

# **7. BIBLIOGRAPHY**

Adham N, Tamm JA, Salon JA, Vaysse PJ, Weinshank RL, Branchek TA. A single point mutation in creases the affinity of serotonin 5-HT<sub>1Dα</sub>, 5-HT<sub>1Dβ</sub>, 5-HT<sub>1E</sub> and 5-HT<sub>1F</sub> receptors for α-adrenergic antagonists. *Neuropharmacology* 1994; 33: 387-391.

Al Meshal IA, Parmar NS, Tariq M, Aqeel AM. Gastric anti-ulcer activity in rats of *Trigonella foenum-graecum* (Hu-Lu-Pa). *Fitoterapia* 1985; 56:232-235.

Argyropoulos SV, Nutt DJ. The use of benzodiazepines in anxiety and other disorders. *Eur Neuropsychopharmacol.* 1999; 9 (suppl. 6): S407- S412.

Aston-Jones G, Rajkowski J, Kibiak P, Alexinsky T. Locus coeruleus neurones in the monkey are selectively activated by attended stimuli in a vigilance task. *J. Neurosci.* 1994; 14: 4467- 4480.

Aston-Jones G, Rajkowski J, Cohen J. Role of locus coeruleus in attention and behavioral flexibility. *Biol. Psychiatry* 1999; 46: 1309-1320.

Azmitia EC, Whitaker PM. Anatomy, cell biology and plasticity of the serotonergic system: neuropsychopharmacological implications for the actions of psychotropic drugs. In Bloom FE & Kupfer DJ (Eds.), *Psychopharmacology: the Fourth Generation of Progress*. New York: Raven Press., 1995: 443-490.

Bagdy G, Calogero AE, Murphy DL, Szemerédi K. Serotonin agonists cause parallel activation of the sympathoadrenomedullary system and the hypothalamo-pituitary-adrenocortical axis in conscious rats. *Endocrinology* 1989; 125: 2664.

Balaraman R, Gulati OD, Bhatt JD, Bhatt SD, Rathod SP, Hemavati KG. Cadmium induced hypertension in rats. *Pharmacology* 1989; 38: 226-234.

Bandler R, Depaulis A. Midbrain periaqueductal gray control of defensive behaviour in the

cat. In: The midbrain periaqueductal grey matter. Functional Anatomical and Neurochemical organization, Depaulis, A and Bandler, R. (Eds.), Plenum Press. New York., 1991: 175-198.

Banes AK, Watts SW. Upregulation of arterial serotonin 1B and 2B receptors in deoxycorticosterone acetate-salt hypertension. *Hypertension* 2002; 39: 394-398.

Barbaccia ML, Costa E, Ferrero P, Guidotti A, Roy A, Sunderland T, Pickar D, Paul SM, Goodwin FK. Diazepam-binding inhibitor. *Arch. Gen. Psychiatry* 1986; 43: 1143-1147.

Barrett JE, Vanover KE. 5-HT receptors as targets for the development of novel anxiolytic drugs: models mechanisms and future directions. *Psychopharmacol.* 1993; 112: 1-12.

Barros HMT, Tannhauser MAL, Tannhauser SL, Tannhauser M. Enhanced detection of hyperactivity after drug withdrawal with a simple modification of the open-field apparatus. *J. Pharmacol. Meth.* 1991; 26: 269-275.

Baulieu EE. Neurosteroids: a novel function of the brain. *Psychoneuroendocrinology* 1998; 23: 963-987.

Beck AT, Rachman S, Maser JD. Cognitive approaches to panic disorder: theory and therapy. In: Beck AT, Ranchman S, & Maser JD (Eds.), *Panic: Psychological Perspective*. Hillsdale: Lawrence Erlbaum. , 1988: 91-109.

Beitz AJ, Clements JR, Mbllett MA, Ecklund LJ. Differential origin of brainstem serotonergic projections to the midbrain periaqueductal gray and superior colliculus of the rat. *J. Comp. Neurol.* 1986; 250: 498-509.

Bell CJ, Nutt DJ. Serotonin and panic. *Br. J. Psychiatry* 1998; 172: 465-471.

Belzung C, Misslin R, Vogel E, Dodd RH, Chapouthier G. Anxiogenic effects of methyl  $\beta$ -

carboline- 3- carboxylate in a light/dark choice situation. *Pharmacol. Biochem. Behav.* 1987; 28: 29-33.

