

BIBLIOGRAPHY

Acker VF, Schouten O, Haenen G, Van der VW, Bast A. Flavonoids can replace alpha-tocopherol as an antioxidant. *FEBS Lett.* 2000; 473:145–8.

Adameova A, Abdellatif Y, Dhalla NS. Role of excessive amounts of circulating catecholamines and glucocorticoids in stress-induced heart disease. *Can J Physiol Pharmacol.* 2009; 87(7): 493-514.

Adhami VM, Mukhtar H. Anti-oxidants from green tea and pomegranate for chemoprevention of prostate cancer. *Mol Biotechnol.* 2007; 37: 52–57.

Aebi H. Catalase *in vivo*. *Methods Enzymol.* 1984; 105: 121-126.

Agnetti G, Bordoni A, Angeloni C, Leoncini E, Guarnieri C, Caldarera CM, Biagi PL, Hrelia S. Green tea modulation of inducible nitric oxide synthase in hypoxic/reoxygenated cardiomyocytes. *Biochimie.* 2005; 87(5):457-460.

Ahmed K, Thomas BS. The effect of long chain fatty acids on sodium plus potassium ion stimulated adenosine triphosphatase of rat brain. *J Biol Chem.* 1971; 246:103-109.

Ahmed KKM, Rana AC, Dixit VK. Effect of *Calotropis procera* latex on isoproterenol induced myocardial infarction in albino rats. *Phytomedicine.* 2004; 11: 327–330.

Al-Bekairi AM, Nagi MN, Shoeb HA, Al-Sawaf HA. Evidence for superoxide radical production by a simple flavoprotein: glucose oxidase. *Biochem Mol Biol Int.* 1994; 34(2): 233-8.

Allegra M, Tesoriere L, Livrea MA. Betanin inhibits the myeloperoxidase/nitrite-induced oxidation of human low-density lipoproteins. *Free Radi Res.* 2007; 41(3):335-341.

Ames N, Shigenaga MK, Hagan TM. Oxidants, antioxidants and the degenerative diseases of aging. *Proceedings of the Academy of Natural Science*, 1993; USA 90: 7915–7922.

Anderson GF, Chu E. Expanding priorities-Confronting Clinic Disease in countries with low income. *New Engl J Med*.2007; 365(3):209-11.

Anurag P, Rajamohan T. Cardioprotective effect of tender coconut water in experimental myocardial infarction. *Plant Foods for Human Nutrition*.2003; 58: 1–12.

Asdaq SMB, Inamdar MN. The potential for interaction of hydrochlorothiazide with garlic in rats *Chemico-Biological Interactions*. 2009;181: 472–479.

Assmann G, Schulte H, Oberwittler W, Hause WH. New aspects in the prediction of coronary artery disease: the prospective cardiovascular monster study. In: Fidge NH, Nestel PJ, eds.1986. *Atherosclerosis VII*. Amsterdam, Netherlands: Elsevier Science Publishers. pp. 19-24.

Atessahin A, Yilmaz S, Karahan I, Ceribasi AO, Karaoglu A. Effects of lycopene against cisplatin-induced nephrotoxicity and oxidative stress in rats.*Toxicology*. 2005; 212:116-123.

Aviram M, Dorenfeld L, Rosenblat M, Volkova N, Kaplan M, Hayek T, Presser D, Fuhrman B. Pomegranate juice consumption reduces oxidative stress, low density lipoproteins modifications and platelet aggregation: studies in the atherosclerotic E0 mice and in humans. *Am. J. Clin. Nutr*. 2000; 71: 1062–1076.

Avogaro P, Ghiselli G, Soldan S, Bittolo Bon G. Relationship of triglycerides and HDL cholesterol in hypertriglyceridemia. *Atherosclerosis*. 1991; 92: 79-86.

Aviram M, Dornfeld L. Pomegranate juice consumption inhibits serum angiotensin converting enzyme activity and reduces systolic blood pressure. *Atherosclerosis*. 2001; 158:195-198.

Azadzoi KM, Schulman RN, Aviram M, Siroky MB. Oxidative stress in arteriogenic erectile dysfunction: prophylactic role of antioxidants. *J Urol.* 2005; 174: 386–393.

Bafna PA, Balaraman R. Antioxidant activity of DHC-1, an herbal formulation, in experimentally induced cardiac and renal damage. *Photother Res.* 2005; 19(3); 216-212.

Bai J, Cederbaum AI. Adenovirus-mediated overexpression of catalase in the cytosolic or mitochondrial compartment protects against cytochrome P450 2E1-dependent toxicity in HepG2 cells. *J Biol Chem.* 2001; 276 (6): 4315-21.

Bansal P, Gupta SK, Ojha SK, Nandave M, Mittal R, Kumari S, Arya DS. Cardioprotective effect of lycopene in the experimental model of myocardial ischemia-reperfusion injury. *Mol Cell Biochem.* 2006; 289:1-9.

Baoranoswka KM, Cisowski W. HPLC determination of flavone-C glycosides in some species of Cucurbitaceae family. *J Chromatogr A.* 1994; 675: 240-243.

Bartlette GR. Phosphorous assay in column chromatography. *J Biol Chem.* 1959; 234:466-468.

Beauchamp C, Fridovich I. Superoxide dismutase: improved assays and an assay applicable to acrylamide gel. *Anal Biochem.* 1971; 44: 276-7.

Bell C, Hawthorne S. Ellagic acid, pomegranate and prostate cancer - a mini review. *J Pharmacy Pharmacol.* 2008; 60: 139–144.

Beretta S, Sala G, Mattavelli L, Ceresa C, Casciati A, Ferri A, Carrì MT, Ferrarese C. Mitochondrial dysfunction due to mutant copper/zinc superoxide dismutase associated with amyotrophic lateral sclerosis is reversed by N-acetylcysteine. *Neurobiology of Disease.* 2003; 13(3): 213-21.

Berg RA, Schwartz ML, Crystal RG. Regulation of the production of secretory proteins: Intracellular degradation of newly synthesized defective collagen. Proc Natl Acad Sci USA. 1980; 77: 4746– 50.

Berman F. Herbs and dietary supplements in prevention and treatment of cardiovascular disease. Prev Cardiol. 2000; 3: 24-32.

Bhakta T, Mukherjee PK, Mukherjee K, Banerjee S, Subhash CM, Maity TK, Pal M, Saha BP. Evaluation of hepatoprotective activity of *Cassia fistula* leaf extract. J Ethnopharmacol. 1999; 66: 277–282.

Bindoli A, Rigobello MP, Deeble DJ. Biochemical and toxicological properties of the oxidation products of catecholamines. Free Radic Biol Med. 1992; 13(4): 391–405.

Blumberg JB, Frei B. Why clinical trials of vitamin E and cardiovascular diseases may be fatally flawed. Commentary on The relationship between dose of vitamin E and suppression of oxidative stress in humans. Free Radic Biol Med. 2007; 43:1374-6.

Bors W, Michael C, Saran M, Lengfelder E. The involvement of oxygen radicals during the auto oxidation of adrenaline. Biochim Biophys Acta. 1978; 540: 162–172.

Buffon A, Biasucci LM, Liuzzo G, D'Onofrio G, Crea F, Maseri A. Widespread coronary inflammation in unstable angina. N Engl J Med. 2002; 347: 5-12.

Boluyt MO, Long X, Exchenhagen T. Isoproterenol infusion alterations in expression of hypertrophy-associated genes in rat heart. Am J Physiol. 1995; 269: H638-H647.

Bono DE, Boon DP. Diseases of the cardiovascular system. In: Edwards, CRW, Boucheir IA (Eds) Davidson's Principle of Practice of Medicine. Churchill Livingstone, 1992. Hong Kong pp 249-340.

Bonow RO, Smaha LA, Smith SC, Mensah GA, Lenfant G. The international burden of cardiovascular disease: responding to the emerging global epidemic. *Circulation*. 2000; 106:1602-1605.

Bonting SL. Membrane ion transport. In: Pambroski TM, Schmidt TH, Blumchen G (Eds) *Bio-Behavioral Base of Coronary Heart Disease*, Vol 1. Wiley Inter Science, London, 1970; pp 254-363.

Bradely PP, Priebat DA, Christensen RD, Rothstein G. Measurement of cutaneous inflammation; estimation of neutrophil content with an enzyme marker. *J Investigational Dermatology*. 1982;78:206-209.

Brodde OE, Michel MC. Adrenergic and muscarinic receptors in the human heart. *Pharmacol Rev*. 1999; 51(4): 651-690.

Brown MR, Miller FJ, Ellingson AN, Mozena JD, Chatterjee P, Engelhardt JF, Zwacka RM, Oberley LW, Fang X, Spector AA, Weintraub NL. Overexpression of human catalase inhibits proliferation and promotes apoptosis in vascular smooth muscle cells. *Circulat Res*. 1999; 85(6): 524-33.

Buja LM. Myocardial ischemia and reperfusion injury. *Cardiovasc Pathol*. 2005; 14(4):170-5.

Cai H, Griendling KK, Harrison DG. The vascular NAD (P) H oxidases as therapeutic targets in cardiovascular diseases. *Trends in Pharmacological Sciences*. 2003; 24(9): 471-8.

Calabro P, Willerson J, Yeh E. Inflammatory cytokines stimulated C-reactive protein production by human coronary artery smooth muscle cells. *Circulation*. 2003; 108:1930-2.

Cannon RO, Butany JW, Mcmanus BM *et al*. early degradation of collagen after myocardial infarction in rats. *Am J Cardiol*. 1983; 52: 390-395.

- Cannon JG, Meydani SN, Fielding RA, Fiatarone MA, Meydani M, Farhangmehr M, Orencole SF, Blumberg JB, Evans WJ. Acute phase response in exercise. II. Associations between vitamin E, cytokines, and muscle proteolysis. *Am J Physiol.* 1991; 260: R1235–R1240.
- Carr AC, McCall MR, Frei B. Oxidation of LDL by myeloperoxidase and reactive nitrogen species: reaction pathways and antioxidant protection. *Arterioscler Thromb Vasc Biol.* 2000a; 20(7): 1716-23.
- Carr AC, Myzak MC, Stocker R, McCall MR, Frei B. Myeloperoxidase binds to low-density lipoprotein: potential implications for atherosclerosis. *FEBS Lett.* 2000b; 487(2): 176-80.
- Chang SC, Lee MS, Li CH, Chen ML. Dietary fiber content and composition of vegetable in Taiwan area. *Asian Pacific J Clin Nutr.* 1995; 4: 204 -210.
- Chappel CI, Rona G, Balazs T. Severe myocardial necrosis produced by isoproterenol in the rat. *Arch Int Pharmacodyn.* 1951; 72:123–128.
- Chein KR, Sherman SC, Mittnacht SJ. Microsomal membrane structure and function subsequent to calcium activation of an endogenous phospholipids. *Arch Biochem Biophys.* 1980; 205: 614-622.
- Chen Y, Hou M, Li Y, Traverse JH, Zhang P, Salvemini D, Fukai T, Bache RJ. Increased superoxide production causes coronary endothelial dysfunction and depressed oxygen consumption in the failing heart. *Am J Physiol Heart Circ Physiol.* 2005; 288: 133–141.
- Chieh-Chung L, Chi-Chang H, Wan-Teng L, Chin-Cheng H, Shih-Yi H, Su-Jiun L, Suh-Ching Y. Lycopene supplementation attenuated xanthine oxidase and myeloperoxidase activities in skeletal muscle tissues of rats after exhaustive exercise. *British Journal Nutrition.* 2005; 94(4): 595-601.

Chidambara MKN, Jayaprakasha GK, Singh RP. Studies on antioxidant activity of pomegranate (*Punica granatum*) peel extract using *in vivo* models. J Agric Food Chem. 2002; 50: 4791-4795.

Choi YJ, Kang JS, Park JKY, Lee YJ, Choi JS, Kang YH. Polyphenolic Flavonoids Differ in Their Antiapoptotic Efficacy in Hydrogen Peroxide-Treated Human Vascular Endothelial Cells. J. Nutr. 2003; 133: 985-991.

Choudhary R, Mishra KP, Subramanyam C. Prevention of isoproterenol induced cardiac hypertrophy by eugenol, an antioxidant. Ind J Clin Biochem. 2006; 21(2):107-113.

Chun O, Chung S, Song W. Estimated dietary flavonoid intakes and major food sources of U.S. adults. J Nutr. 2007; 137:1244-52.

Chun OK, Kim DO, Smith NL, Schroeder D, Han JT, Lee CY. Daily consumption of phenolics and total antioxidant capacity from fruit and vegetables in the American diet. J Sci Food Agric. 2005; 85:1715-24.

