

## REFERENCES

- Adler KB, Fischer BM, Li H, Choe NH, and Wright DT(1995):** Hypersecretion of mucin in response to inflammatory mediators by guinea pig tracheal epithelial cells in vitro is blocked by inhibition of nitric oxide synthase. *Am J Respir Cell Mol Biol*; 13: 526–530.
- AL-Ayadhi L, Korish A and Al- Tuwaijri A (2006):**The effect of vitamine E , l arginine and N-nitro l-arginine methyl ester on endocrine and metabolic changes of rats exposed to acute cold stress.*Saudi Med J*.; 27 (1):17-22.
- Alcon S, Morales S,Camello PJ, Hemming JM,Mawe GM and Pozo MJ(2001):**Aredox-based mechanism for the contractile and relaxing effect of NO in nthe guinea –pig gall bladder .*J Phsiol.*; 532:793-810.
- Alderton WK, Cooper CH, and Knowles RG (2001):** Nitric oxide synthases: structure, function and inhibition. *Biochem J* ;357: 593-615.
- Alexander K,Dana J, Danila J and Olga K(2001):**Changes in angiotensin AT1 receptor mRNA levels in the rat brain after immobilization stress and inhibition of central nitric oxide synthase. *Endocrine regulations* ; 35:65-70.
- Antoni FA and Dayanithi G (1989):** Guanosine 3\*:5\* cyclic monophosphate and activators of guanylate cyclase inhibit secretagogue-induced corticotropin release by rat anterior pituitary cells. *Biochemical and Biophysical Research Communications*; 158: 824–830.
- Assreuy S, Cunha FQ, Liew FY, Moncada S (1993):** Feedback inhibition of nitric oxide synthase activity by nitric oxide. *Br J Pharmacol*; 108: 833-837.
- AuphanN, DidonatoJA and Rosette C(1995):** Immunosuppression by glucocorticoids: inhibition of NF- $\kappa$ B activity through induction of I $\kappa$ B synthesis. *Science*;270:286-290.

- Bamberger C M , Schulte H M and Chrousos G P(1996):** Molecular determinants of glucocorticoid receptor function and tissue sensitivity. *Endocrinol. Rev.*; 17: 221-244.
- Barnes PJ and Karin M (1997):**Nuclear factor-B: a pivotal transcription factor in chronic inflammatory diseases. *N Engl J Med*; 336: 1066-1071.
- Bartolomucci A, Palanza P, Parmigiani S, Pederzani T, Merlot E, Neveu PJ, Dantzer R(2003):** Chronic psychosocial stress down-regulates central cytokines mRNA. *Brain Res Bull*; 62: 173-178.
- Baylis C, Mitruka B and Deng A(1992):** Chronic blockade of nitric oxide synthesis in the rat produces systemic hypertension and glomerular damage. *J Clin Invest* ;90: 278-81.
- Baylis SA, Weiner CP, Monacada S and Charles IG (1994):** In vivo expression of inducible nitric oxide synthase in the human fetus presented at the first international conference on Biochemistry and molecular biology of nitric oxide. Los Angeles, California, P. 66.
- Beishuizen A, Thijs LG and Vermes I(2001):** Patterns of corticosteroid binding globulin and free cortisol index during septic shock and multitrauma. *Intensive Care Med*;27:1584-1591.
- Beltran B, Barrachina MD, Menez A, Quintero E, and Esplugues JV (1999):** Synthesis of nitric oxide in the dorsal nucleus of the vagus mediates the inhibition of gastric acid secretion by central bombesin. *Br J Pharmacol* ;127: 1603-1610.
- Berka JL, Kelly DJ, Robinson DB, Alcorn D, Marley PD, Fernley RT and Skinner SL(1996):**Adrenaline cells of the rat adrenal cortex and medulla contain renin and prorenin. *Mol Cell Endocrinol*; 119:175–184
- Bredt DS and Snyder SH (1990):** Isolation of nitric oxide synthetase, a colodulin-requiring enzyme. *Proc Natl Acad Sci USA*; 87: 682-685.
- Bredt DS(1999):**Endogenous nitric oxide synthesis:biological functions and pathophysiology.*Free Radic Res*;31:577-96.

- Bredt DS, Ferris CD, and Snyder SH (1992):** Nitric oxide synthase regulatory sites. Phosphorylation by cyclic AMP –dependent protein kinase C and calcium/calmodulin protein kinase, identification of flavin and calmodulin binding sites. *J Biol Chem*; 267: 10976-10981.
- Brune B and Lapetina EG (1991):** Phosphorylation of nitric oxide synthase by protein kinase A. *biochem Biophys Res Commun*; 181: 921-926.
- Brunetti L, Preziosi P, Ragazzoni E and Vacca M (1993):** Involvement of nitric oxide in basal and interleukin-1 beta-induced CRH and ACTH release in vitro. *Life Sciences*; 53: PL219–PL222.
- Buckingham JC, Cowell, A-M, Gillies GE, Herbison AE and Steel JH (1997):** The neuroendocrine system: anatomy, physiology and responses to stress. In *Stress, Stress Hormones and the Immune System*, pp 9–47.
- Bukingham JC, Christian HC, Gillies GE, Philip JG and Taylor AD (1996):** The hypothalamo-pituitary-adrenocortical immune axis. In: Kendall MD and Marsh JA (eds). *The Physiology of Immunity*. pp: 331-354. Boca Raton.
- Calogero AE, Gallucci WT, Chrousos GP and Gold PW (1988):** Interaction between GABAergic neurotransmission and rat hypothalamic corticotropin releasing hormone secretion in vitro. *Brain Research*; 463: 28–36.
- Cameron LA and Hinson JP (1993):** The role of nitric oxide derived from L-arginine in the control of steroidogenesis, and perfusion medium flow rate in the isolated perfused rat adrenal gland. *J Endocrinol*; 139: 415–423.
- Cameron LA and Hinson JP (1993):** The role of nitric oxide derived from L-arginine in the control of steroidogenesis, and perfusion medium flow rate in the isolated perfused rat adrenal gland. *J Endocrinol* 139:415–423.

