High intake of dietary fiber reduces risk of death

People who have a high intake of dietary fiber have a lower risk of death than those who consume low levels of dietary fiber, report a team from the USA.

Dietary fiber is known to have many beneficial effects, including reducing levels of glucose in the blood and binding to potential cancer-causing agents so that they can be excreted from the body.

> These effects are thought to reduce the risk of diabetes mellitus, cardiovascular disease, obesity and some cancers. "Prior studies have focused on the relationship between fiber intake and cardiovascular disease, but few have examined the

link between dietary fiber and mortality," explains lead author Yikung Park (National Cancer Institute, Rockville, MD).

In the NIH-AARP Diet and Health Study, 388,122 healthy individuals completed a self-administered food frequency questionnaire and provided information about their lifestyles. The participants were allocated to five quintiles on the basis of their fiber intake. Park and colleagues then compared total and cause-specific death rates of the groups over an average follow-up of 9 years.

The researchers found that the participants with the highest intake of dietary fiber were 22% less likely than those with the lowest levels of dietary fiber intake to die from any cause. Men with high dietary fiber intake were 24–56% less likely to die from cardiovascular disease, cancer and infectious or respiratory diseases. Similar results were found in women; however, there was no association between fiber intake and risk of death from cancer in women. Guidelines in the USA recommend that people consume 14 g of fiber per 1,000 kcal per day. Park *et al.* compared the risk of death between the quintiles of fiber intake from different food sources and found that dietary fiber from grains had the strongest association with reduced risk of death. Fiber from vegetables and beans was weakly associated with reduced risk of death, while fiber from fruit was not associated with this risk.

These findings indicate that a high intake of dietary fiber from grains could have considerable health benefits. However, it is possible that people with a high intake of dietary fiber generally have a healthier lifestyle than people who have a low intake of dietary fibre, which would also reduce their risk of death.

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Original article Park, Y. et al. Dietary fiber intake and mortality in the NIH-AARP Diet and Health Study. Arch. Intern. Med. doi:10.1001/archinternmed.2011.18