

CANCER

Lycopene Supplementation and Disease Risk

Cancer- main findings

- Represented cancer studies: Prostate (n=19), Colorectal (n=2), Breast (n=2), Brain (n=1), Lung (n=1).
- Lycopene supplementation appears to be safe and well tolerated for up to 1 year; however, limited evidence for improving disease status.

Summary of studies and outcomes

- Number of studies = 25
- Risk estimates (RE) = 27
 - (-) = 11
 - N = 17
- Risk estimates by Tomato or Lycopene category
 - √GT G. Tom =
 - √PT P. Tom =
 - √F F Tom =
 - √Lyco Lyco = 11 (-), 17 (N)

Table: Relationship between Lycopene Supplementation and Cancer Progression

Study Type	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=				
Cancer		≤100	101-200	201-500	501-1000	≥1000	≤100	101-200	201-500	501-1000	≥1000	≤100	101-200	201-500	501-1000	≥1000
		√Lyc					√Lyc									
RCT	18	√Lyc √Lyc √Lyc √Lyc √Lyc √Lyc √Lyc √Lyc √Lyc √Lyc					√Lyc √Lyc √Lyc √Lyc √Lyc √Lyc √Lyc √Lyc √Lyc √Lyc	√Lyc								
Interv	3	√Lyc					√Lyc √Lyc									
PC*	3								√Lyc	√Lyc						
CC	1							√Lyc								
Cross Sec	0															
Eco	0															

* PC analyzed for supplement use in diet and incident benign prostate hyperplasia (BPH).