories, such as fast and/or fried food, pizza, snacks, and sofritas. Multiple symbols in each cell mean that the dietary pattern included multiple components from that column/category. Empty cells mean that the dietary pattern did not describe a component within that column/category.

Table A 8. Visualization of dietary pattern components across dietary patterns consumed by adults and older adults organized alphabetically by first-author last name across evidence examining the relationship between dietary patterns consumed and risk of cognitive decline, dementia, Alzheimer's disease, and mild cognitive impairment[*],[†]

Article; Approach[‡]; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Barnes, 2023; RCT; MIND v. Control diet	▲		▲	▲		▲	▲			▲	FS	▼ R	▲		▼ ch				▼	▲ oo		▼ B	▲ W				▼ F	
Agarwal, 2021; a priori; MedDietScore	▲	▲	▲	▲			▲			▲		▼ RP	▼				▼			▲ oo			▼					
Agarwal, 2021; PCA; 'Western'									▲			▲ RP					▲		▲								▲ F	▲

[*] ▲ Positively-scored component, reflecting higher intake within the food category as part of the pattern; ▼ Negatively-scored component, reflecting lower intake within the food category as part of the pattern; ◄ Neutral component, reflecting moderate (in contrast to higher or lower) intake within the food category as part of the pattern

[†] Abbreviations: AF, added fat; Al, alcohol; AP, animal-based foods and products; AS, added sugar; B, butter; Be, beans; B/P, beef/pork; C, coffee only; ch, cheese; CT, cereals and/or tubers; D, included with total dairy; DP, dietary pattern; FF, fried potato or French fries; F, fast and/or fried food; Fr, included with Fruit component; FS, fish and seafood; FV, fruits and/or vegetables; G, included with total grains or cereals; L, liquor; LN, legumes and nuts; LP, lean protein (total/foods); M, meat and or meat products; M:E, ratio of meat to eggs; Mi, milk; Med, Mediterranean; Na+, sodium; OF, oily and/or fatty fish; oo, olive oil; Or, organs/organ meat; P, processed; PCA, principal component analysis; pro, protein (total/foods); R, red meat; RP, red and/or processed; RRR, reduced rank regression; rw, red wine; S, soy and/or soy products; SB, sugar-sweetened beverage; SD, 'sugary dairy'; SN, soybeans and nuts; T, tea only; TC, tea and/or coffee; Tr, trans fat; UF: SF, ratio of unsaturated relative to saturated fat; vo, vegetable oils; V, included in vegetables group; VL, vegetables and legumes; W, wine; W/B, whole grains and mixed beans; X, not included; y, yogurt

[‡] Dietary approaches included methods such as a priori index/score analysis and investigator-assigned dietary intervention (RCT), a posteriori principal component analysis (PCA), and reduced rank regression (RRR). The dietary pattern is abbreviated in this table due to limited space but is described in more detail in **Table 6** of the main document.

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Andreu-Reinón, 2021; a priori; rMED	▲	X	▲	▲		Fr	G	▲	G	▲		▼ RP ▼ M	M							▲ oo			◄					
Andreu-Reinón, 2021; a priori; MDS	▲		▲	▲		▲		▲		▲		▼			▼	D	D			▲ UF :SF		UF: SF	◄					
Andreu-Reinón, 2021; a priori; aMED	▲	X	▲	▲		▲	▲			▲		▼ RP								▲ UF :SF		UF: SF	◄					
Andreu-Reinón, 2021; a priori; arMED	▲	X	▲	▲		Fr		▲		▲		▼ M	M		▼	D	D			▲ oo								
Ashby-Mitchell, 2015; PCA; '101, DP1'	▲	▲		▲			▲	▲																				
Ashby-Mitchell, 2015; PCA; '101, DP2'		▲										▲P							▲								▲	▲
Ashby-Mitchell, 2015; PCA; '101, DP3'	▲								▼						▲y				▼								▼	
Ashby-Mitchell, 2015; PCA; '101, DP4'												▲	▲		▲ ch												▲	