Clark MW, Burnett JR, Croft KD. Vitamin E in human health and disease. Crit Rev Clin Lab Sci. 2008; 45: 417-450.

Cohen JH, Kristal AR, Stanford JL. Fruit and vegetable intakes and prostate cancer risk. J Natl Cancer Inst. 2000; 92:61-8.

Collins P, Billings CG, Barer GR, Daly JJ, Jolly A. Quantitation of isoprenaline induced changes in the ventricular myocardium. Cardiovas Res. 1975; 9:797-808.

Colucci WS, Sawyer DB, Singh K, Communal C. Adrenergic overload and apoptosis in heart failure: implications for therapy. J Card Fail. 2002; 6: 1-7.

Crapo JD, McCord JM. Oxidant induced changes in pulmonary superoxide dismutase assayed by antibody titrations. Am J Physiol. 1976; 231: 1196-1203.

Curtis MJ, Pabla R. Nitric oxide supplementation or synthesis block: which is the better approach to treatment of heart disease? *Trends Pharmacol Sci.* 1997; 18: 239–44.

Das AK, Chandrasekar S, Laxmanan A. Experimental investigations on diabetic heart disease. *Indian J Experimental Biology.* 1986; 24:592-594.

Davies MJ, Bland JM, Hangartner JR, Angelini A, Thomas AC. Factors influencing the presence or absence of acute coronary artery thrombi in sudden ischaemic death. *Eur Heart J.* 1989; 10: 203–208.

Davies MJ, Thomas AC. Plaque fissuring—the cause of acute myocardial infarction, sudden ischaemic death, and crescendo angina. *Br Heart J.* 1985; 53: 363–373.

Davies MJ. The pathology of myocardial ischemia. *J Clin Pathol.* 1977; 30:45-52.

De Bree A, Verschuren WM, Kromhout D, Kluijtmans LA, Blom HJ. Homocysteine determinants and the evidence to what extent homocysteine determines the risk of coronary heart disease. *Pharmacol Rev.* 2002; 54: 599–618.

Desai ID. Vitamin E analysis methods for animal tissues. *Methods in Enzymol.* 1984; 66:138-147.

Deshpande JR, Mishra MR, Meghre VS, Wadodkar SG, Dorle AK. Beneficial effects of *Lagenaria siceraria* (Mol.) Stand. fruit epicarp in animal models. *Ind J Exp Biol.* 2008; 40: 234-242.

Deshpande JR, Mishra MR, Meghre VS, Wadodkar SG, Dorle AK. Free radical scavenging activity of *Lagenaria siceraria* (Mol.) Standl. Fruit. *Natural Product Radiance.* 2007; 6(2): 127-130.

Devaraj S, Li D, Jialal I. The effects of alpha tocopherol supplementation on monocyte function: decreased lipid oxidation, interleukin 1b secretion, and monocyte adhesion to endothelium. *J Clin Investig.* 1996; 98: 756–763.

Devika PT, Prince PSM. (-) Epigallocatechingallate (EGCG) prevents isoproterenol induced cardiac toxicity by stabilizing cardiac marker enzymes and membrane bound ATPases. *J Pharm Pharmac.* 2008a; 60:125-133.

Devika PT, Prince PSM. Preventive effect of (-) epigallocatechin-gallate (EGCG) on lysosomal enzymes in heart and subcellular fractions in isoproterenol-induced myocardial infarcted Wistar rats. *Chemico-Biological Interactions.* 2008;172, (3): 245-252.

Devika PT, Prince PSM. Preventive effect of (-) Epigallocatechingallate (EGCG) lysosomal enzymes in heart and subcellular fractions in isoproterenol induced myocardial infarcted Wistar rats. *Chem Biol Interact.* 2008b; 172: 245-256.

Dhalla NS, Temsah RM, Netticadan T. Role of oxidative stress in cardiovascular diseases. *J Hypertension.* 2000; 31:152-161.

Dhalla NS, Dixon IM, Rupp H, Barwinsky J. Experimental congestive heart failure due to myocardial infarction: sarcolemmal receptors and cation transporters. *Basic Res Cardiol.* 1991; 86 (13):13-23.

Dhalla NS, Dixon IM, Suzuki S, Kaneko M, Kobayashi A, Beamish RE. Changes in adrenergic receptors during the development of heart failure. *Mol Cell Biochem.* 1992; 114 (1-2): 91–95.

Dhalla NS, Temsah RM, Netticadan T. Role of oxidative stress in cardiovascular diseases. *J Hypertens.* 2000; 18(6): 655–673.

Dhalla NS, Yates JC, Naimark B, Dhalla KS, Beamish RE, Ostadal B. In *Cardiovascular Toxicology* (Ed. Acosta, D.) 1992. pp. 239-281. New York; Raven Press.

Dianyuan Li, Yan Qu, Ling Tao, Huirong Liu, Aihua Hu, Feng Gao, Said Sharifi-Azad, Zvi Grunwald, Xin-Liang Ma, Jian-Zhong Sun. Inhibition of iNOS Protects the Aging Heart Against β -Adrenergic Receptor Stimulation-Induced Cardiac Dysfunction and Myocardial Ischemic Injury. *Journal of Surgical Research*. 2006; 131: 64–72.

DiMascio P, Kaiser S, Sies H. Lycopene as the most efficient biological carotenoid singlet oxygen quencher. *Arch Biochem Biophys*. 1989; 274: 532-38.

Divakar MC. *Plant Drug Evaluation*, 2002; 2nd edition, 119.

Dixon IMC, Kaneko M, Hata T, Panagia V, Dhalla NS. Alteration in cardiac membrane Ca^{2+} transport during oxidative stress. *Mol Cell Biochem*. 1990; 99:125-133.

Drexler H, Kastner S, Strobel A, Studer R, Brodde OE, Hasenfuss G. Expression, activity and functional significance of inducible nitric oxide synthase in the failing heart. *J Am Coll Cardiol*. 1998; 32:955-963.

Dugas TR, Morel DW, Harrison EH. Impact of LDL carotenoid and α -tocopherol content on LDL oxidation by endothelial cells in culture. *J Lipid Res*. 1998; 39:999-1007.

Duke JA. *Medicinal Plants*. Science. 1985; 229(4718):1036-38.

Ebenezar KK, Sathish V, Devaki T. Effect of arginine and lysine on mitochondrial function during isoproterenol induced myocardial infarction in rats. *Nut Res*. 2003; 23:1269-77.

Esmailzadeh A, Tahbaz F, Gaieni I, Alavi-Majd H, Azadbakht L. Cholesterol-lowering effect of concentrated pomegranate juice consumption in type II diabetic patients with hyperlipidemia. *Int J Vitam Nutr Res* .2006;76:147-151.

Eiserich JP, Baldus S, Brennan ML, Ma W, Zhang C, Tousson A, Castro L, Lusis AJ, Nauseef WM, White CR, Freeman BA. Myeloperoxidase, a leukocyte-derived vascular NO oxidase. *Science*. 2002; 296 (5577): 2391-4.

Factor SM, Robinson TF. Comparative connective tissue structure function relationships in biologic pumps. *Lab Invest*. 1988; 58: 150–156.

Fang J, Alderman MH. Serum uric acid and cardiovascular mortality the NHANES I epidemiologic follow-up study, 1971–1992. National Health and Nutrition Examination Survey. *J Am Med Assoc*. 2000; 283: 2404–2410.

Fard MH, Bodhankar SL, Dikshit M. Cardioprotective activity of fruit of *Lagenaria siceraria* (Molina) standley on doxorubicin induced cardiotoxicity in rats. *Inter Pharmacol*. 2008; 4 (6):466-471.

Farvin KHS, Surendraraj A, Anandan R. Protective Effect of Squalene on Certain Lysosomal Hydrolases and Free Amino Acids in Isoprenaline-Induced Myocardial Infarction in Rats. *Int J Pharmacol*. 2010; 6: 97-103.

Faraci FM, Didion SP. Vascular protection: superoxide dismutase isoforms in the vessel wall. *Arterioscler Thromb Vasc Biol*. 2004; 24(8): 1367-73.

Fard MH, Bodhankar SL, Dikshit Madhumira. Cardioprotective activity of fruit of *Lagenaria siceraria* (Molina) Stanley on Doxorubicin induced cardiotoxicity in rats. *Int J Pharmacol*. 2008; 4(6): 466-471.

Feng Q, Lu X, Jones DL, Shen J, Arnold JMO. Increased inducible nitric oxide synthase expression contributes to myocardial dysfunction and higher mortality after myocardial infarction in mice. *Circulation*. 2001; 104: 700–704.

Finck BN, Han X, Courtois M, Aimond F, Nerbonne JM, Kovacs A, Gross RW, Kelly DP . A critical role for PPAR alpha mediated lipotoxicity in the pathogenesis of diabetic cardiomyopathy: modulation by dietary fat content. *Proc Natl Acad Sci. U S A*. 2003; 100:1226–1231.

Fiske, Subbarow Y. The colorimetric determination of phosphorus. *J Biol Chem.* 1925; 66: 375-400.

Fleckenstein A, Janke J, Doering HJ. Myocardial fiber necrosis due to intracellular Ca-overload. A new principle in cardiac pathophysiology. *In* Recent advances in studies on cardiac structure and metabolism. Edited by A. Fleckenstein and G. Rona. University Park Press, Baltimore.1974; pp. 563-580.

Fleming I, Michaelis UR, Bredenkotter D, Fisslthaler B, Dehghani F, Brandes RP, Busse R. Endothelium-derived hyperpolarizing factor synthase (Cytochrome P450 2C9) is a functionally significant source of reactive oxygen species in coronary arteries. *Circulation Research.*2001; 88 (1): 44-51.

Folch J, Lees M, Sloane SGH. A simple method for isolation and purification of total lipids from animal tissues *Biol Chem.*1957; 226:497-509.

Freedman JE, Farhat JH, Loscalzo J, Keaney JFJ. Alphotocopherol inhibits aggregation of human platelets by a protein kinase Cdependent mechanism. *Circulation.*1996; 94: 2434-2440.

Fridovich I. Biological effects of the superoxide radicals. *Arch Biochem Biophys.* 1986; 247: 1-11.

Fridovich I. Superoxide radical: an endogenous toxicants. *Annu Rev Pharmacol. Toxicol.* 1983; 23: 29-257.

Fuhrman B, Elis A, Aviram H. Hypocholesterolemic effect of lycopene and beta-carotene is related to suppression of cholesterol synthesis and augmentation of LDL receptor activity in macrophages. *Biochem Biophys Res Commu.*1997; 233: 658-662.

Fuhrman B, Volkova N, Rosenblat M, Aviram M. Lycopene synergistically inhibits LDL oxidation in combination with vitamin E, glabridin, rosmarinic acid, carnosic acid or garlic. *Antioxid Redox Signal.* 2000; 2 (3):491-506.

- Galang N, Sasaki H, Maulik N. Apoptotic cell death during ischemia/reperfusion and its attenuation by antioxidant therapy. *Toxicol.* 2000; 148:111-118.
- Gallego M, Espin L, Vegas L, Echevarria V, Iriarte MM, Casis O. Spironolactone and captopril attenuates isoproterenol induced cardiac remodeling in rats. *Pharmacological Research.* 2002; 44 (4): 311-315.
- Gangwal A, Parmar SK, Gupta GL, Rana AC, Sheth NR. Immunomodulatory effects of *Lagenaria siceraria* fruits in rats. *Pharmacognosy Magazine.* 2008; 4(16): 234-238.
- Gangwal A, Parmar SK, Sheth NR. Isolation and immunomodulatory activity of phytoconstituents of *Lagenaria siceraria*. *InPharm Communique.* 2009; 2(2):46-50.
- Gartner C, Stahl W, Sies H. Lycopene is more bioavailable from tomato paste than from fresh tomatoes. *Am J Clin Nutr.* 1997; 66:116-122.
- Gaziano JM, Manson JE, Ridker PM, Buring JE, Hennekens CH. β -carotene therapy for chronic stable angina. *Circulation.* 1990; 82: Abstract 0796.
- Geesin JC, Gordon JS, Berg RA. Retinoids affect collagen synthesis through inhibition of ascorbate- induced lipid peroxidation in cultured human dermal fibroblasts. *Arch Biochem Biophys.* 1990; 278: 350-355.
- Gesquiere L, Loreau N, Minnich J, Davignon J, Blache D, oxidative stress leads to cholesterol accumulation in vascular smooth muscle cells. *Free Radic Biol Med.* 1999; 27:134-145.
- Gey KF, Moser UK, Jordan P, Stahelin HB, Eichholzer M, Ludin E. Increased risk of cardiovascular disease at suboptimal plasma concentrations of essential antioxidants: an epidemiological update with special attention to carotene and vitamin C. *Am J Clin Nutr.* 1993; 57: 787-797.

