## Diabetes Mellitus Plasma/Serum Lycopene and Disease Risk

## **CVD** - main findings

- Data support a protective association between serum lycopene concentrations and markers of chronic disease, particularly heart disease. This relationship extends to death from CVD (1 PC study), but may not extend to death from stroke.
- The positive (risk) association requires attention.

## Summary of studies and outcomes

- Number of studies = 36^
- Risk estimates = 47
  - o (-) = 24
  - o N = 22
  - $\circ$  (+) = 1

Table: Relationship between Plasma/Serum and Diabetes risk

Study Type Diabetes	N= studies	NEGATIVE ASSOCIATION (protective)					NEUTRAL ASSOCIATION (no associated risk or benefit)					POSTIVE ASSOCIATION (risk factor)					
		Sample size, n=						Sample size, n=					Sample size, n=				
		≤100	101-200	201-500	501-1000	≥1000	≤100	101-200	201-500	501-1000	≥1000	≤100	101-200	201-500	501-1000	≥1000	
RCT	0																
Interv	1						√ <sub>Lyc</sub>										
PC	1							√Lyc									
СС	8	VLyc VLyc VLyc		√Lyc			VLyc VLyc		VLyc				VLyc				
Cross Sec	11	√Lyc	√Lyc √Lyc		√WLyc	√ Lyc √Lyc	VLyc	√Lyc		√ <sup>m</sup> Lyc	√*Lyc √Lyc √Lyc					√ <sub>Lyc</sub>	
Eco	0												65				