

Fiber may boost pancreatic health: Study

By Stephen Daniells, 25-Jan-2012

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Increased intakes of fiber may reduce the risk of pancreatic cancer by 60%; with both soluble and insoluble forms offering benefits, suggests a new study from Italy.

The greatest intakes of soluble fiber were linked to a 60% reduction in pancreatic cancer risk, while insoluble fiber intake was linked to a 50% reduction in risk, report researchers from the Centro di Riferimento Oncologico in Aviano in Northern Italy.

The study – said to be the first to investigate the effect of fiber types in relation to pancreatic cancer risk – included data from 326 pancreatic cancer patients and 652 cancer-free people.

The study's findings, published in the *Annals of Oncology*, provide some clarity to the "scant and inconsistent" literature on the relation between dietary fiber intake and pancreatic cancer.

Pancreatic cancer is the fourth leading causing of cancer death (about 37,500 per year) in the US, according to the Pancreatic Cancer Action Network.

Fiber benefits

Increased intakes of fiber have been linked to a range of health benefits. [Researchers from the US National Cancer Institute](#) reported last year that increased dietary intakes of fiber are associated with lower risks of dying from cardiovascular, infectious, and respiratory diseases (*Archives of Internal Medicine*, doi:10.1001/archinternmed.2011.18).

The message has filtered through to consumers, with a 2008 International Food Information Council survey reporting that 77% of people are proactively trying to consume additional fiber.

[As reported by NutraIngredients-USA last week](#), results of a recent meta-analysis published in the *Annals of Oncology* indicated that every 10 gram per day increase in soluble fiber intake was associated with a 26% reduction in the risk of breast cancer, but no such effect was observed for insoluble fiber.

New data

The researchers analyzed data from 326 pancreatic cancer patients and 652 cancer-free people obtained using a validated food frequency questionnaire.

Results showed that, in addition to the apparent risk reductions for soluble and insoluble fiber, that intake of cellulose and lignin may reduce the risk of pancreatic cancer by 50 to 60%.

Moreover, fruit fiber intake was associated with a 50% reduction in pancreatic cancer, but grain fiber displayed no protective effects, said the researchers.

Commenting on the possible mode of protection of fiber for pancreatic health, the researchers note that several biologically plausible reasons exist. These included a role on insulin metabolism to modulate hormonal pathways linked to development of tumors in the pancreas.

There is also the possibility, they added, that the potential anti-cancer effects associated with fiber are in fact linked to other constituents of fruits and vegetables, or fiber slowing the transit of food and therefore providing greater time to bind potentially carcinogenic chemicals in the intestines. Fiber intake could also be linked to a healthier lifestyle, they added.

Source: *Annals of Oncology*
Volume 23, Issue 1, Pages 264-268, doi: 10.1093/annonc/mdr060
"Fiber intake and pancreatic cancer risk: a case-control study"
Authors: E. Bidoli, C. Pelucchi, A. Zucchetto, et al.

