References :

1.Adrianne Bendich,(1990) Antioxidants Micronutriants and Immune response, and immune functions, A. Bendich and R.K. Chandra (eds) New York Academy of Science , P 175.

2.Agnese Ferretti, Elena Boschi, Alessandro Stefani, Saturnino, Spiga, Marco Romandli. Monica lemmi, Anna, Giobannetti, Biancamaria Longoni, and Franco Mosca (2003). Angiogenesis and nerve regeneration in model of human skin equivalent t5ranaplant. 1985-1994.

3.Arjanw. Griffion and Grietje, Molema 2000). Angiogenesis potential for formacologic intervention in treatment of cancer cardiovascular diseases, and chrinic inflammation.Vol52, Issue 2, 237-268.

4..Bagchi, D., Garg, A., Krohns, R. L., Bagchi, M., Tran, M. X., and Stohs, S. J. (1997) *Res. Commun. Mol. Pathol. Pharmacol.*, **95**, 179-189.

5.Belen Martinrz- Madried, Jacques Donnez, Anne- Sophine Van eyck, Almudena Veiga-lopez, Marie-Madeleine Dolmans, Anne Van Langendoncki. (2008) Chick embryo choriallontoic model (CAM) : a useful tool to study short term transplantation of cryopreserved human ovarian tissue. Ferti steril. 1829-1379.

6.Bird R.P. and Draper H H, (1984). Comparative studies on different methods of Malonaldehyde determination. Oxygen radical in biological system. Methods in enzymology, 105: 299. Edited by L. Packer by Academic Press Inc. New York, London.

7. Bradley M. Patten and Bruce M. Carlson (1977) Foundations of Embryology Mc Hill ,Inc; New york.

8. Brooks PC, Montgomery AM, Cheresh DA 1999 Use of the 10-day-old chick embryo

9.Bruce M. Carison(2007) Foundations of Embryology Mc Hill ,Inc; New york.

10.Buege J.A. and Aust S.D. (1978). Microsomal lipid peroxidation In "Methods in Enzymology." 52, 304 – 310.(LPO)

11. Burri, PH (2004). "Intussusceptive angiogenesis: its emergence, its characteristics, and its significance". *Dev Dyn.* **231** (3): 474–88. doi:10.1002/dvdy.20184

12. Cheesman K H. slater T F. (1993). An introduction to free radical biochemistry. Br. Medical. Buleetin 49(3) : 481-493.

13.Chua C.C., Hamdy R.C., Chua B.H. Upregulation of vascular endothelial growth factor by H_2O_2 in rat heart endothelial cells. Free Radic Biol Med (1998) 25:891–897.[CrossRef][ISI][Medline]

14.Ciancio S. J. Coborun M.Hornsby P.J. (2000) Cutaneous window for in vivo observation of organs and angiogenesis. Journal of surgical research Vol 92 pp 228- 232.

15.Clejan L A and Cederbaum A I (1991). Role of iron , Hydrogen peroxide and reactive Oxygen species in Microsomal oxidation of glycerol to formaldehyde. Arch Biochem Biophys. 15; 285(1): 83-9.

16.Conrad, M, (2004). Essential role for mitochondrial thioredoxin reductase in hematopoiesis, heart development, and heart function. *Mol. Cell. Biol.* **24:**9414-9423.

17.Conrad, M, (2004). Essential role for Mitochondrial thioredoxin reductase in hematopoiesis, heart development; and heart function, Mol. Cell. Biol. 24. 9419-9423.

18.Cooper , D. Y. Levin, S; Narasimhulu, S; Rosenthal, O; and Estabrook, R. W> (1965). Photochemical action spertum of the terminal oxidase of mixed fuction oxidase system. Science 147, 400-402.

19. Dalle-Donne I, Rossi R, Colombo R, Giustarini D, Milzani A.(2006) Biomarkers of oxidative damage in human disease. Clin. Chem. 52, 601-623.

