

Skin

Tomato/Tomato-based foods and Disease Risk

Main findings

- Data suggest a beneficial effect of tomato (lycopene) intake (> 8 weeks) in reducing UV light-induced erythema; however, 5 of the 7 studies are from a single lab with multiple overlaps in study design and subject population. Additional research is warranted in other laboratories.
- Effect may depend on increased carotenoid and lycopene in skin.

Summary of studies and outcomes

- Number of studies = 7
- Risk estimates (RE) = 7
 - (-) = 7
 - N = 0
 - (+) = 0
- Risk estimates by Tomato or Lycopene category
 - √GT G. Tom = 1 (-)
 - √PT P. Tom = 6 (-)
 - √FT F. Tom =
 - √Lyco Lyco =

Table: Relationship between Tomato and Tomato-based foods and Skin protection and general skin health

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=				
Skin		≤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	5	√PT														
Interv	1	√PT														
PC	0															
CC	1			√GT												
Cross Sec	0															
Eco	0															

Note: 4 RCT and 1 Interv study – same lab and multiple overlaps. (ie., subjects).