- Carmichael SW, Stoddard SL, O'Connor DT, Yaksh TL and Tyce GM. (1990):** The secretion of catecholamines, chromogranin A and neuropeptide Y from the adrenal medulla of the cat via the adrenolumbar vein and thoracic duct: different anatomic routes based on size. *Neuroscience*;34:433–440.
- Carol Young (1999):** Stress and the Autonomic Nervous System "Fight or Flight"
- Cataldi M, Magnan E, Guillaume V, Dutour A, Sauze N, Mazzocchi L, Conte-Devolx B and Oliver C (1994):** Acute stress stimulates secretion of GHRH and somatostatin into hypophysial portal blood of sheep. *Neuroscience Letters*; 178 :103–106.
- Charan NB, Johnson S, Lakshminarayan S, Thompson WH, and Carvalho P(1997):** Nitric oxide and -adrenergic agonist-induced bronchial arterial vasodilation. *J Appl Physiol* ;82: 686–692.
- Checkley S (1996):** The neuroendocrinology of depression and chronic stress. *Br Med Bull* ;52:597–617.
- Chen RYZ, Ross G, Chyu KY, and Buth PH (1993):** Role of L-arginine-derived nitric oxide in cholinergic dilation of gastric arterioles. *Am J Physiol*; 265: H2110-H2116
- Chowdrey HS, Jessop DS and Lightman SL( 1991):** Substance P stimulates arginine vasopressin and inhibits adrenocorticotropin release in vivo in the rat. *Neuroendocrinology*; 52: 90–93.
- Chrousos G P (1995):** The hypothalamic-pituitary-adrenal axis and immune-mediated inflammation. *N. Engl. J. Med.*; 332: 1351-1362.
- Chrousos G P(1997):** The neuroendocrinology of stress: Its relation to the hormonal milieu, growth, and development. *Growth Genet. and Horm.* 13: 1-8.
- Clark PM, Neylon I and Raggatt PR(1998) :**Defining the normal cortisol response to the short Synacthen test: implications

for the investigation of hypothalamic-pituitary disorders. Clin Endocrinol;49:287-292.

**Claudia E M, Javier FS, Andrea DL, Juan P P, Carolina DC, Richard F (2005):** The rapid release of corticosterone from the adrenal induced by ACTH is mediated by nitric oxide acting by prostaglandin E<sub>2</sub>. PNAS; 102: 6213-6218.

**Connor KA, Johnson JD, Hansen MK, Frank JLW, Maksimowva E, Watkins LR, Maier SF(2003):** Peripheral and central proinflammatory cytokine response to a severe acute stressor. Brain Res; 991: 123-132.

**Cooper CJ, Landzberg MJ, Anderson TJ, Charbonneau F, Creager MA, Ganz P and Selwyn AP(1996):**Role of nitric oxide in the local regulation of pulmonary vascular resistance in humans. Circulation ;93: 266–271 .

**Cora B C, Sebastián P L, Cecilia C, Carla F, Yael P, Natalia G, Luciana G, Paula M and Ernesto JP( 2002):** Expression of Nitric Oxide Synthases in Rat Adrenal Zona Fasciculata Cells. Endocrinology; 143: 1235-1242.

**Costa A , Trainer P, Besser M and Grossman A( 1993):** Nitric oxide Modulates the release of corticotrophin-releasing hormone from the rat hypothalamus in vitro. Brain Research; 605: 187–192.

**Cymeryng C B, Lotto S P, Colonia C, Finkielstein C, Pomeriniec Y, Grión N, Gadda L, Maloberti P and Podestá E J (2002):** Effects of L-arginine in rat adrenal cells. Endocrinology;143:1235-1242.

**Cymeryng C, Dada LA, Colonna C, Mendez CF and Podestá EJ (1999):**Effects of L-arginine in rat adrenal cells: involvement of nitric oxide synthase. Endocrinology; 140:2962–2967.

**Cymeryng CB, Dada LA, Podesta EJ (1998):** Effect of nitric oxide on rat adrenal zona fasciculata steroidogenesis. J Endocrinol;158: 197-203.

- Darlington DN, Neves RB, Ha T, Chew G and Dallman MF (1990):** Fed, but not fasted, adrenalectomised rats survive the stress of hemorrhage and hypovolemia. *Endocrinology* ;127 :759–765.
- De Kloet ER, Vreugdenhil E, Oitzl MS and Joels M (1998):** Brain corticosteroid receptor balance in health and disease. *Endocrine Reviews*; 19: 269–301.
- De Kloet ER, Vreugdenhil E, Oitzl MS and Joels M(1998):** Brain corticosteroid receptor balance in health and disease. 3:269-301.
- Deak T, Bordner KA, McElderry NK, Barnum CJ, Blandino P Jr, Deak MM, Tammariello SP(2005):** Stress-induced increases in hypothalamic IL-1: a systematic analysis of multiple stressor paradigms. *Brain Res Bull*; 64: 541-556.
- Dijkstra I, Binnekade R and, Tilders FJH (1996):** Diurnal variation in resting levels of corticosterone is not mediated by variation in adrenal responsiveness to adrenocorticotropin but involves splanchnic nerve integrity. *Endocrinology*; 137:540–547.
- Dimitriadis G, Leighton B, Parry-Billings M, Sasson S, Young M, Krause U, Bevan S, Piva T, Wegener G, Newsholme EA (1997):** Effects of glucocorticoid excess on the sensitivity of glucose transport and metabolism to insulin in skeletal muscle. *Biochem J* ;321:707–712.
- Dinerman JL, Dawson TM, Schell MJ, Snowman A and Snyder SH (1994):** Endothelial nitric oxide synthase localized to hippocampal pyramidal cells: implications for synaptic plasticity. *Proc Natl Acad Sci USA*; 91: 4214-4218.
- Dinerman JL, Steiner JP, Dawson TM, Dawson V, and Snyder SH (1994):** Cyclic nucleotide dependent phosphorylation of neuronal nitric oxide synthase inhibits catalytic activity. *Neuropharmacology*;33: 1245-1251.

