
A REVIEW ON ENHANCING HEALTH-PROMOTING EFFECT OF TOMATO

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ABSTRACT

The consumptions of tomatoes fruit, the like those of a many others plants specie are part of diet, thought provides a number of health benefits. Indeed tomatoes fruit a rich sources of a bio-active chemicals identified to have health benefits, such as antioxidants, vitamin, and anticancer agents. Antioxidant metabolites, in a particular, are collection of carotenoids, vitamin, phenolic compound, & phenolic acids which may protect the body neutralizing the free radical, which is unstable molecule related to developments of variety of the degenerative illnesses & disorders. Recent progresses on the tomatoes nutritional importance as well as the mechanism of an action of a different phytochemical against the inflammations process & the preventions of a chronic noncommunicable disease this review. In additions, we will review recent substantial advances in metabolic engineering and/or breeding to enhance the nutritional quality of tomato fruits.

KEYWORDS: *β -carotene, Carotenoids, Human Health, Lycopene, Tomatoes.*

REFERENCES

1. Kozukue N, Friedman M. Tomatine, chlorophyll, β -carotene and lycopene content in tomatoes during growth and maturation. J Sci Food Agric. 2003;
2. Zhang Z, Liu L, Zhang M, Zhang Y, Wang Q. Effect of carbon dioxide enrichment on health-promoting compounds and organoleptic properties of tomato fruits grown in greenhouse. Food Chem. 2014;
3. Al Sane KO, Hesham AEL. Biochemical and genetic evidences of anthocyanin biosynthesis and accumulation in a selected tomato mutant. Rend Lincei. 2015;
4. Scarano A, Butelli E, De Santis S, Cavalcanti E, Hill L, De Angelis M, et al. Combined Dietary Anthocyanins, Flavonols, and Stilbenoids Alleviate Inflammatory Bowel Disease Symptoms in Mice. Front Nutr. 2018;
5. Hernández-Fuentes AD, López-Vargas ER, Pinedo-Espinoza JM, Campos-Montiel RG, Valdés-Reyna J, Juárez-Maldonado A. Postharvest behavior of bioactive compounds in tomato fruits treated with Cu nanoparticles and NaCl stress. Appl Sci. 2017;
6. López-Vargas ER, Ortega-Ortíz H, Cadenas-Pliego G, Romenus K de A, de la Fuente MC, Benavides-Mendoza A, et al. Foliar application of copper nanoparticles increases the fruit quality and the content of bioactive compounds in tomatoes. Appl Sci. 2018;
7. Dūma M, Alsina I, Dubova L, Erdberga I. Bioactive compounds in tomatoes at different stages of maturity. Proc Latv Acad Sci Sect B Nat Exact, Appl Sci. 2018;

8. Liu C, Liu W, Chen W, Yang J, Zheng L. Feasibility in multispectral imaging for predicting the content of bioactive compounds in intact tomato fruit. *Food Chem.* 2015;
9. Sun T, Yuan H, Cao H, Yazdani M, Tadmor Y, Li L. Carotenoid Metabolism in Plants: The Role of Plastids. *Molecular Plant.* 2018.
10. Mozos I, Stoian D, Caraba A, Malainer C, Horbanczuk JO, Atanasov AG. Lycopene and vascular health. *Frontiers in Pharmacology.* 2018.