Belzung C, Le Papes G. Comparison of different behavioral test situations used in psychopharmacology for measurement of anxiety. *Physiol. Behav.* 1994; 56: 63-68.

Benjamin D, Lal H, Meyerson LR. The effects of 5-HT<sub>1β</sub> characterizing agents in the mouse elevated plus-maze. *Life Sci.* 1990; 47: 195-203.

Bensky D, Gamble A. Chinese herbal medicine Materia Medica. Eastland Press, Seattle., 1986: 450-454.

Bereck KH, Barron KW, Webb RL, Brody MJ. Vasopressin CNS interactions in the development of DOCA hypertension. *Hypertension* 1982; 4: 131-137.

Berndlowe C and Wolfgang H. Anxiety and depression in patients with pulmonary hypertension. *Psychosomatic medicine* 2004; 66: 831-836.

Bhattacharya D, Sur TK. The effect of *Panax ginseng* and diazepam on norepinephrine levels of whole brain and hypothalamus during stress. *Ind. J. Pharmacol.* 1999; 31: 124-127.

Bhattacharya SK, Mitra SK. Anxiolytic activity of *Panax ginseng* roots: an experimental study. *J. Ethnopharmacol.* 1991; 34 (1): 87-92.

Bhattacharya SK, Satyan KS. Experimental methods for evaluation of psychotropic agents in rodents: I- Anti-anxiety agents. *Ind. J. of Exp. Biol.* 1997; 35: 565-575.

Bhattacharya SK, Ghosal S. Anxiolytic activity of standardized extract of *Bacopa monniera* –an experimental study. *Phytomedicine* 1998; 5: 77-82.

Bilkei-Gorzo A, Gyertyan I, Levay G. mCPP-induced anxiety in light-dark box in rats –a

new method for screening anxiolytic activity. *Psychopharmacology* 1998; 136: 291-298.

Birnbaumer L, Abramowitz J, Brown AM. Receptor-effector coupling by G proteins. *Biochem. Biophys. Acta.* 1990; 1031: 163-224.

Blanchard RJ, Blanchard DC, Hori K. Ethoexperimental approaches to the study of defensive behavior. In: Blanchard R J, Brain PF, Blanchard DC, Parmigiani S, (Eds.), *Ethoexperimental approaches to the study of behavior.* Dordrecht: Kluwer Academic Publishers.,1989: 114-136.

Blanchard CD, Weatherspoon A, Shepherd J, Rodgers R, Weiss SM, Blanchard RJ. "Paradoxical" effects of morphine on antipredator defense reactions in wild and laboratory rats. *Pharmac. Biochem. Behav.* 1991; 40: 819 -828.

Blier P, de Montigny C, Chaput Y. A role for the serotonergic system in the mechanism of action of antidepressant treatments; preclinical evidence. *J. Clin. Psychiatry* 1990; 6 (5): 5-12.

Bohus B, Koolhaas J M, Korte S M, Bouws GA, Eisenga W, Schmit J. Behavioural physiology of serotonergic and steroid-like anxiolytics as antistress drugs. *Neurosci. Biohehav. Rec.* 1990; 14: 529- 534.

Boissier JR, Simon P. Dissociation de deux composantes dans le comportement d'investigation de la souris. *Arch. Int. Pharmacodyn.* 1964; 147: 372-388.

Boissier JR, Simon P, Wolff J-ML. L'utilisation d'une reaction particuliere de la souris (Methode de la planche atrous) pour l'etude des medicaments psychotropes. *Therapie* 1964; 19: 571-586.

Bone ME, Wilkinson DJ, Young JR, McNeil J, Charlton S. Ginger root, a new anti-emetic.

The effect of ginger root on postoperative nausea and vomiting after major gynaecological surgery. *Anaesthesia* 1990; 45: 669-671.

Boura ALA, Green AF. Antihypertensive agents. In: Laurence DR, Bacharach AL, (Eds.), Evaluation of drug activities pharmacometrics. London: Academic Press. 1964; 1: 431-453.

Bown D. Encyclopedia of herbs and their uses. Dorling Kindersley, London 1995; ISBN0-7513-020-31.

Boyer W. Serotonin uptake inhibitors are superior to imipramine and alprazolam in alleviating panic attacks: a meta-analysis. *Int. Clin. Psychopharmacol.* 1993; 10: 45-49.