20.Davies, KJ. (1995) Oxidative stress: the paradox of aerobic life. *Biochem. Soc. Symp.*. **61:**1-31.

21.Davies, KJ. (1995). Oxidative stress: the paradox of aerobic life. Biochem. Soc. Symp. **61:**1-31.

22.Doğan Yücel, Mehmet Şeneş, Çiğdem Topkaya, (2006); Oxidative / Nitrosative Stress in Chronic Heart Failure:A Critical Review Türk Biyokimya Dergisi [Turkish Journal of Biochemistry - Turk J Biochem] 31 (2); 86–95.

23. Eberhard Kronhausen !(1989) .Phyllis Kronhausen with Harry B. Dempoulous, M.D; Formula of Life , William Marrow and Co, New York, p. 104.

24.Faber, J. P. Schwartz, P.J; Vanoli, E; Stramba- Badiale, M; and De Ferrari, G M (1990). Carbon Monooxide and leathal arrhythmias. Res Rep health Effect Inst. Dec; (36): 1-17; Discussion 19-27.

25. Fisher, R.A. and Yates, F. (1938). Stastical Tables Pub by , Oliver Boyed , Endinbugh

26.Folkman 1975 In *Tumor Angiogenesis* (eds Marme, D. & Fusenig, N.) 1–28 .

27.Frank J. Giordano, (2005,) Oxygen, oxidative stress, hypoxia, and heart failure Published in Volume 115, Issue 3*J. Clin. Invest.* 115(3): 500-508 (2005). doi:10.1172/JCI24408. Copyright © · The American Society for Clinical Investigation.

28.G. Becher and K. Winsel,(1889) Vitamin C lessens Superoxide anion (02)-Induced bronchial constriction , Z- Erkr – Atmungsorgane; 173 (10) : P. 100-4.

29.Gaby, p. (1991), Antioxidant Vitamin – Vitamin C. p 120

30.Genova, ML, (2003).Mitochondrial production of oxygen radical species and the role of Coenzyme Q as an antioxidant. *Exp. Biol. Med. (Maywood).* **228:**506-513. View this article via: PubMed

31.Griendling K.K., Sorescu D., Ushio-Fukai M. (2000) NAD(P)H oxidase: role in cardiovascular biology and disease. Circ Res 86:494–501.

32. Grunnert RR and Phillips RR (1951). Determination of glutathione *Arch Biochem* 30, 217. (glutathione)

33.Halliwell B. (1991) Reactive oxygen species in livins systems: source, biochemistry, and role of in human disease. Am. J. a Med. 91(Suppl), 14S-22S.

34.Halliwell B. (1993) The role of oxygen radicals in human disease, with particular reference to the vascular system. Haemostasis 23(Suppl 1), 118-126.

35.Halliwell, B. and Gutterrige, J.M.C. (1984) Free radicals in Biology and Medicine, 3 rd edn; Clarendon press, Oxford.

36.Harborne, J. B., and Williams, C. A. (2000) Phytochemistry, **55**, 481-504.

37.Harfouche R., Malak N.A., Brandes R.P., Karsan A., Irani K., Hussain S.N. Roles of reactive oxygen species in angiopoietin-1/tie-2 receptor signaling. FASEB J (2005) 19:1728–1.

38.Ide, T, (1999.). Mitochondrial electron transport complex I is a potential source of oxygen free radicals in the failing myocardium. *Circ. Res.* **85**:357-363.

39.Ikeda S., Ushio-Fukai M., Zuo L., Tojo T., Alexander R.W(2005). Novel role of ARF6 in vascular endothelial growth factor signaling and angiogenesis. Circ Res 96:467–475.

40.Ipek, A, sahan, U,Ylmaz, B(2004).The effect of in-ovo ascorbic acid and glucose injection in broiler breeders egs on hatchability and chick weight .Archive far Geflugelkunde, 68 (3)pp 132-135.