Gey KF. Inverse correlation between plasma vitamin E and mortality from ischemic heart disease in cross-cultural epidemiology. *Acta Cardiol.* 1989; 44: 493–494.

Gey KF. The antioxidant hypothesis of cardiovascular disease: epidemiology and mechanisms. *Biochem Soc Trans.* 1990; 18: 1041–1045.

Ghule BV, Ghante MH, Saoji AN, Yeole PG. Antihyperlipidemic effect of the methanolic extract from *Lagenaria siceraria* Stand. fruit in hyperlipidemic rats. *J Ethnopharmacol.* 2009 Jul 15;124(2):333-7. Epub 2009 May 3.

Ghule BV, Ghanta MH, Upaganlawar AB, Yeole PG. Analgesic and anti-inflammatory activities of *Lagenaria siceraria* Stand. fruit juice extract in rats and mice, *Pharmacognosy Magazine.* 2006b; 2(8): 232-238.

Ghule BV, Ghante MH, Saoji AN, Yeole PG. Diuretic activity of *Lagenaria siceraria* fruit extract in rats, *Ind J Pharm Sci.* 2006c; 69 (6): 817-819.

Ghule BV, Ghante MH, Saoji AN, Yeole PG. Hypolipidemic and antihyperlipidemic effects of *Lagenaria siceraria* (mol.) fruit extracts. *Ind J Exp Biol.* 2006a; 44: 905-909.

Giardina C, Inan MS. Nonsteroidal anti-inflammatory drugs, short-chain fatty acids, and reactive oxygen metabolism in human colorectal cancer cells. *Biochimica Biophysica Acta.* 1998; 1401(3): 277-88.

Gil MI, Tomas-Barberan FA, Hess-Pierce B, Holcroft DM, Kader AA. Antioxidant activity of pomegranate juice and its relationship with phenolic composition and processing. *J Agric Food Chem.* 2000; 48: 4581–4589.

Gilski DJ, Borkenhagen B. Rich evaluation in action for cardiovascular health. *Crit Care Nurse.* 2005; 25:26-28.

Glomset JA, Norum KR, King W. Plasma lipoproteins in familial lecithin: cholesterol acyl transferase deficiency: lipid composition and reactivity *in vitro*. J Clin Invest. 1970; 49: 1827-1937.

Glynn RJ, Ridker PM, Goldhaber SZ, Zee RY, Buring JE. Effects of random allocation to vitamin E supplementation on the occurrence of venous thromboembolism: report from the Women's Health Study. Circulation. 2007; 116:1497-1503.

Goldstein JL, Ho YK, Basu SK, Brown MS. Binding site on macrophages that mediates uptake and degradation of acetylated low density lipoproteins, producing massive cholesterol deposition. J Biol Chem. 1979; 76:333-37.

Goldstein JL, Ho YK, Basu SK, Dembinska-kiec A, Pankiewicz J, Wanat A, Anna P. Determination of nitrite/nitrate in human biological material by the simple griess reaction. Clin Chim Acta. 1998; 274:177-88.

Gopalan C, Rama SBV, Balsubramanian SC. Nutritive value of Indian foods. National Institute of Nutrition, ICMR, Hyderabad, India, 1996.

Gottlieb RA, Burleson KO, Kloner RA, Babior BM, Engler RL. Reperfusion injury induces apoptosis in rabbit cardio myocytes. J Clin Invest. 1994; 94: 1621-1628.

Goyal SN, Arora S, Sharma AK, Joshi S, Ray R, Bhatia J, Kumari S, Arya DS. Preventive effect of crocin of *Crocus sativus* on hemodynamic, biochemical, histopathological and ultrastructural alterations in isoproterenol-induced cardiotoxicity in rats. Phytomedicine. 2010a; 17(4): 227-32.

Goyal SN, Arora S, Mittal R, Joshi S, Tapas CN, Ray R, Kumari S, Arya DS. Myocardial salvaging effect of telmisartan in experimental model of myocardial infarction. European Journal of Pharmacology. 2009a; 619: 75-84.

Goyal SN, Mohammed KS, Khalid MS, Arora S, Mittal R, Joshi S, Arya DS. Cardioprotective effect of Khamira Abresham Hakim ArshadWala'a Unani formulation in isoproterenol-induced myocardial necrosis in rats. *Experimental Toxicologic Pathology*. 2010b; 62(1):61-74.

Green DR, Reed JC. Mitochondria and apoptosis. *Science*. 1998; 281:1309-1312.

Griendling KK, FitzGerald GA. Oxidative stress and cardiovascular injury: Part I: basic mechanisms and in vivo monitoring of ROS. *Circulation*. 2003; 108 (16): 1912-6.

Griendling KK, Sorescu D, Lassegue B, Ushio-Fukai M. Modulation of protein kinase activity and gene expression by reactive oxygen species and their role in vascular physiology and pathophysiology. *Arteriosclerosis, Thrombosis & Vascular Biology*. 2000; 20 (10): 2175-83.

Grimm D, Elsner D, Schunkert H. development of heart failure following isoproterenol administration in the rat: Role of rennin angiotensin system. *Cardiovas Res*. 1998; 37:91-100.

Guevara I, Iwanejko J, Dembinska-kiec A, Pankiewicz J, Wanat A, Anna P et al. Determination of nitrite/nitrate in human biological material by the simple griess reaction. *Clin Chim Acta*. 1998; 274:177-88.

Guimaraes PR, Galvao AM, Batista CM, Azevedo GS, Oliveira RD, Lamounier RP, Freire N, Barros AM, Sakurai E, Oliveira JP, Vieira EC, Alvarez-Leite JI. Eggplant (*Solanum melongena*) infusion has modest and transitory effect on hypercholesteremic subjects. *Braz J Med Biol Res*. 2000; 33:1027

Guo C, Wei J, Yang J, Xu J, Pang W, Jiang Y. Pomegranate juice is potentially better than apple juice in improving antioxidant function in elderly subjects. *Nutr Res*. 2008; 28:72-77.

Guo Y, Jones WK, Xuan YT, Tang XL, Bao W, Wu WJ, Han H, Laubach VE, Ping P, Yang Z, Qiu Y, Bolli R. The late phase of ischemic preconditioning is abrogated by targeted disruption of the inducible NO synthase gene. *Proc Natl Acad Sci. USA.*1999; 96: 11507.

Gupta R, Gupta VP. Meta-analysis of coronary heart disease prevalence in India. *Indian Heart J.* 1996; 48: 241-5.

Guzik TJ, West NE, Pillai R, Taggart DP, Channon KM. Nitric oxide modulates superoxide release and peroxynitrite formation in human blood vessels. *Hypertension.* 2002; 39 (6): 1088-94.

Habig WH, Pabst MJ, Jacoby BW. Glutathione s- transferase. The first enzymatic step in mercapturic acid formation. *J Biol Chem.* 1974; 249:1730-1737.

Hager HH. Folic acid and Vitamin B12 administration attenuates isoproterenol induced myocardial infarction in experimental hyperhomocystenemic rats. *Pharmacological Research.*2002; 46(3):213-219.

Halliwell B, Gutteridge JMC. Free radicals in biology and medicine. Oxford: Clarendon Press, 2 nd end, 1989.

Hampton MB, Kettle AJ, Winterbourn CC. Inside the neutrophil phagosome: oxidants, myeloperoxidase, and bacterial killing. *Blood.*1998; 92: 3007-17.

Hansen PR. Role of neutrophils in myocardial ischemia and reperfusion. *Circulation.*1995; 91:1872-1885.

Haramaki N, Stewart DB, Aggarwal S, Ikeda H, Reznick AZ, Packer L. Networking antioxidants in the isolated rat heart are selectively depleted by ischemia-reperfusion. *Free Radic Biol Med.*1998; 25: 329-339.

Hare JM. Nitroso-redox balance in the cardiovascular system. *N Engl J Med.* 2004; 351: 2112–14.

Harman D. Aging: overview. *Ann N Y Acad Sci.* 2000; 928:1–21.

Hasegawa N, Yamada N, Mori M. Powdered green tea has antilipogenic effect on Zucker rats fed a high-fat diet. *Phytother Res.* 2003; 14: 326–332.

Hattori S, Hattori Y, Banba N, Kasai K, Shimoda S, Pentamethylhydroxychromane, vitamin E derivative, inhibits induction of nitric oxide synthase by bacterial lipopolysaccharide, *Biochem Mol Biol Int.* 1995;35(1):177–83.

Hawley MD, Tatawawadi SV, Piekarski S, Adams RN. Electrochemical studies of the oxidation pathways of catecholamines. *J Am Chem Soc.* 1967; 89(2):447–50.

Hearse DJ, De Leiris J, Loisançe J (eds): *Enzymes – in cardiology*, John Wiley and Sons Ltd., London, 1979.

Heinecke JW, Li W, Francis GA, Goldstein JA. Tyrosyl radical generated by myeloperoxidase catalyzes the oxidative cross-linking of proteins. *J Clin Invest.* 1993; 91(6):2866–72.

Heinecke JW. Mass spectrometric quantification of amino acid oxidation products in proteins: insights into pathways that promote LDL oxidation in the human artery wall. *FASEB J.* 1999; 13: 1113–1120.

Heller JL, Crowley JR, Hazen SL, Salvay DM, Wagner P, Pennathur S, Heinecke JW. *p*-Hydroxyphenylacetaldehyde, an aldehyde generated by myeloperoxidase, modifies phospholipids amino groups of low density lipoprotein in human atherosclerotic intima. *J Biol Chem.* 2000; 275: 9957–9962.

Hertog MG, Hollman PC, Katan MB, Kromhout D. Intake of potentially anticarcinogenic flavonoids and their determinants in adults in The Netherlands. *Nutr Cancer*. 1993; 20: 21–29.

Hinderliter AL, Caughey M. Assessing endothelial function as a risk factor for cardiovascular disease. *Curr Atheroscler Rep*. 2003; 5: 506–513.

Hirvonen T, Pietinen P, Virtanen M, Ovaskainen ML, Häkkinen S, Albanes D, Virtamo J. Intake of flavonols and flavones and risk of coronary heart disease in male smokers. *Epidemiology*. 2001; 12: 62–67.

Hitz J, Steinmetz J, Siest G. Plasma lecithin: cholesterol acyl transferase-reference values and effects of xenobiotics. *Clin Chim Acta*. 1983, 133: 85–96.

Hjerken S, Pan H. Purification and characterization of two form of low affinity calcium ion ATPase from erythrocyte membrane. *Biochim Biophys Acta*. 1983; 728: 281–288.

Hodis HN, Mack WJ, LaBree L, Cashin-Hemphill L, Sevanian A, Johnson R. Azen AP. Serial coronary angiographic evidence that antioxidant vitamin intake reduces progression of coronary artery atherosclerosis. *J Am Med Assoc*. 1995; 273: 1849–1854.

Hohler B, Holzapfel B, Kummer W. NADPH oxidase subunits and superoxide production in porcine pulmonary artery endothelial cells. *Histochemistry & Cell Biology*. 2000; 114(1): 29–37.

Holland RP, Brooks H. TQ-ST segment mapping: Critical review and analysis of current concepts. *Am J Cardiol*. 1977; 40: 110–129.

Hong JT, Ryu SR, Kim HJ, Lee JK, Lee SH, Yun YP, Lee BM, Kim PY. Protective effect of green tea extract on ischemia/reperfusion-induced brain injury in Mongolian gerbils. *Brain Research*. 2001; 888: 11–18.

Horn WT and Menahan LA. A sensitive method for the determination of free fatty acids in plasma. *J. Lipid Res.* 22, 377-381 modified by Itaya K 1977. A more sensitive and stable colorimetric determination of free fatty acid in blood. *J Lipid Res.* 1981; 18,663-665.

Hotta Y, Huang L, Muto T, Yajima M, Miyazeki K, Ishikawa N, Fukuzawa Y, Wakida Y, Tushima H, Ando H, Nonogaki T. Positive inotropic effect of purified green tea catechin derivative in guinea pig hearts: The measurements of cellular Ca^{2+} and nitric oxide release. *Eur J Pharmacol.* 2006; 552: 123-130.

Hsiao G, Fong TH, Tzu NH, Lin KH, Chou DS, Sheu JR. A potent antioxidant, lycopene, affords neuroprotection against microglia activation and focal cerebral ischemia in rats. *In Vivo.* 2004; 18(3): 351-6.