- Dobashi K, Pahan K, Chahal A, and Singh I (1997) :** J. Neurochem.; 68: 1806-1903.
- Dobashi M, Fujisawa M, Yamazaki T, Okuda Y, Kanzaki M, Tatsumi N, Tsuji T, Okada H, Kamidono S (2001):** Inhibition of steroidogenesis in Leydig cells by exogenous nitric oxide occurs independently of steroidogenic acute regulatory protein (StAR) mRNA. Arch Androl 47:203–209.
- Dorn LD, Burgess ES, Friedman TC, Dubbert B, Gold PW and Chrousos GP (1997):** The longitudinal course of psychopathology in Cushings syndrome after correction of hypercortisolism. J Clin Endocrinol Metab; 82: 912–919.
- Eaker E D, Sullivan L M, Kelly-Hayes M(2004):** Anger and hostility predict the development of atrial fibrillation in men in the Framingham offspring study. Circulation;109:1267–71..
- Ehrhart-Bornstein M, Bornstein SR, Güse-Behling H, Stromeyer H, Scherbaum WA, Adler G and Holst JJ (1994):** Sympathoadrenal regulation of adrenal androstenedione release. Neuroendocrinology; 59: 406–412.
- Ehrhart-Bornstein M, Bornstein SR, Güse-Behling H, Stromeyer H, Scherbaum WA, Adler G and Holst JJ (1994):** Sympathoadrenal regulation of adrenal androstenedione release. Neuroendocrinology; 59:406–412.
- Elenkov IJ, Papanicolaou DA,. Wilder R L and Chrousos G P(1996):** Modulatory effects of glucocorticoid and catecholamines on human interleukin-12 and interleukin-10 production: Clinical implications. Proc. Assn. Am. Phys.; 108: 374-381.
- Erin L. Rich and Michael Romero(2005):** Exposure to chronic stress downregulates corticosterone responses to acute stressorsv. Am J Physiol Regul Integr Comp Physiol s288: R1628-R1636.
- Esplugeus JV (2002):** NO as a signaling molecule in the nervous system. Br J Pharmacol ;135: 1079-1095.

- Fabio L. M. Ricciardolo, Peter J. Sterk, Benjamin Gaston and Gert Folkerts (2004):** Nitric Oxide in Health and Disease of the Respiratory System *Physiol. Rev.* ;84: 731-765.
- Feelisch M and Stamler JS (1996):** Donors of nitrogen oxides. *Methods in nitric oxide research*, ed. by M. Feelisch and J.S. Stamler, PP. 71-115.
- Fenster L, Katz DF, Wyrobek AJ, Pieper C, Rempel DM, Oman D and Swan SH(1997):** Effects of psychological stress on human semen quality. *J Androl.*;18(2): 194 -202.
- Fujiwara N, Osanai T, Kameda T, Kotoh T, Takahashi K, and Okumura K (2000):** modulation of nitric oxide synthesis by salt intake. *Circulation*; 101: 856-861.
- Furchgott RF and Zawadzki JV(1980):** The obligatory role of endothelial cells in the relaxation of arterial smooth muscle by acetylcholine. *Nature*; 6:288-373.
- Furchgott RF(1999):**Endothelium-derived relaxing factor: discovery, early studies, and identification as nitric oxide. *Biosci Rep* ;19:235–51.
- Gadek M and Bugajeski J(2004):**role of prostaglandin and nitric oxide in the lipopolysaccharide –induced ACTH and corticosteron response. *Journal of physiology and pharmacology*; 55: 663-675.
- Gadek AM , Spyrka J and Bugaliski J(2005):**psychological stress affects the involvement of prostaglandine and nitric oxide In the lipopolysaccharide –induced Hypothalamic – pituitary-adrenal-axis. *journal of physiology and pharmacology* ; 56: 287-298.
- Ganong WF( 2003):**Gas transport between the lungs and the tissues. in: Ganong WF(ed) *Review of medical physiology*, 21<sup>th</sup> edn.Beirut PP:669-674.

- Gary A and Kevin T (2003):** Adrenal glands. In: Gary A and Kevin T (ed). Anatomy and physiology text book ,20<sup>th</sup> edn .unite 3 pp:506-510.
- George P. Chrousos (1998):** Stressors, Stress, and Neuroendocrine Integration of the Adaptive Response: The Hans Selye Memorial Lecture, Annals of the New York Academy of Sciences; 851:311-335 .
- Giliniskii MA ,Petracova GM ,Maslova LN, and Buligina VV (2005):** Hypothalamic monoamines in cold stress on the background of changes in the activity of the nitric oxide system. Neuroscience; 35: 171-175.
- Graier WF, Sturek M, and Kukovetz W R (1994):** Endothelium; 1: 223-236.
- Griffith OW and Gross SS (1996):** Inhibitors of nitric oxide synthases in method of nitric oxide research, ed. by M. Feeliszh and J.S. Stanler; PP. 187-220.
- Grossman A and Tsagarakis S (1989):** The hunt for the CIA: factors which demonstrate corticotrophin-inhibitory activity. Journal of Endocrinology; 123 :169–172.
- Grossman A, Costa A, Forsling M, Jacobs R, Kostoglou-Athanassiou I, Nappi G, Navarra P and Satta MA (1997):** Gaseous neurotransmitters in the hypothalamus. The roles of nitric oxide and carbon monoxide in neuroendocrinology. Hormones and Metabolic Research; 29: 477–482.
- Grossman AB, Rossmanith WG, Kabigting EB, Cadd G, Clifton D and Steiner RA (1994):** The distribution of hypothalamic nitric oxide synthase mRNA in relation to gonadotrophin-releasing hormone neurons. Journal of Endocrinology; 140: R5–R8.
- Gupta V, Gupta A, Saggu S,Divecar HM, Grover SK and Kumar R (2005):** Anti-stress and adaptogenic activity of l-arginine supplementation. Evid Based complement Alternate Med.; 2: 93-97.