Bradley PB, Engel G, Feniuk W, Fozard JR, Humphrey PP, Middlemiss DN, Mylecharane EJ, Richardson BP, Saxena PR. Proposals for the classification and nomenclature of functional receptors for 5-hydroxytryptamine. *Neuropharmacology* 1986; 25: 563-576.

Braestrup C, Squires RF. Brain specific benzodiazepine receptors. *Br. J. Psychiatry* 1978; 133: 249- 260.

Braestrup C, Nielsen M, Honore T, Jensen LH, Petersen EN. Benzodiazepine receptor ligands with positive and negative efficacy. *Neuropharmacology* 1983; 22: 1451- 1457.

Brodie T. The immediate action of an intravenous injection of blood serum. *J. Physiol.* 1900; 26: 48-71.

Brown MR, Fisher LA. Regulation of autonomic nervous system by corticotropin-releasing factor. In: DeSouza EB, Nemeroff CB, (Eds.), Corticotropin-releasing factor: basic and clinical studies of a neuropeptide. Boca Raton, FL: CRC Press., 1990: 291-298.

Bunnag P, Hori MT, Ormsby B, Berger ME, Golub MS, Tuck ML. Impaired in vivo

adrenergic responses in diet-induced hypertensive rats. *Hypertension Research* 1997; 20 (1): 17-21.

Cassia S, Conti I, Vigano G, Garattini S. 1-(2- Pyrimidinyl)-Piperazine as active metabolite of Buspirone in man and rat. *Pharmacology* 1986; 33 (1): 46-51.

Cannon WB. *Bodily Changes in Pain, Hunger, Fear and Death*. New York: Appleton., 1929.

Cantril H, Hunt WA. Emotional effects produced by the injection of adrenaline. *Am. J. Psychol.* 1932; 44: 300-307.

Carol A, Newall Linda A, Anderson J, David Phillipson. *Herbal Medicines-A guide for health Care Professionals*. London. The Pharmaceutical Press., 1996.

Carr DB, Sheehan DV. Panic anxiety: a new biological model. *J. Clin. Psychiatry* 1984; 45: 323- 330.

Carr DB, Sheehan DV, Surman OS, Coleman JH, Greenblatt DJ, Heninger GR, Jones K J, evine PH, Watkins WD. Neuroendocrine correlates of lactate-induced panic and their response to chronic alprazolam treatment. *Am. J. Psychiatry* 1986; 143: 483- 494.

Carvalho-Netto EF. Use of the elevated T- maze to study anxiety in mice. *Behav. Brain Res.* 2004; 148: 119-132.

Chalmers DT, Lovenberg TW, De Souza EB. Localization of novel corticotrophin-releasing factor receptor (CRF<sub>2</sub>) mRNA expression to specific subcortical nuclei in rat brain: comparison with CRF<sub>1</sub> receptor mRNA expression. *J. Neurosci.* 1995; 15: 6340-6350.

Chang CP, Pearse II RV, O'Connel S, Rosenfeld MG. Identification of a seven transmembrane helix receptor for corticotrophin-releasing factor and sauvagine in

mammalian brain. *Neuron* 1993; 11: 1187-1195.

Chaouloff F, Gunn SH, Young JB. Central 5-HT<sub>2</sub> receptors are involved in the adrenal catecholamine-releasing and hyperglycemic effects of the 5-hydroxytryptamine indirect agonist d-fenfluramine in the conscious rat. *J. Pharmacol. Exp. Ther.* 1992; 260: 1008.

Charney DS, Heninger GR, Breier A. Noradrenergic function and panic anxiety effects of yohimbine in healthy subjects and patients with agoraphobia and panic disorder. *Arch. Gen. Psychiatry* 1984; 41: 751- 763.

Charney DS, Woods SW, Goodman WK, Heninger GR. Serotonin function in anxiety: II. Effects of the serotonin agonist mCPP in panic disorder patients and healthy subjects. *Psychopharmacology* 1987; 92: 14- 24.

Chaudhari RD. A practical approach to Industrial Pharmacognosy Herbal drugs Industry. Published by eastern publishers, New Delhi., 1988.

Chaudhury RR. Herbal medicine for human health. World Health Organisation, Geneva, CBS Publishers and Distributors., 1990.

Chen R, Lewis KA, Vale WW. Expression cloning of a human corticotrophin-releasing factor- receptor. *Proc Natl Acad Sci USA* 1993; 90: 8967-8971.