Hsu YM, Lai CH, Chang CY, Fan CT, Chen CT, Wu CH. Characterizing the lipid-lowering effects and antioxidant mechanisms of tomato paste. *Biosci Biotechnol Biochem.* 2008; 72(3):677-85.

Hu A, Jiao X, Gao E, Koch WK, Sharifi-Azad S, Grunwald Z, Ma XL, Sun JZ. Chronic β -Adrenergic Receptor Stimulation Induces Cardiac Apoptosis and Aggravates Myocardial Ischemia/Reperfusion Injury by Provoking Inducible Nitric-Oxide Synthase-Mediated Nitritative Stress. *J Pharmacol Exper Therap.* 2006; 318 (2): 469-475.

Hu FB, Willett WC. Optimal diets for prevention of coronary heart disease. *JAMA.* 2002; 288: 2569-2578.

Hu M, Li YL, Jiang CH, Liu ZQ, Qu SL, Huang YM. Comparison of lycopene and fluvastatin effects on atherosclerosis induced by a high-fat diet in rabbits. *Nutrition.* 2008; 24(10):1030-8.

Huang TH, Yang Q, Harada M, Li GQ, Yamahara J, Roufogalis BD, Li Y. Pomegranate flower improves cardiac lipid metabolism in a diabetic rat model: role of lowering circulating lipids. *Br J Pharmacol.* 2005;145:767-774.

Hung CF, Huang TF, Chen BH, Shieh JM, Wu PH, Wu WB. Lycopene inhibits TNF-alpha-induced endothelial ICAM-1 expression and monocyte-endothelial adhesion. *Eur J Pharmacol.* 2008; 586(1-3):275-82.

Ibrahim HS, Ahmed LA, El-din MM. The functional role of some tomato products on lipid profile and liver function in adult rats. *J Med Food.* 2008; 11(3):551-9.

Ikeda I, Tsuda K, Suzuki Y, Kobayashi M, Unno T, Tomoyori H, Goto H, Kawata Y. Tea catechins with a gallooyl moiety suppress postprandial hypertriacylglycerolammina by delayed lymphatic transport of dietary fat in rats. *J Nutr.* 2005; 135: 155-159.

Ilbey YO, Ozbek E, Simsek A, Cekmen M, Somay A, Tasci AI. Effects of Pomegranate Juice on Hyperoxaluria-Induced Oxidative Stress in the Rat Kidneys. *Renal Failure.* 2009; 31(6):522-531.

Ishigai Y, Mori T, Moriyama S, Shibano T. Induction of cardiac beta-adrenergic receptor kinase 1 in rat heart failure caused by coronary ligation. *J Mol Cell Cardiol.* 1999; 31(6): 1261-1268.

Ithayarasi AP, Padmavathy VN, Devi SC. Effect of alpha-tocopherol on isoproterenol induced myocardial infarction in rats--electrocardiographic biochemical and histological evidences. *Indian J Physiol Pharmacol.* 1996; 40(4): 297-302.

Jabs WJ, Logering BA, Gerke P. The kidney as a second site of human C-reactive protein formation in vivo. *Eur J Immunol.* 2003; 33: 152-161.

Jaffe AS, Landt CA, Parvin DR, Abendsehein EM, Geltman JH. Comparative sensitivity of cardiac troponin I and lactate dehydrogease isoenzymes for diagnosing acute myocardial infarction. *Clin Chem*. 1996; 42:1770-1776.

Jagetia GC, Rajanikant GK, Rao SK, Baliga MS. Alteration in glutathione, glutathione peroxidase, superoxide dismutase and lipid peroxidation by ascorbic acid in the skin of mice exposed to fractionated gamma radiation. *Clin Chim Acta*. 2003; 332: 111-121.

Jagetia GC, Reddy TK, Kedlaya R. Influence of naringin on ferric iron induced oxidative damage in vitro. *Clin Chim Acta*. 2004; 347:189-197.

Jayachandran KS, Vasanthi HR, Rajamanickam GV. Antilipoperoxidative and membrane stabilizing effect of diosgenin, in experimentally induced myocardial infarction. *Mol Cell Biochem*. 2009; 327:203-210.

Jennings RB, Steenbergen C Jr, Reimer KA. Myocardial ischemia and reperfusion. *Monogr Pathol*. 1995; 37:47-80.

Jennings RB, Ganote CE, Reimer KA. Ischemic tissue injury. *Am J Pathol*. 1975; 81(1):179-98.

Jennings RB, Ganote CE. Mitochondrial structure and function in acute myocardial ischemic injury. *Circ Res*. 1976; 38 (5 Suppl 1): I80-91.

Jennings RB, Ganote CE. Structural changes in myocardium during acute ischemia. *Circ Res*. 1974; 35:156-72.

Jennings RB, Reimer KA, Steenbergen C. Myocardial ischemia revisited. The osmolar load, membrane damage and reperfusion. *J Mol Cell Cardiol*. 1986; 18:769-780.

Jensen G, Nyboe J, Appleyard M, Schnohr P. Risk factors for acute myocardial infarction in Copenhagen, II: Smoking, alcohol intake, physical activity, obesity, oral contraception, diabetes, lipids, and blood pressure. *Eur Heart J*.1991; 12 (3): 298-308.

Jiwjinda S, Santisopasn V, Murakam A, Kim OK, Kim HW, Ohigashi H. Suppressive effects of edible Thai plants on superoxide and NO generation. *Asian Pacific J Cancer Prev*. 2002; 3: 215-223.

John D, Bancroft, Marilyn Gamble. "Theory and Practice of Histological Techniques".6th edition. Churchill Livingstone, Elsevier, 2008a. p 150.

John D, Bancroft, Marilyn Gamble. "Theory and Practice of Histological Techniques".6th edition. Churchill Livingstone, Elsevier, 2008b. p 171.

Judd JT, Wexler BC. Myocardial connective tissue metabolism in response to injury: II. Investigation of the mucopolysaccharides involved in isoproterenol-induced necrosis and repair in rat hearts. *Circ Res*. 1970; 26: 101-109.

Kagan VE, Serbinova EA, Forte T, Scita G, Packer L. Recycling of vitamin E in human low density lipoproteins. *J Lipid Res*.1992; 33: 385-397.

Kako K. Biochemical changes of the rat myocardium induced by isoproterenol. *Can J Physiol Pharmacol*.1965; 43: 541-549.

Kaneko M, Masumoto Y, Hayashi H, Kobayashi A, Yamazaki N. Oxygen free radicals and calcium homeostasis in the heart. *Mol Cell Biochem*.1995; 139: 91-100.

Kannel WB. Silent myocardial ischemia and infarction: insights from the Framingham Study. *Cardiol Clin*.1986; 4 (4): 583-91.

Karimi G, Ramezani M, Abdi A. Protective effects of lycopene and tomato extract against doxorubicin-induced cardiotoxicity. *Phytother Res.* 2005; 19 (10):912-4.

Karthikeyan K, Bai BRC, Devaraj SN. Efficacy of grape seed proanthocyanidins on serum and heart tissue lipids in rats subjected to isoproterenol-induced myocardial injury. 2007; 47(5-6): 295-301.

Kasai H, Hayami H, Yamaizumi Z, Saito H, Nishimura S. Detection and identification of mutagens and carcinogens their adducts with guanosine derivatives. *Nucleic Acid Res.*1984; 12:2127-36.

Katiyar SK, Perez A, Mukhtar H. Green tea polyphenol treatment to human skin prevents formation of ultraviolet light B-induced pyrimidine dimmers in DNA. *Clin Cancer Res.* 2000; 6: 3864-9.

Katz A. Cardiomyopathy of overload. *N Engl J Med.*1991; 322:100-110.

Kaur G, Jabbar Z, Athar M, Alam MS. *Punica granatum* (pomegranate) flower extract possesses potent antioxidant activity and abrogates Fe-NTA induced hepatotoxicity in mice. *Food and Chemical Toxicology.*2006; 44(7): 984-993.

Kawaii S, Lansky EP. Differentiation-promoting activity of pomegranate (*Punica granatum*) fruit extracts in HL-60 human promyelocytic leukemia cells. *J Med Food.* 2004; 7:13-18.

Kela AK, Reddy PL, Thombre DP: ECG findings in normal rats and after administration of isoproterenol. *Ind J Physiol Pharmacol.*1980; 24:84-90.

Kelly RA, Balligand JL, Smith TW. Nitric oxide and cardiac function. *Circ. Res.* 1996; 79: 363.

Kennedy TA, Liebler DC. Peroxyl radical scavenging by β -carotene in lipid bilayers. *J Biol Chem.*1992; 267:4658-4663.

Kennedy TA, Liebler DC. Peroxyl radical scavenging by β -carotene in lipid bilayers. *J Biol Chem*. 1992; 267: 4658-63.

Khader YS, Rice J, John L, Abueita O. Oral contraceptives use and the risk of myocardial infarction: a meta-analysis. *Contraception*. 2003; 68 (1): 11-7.

Khan N, Afaq F, Mukhtar H. Cancer chemoprevention through dietary antioxidants: progress and promise. *Antiox Redox Signal*. 2008; 10: 475-510.

Khenouf S, Gharzouli K, Amira S and Gharzouli A. Effects of *Quercus ilex* and *Punica granatum* polyphenols against ethanol-induced gastric damage in rats. *Pharmazie*. 1999; 54: 75-76.

Kirsch M, Korth HG, Sustmann R, de Groot H. The pathobiochemistry of nitrogen dioxide. *Biol Chem*. 2002; 383: 389-399.

Kirtikar KR, Basu BD. *Indian Medicinal Plants*. 2nd ed. Dehradun, Oriental Enterprises, 2001.

Knekt P, Kumpulainen J, Jarvinen R, Rissanen H, Heliovaara M, Reunanen A, Hakulinen T, Aromaa A. Flavonoid intake and risk of chronic diseases. *Am J Clin Nutr*. 2002; 76: 560-8.

Knekt P, Reunanen A, Jarvinen R, Seppanen R, Heliovaara M, Aromaa A. Antioxidant vitamin intake and coronary mortality in a longitudinal population study. *Am J Epidemiol*. 1994; 139:1180-9.

Knowles RG, Moncada S. Nitric oxide synthases in mammals. *Biochem J*. 1994; 298: 249-58.

Kohno Y, Egawa Y, Itoh S. Kinetic study of quenching reaction of singlet oxygen and scavenging reaction of free radical by squalene in n-butanol. *Biochim Biophys Acta*. 1995; 1257: 52-56.

Koo SI, Noh SK. Green tea as inhibitor of the intestinal absorption of lipids: Potential mechanism for its lipid lowering effect. *J Nutr Biochem*. 2007; 18: 179-183.

Kotamballi NCM, Guddadarangavvahally KJ, Ravendra PS. Studies on Antioxidant Activity of Pomegranate (*Punica granatum*) Peel Extract Using in Vivo Models. *J Agric Food Chem*. 2002, 50, 4791-4795.

Kothari HV, Miller BF, Kritchevsky D. Aortic cholesterol esterase: characteristics of normal rat and rabbit enzyme. *Biochem Biophys Acta*, 1973, 296: 446-454.

Krijnen PA, Nijmeijer R, Meijer CJ, Visser CA, Hack CE, Niessen HW. Apoptosis in myocardial ischaemia and infarction. *J Clin Pathol*. 2002; 55 (11): 801-11.

Krinsky NI. The biological properties of carotenoids. *Pure & Appl. Chem*. 1994; 66(5): 1003-1010.

Kucukatay MB, Kucukatay V, Agar A, Baskurt OK. Effect of sulfite on red blood cell deformability *ex vivo* and in normal and sulfite oxidase-deficient rats *in vivo*. *Arch Toxicology*. 2005; 79: 542-546.

Kumar D, Jugdutt BI. Apoptosis and oxidants in the heart. *J Lab Clin Med*. 2003; 142 (5): 288-293.

Kushi LH, Folsom AR, Prineas RJ, Mink PJ, Wu Y, Bostock RM. Dietary antioxidant vitamins and death from coronary heart disease in postmenopausal women. *N Engl J Med*. 1996; 334: 1156-1162.

Kuzkaya N, Weissmann N, Harrison DG, Dikalov S. Interactions of peroxynitrite, tetrahydrobiopterin, ascorbic acid, and thiols: implications for uncoupling endothelial nitric-oxide synthase. *J Biol Chem*. 2003; 278(25): 22546-54.

Lacy F, O'Connor DT, Schmid-Schonbein GW. Plasma hydrogen peroxide production in hypertensive and normotensive subjects at genetic risk of hypertension. *Journal of Hypertension*.1998; 16(3): 291-303.