41. Jack D. Thrasher (2005) Embryo toxicity and teratogenecity of formaldehyde (FA) Cell (505) 937-1150.

42. Jacquelyn Joseph- Silverstain , Seth A. Consigli, Katherine m. Lyser, and Carolyn verpault.(1989). Basic fibroblast growth factors in Chick embryo : Immunolocalisation to striated muscle cells and their precursors.

43.Joerg BorgesFlorian T. Tegtmeir, Nestor Torio pardon, Matthis C. muller , Evam. Lang, G. Bjoern stark.(2003) Chorioallontoic membrane Angiogenesis model for tissue Engineering. Tissue Engineering. 9(3): 441-450 doi: 10. 1089/ 107632703322066624.

44.Kalasz H. (2003). Biological role of formaldehyde, and cycles related to methylation , demethylation , and formaldehyde production . Mini review in medicinal chemistry, 3(3) : 175-192(18).

45.Khan, S. and O'Brien, P.,J. (1995) Modulating hypoxiainduced hepatocyte injury by affecting intracellular redox state. Biochimica Biophysica Acta **1269,**153-161.

46.Kirkman, HN, Gaetani, GF. 1984 Catalase: a tetrameric enzyme with four tightly bound molecules of NADPH. *Proc. Natl. Acad. Sci. U. S. A.*. **81:**4343-4347.

47.Kohen R, Nyska A : (2002.)Oxidation of biological systems: stress phenomena, antioxidants, redox reactions, and methods for their quantification. Toxicol Pathol, 30, 620-650.

48.Krunzi- Rapp, F. Genze, r. Kufer, E. Reich, R houtmann, j. Gshwend(2003) Chorioallontoic membrane assay: Vascularised 3- dimentional cell culture system for Human prostate cancer cells. As an animal substitute model. The Journal of urology, Volume 166, Issue 4, page 1502- 1507 K.

49. Krushel L A. , Prieto A L. Cunnigham B A. Edelman G M. (1993). Expression patterns of the cell adhesion molecules Nr- CAM. During histogenesis of the chick nervous system. Neuroscience Apr, (53) (3) :797-712.

50. Lee H.S., Lee I.S; Kang T.C; Jeong G b; Chang S.I.; (1999) Angiogenin is involved in morphological changes and Angiogenesis in the ovary. Vol 257, number 1, pp-182- 186(5) biochemical and Biophysical research communication.

51.Linipisarn,s. Satonk; Mikamit , Orimo H; Shinjos, Yoshono Y. (1991) Effect of iron on Lipid peroxidation .Int. J. Hematol 54: 181-188.

52. Lowry, O.H., Rose Brough, N.J., Farr, A.L. and Randall, R.j., 1951

53.Luczak K., Balcerczyk A., Soszynski M., Bartosz G. (2004) Low concentration of oxidant and nitric oxide donors stimulate proliferation of human endothelial cells in vitro. Cell Biol Int 28:483–486.

54.Maas JW, **Groothuis** PG, Dunselman GA, de Goeij AF, Struijker-Boudier HA and Evers JL (2001) Development of endometriosis-like lesions after transplantation of human endometrial fragments onto the chick embryo chorioallantoic membrane. Hum Reprod 16,627–631.

55.Marite Castro, Teresa Caprile ,Allison Astuya, Carola Millan Karin Reincke, Juan Carlos Vera and Osman (2001).High affinity sodium Vitamin C transporters (SV CT) expression in mouse neurons. Journal of neurochemistry Volume 78 Issue 4 page 815-823 .

56.Marite Castro, Teresa Caprile, Allissan Atuya, Carolla millan, Karin Reinka, Tuan Carlos Vera and Osman.(2001). High affinity sodium Vitamin C Co transporters (SVCT) expression in mouse neurons. Journal of neurochemistry Volume 78 Issue 4 Page 815-823.