- Hanke CJ and Campbell WB (2000):** Endothelial cell nitric oxide inhibits aldosterone synthesis in zona glomerulosa cells: modulation by oxygen. *Am J Physiol Endocrinol Metab* 279:E846–E854.
- Hanke CJ and Campbell WB (2000):**Endothelial cell nitric oxide inhibits aldosterone synthesis in zona glomerulosa cells: modulation by oxygen. *Am J Physiol Endocrinol Metab*; 279:E846–E854.
- Hanke CJ, Drewett JG, Myers CR and Campbell WB (1999 ):**Nitric oxide inhibits aldosterone synthesis by a guanylyl cyclase-independent effect. *Endocrinology* 139:4053–4060.
- Hansen MB (2003):**Neurohumoral control of gastrointestinal motility. *Physiol. Res.*; 52:1-30.
- Hansson G K, Holm J, Geng Y, Nygren S, Petersson A and Wennmalm A (1993):**Circulation;88: 378 -383 .
- Harbuz MS, Conde GL, Marti O, Lightman SL and Jessop DS( 1997):** The hypothalamic–pituitary–adrenal axis in autoimmunity. *Annals of the New York Academy of Sciences*; 823: 214–224.
- Heiman ML, Ahima RS, Craft LS, Schoner B, Stephens TW and Flier JS (1997):** Leptin inhibition of the hypothalamic–pituitary–adrenal axis in response to stress. *Endocrinology*; 138: 3859–3863.
- Hem L, Ahuja GK and Narang AP(2002):** Effect of starvation stress on lipid peroxidation and lipid profile in rabbits. *Indian J. Physiol. Pharmacol.* 46, 371-374.
- Hem Lata GK, Ahuja AP, Narang and Lily W(2004):** effect of immobilization stress on lipid peroxidation and lipid profile in rabbits. *Indian Journal of Clinical Biochemistry*; 19 (2) 1-4.
- Herman JP and Cullinan WE(1997):**Neurocircuitry of stress: central control of the hypothalamo-pituitary-adrenocortical axis. *Trends Neurosci*; 20: 78-84.

- Hiroshi M and Raj K (1999):** Nitric oxide synthase gene knockout mice. *Am J Physiol Gastrointest Liver Physiol*; 277: 745-750.
- Hodis J, Kutinova-Canova N, Potmesil P and Kamenikova L(2006):** The role of adrenergic agonists on glycogenolysis in rat hepatocyte culture and possible involving of NO. *Physiol Res*;132:423-428.
- Holsboer F and Barden N( 1996):**Antidepressants and hypothalamic-pituitary-adrenocortical regulation. *Endocr Rev* ;17:187–205.
- Jain SK, Pandey SN, Srivastava RK and Ghosh SK(2000):** Stress And Serum Cholesterol Levels-An Experimental Study .*J Anat. Soc. India*; 49(2): 165-167.
- Jessop DS, Chowdrey HS and Lightman SL (1990):** Inhibition of rat corticotropin-releasing factor and adrenocorticotropin secretion by an osmotic stimulus. *Brain Research*; 523: 1–4.
- Jessop DS, Chowdrey HS, Larsen PJ and Lightman SL (1992):** Substance P: multifunctional peptide in the hypothalamo–pituitary system? *Journal of Endocrinology*; 132: 331–337.
- Jia L, Bonaventura C, Bonaventura J, Stamler JS (1996):** S-nitroso haemoglobin: a dynamic activity of blood involved in vascular control. *Nature*, 380: 221-6.
- Jobgen WS, Fried SK, Fu WJ, Meininger CJ and Wu G (2006):** Regulatory role for the arginine-nitric oxide pathway in metabolism of energy substrates. *J Nutr Biochem*. 17(9):571-588.
- John CW and Alexander SK (2002):** Endocrine Responses to Unpredictable Environmental Events: Stress or Anti-Stress Hormones? *Integrative and Comparative Biology*;42(3):600-609.
- Jonathan S. Stamler and Gerhard M(2001):** Physiology of Nitric Oxide in Skeletal Muscle . *Physiol. Rev.*; 81: 209-237.

- Juan C, Leza E, Grzegorz S, James C and Marek W(1998):** The Effects of Stress on Homeostasis in JCR-LA-cp Rats: The Role of Nitric Oxide. *Journal of pharmacology*; 286: 1397-1403.
- Juan C. Leza, Eduardo Salas, Grzegorz Sawicki, James C. Russell and Marek W. Radomski(1998):** The Effects of Stress on Homeostasis in JCR-LA-cp Rats: The Role of Nitric Oxide. *J of Pharmacology*; 286: 1397-1403.
- Julia C (2006): Glucocorticoids:** exemplars of multi-tasking. *British Journal of Pharmacology*; 147:S258–S268.
- Jun T and Wennmalm A(1994):** NO-dependent and -independent elevation of plasma levels of insulin and glucose in rats by L-arginine. *Br J Pharmacol.* 113(2):345-348.
- Karupiah G, Xie Q, Buller RML, Mathan CF, Darte C and Macmicking JD (1993):** Inhibition of viral replication by interferon-gamma induced nitric oxide synthase. *Science* 261: 1445-1448.
- Kesavarao K, Venkatachalem S and Thirovingadam D (2003):** Effect of arginine and lysin on mitochondrial function during isoproterenol induced myocardial infarction in rats under the effect of stress. *Nutrition research*; 23:1417-1425.
- Kim KC and Rivier C (1998):** Influence of nitric oxide synthase inhibitors on the ACTH and cytokine responses to peripheral immune signals. *Journal of Neuroendocrinology* ;10: 353–362
- Kishimoto J, Tsuchiya T, Emson P and Nakayama Y (1996):** Immobilization induced stress activates neuronal nitric oxide synthase (nNOS) mRNA and protein in hypothalamic-pituitary-adrenal axis in rats. *Brain Res*; 720:159–171.
- Komeima K, Hayash Y, Naito Y, and Watanabe Y (2000):** Inhibition of neuronal nitric oxide synthase by calcium/calmodulin-dependent protein kinase II alpha through ser 847

Phosphorylation in NG108-15 neuronal cells. J Biol Chem ;275: 28139-28143.

