## Plasma/Serum Lycopene and Disease Risk Pancreatic Cancer Critial 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	Burney PG	Serologic precursors of cancer: serum micronutrients and the subsequent risk of pancreatic cancer. Burney PG, Comstock GW, Morris JS. Am J Clin Nutr. 1989 May:49(5):895- 900.	1989	In a nested case-control study the stored, frozen sera from 22 cases of cancer of the pancreas and 44 matched control subjects were assayed for retinol, retinol-binding protein, total carotenoids, beta-carotene, lycopene, vitamin E (alpha-tocopherol), and selenium. Prediagnostic serum levels of lycopene and Se were lower among cases than among matched control subjects. These differences remained after adjustment was made for possible confounding by smoking, educational level, and the other measured serum levels. Low levels of serum vitamin E appeared to have a protective effect but a chance association between vitamin E and cancer of the pancreas could not reasonably be excluded. The association between cancer of the pancreas and serum Se was significant when the data were analyzed as a whole but its effect was seen principally in men.	CC nested				(-)	