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Ashby-Mitchell, 2015; PCA; '101, DP5'	▲		▲	▲						▲					▲ ch												▲S	
Ashby-Mitchell, 2015; PCA; '101, DP6'	▼						▲		▲														▲ W, L					
Ashby-Mitchell, 2015; PCA; '101, DP7'				▲	▲		▲	▲	▲					▼		▲	▼				▼	▼						
Ashby-Mitchell, 2015; PCA; '32, DP1'		▲ FF							▲			▲R	▲										▲ B				▲	▲
Ashby-Mitchell, 2015; PCA; '32, DP2'	▲			▲		▲				▲																		
Ashby-Mitchell, 2015; PCA; '32, DP3'	▲	▲					▲																▼ W				▲	
Ashby-Mitchell, 2015; PCA; '32, DP4'														▲		▼	▲				▼	▲						
Ashby-Mitchell, 2015; PCA; '20, DP1'	▲			▲	▲	▲	▲			▲		▲ M	M														▲	
Ashby-Mitchell, 2015; PCA; '20, DP2'		▲ FF	▼																▲	▲	▲						▲	▲

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Ashby-Mitchell, 2015; PCA; '20, DP3'							▼		▲			▲ M	M		▼								▲					
Beydoun, 2022; a priori; HEI-1995	▲			▲				▲				▼ M	M		▼ Mi	Mi	Mi			▼	▼	▼		◄			▲	
Boumenna, 2022; a priori; MIND	▲		▲ Be	▲		▲	▲			▲ FS	FS	▼R	▲		▼ ch				▼	▲ oo		▼ B	▲ W				▼F	
Charisis, 2021; MedDietScore	▲	▲	▲	▲			▲			▲		▼ RP	▼				▼			▲ oo			▼					
Chen, 2017; PCA; 'Vegetable' DP	▲	▲																		▲								
Chen, 2021; a priori; DGI-2013	▲		▲	▲		▲	▲			▲			▲	▲	▲		▼		▼	▼		▼	▼	▼			▼	
Chen, 2022; a priori; MDS	▲		▲	▲		▲		▲		▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					
Chen, 2022; a priori; MedDietScore	▲	▲	▲	▲			▲			▲		▼ RP	▼				▼			▲ oo			▼					

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Chen, 2022; a priori; mDASH	▲	X	▲ LN	▲	Fr	LN	▲					▼ RP				▲		▼	AS					▼				
Chen H, 2023; a priori; MIND	▲		▲ Be	▲		▲	▲			▲ FS	FS	▼R	▲		▼ ch				▼	▲ oo		▼ B	▲ W				▼F	
Chen LW, 2023; a priori; mAHEI	▲			▲			▲			▲		▲ M:E	M:E	M:E									◄				▲S	▼F
Chen J, 2023; PCA; 'Traditional Finnish'		▲			▼			▲				▲P			▲							▲			▲			
Chen J, 2023; PCA; 'Vegetables and Dairy Products'	▲														▲													
Chen J, 2023; PCA; 'Traditional Finnish & High Carbohydrate'		▲						▲											▲	▲	▲	▲						
Chen J, 2023; PCA; 'Red Meat'										▲		▲	▲	▲													▲	
Chen J, 2023; PCA; 'Healthy'	▲		▲ LN	▲		LN				▲					▲ ch										▲T			

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Chen J, 2023; PCA; 'High Carbohydrate'		▲		▲				▲				▲ M	M	▲	▲				▲	▲	▲							
Chou, 2019; a priori; mAHEI	▲			▲			▲			▲		▲ M:E	M:E	M:E									◄				▲S	▼F
Corley & Deary, 2021; a priori; MDS	▲		▲	▲		▲		▲		▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					
Corley & Deary, 2021; PCA; 'Mediterranean -Style'	▲		▲					▲		▲			▲							▲ oo							▲	▲
Corley & Deary, 2021; PCA; 'Traditional	▲	▲	▲									▲P	▲		▲				▲						▼C		▲	
Cornelis, 2023; a priori; MIND	▲		▲ Be	▲		▲	▲			▲ FS	FS	▼R	▲		▼ ch				▼	▲ oo		▼ B	▲ W				▼F	
Cornelis, 2023; a priori; AHEI-2010	▲	X	▲ LN	▲	SB	LN	▲			▲ OF	OF	▼ RP						▼			▼ Tr		◄	▼				
D'Amico, 2020; PCA; 'Prudent ♂'	▲		▲	▲		▲	▲	▲		▲ OF			▲			▲											▲	

