

The Role of Fiber in the Risk of Pancreatic Cancer

Source: *Annals of Oncology*

Pancreatic cancer is a disease in which malignant cells are found in the tissue of the pancreas. In 2009 in the United States there were 42,470 new cases and 35,240 die from the disease. The prognosis is relatively poor but has improved; the three-year survival rate is now about thirty percent (according to the Washington University School of Medicine), but less than 5 percent of those diagnosed are still alive five years after diagnosis.

Complete remission is still rare. Pancreatic cancer is sometimes called a "silent killer" because early pancreatic cancer often does not cause symptoms, and the later symptoms are usually non-specific and varied. Therefore, pancreatic cancer is often not diagnosed until it is advanced.

Dietary fiber is a general term that refers to a wide variety of compounds from plants that are resistant to the digestive enzymes produced by humans. Because dietary fiber is resistant to digestive enzymes, it is not broken down or absorbed, which means it does not provide calories or energy to the body. In general, high fiber diets are associated with significantly reduced risks of cardiovascular disease, cancer, and all-cause mortality. It is generally recommended that Americans should strive to achieve a total dietary fiber intake of 25 to 30 grams/day, which should preferentially come from foods, not supplements. However, dietary surveys indicate that dietary fiber intake among adults in the United States averages about 15 grams/day, or approximately half the recommended amount.

A recent study published in the *Annals of Oncology* was the first to investigate the effect of various dietary fibers in relation to pancreatic cancer risk. Researchers enrolled 326 patients with pancreatic cancer and 652 cancer-free people. Information was elicited by using a validated food frequency questionnaire to all of the subjects. An inverse association emerged between pancreatic cancer and both soluble and total insoluble fiber, particularly cellulose and lignin showed a 50 to 60 percent reduced risk of pancreatic cancer. Fruit fiber intake was inversely associated with a 50 percent reduction in pancreatic cancer, whereas grain fiber did not show any protective effect. In conclusion the results of this study suggest that selected types of fiber and total fiber are inversely related to pancreatic cancer.¹

¹ Bidoli E, Pelucchi C, Zucchetto A, et al. Fiber intake and pancreatic cancer risk: a case-control study. *Annals of Oncology*. Jan2012;23(1):264-8.