Abstract
Title: Can a high dietary fiber intake reduce the risk of recurrence of colorectal adenoma polyps?
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Background: There is convincing evidence that a high fiber intake reduces the risk of developing colorectal cancer, but the evidence concerning fiber and recurrence is not as clear. Adenoma polyps are a precursor to colorectal cancer and is therefore used as an endpoint in studies.

Objective: The aim of this systematic review was to evaluate the scientific evidence whether a diet rich in dietary fiber, equivalent Nordic Nutrition Recommendations or higher, should be recommended to patients diagnosed with adenoma polyps to reduce the risk of recurrence.

Search strategy: The literature search was carried out in the databases PubMed and Scopus. Several keywords were used to capture relevant articles and to get a broad scientific basis to this issue of the review. The literature search was done by two persons. Most keywords were MeSH terms.

Selection criteria: The inclusion criteria were: RCT, human studies, articles written in English, both sexes represented, studies that investigated the effect of dietary fiber in the recurrence of adenomas or polyps, intervention consisting food. Exclusion criteria were: intervention with a specifically food or fiber supplementation of any kind.

Data collection and analysis: “Mall för kvalitetsgranskning av randomiserade studier” made by SBU was used for the review. “Underlag för sammanvägd bedömning enligt GRADE” made by the University of Gothenburg, was used to summarize the evidence of the articles.

Main results: Altogether data from 2280 participants was reported in four articles in which the intervention included a diet low in fat and a high fiber intake. Two of the articles showed that the intervention did not effect the risk of recurrence between intervention- and control groups. The third article included participants with high adherence to the dietary intervention. Those participants had a decreased risk of recurrence.

Conclusions: There is low evidence (++) to recommend a high fiber intake, equivalent to the Nordic Nutrition Recommendations, for patients diagnosed with adenoma polyps to reduce the risk of recurrence, but there are indications that a very high fiber intake can have an effect on the risk. There is a need for more studies with high quality and high compliance to determine whether a high or very high intake of fiber can reduce the risk of recurrence in colorectal adenoma polyps.

Keywords: Dietary fiber, colorectal adenomas, colorectal polyps, adenomas, polyps, recurrence, colorectal cancer.