Landmesser U, Dikalov S, Price SR, McCann L, Fukai T, Holland SM. Oxidation of tetrahydrobiopterin leads to uncoupling of endothelial cell nitric oxide synthase in hypertension. *Journal of Clinical Investigation*. 2003; 111(8): 1201-9.

Lansky EP, Newman RA. *Punica granatum* (pomegranate) and its potential for prevention and treatment of inflammation and cancer. *J Ethnopharmacol*. 2007; 109: 177–206.

Lee A, Thurnham DI, Chopra M. Consumption of tomato products with olive oil but not sunflower oil increases the antioxidant activity of plasma. *Free Radic Biol Med*. 2000;29(10):1051–1055.

Lee HR. Adrenergic receptors in heart failure. *Heart Fail*.1989; 5: 62–70.

Lehr D. Healing of myocardial necrosis caused by sympathomimetic amines. *Recent Adv Stud Cardiac Struct Metab*.1972; 1: 526–550.

Leopoldini M, Russo N, Chiodo S, Toscano M. Iron chelation by the powerful antioxidant flavonoid quercetin. *J Agric Food Chem*. 2006; 54:6343–51.

Li D, Qu Y, Tao L, Liu H, Hu A, Gao F, Sharifi-Azad S, Grunwald Z, Ma XL, Sun JZ. Inhibition of iNOS protects the aging heart against beta-adrenergic receptor stimulation-induced cardiac dysfunction and myocardial ischemic injury. *J Surg Res*. 2006; 131:64–72.

Li WG, Miller FJ, Jr, Brown MR, Chatterjee P, Aylsworth GR, Shao J, Spector AA, Oberley LW, Weintraub NL. Enhanced H₂O₂- induced cytotoxicity in "epithelioid" smooth muscle cells: implications for neointimal regression. *Arteriosclerosis, Thrombosis & Vascular Biology*. 2000; 20(6): 1473-9.

Libby P, Ridker PM, Maseri A. Inflammation and atherosclerosis. *Circulation*.2002; 105:1135–1143.

Lie JT, Pairolero PC, Holley KE, Titus JL. Macroscopic enzyme mapping verification of large, homogenous, experimental myocardial infarcts of predictable size and location in dog. *J of Thoracic and Cardiovascular Surgery*.1975; 69: 599-605.

Limpens J, Schroder FH, de Ridder CMA, Bolder CA, Wildhagen MF et al. Combined Lycopene and Vitamin E Treatment Suppresses the Growth of PC-346C Human Prostate Cancer Cells in Nude Mice. *J Nutretion*.2006; 1287-93

Lin CC, Hsu YF, Lin TC, Hsu FL, Hsu HY. Antioxidant and hepatoprotective activity of punicalagin and punicalin on carbon tetrachloride induced liver damage in rats. *J Pharm Pharmacol*.1998; 50: 789–794.

Lind L. Circulating markers of inflammation and atherosclerosis. *Atherosclerosis*. 2003; 169:203–14.

Lindberg G, Eklund GA, Gullberg B, Rastam L. Serum sialic acid concentration and cardiovascular mortality. *Br Med J*.1991; 302: 143–146.

Liu X, Qu D, He F, Lu Q, Wang J, Cai D. Effect of lycopene on the vascular endothelial function and expression of inflammatory agents in hyperhomocysteinemic rats. *Asia Pac J Clin Nutr*. 2007; 16: 244-8.

Loren DJ, Seram NP, Schulman RN, Holtzman DM. Maternal dietary supplementation with pomegranate juice is neuroprotective in an animal model of neonatal hypoxic-ischemic brain injury. *Ped Res*. 2005; 57: 858–864.

Losonczy KG, Harris TB, Havlik RJ. Vitamin E and vitamin C supplementation use and risk of all-cause and coronary heart disease mortality in older persons: The Established Populations for Epidemiologic Studies of the Elderly. *Am J Clin Nutr*. 1996; 64: 190–196.

Lowery OH, Rosenbrough NJ, Farr AI, Randall RJ. Protein measurement with the Folin phenol reagent. *J Biol Chem.*1951; 193: 265-75.

MacMillan-Crow LA, Thompson JA. Tyrosine modifications and inactivation of active site manganese superoxide dismutase mutant (Y34F) by peroxynitrite. *Arch Biochem Biophys.* 1999; 366(1):82-8.

Maggio B, Diplock AT, Lucy JA. Interaction of tocopherols and ubiquinones with monolayers of phospholipids. *Bio-Chem J.*1977; 161:111-21.

Mair J, Wagner I, Lechleitner P, Drenstl F, Puschendorf B, Michel G. different time courses of cardiac contractile proteins after acute myocardial infarction. *Clin Chim Acta.* 1994; 231: 47-60.

Mallet RT, Sun J. Antioxidant properties of myocardial fuels. *Mol Cell Biochem.* 2003; 253: 103-111.

Manjula TS, Devi CS: Effect of aspirin on isoproterenol induced changes in lipid metabolism in rats. *Indian J Med Res.*1993; 98: 30-33.

Manjula TS, Geetha A, Devi SCS. Effect of aspirin on isoproterenol induced myocardial infarction – a pilot study. *Indian J Biochem Biophys.*1992; 29: 378-379.

Martorana PA. The role of cyclic AMP in isoprenaline-induced cardiac Necrosis in the rat. *J Pharm Pharmacol.*1971; 23: 200-203.

Marczin N, El-Habashi, Hoare GS, Bundy RE, Yacoub M. Antioxidants in myocardial ischemia-reperfusion injury: therapeutic potential and basic mechanisms. 2003; 420: 222-236.

Masahiro T, Kanehisa M, Sei-ichi N. Beneficial Effect of Tomato Juice Drinking on Anti-Mutagenicity of Saliva. *Environmental Health and Preventive Medicine.*2003; 7: 289-291.

Masini E D, Bani I, Sardi R, Baronti T, Bani-Sacchi M, Bigazzi, PF Mannaioni. Dual role of nitric oxide in myocardial ischemia-reperfusion. *Inflamm Res.* 2000; 49: 78–79.

Mathew S, Menon PVG, Kurup PA. Changes in myocardial and aortic lipids, lipolytic activity and fecal excretion of sterols and bile acids in isoproterenol induced MI in rats. *Ind J Biochem Biophys.* 1981; 18:131-33.

Mathew S, Menon VP, Kurup PA. Changes in glycoproteins in isoproterenol-induced myocardial infarction in rats. *Ind J Biochem Biophys.* 1982; 19: 41–43.

Mauricio DM, Marco AAP, Lucia Y, Susana V, Lidia M, Gisele R, Mario Y, Sotero R, Victoria CS. Correlation between oxidative stress and alteration of intracellular calcium handling in isoproterenol-induced myocardial infarction. *Mol Cell Biochem.* 2006; 289: 125–136.

Mc Cord JM. Free radicals and myocardial ischemia. *Free Radic. Biol. Med.* 1988; 4: 9–14.

McCord JM and Roy RS. The pathophysiology of superoxide role in inflammation and ischemia. *Can J Physiol Pharm.* 1982; 60:1346-1352.

Mckay DL, Blumberg JB. The role of tea in human health: An update. *J Am Coll Nutr.* 2002; 21: 1-13.

McKenzie D, Henderson AR. Electrophoresis of lactate dehydrogenase isoenzymes. *Clin Chem.* 1983; 29:189-195.

McSweeney JC, Cody M, O'Sullivan P, Elberson K, Moser DK, Garvin BJ. Women's early warning symptoms of acute myocardial infarction. *Circulation.* 2003; 108 (21): 2619-23.

Meister A. Glutathion metabolism and its selective modification. J Biol Chem.1988; 263: 7205-8.

Meyer JW, Holland JA, Ziegler LM, Chang MM, Beebe G, Schmitt ME. Identification of a functional leukocyte-type NADPH oxidase in human endothelial cells: a potential atherogenic source of reactive oxygen species. Endothelium.1999; 7(1): 11-22.

Milde J, Elstner EF, Graÿmann J. Synergistic effects of phenolics and carotenoids on human low-density lipoprotein oxidation. Mol Nutr Food Res. 2007 Jul 18;

Miller NJ, Sampson J, Candeias LP, Bramley PM, Rice-Evans C. Antioxidant activities of carotenes and xanthophylls. FEBS Lett.1996; 284:240-242.

Miriyala S, Panchatcharam M, Dilly AK, Natarajan A, Kedike B, Bhakthavatsalam MM, Rengarajulu P. Experimental myocardial necrosis in rats: Role of arjunolic acid on platelet aggregation, coagulation and antioxidant status. Mol Cell Biochem. 2001; 224: 135-142.

Mishra HP, Fridovich I. The role of superoxide anion in the autooxidation of epinephrine and a simple assay of superoxide dismutase. J Biol Chem.1972; 247: 3170-3175.

Mladenkaa P, Libuse Z, Tomás S. Direct administration of rutin does not protect against catecholamine Cardiotoxicity. Toxicology. 2009; 255: 25-32.

Mohale DS, Dewani AP, Saoji AN, Khadse CD. Antihyperlipidemic activity of isolated constituents from *Lagenaria siceraria* in albino rats. 2008; 104-107.

Moron MS, Depierre JW. Levels of glutathione, glutathione reductase and glutathione S transferase activities in rat lung and liver. Biochem Biophys Acta.1979; 582: 67-78.

Moskaug JO, Borge GI, Fagervoll AM, Paur I, Carlsen H, Blomhoff R. Dietary polyphenols identified as intracellular protein kinase A inhibitors. *Eur J Nutr.*2008; 47:460-469.

Moss AJ. Measurement of the QT interval and the risk associated with QTc interval prolongation: A review. *Am J Cardiol.*1993; 72:23B.

Mourelle M, Franco MT. Erythrocytes defects precede the onset of CCl₄ induced liver cirrohsis. Protection of silymarin. *Life Sci.*1991; 48:1083-90.

Muller S, Konig I, Meyer W, Kojda G. Inhibition of vascular oxidative stress in hypercholesterolemia by eccentric isosorbide mononitrate. *J Am Coll Cardiol.* 2004; 44(3): 624-31.

Nadkarni KM. *Indian Materia Medica*, Volume I, A.K. Nadkarni, Popular Prakashan. 1992; p 722 – 723.

Nair PS, Devi CSS. Efficacy of mangiferin on serum and heart tissue lipids in rats subjected to isoproterenol induced cardiotoxicity. *Toxicology.* 2006; 228:135-139.

Nandave M, Mohanty I, Nag TC, Ojha SK, Mittal R, Kumari S, Arya DS. Cardioprotective response to chronic administration of vitamin E in isoproterenol induced myocardial necrosis: hemodynamic, biochemical and ultrastructural studies. *Ind J Clin Biochem.*2007;22(1):22-28.

Napolitano M, De Pascale C, Wheeler-Jones CP, Botham KM, Bravo E. The effects of lycopene on the induction of foam cell formation by modified LDL. *Am J Physiol Endocrinol Metab.* 2007; 293(6): 1820-7.

Narr Ben C, Ayed N, Metche M. Quantitative determination of the polyphenolic content of pomegranate peel. *Z Lebensm. Unters. Forsch.* 1996; 203: 374-378.

Narula J, Haider N, Virmani R et al. Apoptosis in myocytes in end-stage heart failure. *N Eng J Med*.1996; 335:1182-89.

Nirmala C, Anand S, Puvanakrishnan R. Curcumin treatment modulates collagen metabolism in isoproterenol induced myocardial necrosis in rats. *Mol Cell Biochem*.1999; 197: 31-37.

Nirmala C, Puvanakrishnan R: Protective role of curcumin against isoproterenol induced myocardial infarction in rats. *Mol Cell Biochem*.1996; 159: 85-93.

Niskanen LK, Laaksonen DE, Nyysönen K, Alfthan G, Lakka HM, Lakka TA, Salonen JT. Uric acid level as a risk factor for cardiovascular and all-cause mortality in middle-aged men: a prospective cohort study. *Arch Intern Med*. 2004; 164: 1546-1551.

Nordby G, Norum KR. Substrate specificity of lecithin: cholesterol acyl transferase, esterification of demosterol, β -sitosterol and cholecalciferol in human plasma. *Scand J Clin Lab Invest*.1975; 35: 677-682.

Nordis HN, Mack WJ. Triglyceride-rich lipoproteins and progression of coronary artery disease. *Curr Opin Lipidol*.1995; 6: 209-214.

NRC (National Research Council, USA), Committee on Diet and Health, Implication for reducing Chronic Disease risk. Washington, DC: National Academy of Sciences, 1989.