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
D'Amico, 2020; PCA; 'Western ♂'		▲							▲			▲ RP	▲	▲			▲	▲	▲			▲		▲			▲F	
D'Amico, 2020; PCA; 'Prudent ♀'	▲		▲	▲		▲		▲		▲ OF				▲	▲ ch	▲											▲	
D'Amico, 2020; PCA; 'Western ♀'		▲						▲	▲			▲ RP	▲				▲	▲	▲			▲		▲			▲F	
Daniel, 2021; a priori; DASH	▲	X	▲ LN	▲	Fr	LN	▲					▼ RP				▲		▼						▼				
de Crom, 2022; a priori; MIND	▲		▲ Be	▲		▲	▲			▲ FS	FS	▼R	▲		▼ ch				▼	▲ oo		▼ B	▲ W				▼F	
de Crom, 2022; a priori; DDG-2015	▲		▲	▲		▲	▲		▼	▲		▼ RP			▲	D	D			▲			▼	▼	▲			
de Crom, 2022; a priori; MedDietScore	▲	▲	▲	▲			▲			▲		▼ RP	▼				▼			▲ oo			▼					
de Crom, 2023; a priori; aPDI	▲	▲	▲	▲		▲	▲		▲	▼	FS	▼ RP	▼	▼	▼ ch, SD	▼	▼	▲	▲	▲ vo		▼			▲ TC			

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
de Crom, 2023; a priori; hPDI	▲	▼	▲	▲		▲	▲		▼	▼	FS	▼ RP	▼	▼	▼ ch, SD	▼	▼	▼	▼	▲ vo		▼			▲ TC			
de Crom, 2023; a priori; uPDI	▼	▲	▼	▼		▼	▼		▲	▼	FS	▼ RP	▼	▼	▼ ch, SD	▼	▼	▲	▲	▲ vo		▼			▼ TC			
Dhana, 2021; a priori; MIND	▲		▲ Be	▲		▲	▲			▲ FS	FS	▼R	▲		▼ ch				▼	▲ oo		▼ B	▲ W				▼F	
Flores, 2023; a priori; DST	▲			▲	Fr		G	▲	G	LP	LP	▼P	▲ LP		◄				▼		▼ AF		▼				▲	
Galbete, 2015; a priori; MDS	▲		▲	▲		▲		▲		▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					
Gelber, 2012; a priori; Diet Score	▲			▲			G	▲	G	▲		▼ M	M		▼	D	D			▲ UF :SF		UF: SF	◄					
Glans, 2023; a priori; mMDS	▲ VL		VL	▲		▲				▲	▲	▼ RP						▼	▼	▲ vo	▼	▼ B	▲ W					
Glans, 2023; a priori; SDGS	▲ FV			FV						▲ FS	FS	▼ RP							▼							▲		
Granic, 2016; PCA; 'High Red Meat'		▲	▲									▲								▲		▼					▲	

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Granic, 2016; PCA; 'Low Meat'		▼		▲		▲	▲			▲ FS	FS	▼ RP		▲		▲	▲					◀ B	▲ C, Al		C, Al		▼	▲
Granic, 2016; PCA; 'High Butter'												◀R								▼	▼	▲ B						
Gregory, 2022; a priori; MEDAS	▲		▲	▲		▲				▲		▼R	▲		▼	D	D	▼	▼	▲ oo		▼	▲ rw				▲	
Guo, 2021; a priori; AHA-LS7	▲F V			FV						▲									▼					▼				
Hsiao, 2022; a priori; DVS	▲		▲	▲						▲	▲	▲	▲		▲										▲T			
Hu, 2020; a priori; HEI-2015	▲	V	V	▲			▲		▼	▲ pro	pro	pro	pro		▲			AS	▼	▲ UF :SF		▼		▼				
Hu, 2020; a priori; AHEI-2010	▲		▲ LN	▲	SB	LN	▲					▼ RP						▼		▲ UF :SF	▼ TF	UF: SF	◀	▼				
Hu, 2020; a priori; aMED	▲		▲	▲		▲	▲			▲		▼ RP								▲ UF :SF		UF: SF	◀					
Hu, 2020; a priori; DASH	▲	X	▲ LN	▲	Fr	LN	▲					▼ RP				▲		▼						▼				