57. Matthew J. Korn, Karina S. Cramer(2007). Windowing Chicken Eggs for Developmental Studies Department of Neurobiology and Behaviour, University of California, Irvine Correspondence to: Matthew J.Kornmkorn@uci.eduURL:http://www.jove.com/index/Details.stp?ID=306DOI: 10.3791/306 Citation: J. Korn M., S. Cramer K. Windowing Chicken Eggs for Developmental Studies. JoVE. 8. http://www.jove.com/index/Details.stp?ID=306, doi: 10.3791/306.

58.Maulik N. (2002) Redox regulation of vascular angiogenesis. Antioxid Redox Signal 4:783–784.

59.Mc Dowell (1989) Vitamin in animal nutrition Vitamin C Folacin . In Comparative aspects to human nutrition; Academixc oress New York @98-232

60.Mehendale Sangeeta R.; Wang chong –Zhi; Shao Zuo-Hui; Li Chang –Qing; Xie Jing –Tian; Aung Han H. Yuan Chun-su.(2006). Chronic pretreatment with american ginseng berry and its polyphenolic constituants attenuate oxidants stress in cardiomyocytes. Europian journal of pharmacology , Volume 553(1-3):209-214.

61.Miwa, S, Brand, MD. (2003). Mitochondrial matrix reactive oxygen species production is very sensitive to mild uncoupling. *Biochem. Soc. Trans.* **31:**1300-1301. View this article via: PubMed

62.Mohanraj, P., Merola, A.J., Wright, V.P. and Clanton,T.L. (1998) Antioxidants protect rat diaphragmatic muscle function under hypoxic conditions. Journal of Applied Physiology **84,** 1960-1966.

63. Mousa A S, Mousa S A, (2005). Anti- angiogenesis efficacy of the garlic ingrediant allin and antioxidants : role of nitric oxide and P^{53} .

64.Murohara T., Asahara T. (2002) Nitric oxide and angiogenesis in cardiovascular disease. Antioxid Redox Signal 4:825–831.

65.Nap AW, Dunselman GA, Griffioen AW, Mayo KH, Evers JL, **Groothuis** PG (2005) Angiostatic agents prevent the development of endometriosis-like lesions in the chicken chorioallantoic membrane. Fertil Steril 83,793–795.

66.NAP. Annemik W. Dunselman Gerared A.J. Degoeij Anton F PM; Evers Johannes L.H. , Groothius Patrick G (2004) Inhibitting MMP activity prevents the development of endometritis in the chicken Chorioallontoic membrane model Jo. Human reproduction ISSN 0268-1161 vol . 19, pp 2180-2187.

67.Nisigaki. I. Kuttan. R. Okuh, Ashoorif Abe H, yagi K (1991). Supressive effect of curcumin on lipd peroxidation induced in rats by carbon tetrachloride or cobalt -60 irradiation J. Clin Biochem Nutri. 13:: 23-9.

68.Nordberg, J, Arner, 2001. ES. Reactive oxygen species, antioxidants, and the mammalian thioredoxin system. *Free Radic. Biol. Med.* **31:**1287-1312.

69.P. Maboudou, D. Mathue, H. Bachelet, J. F. Wiart, M. Lhermitte (2002). Detection of oxidative stress . Interest of GC-MS for malonaldehyde and formaldehyde monitoring. Biomedical chromatography 16 (3): 199-202.

70.P. Sharma (10 February 1997)Consequences of hypoxia on the cell size of neuropeptide –Y neurons and the role of ascrobate in the cultured neurons from chick embryo.Jacquelyn

71. P. Sharma (10 february). Concequence of Hypoxia on the cell size of neuropeptide –Y neurons and the role of ascorbate in cultured neurons from chick embryo.

72.Paulsan L L, Kadlubar F fand Ziegler D M (1974). Arch. Biochem. Biophys. 164, P-774.

Peter (2004).