Ohinishi T, Suzuki T, Suzuki Y, Ozawa K. A Comparative study of plasma membrane Mg^{2+} ATPase activities in normal, regenerating and malignant cells. *Biochim Biophys Acta*.1982; 684: 67-74.

Olivetti G, Abbi R, Quaini F, Kajstura J, Cheng W, Nitahara JA, Quaini E, Di Loreto C, Beltrami CA, Krajewski S, Reed JC, Anversa P. Apoptosis in the failing human heart. *N Eng J Med*.1997; 336: 1131-41.

Ong KC, Khoo HE. Effect of myricetin on glycemia and glycogen metabolism in diabetic rats. *Life Sci.* 2000; 67:1695-1705.

Onyeneke EC, Oluba OM, Ojeaburu SI, Adeyemi O, Eriyamremu GE, Adebisi KE, Adeyemi O. Effect of soy protein on serum lipid profile and some lipid-metabolising enzymes in cholesterol fed rats. *African J Biotechnology.* 2007;6(19):2267-73.

Palozza P, Krinsky NI. Antioxidant effects of carotenoids on biological membranes. *Acta Medica Romana.* 1993; 31:131-140.

Palozza P, Krinsky NI. β -carotene and α -tocopherol are synergistic antioxidants. *Arch Biochem Biophys.* 1992; 297(1): 184-97.

Palozza P, Simone R, Catalano A, Boninsegna A, Böhm V, Fröhlich K, Mele MC, Monego G, Ranelletti FO. Lycopene prevents 7-ketocholesterol-induced oxidative stress, cell cycle arrest and apoptosis in human macrophages. *J Nutr Biochem.* 2010; 21: 34-46.

Panda VS, Naik SR. Cardioprotective activity of *Ginkgo biloba* Phytosomes in Isoproterenol-induced myocardial necrosis in rats: a biochemical and histoarchitectural evaluation. *Exp Toxicol Pathol.* 2008; 60; 397-404.

Paolo C, James T. Willerson, Edward TH. Inflammatory Cytokines Stimulated C-Reactive Protein Production by Human Coronary Artery Smooth Muscle Cells. *Circulation.* 2003; 108; 1930-1932.

Parekh AC, Jung DH. Determination of cholesterol with ferric acetate, uranium acetate and sulfuric acid, ferrous sulphate reagents. *Anal Chem.* 1970; 42: 1423-27.

Parvin R, Akhter N. Protective effect of tomato against adrenaline-induced myocardial infarction in rats. *Bangladesh Med Res Counc Bull.* 2008; 34: 104-108.

Patel RP, Levonen A, Crawford JH, Darley-USmar VM. Mechanisms of the pro- and anti-oxidant actions of nitric oxide in atherosclerosis. *Cardiovasc Res.* 2000a; 47(3): 465-74.

Patel RP, Moellering D, Murphy-Ullrich J, Jo H, Beckman JS, Darley-USmar VM. Cell signaling by reactive nitrogen and oxygen species in atherosclerosis. *Free Radic Biol Med.* 2000b; 28(12): 1780-94.

Patil L, Balaraman R. Effect of green tea extract on cisplatin induced oxidative damage on kidney and testes of rats. *Ars Pharmaceutica.* 2005; 46(1):235-245.

Patil L, Balaraman R. Protective effect of green tea extract on doxorubicin induced cardiotoxicity in rats. *Oriental Pharmacy and Experimental Medicine.* 2005; 5(2): 137-145.

Peacock WF, Hollander JE, Smalling RW, Bresler MJ. Reperfusion strategies in the emergency treatment of ST-segment elevation myocardial infarction. *Am J Emerg Med.* 2007; 25: 353-366.

Pearson DA, Frankel EN, Aeschbach R, German JB. Inhibition of endothelial cell mediated low-density lipoprotein oxidation by green tea extracts. *J Agri Food Chem.* 1998; 46: 1445-1449.

Peer PA, Purvi CT, Prashant BN, Mahesh MG, Avinash DD. Cardioprotective effect of *Azadirachta indica* A. Juss on isoprenaline induced myocardial infarction in rats. *Int J cardiol.* 2008; 126(1):123-126.

Persad S, Rupp H, Jindal R, Arneja J and Dhalla NS. Modification of cardiac beta-adrenoceptor mechanism by H₂O₂. *Am J Physiol Heart Circ Physiol.* 1998; 274: H416-H423.

Peter MC. Diet and C-reactive Protein. *Current Atherosclerosis Report.* 2003; 5:431-436.

Pinn G, Herbs and cardiovascular disease. From past to present. *Aust Fam Physician*. 2000; 29:1149-1153.

Pinto VD, Cutini GJ, Sartorio CL, Paigel AS, Vassallo DV, Stefanon I. Enhanced beta adrenergic response in rat papillary muscle by inhibition of inducible nitric oxide synthase after myocardial infarction. *Acta Physiol*. 2007; 190(2):111-7.

Potenza MA, Marasciulo FL, Tarquinio M, Tiravanti E, Colantuono G. EGCG, a green tea polyphenol, improves endothelial function and insulin sensitivity, reduced blood pressure and protects against myocardial I/R injury in SHR. *Am J Physiol Endocrinol Metab*. 2007; 292: 378-387.

Pour ZM, Zal F, Monabati A, Vessal MO. Protective effects of a combination of quercetin and vitamin E against cyclosporine A-induced oxidative stress and hepatotoxicity in rats. *Hepatology Research* 2008; 38: 385–392

Prabhu S, Jainu M, Sabiths KE, Devi CSS. Role of mangiferin on biochemical alterations and antioxidant status in isoproterenol-induced myocardial infarction in rats. *J Ethnopharmacol*. 2006; 107:126-133.

Priscilla DH, Prince PSM. Cardioprotective effect of gallic acid on cardiac troponon-T, cardiac marker enzymes, lipid peroxidation products and antioxidants in experimentally induced myocardial infarction in Wistar rats. *Chemico-Biological Interaction*. 2009; 179:118-124.

Punithavathi VR, Prince PSM. Pretreatment with a combination of quercetin and α -tocopherol ameliorates adenosine triphosphatases and lysosomal enzymes in myocardial infarcted rats. *Life Sciences*, 2010; 86(5-6):178-84.

Punithavathi VR, Prince SM. Combined effects of quercetin and α -tocopherol on lipids and glycoprotein components in isoproterenol induced myocardial infarcted Wistar rats *Chemico-Biological Interactions*. 2009; 181(3):322-7.

Qin F, Yan C, Patel R, Liu W, Dong E. Vitamins C and E attenuate apoptosis, β -adrenergic receptor desensitization, and sarcoplasmic reticular Ca^{2+} ATPase downregulation after myocardial infarction. *Free Radical Biology Medicine*. 2006; 40:1827–1842.

Qing-Yi Wei, Bo Zhou, Yu-Jun Cai, Li Yang and Zhong-Li Liu. Synergistic effect of green tea polyphenols with trolox on free radical-induced oxidative DNA damage. *Food Chemistry* .2006; 96 (1): 90-95.

Raghuvanshi R, Chandra M, Misra PC, Misra MK. Effect of vitamin E on the platelet xanthine oxidase and lipid peroxidation in the patients of myocardial infarction. *Ind J Clinical Biochemistry*. 2005; 20(1):26-29.

Rahaman HAS. Bottle gourd (*Lagenaria siceraria*)- a vegetable for good health. *Natural Product Radiance*.2003; 2(5): 249-256.

Rajadurai M, Prince SMP. Preventive effect of naringin on isoproterenol-induced cardiotoxicity in Wistar rats: an *in vivo* and *in vitro* study. *Toxicology*.2007; 232: 216–225.

Rajadurai M, Prince SMP. Preventive effect of naringin on cardiac markers, electrocardiographic patterns and lysosomal hydrolases in normal and isoproterenol-induced myocardial infarction in Wistar rats. *Toxicology*. 2007a; 230: 178-188.

Rajadurai M, Prince SMP. Preventive effect of naringin on lipid peroxides and antioxidants in isoproterenol induced cardiotoxicity in wistar rats; *Biochemical and histopathological evidence*.*Toxicology*. 2006; 228: 259-268.

Rao AV, Waseem Z, Agarwal S. Lycopene content of tomatoes and tomato products and their contribution to dietary lycopene. *Food Res Int*.1998; 31:737–741.

Rathore N, John S, Kale M *et al.* Lipid peroxidation and antioxidant enzymes in isoproterenol induced oxidative stress in rat tissues. *Pharmacol Res.*1998; 38: 297-303.

Ravichandran LV, Puvanakrishnan R. *In vivo* labelling studies on the biosynthesis and degradation of collagen in experimental myocardial infarction. *Biochem Int.* 1991; 24: 405-414.

Remondino A, Kwon SH, Communal C, Pimentel DR, Sawyer DB, Singh K, Colucci WS. β -Adrenergic receptor-stimulated apoptosis in cardiac myocytes is mediated by reactive oxygen species/c-Jun NH2-terminal kinase-dependent activation of the mitochondrial pathway. *Circ Res.* 2003; 92:136-138.

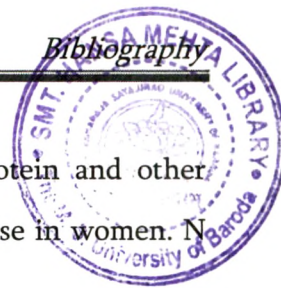
Rencuzogullari N, Erdogan S. Oral administration of lycopene reverses cadmium-suppressed body weight loss and lipid peroxidation in rats. *Biol Trace Elem Res.* 2007; 118(2):175-83.

Ribeiro DA, Buttros JB, Oshima CTF, Bergamaschi CT, Campos RR. Ascorbic acid prevents acute myocardial infarction induced by isoproterenol in rats: role of inducible nitric oxide synthase production. *J Mol Hist.* 2009; 40(2):99-105.

Ricci D, Giamperi L, Bucchini A, Fraternale D. Antioxidant activity of *Punica granatum* fruits. *Fitoterapia* 2006; 77:310-12.

Ricciarelli R, Tasinato A, Clement S, Ozer NK, Boscoboinik D, Azzi A. Alpha-tocopherol specifically inactivates cellular protein kinase C alpha by changing its phosphorylation state. *Biochem J.* 1998; 334: 243-249.

Richardson PD, Davies MJ, Born GV. Influence of plaque configuration and stress distribution on fissuring of coronary atherosclerotic plaques. *Lancet.*1989; 2: 941-944.



Ridker PM, Hennekens CH, Buring JE, Rifai N. C-reactive protein and other markers of inflammation in the prediction of cardiovascular disease in women. *N Engl J Med.* 2000; 342: 836–43.

Robak J, Gryglewski RJ. Flavonoids are scavengers of superoxide anions. *Biochem Pharmacol.* 1988; 37: 837–4.

Rohde LE, Ducharme A, Arroyo LH. Matrix metalloproteinase inhibition attenuates early left ventricular enlargement after experimental myocardial infarction in mice. *Circulation.* 1999; 99: 3063-3070.

Roksana P, Nargis A. Protective effect of tomato against adrenaline-induced myocardial infarction in rats. *Bangladesh Med Res Counc Bull.* 2008; 34: 104-108.

Rona G, Chappel CI, Balazs T, Gaudry R. An infarct-like myocardial lesion and other toxic manifestations produced by isoproterenol in the rat. *Arch Pathol.* 1959b; 67:443–455.

Rona G, Chappel CI, Balazs T, Gaudry R. The effect of breed, age, and sex on myocardial necrosis produced by isoproterenol in the rat. *J Gerontol.* 1959a; 14:169–173.

Rona G: Catecholamine cardiotoxicity. *J Mol Cell Cardiol.* 1985; 17: 291–300.

Rosenblat M, Hayek T, Aviram M. Anti-oxidative effects of pomegranate juice (PJ) consumption by diabetic patients on serum and on macrophages. *Atherosclerosis.* 2006; 187:363-371.

Ross R. The pathogenesis of atherosclerosis. In: *Heart disease: A textbook of cardiovascular medicine.* Braunwald E (Ed) WB Saunders Company, Philadelphia. 1992.

Rotruck JT, Pope AL, Ganther HE. Selenium: biochemical role as a component of Glutathion peroxidase. *Science*. 1975; 179: 588-590.

Rupp H, Dhalla KS, Dhalla NS. *J. Cardiovasc. Pharmacol.* 1994; 24: S16.

Saad SY, Najjar TA, Al-Rikabi AC. The preventive role of deferoxamine against doxorubicin-induced cardiac, renal and hepatic toxicity in rats. *Pharmacol Research*. 2001; 43: 211-218.