**Kone BC (1997):** Nitric oxide in renal health and disease. Am j of kidney; 30(3): 311-333.

**Kostoglou-Athanassiou I, Costa A, Navarra P, Nappi G, Forsling ML and Grossman AB (1998):** Endotoxin stimulates an endogenous pathway regulating corticotrophin-releasing hormone and vasopressin release involving the generation of nitric oxide and carbon monoxide. Journal of Neuroimmunology; 86: 104–109.

**Lampert R, Jain D and Burg M M (2000):** Destabilizing effects of mental stress on ventricular arrhythmias in patients with implantable cardioverter-defibrillators. Circulation;101:158–64.

**LeDoux JE (1995):** In search of an emotional system in the brain: leaping from fear to emotion and consciousness. In: Gazzaniga M, ed. The cognitive neurosciences. Cambridge, Mass.: MIT Press, 1049-61.

**Lee S and Rivier C( 1998):** Interaction between corticotrophin-releasing factor and nitric oxide in mediating the response of the rat hypothalamus to immune and non-immune stimuli. Molecular Brain Research; 57: 54-62.

**Lim AT, Dow, RC, Yang Z and Fink G (1994 ):** ANP is the major molecular species in hypophyseal portal blood of the rat. Peptides; 15: 1557–1559.

**Lincoln TM and Cornwell TL (1993):** Intracellular cyclic GMP receptor proteins. FASEB J; 7: 328-338.

**Lippincott W and Wilkins( 2004) .**Vascular Function. In: Richard E cardiovascular physiology concepts.

**Luke RH and Michael L R(2001):** Corticosterone and insulin interact to regulate glucose and triglyceride levels during stress in a bird .Am J Physiol Regul Integr Comp Physiol 281: R994-R1003

- Machado J D, Segura F, Brioso M A and Borges R (2000):** glucocorticoids .J. Biol. Chem.; 257: 20274-20279.
- Maier C, Runzler D, Schindelar J, Grabner G, Waldhausl W, Kohler G, Luger A.(2005):** G-protein-coupled glucocorticoid receptors on the pituitary cell membrane;118:3353-61.
- Malyshev Yu, Malugin A V, Golubeva L Yu, ZeninaTA, Manukhina EB, Mikoyan V D and Vanin A F (1996):** FEBS Lett.; 391: 21-23.
- Manukhina EB and Malyshev YU ( 2000):**The nitric oxide stress-limiting system ,Ros.Fiziol.Sechenova;86:1283-1292.
- Mar S, Aguado F, Sánchez T and Saphier D(1998):** Neuroendocrine and Immunocytochemical Demonstrations of Decreased Hypothalamo-Pituitary-Adrenal Axis Responsiveness to Restraint Stress after Long-Term Social Isolation. Endocrinology; 139 : 579-587.
- Maric D, Kostic T and Kovacevic R(1996):** Effects of acute and chronic immobilization stress on rat Leydig cell steroidogenesis. J Steroid Biochem Mol Biol.;58(3): 351 -355.
- Marti O, Armario A(1997):** Influence of Regularity of Exposure to Chronic Stress on the Pattern of Habituation of Pituitary-Adrenal Hormones, Prolactin and Glucose.
- Massberg S ,Sausbier M, Klatt P ,Bauer M ,Siess W and Hofmann F (1999):**Increased adhesion and aggregation of platelets lacking cyclic guanosine 3,5 monophosphate kinase 1.J Exp Med ;189 (3):1255-64.
- Mazzocchi G, Malendowicz LK, Belloni AS and Nussdorfer GG (1995):** Adrenal medulla is involved in the aldosterone secretagogue effect of substance P. Peptides; 16:351–355.
- McEwen BS(2000):** The neurobiology of stress: from serendipity to clinical relevance. Brain Res.;886(1-2):172-89.

- McGivern RF, Rittenhouse P, Aird F, Van de Kar LD and Redei E (1997):** Inhibition of stress-induced neuroendocrine and behavioural responses in the rat by prepro-thyrotropin-releasing hormone 178–199. *Journal of Neuroscience*; 17: 4886–4894.
- Meijer OC, Karssen AM and de Kloet ER(2003):** Cell- and tissue-specific effects of corticosteroids in relation to glucocorticoid resistance: examples from the brain. *J Endocrinol.*; 178(1):13-8.
- Mellor AL and Munn DH(1999):** Tryptophan catabolism and T-cell tolerance: immunosuppression by starvation? *Immunol Today.*;20:469-73.
- Mensah-Brown EP, Bailey TA, Pallot DJ and Garner A (2000):** Peptidergic hormones and neuropeptides, and aminergic neurotransmitters of the pancreatic islets of the Houbara bustard. *Janat*; 196 (pt 2): 233-241.
- Minowa T, Miwa S, Kobayashi S, Enoki T, Zhang X F, Komuro T, Yamuro Y and Masaki T (1997):** *Brit. J. Pharmacol.*, 120 :1536-1544.
- Moncada S and Rigiss RS (1995):** Molecular mechanisms and therapeutic strategies related to nitric oxide. *FASEB J*; 9: 1319-1330
- Moncada S, Palmer RMJ, Higgs EA (1991):** Nitric oxide: physiology, pathophysiology and pharmacology. *Pharmacol Rev* 43: 109-142.
- Monika Ehrhart-Bornstein, Joy P. Hinson, Stefan R. Bornstein, Werner A. Scherbaum and Gavin P. Vinson(1998):** Intraadrenal Interactions in the Regulation of Adrenocortical Steroidogenesis ;19 (2): 101-143.
- Murray SA and Pharrams SY (1997):** Comparison of gap junction expression in the adrenal gland. *Microsc Res Tech* ;36:510–519 .

