Nut Consumption for Depression & Anxiety: A Scoping Review

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INTRODUCTION

- Depression and anxiety are major global mental health challenges.
- Growing evidence suggests that dietary factors may influence these conditions.
- Tree nuts and peanuts ('nuts') are nutrient dense with cardiometabolic benefits.
- The impact of nut intake on psychological well-being remains less well understood.

OBJECTIVE

To conduct a scoping review to examine the current evidence on the relationship between nut consumption and the mental health conditions of depression and anxiety.

METHODS

Protocol

1. Open Science Framework: https://doi.org/10.1760
2. Joanna Briggs Institute (JBI) scoping review guidelines

Databases

PubMed (through to 7 August 2025)
Web of Science (through to 7 August 2025)
PsychINFO (through to 7 August 2025)

Inclusion Criteria

- Adults (≥18 years)
- Whole tree nut and/or peanut intake
- Depression and/or anxiety outcomes
- Observational studies or clinical trial
- Peer-reviewed article
- Published in English

Exclusion Criteria

- Infants / Children
- Animal studies
- Extracted/nutraceutical forms of nuts

Acknowledgements

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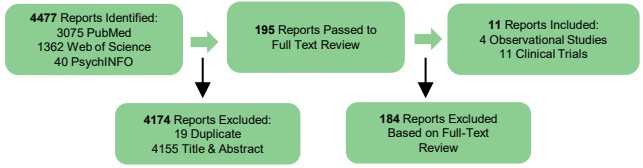
FINDINGS

Flow of Literature



Included Observational Studies

Reference	N	Exposure	Control	Outcome
Cross-sectional Studies				
Arab et al., 2019	F: 13,384 M: 13,272	Walnuts, 24 g/d	No nuts	↓ Depression prevalence
Fernández-Rodríguez et al., 2023	F: 2,713 M: 2,291	Mixed Nuts ≥3 serving/wk (30 g/serving)	Mixed Nuts <1 serving/wk	↔ Depression prevalence
Su et al., 2016	F: 6,033 M: 7,593	Mixed Nuts ≥4 serving/wk (30 g/serving)	Mixed nuts <1 serving/wk	↓ Depression symptoms
Cohort Study				
Bizzozero-Peroni et al., 2023	F: 6,850 M:6,654	Mixed Nuts 1-4 serving/wk (30 g/serving)	No nuts	↔ Depression incidence

Included Clinical Trials

Reference	N	Duration	Exposure	Control	Outcome
Pribis, 2016	F: 29 M: 20	8 wks	Walnuts, 60g/d	No nuts	↔ Anxiety score ↔ Depression score
Ren et al., 2020	F: 25 M: 20	12 wks	Almonds, 56g/d	Low fat diet	↓ Depression score
Coates et al., 2020	F: 78 M:70	12 wks	Almonds, 15%E	Carb snacks, 15%E	↔ Depression score
Parilli-Moser et al., 2021	F: 38 M:25	26 wks	Peanuts, 25g/d Peanut butter, 32g/d	Peanut oil-based butter, 32g/d	↓ Anxiety Score ↓ Depression Score
Herselman et al., 2022	F: 78 M: 70	16 wks	Walnuts, 56g/d	Fatty fish	↔ Anxiety Score ↓ Depression
Reeder et al., 2024	F: 61: M: 0	12 wks	Peanuts, 49g/d	Peanut-free diet	↔ Anxiety Score ↔ Depression Score
Landaverde-Mejia et al., 2024	F: 22 M: 6	4 wks	Pistachios, 28g/d	N/A	↓ Anxiety Score ↓ Depression Score

CONCLUSIONS

Nut consumption shows potential as a complementary dietary approach for supporting mental health, particularly depression. Larger, longer-term randomized controlled trials are needed to confirm these associations.

SIGNIFICANCE TO PRACTICE

Incorporating nuts into everyday eating patterns may offer a practical, convenient option to support both physical and mental health.

References

Arab et al. Nutrients, 2019. Bizzozero-Peroni et al. Clinical Nutrition, 2023. Coates et al. Nutrients, 2020. Hernández-Rodríguez et al. The Journal of Nutrition, Health &; Aging, 2023. Herselman et al. Nutrients, 2022. Landaverde-Mejia et al. Food Chemistry, 2024. Parilli-Moser et al. Clinical Nutrition, 2021. Pribis. Nutrients, 2016. Reeder et al. Functional Foods in Health and Disease, 2022. Ren et al. Nutrients, 2020.