

## High fiber diet linked to reduced risk of colorectal cancer

November 11 2011

Eating a diet high in fibre, particularly from cereal and whole grains, is associated with a reduced risk of colorectal cancer, finds a new study integrating all available evidence published in the British Medical Journal today.

Intake of <u>dietary fibre</u> and <u>whole grains</u> is known to help protect against cardiovascular disease, but its association with colorectal <u>cancer risk</u> is less clear. And, although the idea that dietary fibre reduces the risk of colorectal cancer has been around for nearly 40 years, studies attempting to explain the association have not had consistent results.

The results of the new <u>bmj</u>.com study now provide further support for public health recommendations to increase fibre intake, particularly cereal fibre and whole <u>grains</u>, to help prevent colorectal cancer. Whole grain foods include whole grain breads and cereals, oatmeal, <u>brown rice</u> and porridge.

However, the authors stress that further studies are needed to clarify the results for different types of fibre and subsites within the colorectum, and in populations with different lifestyles and dietary characteristics.

Colorectal cancer is the third most common cancer worldwide with 1.2 million new cases diagnosed each year. So a team of UK and Dutch researchers set out to investigate the association between intake of dietary fibre and whole grains and risk of colorectal cancer as part of the World Cancer Research Fund/American Institute for Cancer Research's



Continuous Update Project (CUP).

They analysed the results of 25 prospective studies involving almost two million participants. Study design and quality were taken into account to minimise bias.

The results show that, although the overall reductions in risk of colorectal cancer were small, there was a clear gradient in risk associated with the amount of dietary fibre. Compared with the lowest levels of fibre intake, each 10 g/day increase in intake of total dietary fibre and cereal fibre was associated with a 10% reduction in risk of colorectal cancer. Adding three servings (90 g/day) of whole grains was associated with about a 20% reduction.

They found no significant evidence for an association between fruit or vegetable fibre and risk of colorectal cancer. However, a previous analysis showed a reduction in risk with high intake of fruit and vegetables, suggesting the potential role of components other than fibre in fruits and vegetables in explaining this result, say the authors.

Increasing intake of dietary fibre and whole grains is also likely to reduce the risk of cardiovascular disease, type 2 diabetes, overweight and obesity, and possibly overall mortality, thus there are several health benefits by increasing fibre intake and replacing refined grains with whole grains, they add.

"In summary, our meta-analysis suggests that a high intake of dietary fibre, particularly from cereal and whole grains, is associated with a <u>reduced risk</u> of colorectal cancer," they conclude. And they suggest that any further studies should report more detailed results to be included in future analyses.

This analysis adds to the current evidence of the many health effects of



whole grains, says Professor Anne Tjønneland from the Danish <u>Cancer</u> Society in an accompanying editorial. However, she says that research is still needed to explain the biological mechanisms responsible for the beneficial effects of these foods in detail and to study barriers to increasing the intake of wholegrain products.

Provided by British Medical Journal

Citation: High fiber diet linked to reduced risk of colorectal cancer (2011, November 11) retrieved 1 May 2024 from https://medicalxpress.com/news/2011-11-high-fiber-diet-linked-colorectal.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.