- Nagaki M, Shimura MN, Irokawa T, Sasaki T, and Shirato K(1995):** Nitric oxide regulation of glycoconjugate secretion from feline and human airways in vitro. *Respir Physiol* ;102: 89–95.
- Naito HK (2003):**coronary artery disease and disorders of lipid metabolism, clinical chemistry: theory. analysis. correlation. 4<sup>th</sup> ed Kaplan LA and pesce AJ;603.
- Nakan M, Michell J, Forstermann U, and Murad F (1991):** Phosphorylation by calcium calmodulin-dependent protein kinase II and protein kinase C modulates the activity of nitric oxide synthase. *Biochem Biophys Res Commun*;180: 1396-1402.
- Natarajan R, Lanting L, Bai W, Bravo EL and Nadler J (1997):** The role of nitric oxide in the regulation of aldosterone synthesis by adrenal glomerulosa cells. *J Steroid Biochem Mol Biol*; 61:47–53.
- Nathan C (1992):**Nitric oxide as asecretory product of mammalian cells.*FASEB J* ;6:3051-64.
- Okada S, Murakami Y, and Yokotani K (2002):** Centrally applied nitric oxide donor elevates plasma corticosterone by activation of the hypothalamic noradrenergic neuronsin rats". *Brain Res*, No. 1-2, 26-33.
- Olga Sánchez, Anna Arnau, Miguel Pareja, Enric Poch, Ignasi Ramírez, and Maria Soley(2002):** Acute stress-induced tissue injury in mice: differences between emotional and social stress .*Cell Stress Chaperones*; 7(1): 36–46.
- Pacak K and Palkovits M(2001):** Stressor specificity of central neuroendocrine responses: implications for stress-related disorders. *Endocr Rev.*; 22 (4): 502-548.
- Pacak K, Palkovits M, Yadid G, Kvetnansky R, Kopin IJ and Goldstein DS(1998):** doctrine of nonspecificity. *Am J Physiol.*; 275(4 Pt 2): R1247-R1255.

- Parkes D, Kasckow J and Vale W (1994 ):**Carbon monoxide modulates secretion of corticotropin-releasing factor (CRF) from rat hypothalamic cell cultures. *Brain Research*; 646 :315–318.
- Parkes DG and May CN( 1995):** ACTH-suppressive and vasodilator actions of adrenomedullin in conscious sheep. *Journal of Neuroendocrinology*; 12: 923–929.
- Parratt JR (2002):** Nitric oxide plays a role in the regulation of adrenal blood flow and adrenocorticomedullary functions in the llama fetus *Journal of Physiology* ; 544.1: pp. 267-276.
- Päth G, Bornstein SR, Ehrhart-Bornstein M and Scherbaum WA (1997):** Interleukin-6 and the interleukin-6 receptor in the human adrenal gland: expression and effects on steroidogenesis. *J Clin Endocrinol Metab.*; 82:2343–2349.
- Paul E ,Marik FC and Gary P(2002):** Adrenal Insufficiency in the Critically Ill. *FCCP* ;122:1784-1796.
- Pignatelli D, Pinto P, Azevedo ME, Magalhaes M M and Magalhaes MC (1998):**Acute stress effects on the adrenal cortex in the rat. A biochemical and immunohistochemical study. *Endocrine Res*; 22: 445-451.
- Pilkis SJ and Granner DK(1992):** Molecular physiology of the regulation of hepatic gluconeogenesis and glycolysis. *Annu Rev Physiol*;54:885-909.
- Polonsky KS, O'Meara NM (1995):** Secretion and metabolism of insulin, proinsulin, and C-peptide. In: DeGroot LJ (ed) *Endocrinology*. W.B. Saunders Co., Philadelphia, pp 1354–1376.
- Pozzoli G, Mancuso C, Mirtella A, Preziosi P, Grossman AB and Navarra P (1994):** Carbon monoxide as a novel neuroendocrine modulator: inhibition of stimulated corticotropin-releasing hormone release from acute rat hypothalamic explants. *Endocrinology*; 135: 2314–2317.

- Price K J ,Hanson PJ and Whittle BJR (1994):** Stimulation by carbachol of mucus gel thickness in rat stomach involves nitric oxide. *Eur J pharmacol* ;263:199-202.
- Ralph A. Kelly, Jean-Luc Balligand, Thomas W. Smith(1996):** Nitric Oxide and Cardiac Function. *Circulation Research*;79:363-380.
- Rees LH, Cook DM, Kendall JW, Allen CF, Kramer RM, Ratcliffe JG and Knight RA( 1971):** A radioimmunoassay for rat plasma ACTH. *Endocrinology*; 89 :254–261.
- Rivier C (1994):** Endogenous nitric oxide participates in the activation of the hypothalamic–pituitary–adrenal axis by noxious stimulus. *Endocrine Journal*;2: 367–373.
- Rivier C and Rivest S (1991):** Effect of stress on the activity of the hypothalamic-pituitary-gonadal axis: peripheral and central mechanisms. *Biol Reprod.*; 45(4): 523 -532.
- Rivier C (1998):** Role of nitric oxide and carbon monoxide in modulating the ACTH response to immune and nonimmune signals. *Neuroimmunomodulation* ; 5 :203–213.
- Robert MS, Michael L R and Allan U M (2000):** How Do Glucocorticoids Influence Stress Responses? Integrating Permissive, Suppressive, Stimulatory, and Preparative Actions. *Endocrine Reviews* 21 (1): 55-89
- Rogers NE and Ignarro LJ(1992):** Constitutive nitric oxide synthase from cerebellum is reversibly inhibited by nitric oxide from L-arginine. *Biochem Biophys Res Commun* ;189:242.
- Roitts I (1997):** *Essential immunology . (black well wiessenschafts-verlag GmbH, Berlin), p 10.*
- Ronald DK (2003):** hormones, brain and stress. *Endocrine regulations*; 37:51–68.
- Roy M S, Roy WT,Gallucci B,Collier K., Young TC, Kamilaris and Chrousos G P (1993):** The ovine corticotropin releasing

hormone test in type I diabetic patients and controls: Suggestion of mild chronic hypercortisolism. *Metabolism*; 42: 696-700.