Sam F, Sawyer DB, Xie Z, Chang DL, Ngoy S, Brenner DA, Siwik DA, Singh K, Apstein CS, Colucci WS. Mice lacking inducible nitric oxide synthase have improved left ventricular contractile function and reduced apoptotic cell death late after myocardial infarction. *Circ Res*. 2001; 89: 351.

Sanchez A, Fonseca G, Fuentes JL, Cozzi R, Cundari E, Fiore M, et al. Assessment of the genotoxic risk of *Punica granatum* L. (Punicaceae) whole fruit extracts. *J Ethnopharmacol*. 2008; 115:416-22.

Sangeetha T, Darlin QS. Preventive effect of S-allyl cysteine sulfoxide (alliin) on cardiac marker enzymes and lipids in isoproterenol induced myocardial injury. *J Pharm Pharmacol*. 2006; 58:617-623.

Sannoumaru YJ, Shimizu. Effects of semi-purified dietary fibers isolated from *Lagenaria siceraria*, *Raphanus sativus* and *Lentinus edobus* on fecal steroid excretion in rats. *J Nut Sci Vitam*. 1996; 42 (2): 97-110.

Saradha A, Jhan TMG. Cardiovascular disease treatment strategies. *Health Action*. 2009; 22:28-31.

Saraste A, Pulkki K, Kallajoki M, Henriksen K, Parvinen M, Voipio-Pulkki L-M. Apoptosis in human acute myocardial infarction. *Circulation* 1997; 95: 320-3.

Saravanan G, Prakash J. Effect of garlic on (*Allium sativum*) on lipid peroxidation in experimental myocardial infarction in rats. *J Ethnopharmacol.* 2004; 94: 155-158.

Sathish V, Ebenazer KK, Devaki T. Synergistic effect of nicorandil and amlodipine on tissue defense system during experimental myocardial infarction in rats. *Mol Cell Biochem.* 2003a; 243: 133-138.

Sathish V, Ebenezer KK, Devika T. Biochemical changes on the cardioprotective effect of nicorandil and amlodipine during experimental myocardial infarction in rats. *Pharmacol Res.* 2003b; 48:565-570.

Savenkova ML, Mueller DM, Heinecke JW. Tyrosyl radical generated by myeloperoxidase is a physiological catalyst for the initiation of lipid peroxidation in low density lipoprotein. *J Biol Chem.* 1994; 269: 20394–20400.

Schimke RT, Katunuma N. Intracellular protein turnover, pp 173–186. Academic Press, New York, 1975.

Schmidt FH, Stork H, Dahl K. In: *Methods in Enzymatic analysis*, Bergmeyer HV(ed). Academic Press, New York. 1947; 2: 819.

Schwartz PJ, Wolf MD. QT interval prolongation as predictor of sudden death in patients with myocardial infarction. *Circulation.* 1978; 57: 1074.

Searle AJ, Wilson RL. Glutathione peroxidase: effect of superoxide, hydroxyl and bromine free radicals on enzyme activity. *Int J Radiat Biol Relat Stud Phy Chem Med.* 1980; 37: 213-217.

Senthil S, Sridevi M, Pugalandi KV. Cardioprotective effect of Oleanolic Acid on Isoproterenol-Induced Myocardial Ischemia in Rats. *Toxicologic Pathology.* 2007; 35:418–423.

Sesso HD, Gaziano JM, Buring JE, Hennekens CH: Coffee and tea intake and the risk of myocardial infarction. *Amer J Epidemiol*. 1999; 149:162–167.

Sethi R, Saini HK, Guo X, Wang X, Elimban V and Dhalla NS. Dependence of changes in beta-adrenoceptor signal transduction on type and stage of cardiac hypertrophy. *J Appl Physiol*. 2007; 102(3): 978–984.

Sethi R, Saini HK, Wang X, Elimban V, Babick A, Dhalla NS. Differential changes in beta-adrenoceptor signal transduction in left and right ventricles of infarcted rats. *Can J Physiol Pharmacol*. 2006; 84(7): 747–754.

Shah PK. Circulating markers of inflammation for vascular risk prediction: are they ready for prime time. *Circulation*. 2000; 101:1758 –1759.

Shaohua S, Shusen Z, Youfa Z, Changku J, Haiyang X. Inhibitory effect of tea polyphenols on renal cell apoptosis in rat test subjects suffering from cyclosporine induced chronic nephrotoxicity. *Chinese Medical Journal*. 2003; 116(9):1345-1350.

Sharma M, Kamal Kishore, Suresh K. Gupta, Sujata Joshi and Dharamvir S. Arya. Cardioprotective potential of *Ocimum sanctum* in isoproterenol induced myocardial infarction in rats. *Mol Cell Biochem*. 2001; 225: 75–83.

Sharma S, Adroque JV, Golfman L, Uray I, Lemm J, Youker K, Noon GP, Frazier OH, Taegtmeyer H. Intramyocardial lipid accumulation in the failing human heart resembles the lipotoxic rat heart. *FASEB J*. 2004; 18:1692–1700.

Shen YC, Chen SL, Wang CK. Contribution of Tomato Phenolics to Antioxidation and Down-regulation of Blood Lipids. *J Agric Food Chem*. 2007; 55(16):6475-81.

Shi J, LeMaguer M. Lycopene in tomatoes: Chemical and physical properties affected by food processing. *Crit. Rev. Food Sci. Nutr*. 2000; 40(1):1–42.

Shirwaikar A, Sreenivasan KK. Chemical investigation and antihepatotoxic activity of the fruits of *Lagenaria siceraria*. Ind J Pharm Sci.1996; 58(5): 197-202.

Sidhu GS, Oakenful DG. Could saponins be a useful treatment for hypercholesterolemia? Eur J Clin Nutr.1990; 44:79.

Sidhu GS, Oakenful DG. Mechanism for the hypocholesterolemic activity of saponins.Br J Nutrition.1986; 55:643.

Sies H, Stahl W. Vitamins E and C, beta-carotene, and other carotenoids as antioxidants. Am J Clin Nutr.1995; 62(6):1315-1321.

Singal PK, Beamish RE,Dhalla NS.Potential oxidative pathways of catecholamines in the formation of lipid peroxides and genesis of heart disease. Adv Exp Med Biol.1983; 161:391-400.

Singal PK, Khaper N, Palace V, Kumar D. The role of oxidative stress in the genesis of heart disease. Cardiovasc Res. 1998; 40: 426-32.

Slater AM, White DA. Effect of dietary fat on cholesterol metabolism: regulation of plasma LDL concentrations. Nutr Res.1996; 9: 241-257.

Slater TF, Sawyer BC. The stimulatory effect of carbon tetrachloride and other halogenalkane on peroxidative reaction in the rat liver functions in vitro. Biochem J.1971; 123: 805-815.

Sreejayan N, Rao MNA. Curcumin inhibits iron dependent lipid peroxidation. Int J Pharmacol. 1993; 100: 93-97.

Sreejayan N, Rao MNA. Nitric oxide scavenging by curcuminoids. J Pharm Pharmacol. 1997; 49: 105-7.

Stahl W, Sies H. Antioxidant activity of carotenoids. Mol. Aspects Med. 2003; 24:345-351.

Stampfer MJ, Hennekens CH, Manson JE, Colditz GA, Rosner B, Willett WC. Vitamin E consumption and the risk of coronary disease in women. *N Engl J Med* 1993; 328:1444-9.

Stanley WC. Cardiac energetics during ischaemia and the rationale for metabolic interventions. *Coron Artery Dis*. 2001; 12 (1): 3-7.

Stephens NG, Parsons A, Schofield PM, Kelly F, Chessman K, Mitchinson MJ and Brown MJ. Randomized, controlled trial of vitamin E in patients with coronary disease: Cambridge Heart Antioxidant Study (CHAOS). *Lancet*.1996; 347: 781-786.

Stepp DWJ, Ou AW, Ackerman S, Welak D, Klick KA, Pritchard Jr. Native LDL and minimally oxidized LDL differentially regulate superoxide anion in vascular endothelium in situ. *American Journal of Physiology-Heart Circulatory Physiology*. 2002; 283(2):750-9.

Stief TW. The physiology and pharmacology of singlet oxygen. *Med Hypoth*. 2003; 60: 567-72.

Stokes KY, Clanton EC, Bowles KS, Fuseler JW, Chervenak D, Chervenak R, Jennings SR, Granger DN. The role of T-lymphocytes in hypercholesterolemia-induced leukocyte-endothelial interactions. *Microcirculation*. 2002a; 9(5): 407-17.

Stokes KY, Cooper D, Tailor A, Granger DN. Hypercholesterolemia promotes inflammation and microvascular dysfunction: role of nitric oxide and superoxide. *Free Radic Biol Med*.2000b; 33(8): 1026-36.

Subash D, Narinder KK, Nityanand S. Effect of isoprenaline on lipid profile and cardiac enzymes in rats. *Ind J Exp Biol*.1978; 16: 376-378.

Subramaniam HSK, Rangasamy A, Thiruvengadam D, Mani SK. Cardioprotective effects of *Picrorrhiza kurroa* against isoproterenol induced myocardial stress in rats. *Fitoterapia*, 2001; 72:402-405.

Suchalatha S, Thiruganasambandam P, Maheshwaran E, ShyamlaDevi CS. Role of Arog, a polyherbal formulation to mitigate oxidative stress in experimental myocardial infarction. *Ind J Exp Biol.*2004; 42: 224-226.

Sushma KS, Jaydeep A, Suresh Kumar JS. Effects of carnitine on malondialdehyde, taurine and glutathione levels in heart of rats subjected to myocardial stress induced by isoproterenol. *Ind J Exp Biol.* 1989; 27:134-137.

Szabo C. Alterations in nitric oxide production in various forms of circulatory shock. *New Horizons.*1995; 3:2.

Tabata M, Taluka S, Shimakura J, Ito M. Production of an antiallergic triterene bryonolic acid by plant tissue cultures. *J Nat Products.*1993; 56 (2): 165-175.

Takahashi S, Barry AC, Factor SM. Collagen degradation in ischemic rat heart. *Biochem Journal.*1990; 265: 233-241.

Takeo S, Taam GM, Beamish RE, Dhalla NS. Effect of adrenochrome on calcium accumulation by heart mitochondria. *Biochem Pharmacol.*1981; 30(2): 157-163.

Takeo S, Taam GM, Beamish RE, Dhalla NS. Effects of adrenochrome on calcium accumulating and adenosine triphosphatase activities of the rat heart microsomes. *J Pharmacol Exp Ther.* 1980; 214(3): 688-693.

Tanaka MH, Ito S, Adachi H, Akimoto T, Nishikawa T, Kasajima T, Marumo F, Hiroe M. Hypoxia induces apoptosis with enhanced expression of fas antigen messenger RNA in cultured neonatal rat cardiomyocytes. *Circ Res.*1994; 75: 426-433.

Tang XY, Yang XD, Peng YF, Lin JH. Protective Effects of Lycopene against H₂O₂-Induced Oxidative Injury and Apoptosis in Human Endothelial Cells. *Cardiovascular Drugs and Therapy.* 2009; 23(6):439-448.

Tani M. Mechanisms of Ca^{2+} overload in reperfused ischemic myocardium. *Ann Rev Physiol.*1990; 52: 543–549.

Taniyama Y, Griendling KK. Reactive oxygen species in the vasculature: molecular and cellular mechanisms. *Hypertension.*2003; 42(6): 1075-81.

Terao J, Piskula M, Yao Q. Protective effect of epicatechin, epicatechin gallate and quercetin on lipid peroxidation in phospholipids bilayers. *Arch Biochem Biophys.*1994; 308: 278-284.

Thippeswamy BS, Thakker SP, Tubachi S, Kalyani GA, Netra MK, Patil U, Desai S, Gavimath CC, Veerapur VP. Cardioprotective Effect of *Cucumis trigonus* Roxb on Isoproterenol-Induced Myocardial Infarction in Rat. *Ame J Pharmacol Toxicolo.*2009; 4 (2): 29-37.

Tipoe GL, TM Leung, MW hung, Fung ML.Green tea polyphenols as an antioxidant and anti-inflammatory agent for cardiovascular protection. *Cardiovasc Hematol Disord Drug Targets.* 2007; 74: 135-144.

Thompson JA, Hess ML. The oxygen free radical system: a fundamental mechanism in the production of myocardial necrosis. *Prog Cardiovasc Dis.* 1986;28(6):449-62.

