Tomato/Tomato-based foods and Disease Risk Pancreatic Cancer Critical Findings

Disease type	First Author	Study Title and Complete Citation	Date	Abstract	Study Type	G.Tom +, N, -	P.Tom +, N, -	F.Tom +, N, -	Lyco +, N, -	Other +, N, -
Cancer: pancreatic	Bueno De Mesquita H.B.	Intake of foods and nutrients and cancer of the exocrine pancreas: a population- based case- control study in The Netherlands. Bueno de Mesquita HB, Maisonneuve P, Runia S, Moerman CJ. Int J Cancer. 1991 Jun 19;48(4):540-9.	1991	During 1984-88 a population-based case-control study was carried out in the Netherlands in collaboration with the International Agency for Research on Cancer in order to investigate the role of diet in exocrine pancreatic carcinoma. A semi-quantitative food- frequency questionnaire was used to comprehensively assess usual diet about 1 year prior to diagnosis of 164 cases or interview of 480 controls. More than half of the cases were directly interviewed. After controlling for age, gender, response status,life-time cigarette consumption and dietary intake of total energy, monotonic, significantly inverse dose-response effects with estimates of daily consumption of vegetables were found. The significant inverse effect of total cooked vegetables was primarily concentrated in cruciferous vegetables. Consumption of fresh vegetables was also significantly and inversely related to risk. A monotonic, positive dose-response gradient was seen for the consumption of eggs, while consumption of fish was significantly related to risk as well. Among direct respondents, significantly inverse relationships were found for the consumption of legumes, tomatoes, cheese and fermented milk products. Inverse associations with consumption of (subgroups of) fruits were observed in women only. The monotonic, significantly inverse relationship for consumption of low- fibre vegetables and the somewhat weaker, inverse association for high-fibre vegetables in directly interviewed subjects only, may point to protective agents other than vegetable fibre. Although intake of dietary fibre and beta-carotene were both inversely related to risk, simultaneous estimation suggested that beta-carotene or other as yet unknown correlated constituents, rather than dietary fibre, might explain the inverse relationships. A significant protective effect of vitamin C was demonstrated in women but not in men. Our study suggests that, independent of smoking and	CC					

				dietary intake of total energy, low consumption of specific vegetables and possibly fermented milkproducts and high consumption of eggs and fish may have influenced the development of exocrine pancreatic cancer.			
Cancer: pancreatic	Jansen RJ	Fruit and vegetable consumption is inversely associated with having pancreatic cancer. Jansen RJ, Robinson DP, Stolzenberg- Solomon RZ, Bamlet WR, de Andrade M, Oberg AL, Hammer TJ, Rabe KG, Anderson KE, Olson JE, Sinha R, Petersen GM. Cancer Causes Control. 2011 Sep 14. [Epub ahead of print]	2001	OBJECTIVE: Studies on fruit, vegetable, fiber, and grain consumption and pancreatic cancer risk are inconclusive. We used a clinic-based case-control study specifically designed to address limitations of both cohort and case-control studies to examine the relationship. METHODS: Participants were excluded who reported changing their diet within 5 years prior to study entry. And 384 rapidly ascertained cases and 983 controls (frequency matched on age (±5 years), race, sex, and residence) completed epidemiologic surveys and 144-item food frequency questionnaires. Odds ratios (OR) and 95% confidence intervals were calculated using logistic regression adjusted for age, sex, smoking, body mass index, energy intake, and alcohol consumption. RESULTS: Comparing highest to lowest quintiles, we observed significant inverse associations (OR < 0.8) with significanttrends (p (trend) < 0.05) for citrus, melon, and berries, other fruits, dark green vegetables, deep yellow vegetables, tomato, other vegetables, dry bean and pea, insoluble fiber, soluble fiber, whole grains, and orange/grapefruit juice, and an increased association with non-whole grains. Results were similar after adjusting for diabetes or total sugar intake. CONCLUSIONS: We provide evidence that lower consumption of fruits, vegetables, whole grains, and fiber is associated with having pancreatic cancer. This may have a role in developing prevention strategies.	CC		