**Sakaue M and Hoffman BB(1992):** Glucocorticoids induce transcription and expression of the 1B adrenergic receptor gene in DTT1 MF-2 smooth muscle cells. *J Clin*; 88:385-389 .

**Salvador Moncada, Annie Higgs and Robert Furchgott (1997):** International union of pharmacology nomenclature in nitric oxide research. Vol. 40, 137-142.

**Samson WK, Murphy T and Schell DA (1995) :** A novel vasoactive peptide, adrenomedullin, inhibits pituitary adrenocorticotropin release. *Endocrinology*; 136: 2349–2352.

**Sander M and Victor RG(1999):** Neural mechanisms in nitric-oxide-deficient hypertension. *Curr Opin Nephrol Hypertens*; 8: 61-73.

**Sandi C and Guaza C( 1995):** Evidence for a role of nitric oxide in the corticotropin- releasing factor release induced by interleukin-1 beta. *European Journal of Pharmacology*; 274 :17–23.

**Sapolesky RM, Romero LM and Munk AU (2000):** How do glucocorticoids influence stress responses? Integrating permissive, suppressive, stimulatory, and preparative actions. *Endocr. Rev.*; 21:55–89.

**Sessa WC, Pritchard K, Seyed N, Wang J and Hintze TH (1994):** Chronic exercise in dogs increases coronary vascular nitric oxide production and endothelial cell nitric oxide synthase gene expression. *Circ Res*; 74: 349-353.

**Shaul PW, Afshar S, Gibson LL, Sherman TS, Kerecman JD, Grubb PH, Yoder BA, and McCurnin DC(2002):** Developmental changes in nitric oxide synthase isoform expression and nitric oxide production in fetal baboon lung. *Am J Physiol*

Lung Cell Mol Physiol 283: L1192–L1199.

**Shen W Q, Zhang X P, Zhao G, Wolin M S, Sessa W and Hintze T H (1995):** Stress, Adaptation, and Nitric Oxide ,Med. Sci. Sports Exer.; 27: 1125-1134.

**Silbernagl (2000):** color atlas of pathophysiology; page 268.

**Smith T, Flower RJ and Buckingham JC (1993):** Lipocortins I, II and IV in the brain and the pituitary gland: selective induction by dexamethasone of lipocortin 1 in the anterior pituitary gland. Molecular Neuropharmacology; 3 :45–55.

**Solberg LC , Olson SL, Turek FW and Redei E (2001):** Altered hormone levels and circadian rhythm of activity in the WKy rat, a putative animal model of depression. Am j physiol regulatory integrative comp physiol; 281: 786:794.

**Sorrenti V, Di Giacoma C, Salerno L, Siracusa MA, Guerrera F and Vanella A (2001):** Inhibition of neuronal nitric oxide synthase by N-phenacylimidazoles nitric oxide; 5: 32-38.

**Stephens A and Brydon L (2005):** Associations Between Acute Lipid Stress Responses and Fasting Lipid Levels 3 Years Later. Health Psychology. 24; 6: 601-607.

**Streeter D (1999):** What test for hypothalamic-pituitary adrenocortical insufficiency? Lancet; 354:179-180.

**Susanne T, Nury S, and Yvette M. (2003):** Nitric Oxide Synthase Production and Nitric Oxide Regulation of Preimplantation Embryo Development. Biol Reprod; 68: 1538-1544.

**Sydow K, Mondon CE and Cooke JP (2005):** Insulin resistance: potential role of the endogenous nitric oxide synthase inhibitor ADMA. Vasc Med. 1:S35-543.

**Szabo C (1996):** DNA strand breakage and activation of poly-ADP ribosyltransferase: a cytotoxic pathway triggered by peroxynitrite. Free Radic Biol Med.; 21: 855-69.

- Taylor A, Cowell A-M, Flower J and Buckingham JC( 1993):** Lipocortin-1 mediates an early inhibitory action of glucocorticoids on the secretion of ACTH by the rat anterior pituitary gland in vitro. *Neuroendocrinology*; 58:430–439.
- Tilbrook AJ, Turner AI and Clarke IJ(2000):** Effects of stress on reproduction in non-rodent mammals: the role of glucocorticoids and sex differences. *Rev Reprod.*; 5(2): 105-113.
- Tilbrook AJ, Turner AI and Clarke IJ(2000):** Effects of stress on reproduction in non-rodent mammals: the role of glucocorticoids and sex differences. *Rev Reprod.*; 5(2): 105-113.
- Torpy DJ, Grice JE, Hockings GI, Walters MM, Crosbie GV and Jackson RV (1997):** Diurnal effects of fluoxetine and naloxone on the human hypothalamic–pituitary–adrenal axis. *Clinical and Experimental Pharmacology and Physiology*; 24: 421–423.
- Tsigos C and Chrousos G P (1995):** Stress, endocrine manifestations and diseases. Chapter 3. In *Handbook of Stress Medicine*. C. L. Cooper, CRC Press. Boca Raton, FL. Ed.: 61-65.
- Tsuchiya T, kishimoto J, koyama J and ozawa T(1997):** Modulatory effect of L-NAME, a specific nitric oxide synthase (NOS) inhibitor, on stress-induced changes in plasma adrenocorticotrophic hormone (ACTH) and corticosterone levels in rat. *Brain res.*; 776:68-74.
- Tsuchiya T, Kishimoto J and Nakayama Y (1996):** Marked increases in neuronal nitric oxide synthase (nNOS) mRNA and NADPH-diaphorase histostaining in adrenal cortex after immobilization stress in rats. *Psychoneuroendocrinology*; 21:287–293.
- Turnbull AV and Rivier C (1996):** Corticotropin-releasing factor, vasopressin and prostaglandins mediate, and nitric oxide restrains, the hypothalamic–pituitary–adrenal response to acute local inflammation in the rat. *Endocrinology*; 137: 455–463.