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Jia, 2023; a priori; CDGI 2022-E	▲	G	W/ B	▲		▲	▲ W/ B	◄		◄ FS	FS	◄ M, P	M, P	◄	▲					▼			▼	▼				
Keenan, 2020; a priori; aMED	▲		▲	▲		▲	▲			▲		▼ RP								▲ UF :SF		UF: SF	◄					
Kjeldsen, 2022; a priori; Danish DG	▲			▲						▲		▼P						▼		▲		▼					▼F	
Lai, 2023; a priori; DASH	▲	X	▲ LN	▲	Fr	LN	▲					▼ RP			▲	D	D	▼										
Larsson & Wolk, 2018; a priori; DASH	▲	X	▲ LN	▲	Fr	LN	▲					▼ RP				▲		▼										
Larsson & Wolk, 2018; a priori; mMED	▲		▲ LN	▲		LN	▲			▲		▼ RP					▼			▲ oo			◄					
Liang, 2022; a priori; hPDI	▲	▼	▲	▲	▼	▲	▲		▼	▼ FS	FS	▼	M	▼	▼			▼	▼	▲		▼			▲ TC		▼ AP	
Liang, 2022; a priori; PDI	▲	▲	▲	▲	▲	▲	▲		▲	▼ FS	FS	▼	M	▼	▼			▲	▲	▲		▼			▲ TC		▼ AP	
Liang, 2022; a priori; uPDI	▼	▲	▼	▼	SB	▼	▼		▲	▼ FS	FS	▼	M	▼	▼			▲	▲	▼		▼			▼ TC		▼ AP	

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Liu, 2022; a priori; PDI	▲	▲	▲	▲	▲	▲	▲		▲	▼ FS	FS	▼	M	▼	▼			▲	▲	▲		▼			▲ TC		▼ AP	
Liu, 2022; a priori; hPDI	▲	▼	▲	▲	▼	▲	▲		▼	▼ FS	FS	▼	M	▼	▼			▼	▼	▲		▼			▲ TC		▼ AP	
Liu, 2022; a priori; uPDI	▼	▲	▼	▼	SB	▼	▼		▲	▼ FS	FS	▼	M	▼	▼			▲	▲	▼		▼			▼ TC		▼ AP	
Lohman, 2023; a priori; HEI-2015	▲	V	V	▲			▲		▼	▲ pro	pro	pro	pro		▲			AS	▼	▲ UF :SF		▼		▼				
Lu, 2021; a priori; JDI	▲							▲ rice		▲		▲ B/P	B/P												▲ TC		▲	
Malek, 2022; PCA; 'Sweet foods-beverages'															▲ SD	▼			▲			▼ B			▲ TC		▲	
Malek, 2022; PCA; 'Tropical fruits-oats'				▲			▲																					
Malek, 2022; PCA; 'Meat-vegetables-rice and noodles'	▲							▲	▲			▲ B/P	B/P															

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Malek, 2022; PCA; 'Local snacks-fish and seafoods-high-salt-foods'										▲ FS	FS													▲			▲	▲
Malek, 2022; PCA; 'Fruits-legumes'			▲	▲																								
Mamalaki, 2023; a priori; MedDietScore	▲	▲	▲	▲			▲			▲		▼ RP	▼				▼			▲ oo			▼ W					
Mattei, 2019; a priori; MDS	▲		▲	▲		▲		▲		▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					
Mattei, 2019; a priori; HEI-2005	▲	V	V, Be	▲			▲	▲	▼			▲ M, Be	M, Be		▲ Mi, y, ch, S	Mi, y, ch, S	Mi, y, ch, S	AS, AF, Al	▼	▲	AF, AS, Al	▼	AF, AS, Al	▼ Na+				
Matteri, 2019; a priori; AHEI-2010	▲	X	▲ LN	▲	SB	LN	▲					▼ RP						▼		▲ UF :SF	▼ Tr	UF: SF	◄	▼				
Mattei, 2019; a priori; DASH	▲	X	▲ LN	▲	Fr	LN	▲					▼ RP				▲		▼						▼				

