

Evidence for dietary fibre modification for the prevention of diverticulitis: A systematic literature review

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DIVERTICULITIS

Dietary Fibre for Prevention

A Systematic Review and Meta-Analysis

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Introduction

Despite the belief that dietary fibre prevents diverticulosis and diverticulitis (diverticular disease), little evidence exists examining this relationship.

Therefore, there are no dietary management guidelines for the prevention of acute diverticulitis.

Study Aims

A systematic review of the literature was undertaken to synthesise and critically appraise existing evidence to give recommendations for dietary fibre modifications with or without probiotics and/or antibiotics in adults for the prevention of diverticulitis.

Methods

- Intervention and observational studies were searched for using five electronic databases from database inception up until 31st March 2017.
- Study quality was assessed using the Cochrane risk of bias tool. Data was pooled via meta-analysis. The quality of the body of evidence was assessed via GRADE.

Recommendations Based on Results



In Populations with Diverticulitis:

1. A liberalised diet is recommended over a restricted dietary fibre diet as inpatient management (*strong recommendation based on 'very low' quality of evidence*).
2. A high dietary fibre diet is recommended as opposed to a standard or low dietary fibre diet following resolution of an acute episode (*strong recommendation based on 'very low' quality of evidence*).



In Populations with Diverticulosis:

1. A high dietary fibre intake is beneficial, however, there is 'low' confidence in the guiding body of evidence
2. Co-administration of a probiotic or oral antibiotic in comparison to dietary fibre alone, may be beneficial, however, there is "very low" confidence in the body of evidence for this.



In Healthy Populations:

1. A high dietary fibre intake is beneficial, however, there is 'low' confidence in the body of evidence supporting this.

Recommendations have been made based on 28 studies located, most of which had moderate to high risk of bias.

Conclusions

For all populations, a high dietary fibre intake in accordance with national gender and age specific dietary fibre intake guidelines is recommended to prevent diverticulitis occurrence and reoccurrence.

The use of dietary fibre restrictions (e.g. bowel rest or fluid only diets) for adults with acute, uncomplicated diverticulitis may not be necessary.

It is, however, important to note that patients with contraindicating comorbidities or symptoms should be supported with individualised nutrition recommendations.