Toklu HZ, Dumlu MU, Sehirli O, Ercan F, Gedik N, Gokmen V and Sener G. Pomegranate peel extract prevents liver fibrosis in biliary-obstructed rats. *J Pharmacy Pharmacol.* 2007; 59: 1287–1295.

Torun M, Yardim S, Simsek B, Burgaz S. Serum uric acid level in cardiovascular diseases. *J Clin Pharm.Ther.*1998 ; 23:25-29.

Traber MG. Vitamin E. In: Shils ME, Shike M, Ross AC, Caballero B, Cousins R, eds. *Modern Nutrition in Health and Disease*. 10th ed. Baltimore, MD: Lippincott Williams & Wilkins, 2006; 396-411.

Trivedi CJ, Balaraman R, Majithiya JB, Bothara SB. Effect of atrovastatin treatment on Isoproterenol induced myocardial infarction in rats. *Pharmacology*.2006; 77:25-32.

Trofimov GA, Baranovskii Alu, Polozhentesv SD. Importance of determination of the content of lactate dehydrogenase and its isoenzymes in patients with myocardial infarction complicated by rupture of the heart. *Kardiologiya*. 1975;15:82-84.

Tunstall-Pedoe H, Kuulasmaa K, Amouyel P, Arveiler D, Rajakangas AM, Pajak A. Myocardial infarction and coronary deaths in the World Health Organisation MONICA project. Registration procedures, event rates and case fatality rates in 38 populations from 21 countries in four continents. *Circulation*. 1994; 90:583.

Ulker S, McKeown PP, Bayraktutan U. Vitamins reverse endothelial dysfunction through regulation of eNOS and NAD (P) H oxidase activities. *Hypertension*. 2003; 41(3): 534-9.

Unger RH. Lipotoxic diseases. *Annu Rev Med*. 2002; 53:319–336.

Upaganlawar A, Gandhi C, Balaraman R. Effect of green tea and vitamin E combination on isoproterenol induced myocardial infarction in rats. *Plant Foods Human Nutri*. 2009; 64: 75-80.

Van DWB, Hopkins R, Stegner J, Weinberg R. Effect of combined vitamin E and C treatment on high density lipoprotein plasma levels and oxidation in cigarette smokers. *Circulation*. 1995; 92:I-352, Abstract #1678, Suppl. I, 1995.

Van Wyk BE, Gericke N. *People's Plants, a guide to useful plants of southern Africa*. Briza Publications, Pretoria.2000.

Vani T, Rajdurani M, Sarkar S, Shishoo CJ. Antioxidant properties of the ayurvedic formulation Triphala and its constituents. *Int J Pharmacog*.1997; 35 (5): 313-317.

Varadi G, Mori Y, Mikala J, Schwartz A. Molecular determinants of Ca²⁺ channel functions and drug action. *Trends Pharmacol Sci.* 1995; 16:43-49.

Vassalle C, Petrozzi L, Botto N, Andreassi MG, Zucchelli GC. Oxidative stress and its association with coronary artery disease and different atherogenic risk factors. *J Intern Med.* 2004; 256(4): 308-15.

Veinot JP, Gatteringer DA, Fliss H. Early apoptosis in human myocardial infarcts. *Hum Pathol* 1997; 28: 485-92.

Verhaegen S, McGowan AJ, Brophy AR, Fernandes RS, Cotter TG. Inhibition of apoptosis by antioxidants in the human HL-60 leukemia cell line. *Biochem Pharmacol.* 1995; 50:1021-29.

Verma S, Devaraj S, Jialal I. C-Reactive protein promotes atherothrombosis. *Circulation.* 2006; 113:2135-50.

Verma S, Li SH, Badiwala MV. Endothelin antagonism and interleukin-6 inhibition attenuate the proatherogenic effects of C-reactive protein. *Circulation.* 2002b; 105:1890 -1896.

Verma S, Wang CH, Li SH, Dumont AS, Fedak PW, Badiwala MV, Dhillon B, Weisel RD, Li RK, Mickle DA, Stewart DJ. A self-fulfilling prophecy: C-reactive protein attenuates nitric oxide production and inhibits angiogenesis. *Circulation.* 2002a; 106:913-919.

Virag L, Szabo E, Gergely P, Szabo C. Peroxynitrite-induced cytotoxicity: mechanism and opportunities for intervention. *Toxicol Lett.* 2003; 140: 113-24.

Virmani R, Forman MB, Kolodgie FD. Myocardial reperfusion injury. Histopathological effects of perfluorochemical. *Circulation* 1990; 81(3): 57-68.

Walker AF. Of hearts and herbs. *Biologist*.1996; 43:177–180.

Wang HX, Ng TB. Lagenin: a novel ribosome inactivating protein with ribonucleolytic activity from bottle gourd (*Lagenaria siceraria*) seeds: *Life Sci*.2000; 67: 2631-2638.

Wang SB, Tian S, Yang F, Yang HG, Yang XY, Du GH. Cardioprotective effect of salvianolic acid A on isoproterenol-induced myocardial infarction in rats. *Eur J Pharmacol*. 2009; 615(1-3):125-32.

Wanner C, Metzger T. C-reactive protein a marker for all-cause and cardiovascular mortality in haemodialysis patients. *Nephrol Dial Transplant*. 2002;17(8):29–32.

Wasserman SM, Topper JN. Adaptation of the endothelium to fluid flow: *in vitro* analysis of gene expression and in vivo implications. *Vasc Med*: 2004; 9(1):35-45.

Weber KT, Brilla CG. Pathological hypertrophy and cardiac interstitium: fibrosis and renin-angiotensin-aldosterone system. *Circulation*. 1991; 83: 1849–65.

Weber KT, Sun Y, Tyagi SC *et al*, Collagen network of the myocardium: function, structural remodeling and regulatory mechanisms. *Mol Cell Cardiol*. 1994; 26:279-292.

Weir CJ, Muir SW, Walters MR, Lees KR. Serum urate as an independent predictor of poor outcome and future vascular events after acute stroke. *Stroke*. 2003; 34: 1951–56.

Weisburger JH. Lifestyle, health and disease prevention: the underlying mechanisms. *Eur J Cancer Prev*. 2002; 11: S1–7.

Wertz K, Siler U, Goralczyk R. Lycopene: modes of action to promote prostate health. *Arch Biochem Biophys*. 2004; 430: 127-34.

Wexler BC, Kittinger GN. Myocardial necrosis in rats: serum enzymes, adrenal steroids and histopathological alterations. *Circ Res.*1963; 13: 159–171.

Wexler BC. Myocardial infarction in young vs old male rats: pathophysiologic changes. *Am Heart J.*1978, 96:70-80.

Wheathly AM, Thandroyen FT, Opie LH. Catecholamine induced myocardial cell damage: catecholamine or adrenochrome. *J Mol Cell Cardiol.*1985; 17: 349-359.

Williams I. Evolving concepts in congestive heart failure. *Modern Concepts Cardiovasc Dis.* 1990; 59; 43-47.

Wilson AM, Ryan MC, Boyle AJ. The novel role of C-reactive protein in cardiovascular disease: risk marker or pathogen. *Int J Cardiol.*2006; 106 (3): 291-7.

Wilson PW, D'Agostino RB, Levy D, Belanger AM, Silbershatz H, Kannel WB. Prediction of coronary heart disease using risk factor categories. *Circulation.*1998; 97 (18): 1837-47.

Winocour PH, Durrington PN, Bhatnagar D, Mbewu AD, Ishola M, Mackness M, Arrol S. A cross-sectional evaluation of cardiovascular risk factors in coronary heart disease associated with type 1 (insulin-dependent) diabetes mellitus. *Diabetes Res Clin Pract.* 1992; 18(3):173-84.

Witting LA. Vitamin E and lipid antioxidants in free radical initiated reactions. In. *Free Radicals in Biology.* Pngor, WA ed. New York: Academic Press.1980.pp.295-319.

Wolin MS, Gupte SA, Oeckler RA. Superoxide in the vascular system. *J Vasc Res.*2002; 39(3): 191-207.

Woodward M, Tunstall-Pedoe H. Coffee and tea consumption in the Scottish Heart Health Study follow up: conflicting relations with coronary risk factors, coronary disease, and all cause mortality. *J Epidemiol Commun Health* .1999; 53:481–487.

Wu QY, Fehr JJ. Effect of ischemia-reperfusion on ryanodine binding and Ca^{2+} uptake of cardiac sarcoplasmic reticulum. *J Mol Cell Cardiol*.1995; 27: 1965–1975.

Xia Y and Zweier JL. Superoxide and peroxynitrite generation from inducible nitric oxide synthase in macrophages. *Proc Natl Acad Sci USA*.1997; 94: 6954–58.

Xu Y, Ho CT, Amin SG, Han C, Chung FL. Inhibition of tobacco specific nitrosamine induced lung tumorigenesis in A/J mice by green tea and its major polyphenols as antioxidants. *Cancer Res*.1992; 52:3875-3879.

Yang CS: Tea and health. *Nutrition* .1999; 15:946–949.

Yaoita H, Ogawa K, Maehara K, Maruyama Y. Attenuation of ischemia/reperfusion injury in rats by a caspase inhibitor. *Circulation* 1998; 97: 276-81.

Yasojima K, Schwab C, McGeer EG. Human neurons generate C-reactive protein and amyloid P: upregulation in Alzheimer's disease. *Brain Res*. 2000; 887: 80–89.

Yeagle PL. Cholesterol and the cell membrane. *Biochim Biophys Acta*.1985; 822: 267–87.

Yeh ET, Palusinski RP. C-reactive protein: the pawn has been promoted to queen. *Curr Atheroscler Rep*. 2003; 5:101–105.

Yilmaz S, Atessahin A, Sahna E, Karahan I, Ozer S. Protective effect of lycopene on adriamycin-induced cardiotoxicity and nephrotoxicity. *Toxicology*. 2006; 218(2-3):164-71.

Ying W. Deleterious network hypothesis of aging. *Med.Hypothesis*, 1997; 48: 143-148.

Yogeeta SK, Balaji HBR, Gnanapragasam A, Senthilkumar S, Subhashini R, Devaki T. Attenuation of abnormalities in the lipid metabolism during experimental myocardial infarction induced by isoproterenol in rats-Beneficial effect of ferulic acid and ascorbic acid. *Basic Clin Pharmacol Toxicol*. 2006; 98: 467-472.

Yokozawa T, Nakagawa T. Direct scavenging of nitric oxide and superoxide by green tea. *Food and Chemical Toxicology*. 2002; 40:1745-1750.

Yoshihara Y, Watanabe Y. Translocation of phospholipase A2 from cytosol to membranes in rat brain induced by calcium ions. *Biochem Biophys Res Commun*.1990; 170: 484-91.

Yusuf S, Hawken S, Ounpuu S, Bautista L et al. Obesity and the risk of myocardial infarction in 27,000 participants from 52 countries: a case-control study.*Lancet*. 2005; 366 (9497): 1640-9.

Zachariah B, Basu D. Surface carbohydrates in cell-biology. *Ind J Biochem Biophys*.1993; 30:422-425.

Zahler S, Massoudy P, Hartl H. Acute cardiac inflammatory responses to postischemic reperfusion during cardiopulmonary bypass. *Cardiovasc Res*.1999; 41: 722-730.

Zhang DX, Zou AP, Li PL. Ceramide-induced activation of NADPH oxidase and endothelial dysfunction in small coronary arteries. *Am J Physiol Heart Circ Physiol*. 2003; 284(2): 605-12.

Zhang J, Knapton A, Lipshultz SE, Weaver JL, Herman EH. Isoproterenol-induced cardiotoxicity in sprague-dawley rats: correlation of reversible and irreversible myocardial injury with release of cardiac troponin T and roles of iNOS in myocardial injury. *Toxicol Pathol*. 2008; 36:277-278.

Zhao B, Guo Q, Xin W. Free radical scavenging by green tea polyphenols. *Meth Enzymol.* 2001; 77: 334-50.

Zhou B, Wu L, Tashiro S, Onodera S, Uchiyama F, Ikejima T. Silibinin protects rat cardiac myocyte from isoproterenol-induced DNA damage independent on regulation of cell cycle. *Biol Pharm Bull.* 2006; 29(9):1900-1905.

Zhou BO, Wu L-M, Yang LI, Liu Z-L. Evidence for alpha tocopherol regeneration reaction of green tea polyphenols in SDS micelles. *Free Radic Biol Med.* 2005; 38:78-84.

Zou M, Yesilkaya A, Ullrich V. Peroxynitrite inactivates prostacyclin synthase by heme-thiolate-catalyzed tyrosine nitration. *Drug Metab Rev.* 1999; 31(2): 343-9.