73.Phillips M, Cataneo RN, Greenberg J, Gunawardena R, Rahbari-Oskouia F : 2003.Increased oxidative stress in younger as well as in older humans. Chimica Acta, 328, 83-86.

74.Polytarchou C., Papadimitriou E. (2004) Antioxidants inhibit angiogenesis in vivo through down-regulation of nitric oxide synthase expression and activity. Free Radic Res 38:501–508.

75.Protein measurement with folin phenol reagent, J. Biol. Chem., 193;265-75

76.Przekwas M, Matgorzewicz S, Zdrojewski Z, Debska- Slizien A, Lysiak-Szydtowska W, Rutkowski B(2003.) : Influence of Predialysis Oxidative Stress on

77.Peroxidation Processes After Renal Transplantation. Transplantation Proceedings 35, 2170-2173.

78.Przekwas M, Matgorzewicz S, Zdrojewski Z, Debska-Slizien A, Lysiak-Szydtowska W, Rutkowski B (2003): Influence of PredialysisOxidative Stress on Peroxidation Processes After Renal Transplantation. Transplantation Proceedings 35, 2170-2173.

79.R.G. Ahmed. (2005) Is there balance between oxidative stress and antioxidant defense system during development? Medical journal of Islamic world academy of science 15:2, 55-63.

80.Rahman, I.(2003) Oxidative stress and gene transcription in inflammation and chronic lung disease, J. Biochem; Mol.Biol. 36. 95-109.

81. Ribatti D, Nico B, Morbidelli L, Donnini S.Ziche M, Vacca A, Roncali L, Presta M. (2001). Cell – mediated dilivary of fibroblast growth factor -2 and vascular endothelial growth factor on to the Chick chorioallontoic membrane: endothelial fenestration and angiogenesis. Vasc Res, Jul-Aug; 38 (4): 389-97.

82.Ribatti. D; Gualandris A, Belleri M, Massardil,Nico. B, Rusnati.M, Dellera, D, Vacca a, Roncali l, presta, M (1996). Alterations of blood vessel developement by endithelial cells overexpressing fibroblast growth factor . 2 J. pathol 18. 6240-6248.

83.Robert S. Mc Even (1969) Vertebrate Embryology . New york, U.S.A.

84.Roy S., Khanna S., Nallu K., Hunt T.K., Sen C.K. Dermal wound healing is subject to redox control. Mol Ther 13:211–220.

85.Ruef J., Hu Z.Y., Yin L.Y., Wu Y., Hanson S.R., Kelly A.B., (1997) Induction of vascular endothelial growth factor in balloon-injured baboon arteries. Circ Res 81:24–33.

86.S.K. Gaby and Singh,(1991) Vitamin Intake and health: A scientific review, S. K. Gaby, A. bendich, V. Singh and L. Machlin (eds) Marcel Decker, N.Y. p 103-1043.

87.Satio Y, Nishio K, Yoshida Y, Niki E. (2005). Cytotoxic effect of formadehyde with free radicals via increment of cellular reactive oxygen speccies. Toxicology. 210: 235-245.

88.Sawyer, DB, (2002). Role of oxidative stress in myocardial hypertrophy and failure. *J. Mol. Cell. Cardiol.*. **34:**379-388.

89.Seshiah, PN, (2002.)Angiotensin II stimulation of NAD(P)H oxidase activity: upstream mediators. *Circ. Res.* **91:**406-413.

90. Sies H: Oxidative stress : Oxidants and antioxidants, (1991) New York Academic press.

91. Stone J.R., Collins T. (2002) .The role of hydrogen peroxide in endothelial proliferative responses. Endothelium 9:231–238.[CrossRef][ISI][Medline]

92. T.I.. Valdes, U. Klueh, D. Kreutzer, F Moussy (2003) EX.ova Chick Chorioallontoic membrane as a novel in vivo model for testing biosensors email. F Moussy C F Moussy, (f moussy @ eng. USF.edu) Department of Mechanical Engineering and Diabetes center, 4202 E fowler Ave. ENB 118, Tampa Florida 33620-5350.

