

ANTIATHEROGENIC AND WOUND HEALING EFFECTS OF TOMATOES



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Tomatoes are a valuable component of cardioprotective diet (Wilcox et al., 2003; Riccioni et al., 2008). They possess antioxidant activity, reduce blood pressure, low density lipoprotein (LDL) cholesterol, homocystein and platelet aggression by virtue of their high content of lycopene, beta carotene, folate, vitamins A, B, C, E, flavonoids and valuable minerals like potassium, magnesium, chromium, calcium, phosphorous and iron (Beecher, 1998; Wilcox et al., 2003; Riccioni et al., 2008). Through regulation of blood sugar and blood pressure, tomatoes can effectively prevent heart attack, stroke and other atherosclerosis related problems (Bhowmick et al., 2012). Lycopene has been identified as the major cardiovascular health improving ingredient in tomatoes. Besides potent antioxidant activity which improves endothelial function, it reduces ox – LDL and foam cell formation by decreasing lipid synthesis and down regulating the activity and expression of scavenger receptor A (Napolitano et al., 2007; Gajendragadkar et al., 2014). In this way, it reduces the risk of stroke and myocardial infarction (Karppi et al., 2012; Karppi et al., 2012; Ohja et al., 2013; Xinli and Jihong, 2014). Indeed, consumption of tomato based foods and preferably whole tomato constitutes a potential first line approach to cardiovascular health (Burton – Freeman and Sesso, 2014). The report by Zamide et al [2015] in this issue revealed that extract of tomato leaf promotes wound healing via antibacterial activity, rapid initiation and acceleration of wound contraction, increased fibroblast production and collagen synthesis. These findings are consistent with other reports...." Tomatoes are rich in Vitamin A and C as well as lycopene which promote wound healing" [www.advancedtissue.com]. These findings provide a strong case for consistent inclusion of tomatoes and their products in our daily diets as part of the strategy for controlling the imminent of epidemic of atherosclerotic disease in Sub – Saharan Africa. Further, tomato leaves have potential for low cost wound management remedies.

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