- Turnbull AV, Kim CK, Lee S and Rivier C (1999):** Influence of carbon monoxide, and its interaction with nitric oxide, on the ACTH response of the of the normal rat to a physico-emotional stress. *Journal of Neuroendocrinology*; 10 :793–802.
- Uno H, Arakawa T, Fukuda T, Fujiwara H Y, Higuchi K, Inoue M, and Kobayashi K (1997):** Prostaglandins; 53:153-162.
- Valerie B. O'Donnell, Bruce A and Freeman (2001):** Interactions Between Nitric Oxide and Lipid Oxidation Pathways; *Circulation Research*;88:12.
- Vallance p and Chan N (2001):**General cardiology.Endothelial function and nitric oxide:Clinical Relevance.*Heart*; 85:342.
- Van de Kar LD and Blair ML(1999):** Forebrain pathways mediating stress-induced hormone secretion. *Front Neuroendocrinol.*; 20(1): 1 -48.
- Vesna Koko\*, Jelena Djordjević, Gordana Cvijić and Vukosava Davidović (2004):** Effect of acute heat stress on rat adrenal glands: a morphological and stereological study .*Journal of Experimental Biology*; 207: 4225-4230
- Walker HA, McGing E, Fisher I, Boger RH, Bode-Boger SM, Jackson G, Ritter HM, and Chowienczyk PJ (2001):** lack of effect of oral L-arginine on endothelia function, oxidative stress and exercise performance. *J Am Coll Cardiol*; 38: 499-505.
- Webster E L, Elenkov IJ and Chrousos G P (1997):** The role of corticotropin-releasing hormone in neuroendocrine-immune interactions. *Mol. Psychiatry* ;2: 368-372.
- Weidenfeld J, Feldman S, Dekeyser FG, and Ovadia H (1999):** "Effect of endogenous nitric oxide and inhibitors of nitric oxide synthase on the hypothalamus-pituitary-adrenal axis responses to neural stimuli". *Neuro Endocrinol*, 70 No. 3, 153-159.

- Weiming Xu<sup>1</sup> and Lizhi Liu(2000):** Nitric Oxide: From a mysterious labile factor, to the molecule of the Nobel Prize. Recent progress on nitric oxide research.
- Weiner CP, Lizasoain I, Baylis SA, Knowles RG, Charles IG, and Moncada S (1994):** Induction of calcium-dependent nitric oxide synthases by sex hormones. Proc Natl Acad Sci USA;91: 5212-5216.
- Wendy K., Chris E. and Richard G (2001):** Nitric oxide synthases: structure, function and inhibition. Biochem. J. ; 357: 593–615.
- Wenjiang JFu, Tony E H, Ripla K, Jianbo H, Wenjuan S, Thomas ES, Raymond J C, Cynthia J Mand Guoyao Wu(2005):** Dietary L-Arginine Supplementation Reduces Fat Mass in Zucker Diabetic Fatty Rats. J. Nutr.; 135:714-721.
- Wiesinger H (2001):**Arginine metabolism and the synthesis of nitric oxide in the nervous system .Prog Neurobiol(Oxford) ;64:365-391.
- Willenberg HS, Stratakis CA, Marx C, Ehrhart-Bornstein M, Chrousos GP, Bornstein SR (1998):** Aberrant interleukin-1 receptor in a cortisol-secreting adrenal adenoma causing Cushing's syndrome. N Engl J Med.; 339: 27–31.
- Wink DA, Osawa Y, Darbybire JF, Jones CR, Eshenaur SC and Nims RW( 1993):** Inhibition of cytochromes P450 by nitric oxide and a nitric oxide releasing agent. Archives of Biochemistry and Biophysics; 300: 115–123.
- Xiao E, Xia-Zhang L and Ferin M(1999):** Stress and the menstrual cycle: short- and long-term response to a five-day endotoxin challenge during the luteal phase in the rhesus monkey. J Clin Endocrinol Metab.;84(2): 623 -626.
- Xie Qw, Whisnant R, and Nathan C (1993):**J. Exp. Med; 177:1779-1784.
- Yamada K, Noda Y, Nakayama S, Komori Y, Sugihara H, Hasegawa T and Nabeshima T(1995):** Role of nitric oxide in learning

and memory and in monoamine metabolism in the rat brain. Br J Pharmacol; 115(5): 852-858.

**Yasin SA, Costa A, Navarra P, Pozzoli G, Kostoglou-Athanassiou I, Forsling ML and Grossman A (1994):** Endothelin stimulates the in vitro release of neurohypophyseal hormones, but not corticotrophin releasing hormone, via ETA receptors. Neuroendocrinology; 60: 553–558.

**Yasin SA, Costa A, Trainer P, Windle R, Forsling ML and Grossman A (1993):** Nitric oxide modulates the release of vasopressin from rat hypothalamic explants. Endocrinology, 133: 1466–1469.

**Young DS (2001):** Effects of disease on clinical lab. testes, 4<sup>th</sup> ed AACC.

**Zanchi A, Shaad N C, Osterheld M C, Grouzmann E, Nussberger J, Brunner H R, and Waeber B (1995) :** Amer. J. Physiol.; 37 H2267-H2273.