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Melo van Lent, 2021; a priori; MIND	▲		▲ Be	▲		▲	▲			▲ FS	FS	▼R	▲		▼ ch				▼	▲ oo		▼ B	▲ W				▼F	
Melo van Lent, 2022; a priori; EDIP	▲				▲				▼	▼		▼P ▼R ▼ Or						▼							▲ T ▲ C		▲	
Milte, 2019; a priori; DGI-2013	▲		▲	▲		▲	▲			▲			▲L	▲	▲		▼		▼	▼		▼	▼	▼			▼	
Morris, 2015; a priori; MIND	▲		▲ Be	▲		▲	▲			FS	▲	▼ R	▲		▼ ch				▼	▲ oo		▼ B	▲ W				▼F	
Morris, 2015 (MIND); a priori; MIND	▲		▲ Be	▲		▲	▲			FS	▲	▼ R	▲		▼ ch				▼	▲ oo		▼ B	▲ W				▼F	
Moustafa, 2022; a priori; MDS	▲		▲	▲		▲		▲		▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					
Moustafa, 2022; a priori; mMDS	▲		▲	▲		▲	▲			▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					
Mueller, 2020; a priori; MIND	▲		▲	▲		▲	▲			FS	▲	▼ R	▲		▼ ch				▼	▲ oo		▼ B	▲ W				▼F	

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Muñoz-García, 2020; a priori; MEDAS	▲		▲	▲		▲				▲		▼ RP	▲					▼	▼	▲ oo		▼	▲ rw				▲	
Muñoz-García, 2020; a priori; MDS	▲		▲	▲		▲		▲		▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					
Muñoz-García, 2020; a priori; DASH	▲	X	▲ LN	▲	Fr	LN	▲					▼ RP				▲		▼						▼				
Muñoz-García, 2020; a priori; MIND	▲		▲ Be	▲		▲	▲			FS	▲	▼ R	▲		▼ ch				▼	▲ oo		▼ B	▲ W				▼F	
Muñoz-García, 2020; a priori; AHEI-2010	▲	X	▲ LN	▲	SB	LN	▲					▼ RP						▼		▲ UF :SF	▼ Tr	UF: SF	◄	▼				
Muñoz-García, 2020; a priori; Provegetarian Food Pattern	▲	▲	▲	▲		▲		▲		▼	FS	▼ M	M		▼	D	D					▼						
Muñoz-García, 2022; PCA; 'Western'									▲			▲ RP		▲			▲	▲	▲								▲F	▲

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Muñoz-García, 2022; PCA; 'Mediterranean'	▲			▲	▲	▲				▲										▲ oo								
Nicoli, 2021; a priori; MDS	▲		▲	▲		▲		▲		▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					
Nishi, 2021; a priori; MEDAS	▲		▲	▲		▲				▲		▼ RP	▲					▼	▼	▲ oo		▼	▲ rw				▲	
Nishi, 2021; a priori; MIND	▲		▲ Be	▲		▲	▲			FS	▲	▼ R	▲		▼ ch				▼	▲ oo		▼ B	▲ W				▼F	
Nishi, 2021; a priori; DASH	▲	X	▲ LN	▲	Fr	LN	▲					▼ RP				▲		▼						▼				
Nooyens, 2021; a priori; mMDS	▲		▲	▲		▲		▲		▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					
Nooyens, 2021; a priori; mDHD15	▲		▲	▲	▼	▲	▲			▲		▼ RP			▲	D	D	▼		▼	AF	AF	▼		▲T			
Olsson, 2015; a priori; MDS	▲		▲	▲		▲		▲		▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					
Parrott, 2021; PCA; 'Prudent'	▲		▲	▲		▲	▲			▲	FS		▲			▲											▲	

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Parrott, 2021; PCA; 'Western'		▲							▲			▲ RP						▲	▲			▲ B						
Razquin, 2022; a priori; MDS	▲		▲	▲		▲		▲		▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					
Rodrigues, 2020; a priori; MEDAS	▲		▲	▲		▲				▲		▼ RP	▲					▼	▼	▲ oo		▼	▲ rw				▲	
Samuelsson, 2022; RRR; 'Western'	▼	▲	▼	▼		▼			▲			▲ P, M	P, M		▲	▼	▲		▲		▲		▲					
Samuelsson, 2022; RRR; 'Healthy'	▲	▲		▲	▲	▲	▲	▲		▲	▲	▲ P, M	P, M	▲	▲				▲	▲ vo	▲		▲					
Shang, 2021; PCA; 'Dairy-fruits-fast foods'				▲										▲	▲	D	D										▲F	
Shang, 2021; PCA; 'Grains-vegetables-pork'	▲								▲				▲															
Shang, 2021; PCA; 'Plant-based'			▲	▲			▲	▲F	▼										▼									