93. Tai Du, Giuseooe D. Ciccotosto, greg A. Cranston, Glucan Kocak, Colin L. Masters, Peter J. Crouch, Roberto Cappai and Anthony R. white (2008). Neurotoxicity from Glutathione depletion is mediated by Cu- dependent P^{53} activation . Free radical Biology and medicine 44(1) : 44-55.

94. Takeda K, Shimada Y, Amano M, Sakal T, Okada T, Yoshia I, (1984). Plasma lipid peroxides and alpha tocopherol in critically ill patients. J Crit care Med, 12, 957-959.

95. Tapiero, H., Tew, K. D., Ba, G. N., and Mathe, G. (2002) *Biomed. Pharmacother.*, **56**, 200-207.

96. Teruyasu Ohnu. M.D. Ph.D; Michael Pelzar, M.D. Miko larson, Patrcia F. Frendrich , Allen T. Bishop.(2007) Host- derived angiogenesis maintains bone blood flow after withdrawal of immunosupression Department of arthopedic surgery , Microvascular research laboratory,200 first street SW , Rochester Minnesota 55905.

97. Thannickal, VJ, Fanburg, BL. (2000) Reactive oxygen species in cell signaling. *Am. J. Physiol. Lung Cell Mol. Physiol.*. **279**:L1005-L1028.

98. Theiry J P. Delouvee A. Gramet M, Edelmen G M (1985). Initial appearance and regional distribution of the neuron –glia cell adhesion molecule in chick embryo. J. cell Biol. FEB; 100(2): 442-56.

99. Tojo T., Ushio-Fukai M., Yamaoka-Tojo M., Ikeda S., Patrushev N.A., (2005) Alexander R.W. Role of gp91phox (Nox2)-containing NAD(P)H oxidase in angiogenesis in response to hindlimb ischemia. Circulation 111:2347–2355.

100. Toufektsian, MC, Boucher, FR, Tanguy, S, Morel, S, de Leiris, JG. (2001). Cardiac toxicity of singlet oxygen: implication in reperfusion injury. *Antioxid. Redox. Signal.* **3**:63-69.

101. Tribble, d.l; AW, T.Y; Jones, D.P. (1987). The pathophysiological significance of Lipid peroxidation in Oxidative cell injury. Hepatology. Mar- Apr; 7 (2): 377-86.

102. Tufan AC, Satiroglu-Tufan NL: *2003;* The Effect of Ethanol Exposure on Extraembryonic Vascular Development in the Chick Area Vasculosa. *Cells Tissues Organs 175:84-97 (DOI: 10.1159/000073752)*

103. Ushio-Fukai M., Tang Y., Fukai T., Dikalov S., Ma Y., Fujimoto M, et al. (2002) Novel role of gp91phox-containing NAD(P)H oxidase in vascular

endothelial growth factor-induced signaling and angiogenesis. Circ Res 91:1160–1167.

104. Werringloer, J.(1978). Methods in enzymology, 52-297 (formaldehyde)

105. Wilting J. crist B, Bokeloh M.A. (1991) modified chorioallontoic assay for qualitative and quantitative study of growth factors. Anta. Embryol 183: 259-271.

106. Witold Kilarski, Andreas Bikfalvi (2007) Chorioallontoic membrane blood supply (Experimental approach to study in vivo angiogenesis)Bull cancer, Spec No: s 166-917846001.

107. Yasuda M., Ohzeki Y., Shimizu S., Naito S., Ohtsuru A., Yamamoto T., (1999). Stimulation of in vitro angiogenesis by hydrogen peroxide and the relation with ETS-1 in endothelial cells. Life Sci 64:249–258.[CrossRef][ISI][Medline]

108. YU. BP. (1994) Cellular defence against damage from reactive oxygen species , Physiol. Rev. 74:: 139-62.