



Canadian Agency for
Drugs and Technologies
in Health

RAPID RESPONSE REPORT: REFERENCE LIST

Title: Oral Nutrition Intake for the Prevention of Falls in Older Adults: Clinical Effectiveness and Guidelines

DATE: 31 March 2014

RESEARCH QUESTION

1. What is the clinical effectiveness of oral nutritional intake (Vitamins D or B12, protein, or hydration) for the prevention of falls in adults over 65 years of age?
2. What is the clinical evidence regarding the association between malnutrition and falls in adults over 65 years of age?
3. What are the evidence-based guidelines regarding the use of oral nutritional intake (Vitamins D or B12, protein, or hydration), or management of malnutrition for the prevention of falls in adults over 65 years of age?

KEY MESSAGE

One health technology assessment, 12 systematic reviews, seven randomized controlled trials, 15 non-randomized studies and seven guidelines were identified regarding oral nutrition intake for the prevention of falls in older adults.

METHODS

A limited literature search was conducted on key resources including PubMed, The Cochrane Library (2014, Issue 2), University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. No filters were applied to limit the retrieval by study type. The search was also limited to English language documents published between Jan 1, 2009 and Mar 25, 2014. Internet links were provided, where available.

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RESULTS

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines.

One health technology assessment, 12 systematic reviews, seven randomized controlled trials, 15 non-randomized studies and seven guidelines were identified regarding oral nutrition intake for the prevention of falls in older adults.

Additional references of potential interest are provided in the appendix.

Q1: What is the clinical effectiveness of oral nutritional intake (Vitamins D or B12, protein, or hydration) for the prevention of falls in adults over 65 years of age?

Health Technology Assessments

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[PubMed: PM22536299](#)

Systematic Reviews and Meta-analyses

2. Guo JL, Tsai YY, Liao JY, Tu HM, Huang CM. Interventions to reduce the number of falls among older adults with/without cognitive impairment: an exploratory meta-analysis. *Int J Geriatr Psychiatry*. 2013 Dec 7. [Epub ahead of print].
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[PubMed: PM21795448](#)

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[PubMed: PM20579169](#)
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[PubMed: PM21595101](#)
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13. Stern C, Jayasekara R. Interventions to reduce the incidence of falls in older adult patients in acute-care hospitals: a systematic review. *International Journal of Evidence-Based Healthcare* 2009; 7(4): 243-249
Structured abstract available from:
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Randomized Controlled Trials

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[PubMed: PM18629569](#)

Non-Randomized Studies

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Evidence-Based Guidelines

22. Joanna Briggs Institute. Interventions to reduce the incidence of falls in older adult patients in acute care hospitals. Best Practice: evidence-based information sheets for health professionals. 2010; 14(15):1-4

Q2: What is the clinical evidence regarding the association between malnutrition and falls in adults over 65 years of age?

Non-Randomized Studies

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[PubMed: PM23208029](#)

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Q3: *What are the evidence-based guidelines regarding the use of oral nutritional intake (Vitamins D or B12, protein, or hydration), or management of malnutrition for the prevention of falls in adults over 65 years of age?*

Guidelines and Recommendations

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See page 14 for vitamin D recommendations.
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See chapters on Nutrition and Hydration and Vitamin D and calcium supplementation.
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Validated Malnutrition Screening Tools

Non-randomized Studies

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APPENDIX – FURTHER INFORMATION:**Guidelines and Consensus Statements**

43. Prevention of falls and fall injuries in the older adult: guideline supplement [Internet]. Toronto: Registered Nurses' Association of Ontario; 2011 May. [cited 2014 Mar 28]. Available from: http://rnao.ca/sites/rnao-ca/files/storage/related/7446_FALLS-Supplement_FA.pdf
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46. Preventing falls and harm from falls in older people: best practice guidelines for Australian residential aged care facilities [Internet]. Sydney (AU): Australian Commission on Safety and Quality in Health Care (ACSQHC); 2009. [cited 2014 Mar 28]. Available from: <http://www.safetyandquality.gov.au/wp-content/uploads/2012/01/Guidelines-RACF.pdf>
See chapter 18 for vitamin D recommendations.

Review Articles

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See page 21 for fall prevention.

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