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Shang, 2021; PCA; 'Beans-mushroom'			▲																								▲	▲
Shang, 2021; PCA; 'Beverages-nuts'						▲							▲														▲	
Shannon, 2023; a priori; MEDAS	▲		▲	▲		▲				▲		▼ RP	▲					▼	▼	▲ oo		▼ B	▲ W				▲	
Shannon, 2023; a priori; PyrMDS	▲	▼	▲	▲		▲		▲		▲		▼R ▼P	▲	▲	▲	D	D	AS	▼	▲ oo			▼					
Tanaka, 2018; a priori; MDS	▲		▲	▲		▲		▲		▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					
Tangney, 2014; a priori; MedDietScore	▲	▲	▲	▲			▲			▲		▼ RP	▼				▼			▲ oo			▼					
Tangney, 2014; a priori; aDASH	▲	X	▲ LN	▲	Fr	LN		▲				▼ RP			▲	D	D		▼	▼	▼	▼		▼				

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Thomas, 2024; a priori; DAGI	▲		▲	▲			▲	▲	G	▲	FS	▲ M	M		▲	D	D	▼	▼		◄ Tr	◄	▼	◄		▲	◄	
Thomas, 2024; a priori; MIND	▲		▲ Be	▲		▲	▲			FS	▲	▼ R	▲		▼ ch				▼	▲ oo		▼ B	▲ W				▼F	
Thomas, 2024; a priori; MDS	▲		▲	▲		▲		▲		▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					
Tong, 2021; a priori; DASH	▲	X	▲ LN	▲	Fr	LN	▲					▼ RP			▲	D	D	▼										
Trichopoulou, 2015; a priori; MDS	▲		▲	▲		▲		▲		▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					
van Soest, 2023; a priori; mPDI	▲	▲	▲	▲	▲	▲	▲		▲	▼ FS	FS	▼ M	M	▼	▼			▲	▲	▲					▲ TC		▼ AP	
van Soest, 2023; a priori; mhPDI	▲	▼	▲	▲	▼	▲	▲		▼	▼ FS	FS	▼ M	M	▼	▼			▼	▼	▲					▲ TC		▼ AP	
van Soest, 2023; a priori; muPDI	▼	▲	▼	▼	▲ SB	▼	▼		▲	▼ FS	FS	▼ M	M	▼	▼			▲	▲	▼					▼ TC		▼ AP	

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Vercambre, 2012; a priori; MedDietScore	▲	▲	▲	▲			▲			▲		▼ RP	▼				▼			▲ oo			▼ W					
Vercambre, 2012; a priori; MDS	▲		▲	▲		▲		▲		▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					
Vlachos, 2022; a priori; MedDietScore	▲	▲	▲	▲			▲			▲		▼ RP	▼				▼			▲ oo			▼					
Vu, 2022; a priori; MIND	▲		▲ Be	▲		▲	▲			FS	▲	▼ R	▲		▼ ch				▼	▲ oo		▼ B	▲ W				▼F	
Wade, 2019; a priori; LitMDS	▲		▲	▲		Fr		▲		▲		▼ M			▼	D	D			▲ oo			◄					
Wagner, 2020; a priori; aMED	▲	X	▲	▲		▲	▲			▲		▼ RP								▲ UF :SF		UF: SF	◄					
Wagner, 2023; a priori; MIND	▲		▲ Be	▲		▲	▲			FS	▲	▼ R	▲		▼ ch				▼	▲ oo		▼ B	▲ W				▼ F	
Wang, 2021; a priori; DP Score	▲			▲		▲		▲		▲		▼ M	M			▲ Mi	Mi		▼									

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Wu, 2023; a priori; PDI	▲	▲	▲	▲	▲	▲	▲		▲	▼ FS	FS	▼ M	M	▼	▼			▲	▲	▲		▼			▲ TC		▼ AP	
Wu, 2023; a priori; hPDI	▲	▼	▲	▲	▼	▲	▲		▼	▼ FS	FS	▼ M	M	▼	▼			▼	▼	▲		▼			▲ TC		▼ AP	
Wu, 2023; a priori; uPDI	▼	▲	▼	▼	▲ SB	▼	▼		▲	▼ FS	FS	▼ M	M	▼	▼			▲	▲	▼		▼			▼ TC		▼ AP	
Yuan, 2022; a priori; aMED	▲	X	▲	▲		▲	▲			▲		▼ RP								▲ UF :SF		UF: SF	◄					
Yuan, 2022; a priori; DASH	▲	X	▲ LN	▲	Fr	LN	▲					▼ RP				▲		▼						▼				
Yuan, 2022; a priori; AHEI-2010	▲	X	▲ LN	▲	SB	LN	▲					▼ RP						▼		▲ UF :SF	▼ Tr	UF: SF	◄	▼				
Zhang, 2021; a priori; CDGI-2018	▲	▲ CT	▲ SN	▲		SN		CT		◄	FS	◄ M	M	◄	▲	D	D			▼			▼ W	▼				
Zhang JJ, 2023; a priori; PHD	▲	◄	▲	▲		▲	▲	▼	▼	▲		▼	◄	◄			◄	▼	▼	▲		▼						
Zhang J, 2023; a priori; hPDI	▲	▼	▲	▲	▼	▲	▲		▼	▼ FS	FS	▼ M	M	▼	▼			▼	▼	▲		▼			▲ TC		▼ AP	
Zhang J, 2023; a priori; MDS	▲		▲	▲		▲		▲		▲		▼ RP			▼	D	D			▲ UF :SF		UF: SF	◄					

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Zhang J, 2023; a priori; aRFS	▲	▲	▲	▲	▲		▲	▲					▲															
Zhang J, 2023; a priori; MIND	▲		▲ Be	▲		▲	▲			FS	▲	▼ R	▲		▼ ch				▼	X		▼ B	▲ W				▼F	
Zhang S, 2023; a priori; wJD19	▲		▲	▲				◄ rice		▲	FS	▼ R	▼												▲T		▲	
Zhang S, 2023; a priori; JD18	▲							▲ rice		▲	FS	▼ R	▼												▲T		▲	
Zhang S, 2023; a priori; mJDI12	▲		▲	▲				▲ rice		▲	FS	▼ R	▼												▲T		▲	▼ C
Zhang S, 2023; a priori; JDI	▲							▲ rice		▲	FS	▼ R	▼												▲T		▲	▼ C
Zhang X, 2023; a priori; hPDI	▲		▲	▲		▲				▲			▲							▲								
Zhou, 2021; a priori; PDI	▲	▲	▲	▲	▲	▲	▲		▲	▼ FS	FS	▼ M	M	▼	▼			▲	▲	▲		▼			▲ TC		▼ AP	
Zhou, 2021; a priori; aMED	▲	X	▲	▲		▲	▲			▲		▼ RP								▲ UF :SF		UF: SF	◄					

Article; Approach*; Dietary pattern	Vegetables	Potato	Legumes	Fruit	Fruit Juice	Nuts, Seeds	Grains: Whole	Grains	Grains: Refined	Fish	Seafood, shellfish	Meats (Red Processed)	Lean meats (Poultry)	Eggs	Dairy	Dairy: Low, non-fat	Dairy: Whole, high fat	Sugary Beverages	Sugary foods	Fat: Unsaturated	Fat: Other	Fat: Saturated	Alcohol	Salty foods, Sodium Na+	Tea and Coffee	Fiber	Other, A	Other, B
Zhou, 2021; a priori; hPDI	▲	▼	▲	▲	▼	▲	▲		▼	▼ FS	FS	▼ M	M	▼	▼			▼	▼	▲		▼			▲ TC		▼ AP	
Zhou, 2021; a priori; DASH	▲	X	▲ LN	▲	Fr	LN	▲					▼ RP				▲		▼						▼				
Zhou, 2021; a priori; AHEI-2010	▲	X	▲ LN	▲	SB	LN	▲					▼ RP						▼		▲ UF :SF	▼ Tr	UF: SF	◄	▼				
Zhu, 2022; a priori; PDI	▲	▲	▲	▲	▲	▲	▲		▲	▼ FS	FS	▼ M	M	▼	▼			▲	▲	▲		▼			▲ TC		▼ AP	
Zhu, 2022; a priori; uPDI	▼	▲	▼	▼	▲ SB	▼	▼		▲	▼ FS	FS	▼ M	M	▼	▼			▲	▲	▼		▼			▼ TC		▼ AP	
Zhu, 2022; a priori; hPDI	▲	▼	▲	▲	▼	▲	▲		▼	▼ FS	FS	▼ M	M	▼	▼			▼	▼	▲		▼			▲ TC		▼ AP	