Chopin. P, Briley M. Animal models of anxiety: the effect of compounds that modify serotonergic function. *Trends Pharmac. Sci.* 1987; 8: 383- 388.

Chopra RN, Chopra IC, Honda KL, Kapur LD. Chopra's Indigenous Drugs of India. Academic Publishers. Calcutta, New Delhi, India., 1982: 582.

Clark G, Koster AG, Person DW. Exploratory behaviour in chronic disulfotan poisoning in

mice. *Psychopharmacology* (Berlin) 1971; 20: 169-171.

Clow A, Glover V, Armando I, Sandler M. New endogenous benzodiazepine receptor ligand in human urine: identity with endogenous monoamine oxidase inhibitor? *Life. Sci.* 1983; 33: 735- 741.

Clow A, Glover V, Sandler M, Tiller J. Increased urinary tribulin output in generalised anxiety disorder. *Psychopharmacology* 1988a; 95: 378- 380.

Clow A, Glover V, Weg MW, Walker P L, Sheehan DV, Carr DB, Sandler M. Urinary catecholamine metabolic and tribulin output during lactate infusion. *Br. J. Psychiatry* 1988b; 152: 122- 126.

Cohen ML, Schenck KW, Mabry TE, Nelson DL, Audia JE. LY272015, a potent selective and orally active 5-HT<sub>2B</sub> receptor antagonist. *J. Ser. Res.* 1996; 3: 131-144.

Coleman TG, Guyton AC, Young DB, De Clue JW, Norman RA Jr, Manning Rd Jr. The role of kidney in essential hypertension. *Clin. Exp. Pharm. Physiol.* 1975; 2: 571-581.

Coplan JD, Gorman JM, Klein DF. Serotonin-related function in panic disorder: a critical overview. *Neuropsychopharmacology* 1992; 6: 189- 200.

Corbett R, Fielding St, Cornfeldt M, Dunn RW. GABA mimetic agents display anxiolytic-like effects in the social interaction and elevated plus maze procedures. *Psychopharmacology* 1991; 104: 312-316.

Costall B, Naylor RJ. Anxiolytic potential of 5HT<sub>3</sub> receptor antagonists. *Pharmacol. Toxicol.* 1992; 70: 157-162.

Coulston AM, Johnson RK. Sugar and sugars: myths and realities. *J. Am. Diet. Assoc.* 2002; 102: 351-353.

Crawley J, Goodwin KK. Preliminary report of a simple animal behavior model for the anxiolytic effects of benzodiazepines. *Pharmacol. Biochem. Behav.* 1980; 13: 167–170.

Crawley JN. Neuropharmacologic specificity of a simple animal model for the behavioral actions of benzodiazepines. *Pharmacol. Biochem. Behav.* 1981; 15: 695–699.

Crawley JN. Exploratory behaviour models of anxiety in mice. *Neurosci. Biobehav.* 1985; Rev 9: 37-44.

Critchley MA, Njung'e K, Handley SL. Actions and some interactions of 5-HT<sub>1A</sub> ligands in the elevated X-maze and effects of dorsal raphe lesions. *Psychopharmacol* 1992; 106: 484-490.

Cronin JR. Passionflower: Reigniting male libido and other potential uses. *The Journal of Alternative and complementary medicine.* 2003; 9 (2): 89-92.

Csonka E, Fekete M, Nagy G. Anxiogenic effect of cholecystokinin in rats. In: B. Penke, & A. Torok (Eds.), *Peptides*. New York: Walter de Gruyter., 1988: 249-252.

Cummings S, Elde R, Ells J, Lindall A. Corticotropin-releasing factor immunoreactivity is widely distributed within the central nervous system of the rat: an immunohistochemical study. *J. Neurosci.* 1983; 3: 1355-1368.

Curzon G, Kennett GA. mCPP: a tool for studying behavioral responses associated with 5-HT<sub>1C</sub> receptors. *TIPS* 1990; 11: 181-182.

CustodioTeixeira R, Zangrossi H, Graeff FG. Behavioral effects of acute and chronic imipramine in the elevated T- maze model of anxiety. *Pharmacol. Biochem. Behav.* 2000; 65(4): 571-576.

D' Angelo L, Grimaldi R, Caravaggi M. A double blind, placebo controlled study on a standardized ginseng extract on psychomotor performance in healthy volunteers. *J.Ethnopharmacol.* 1986; 16: 15-22.

Dahl LK. Possible role of salt intake in the development of essential hypertension. In: Pork KD, Cottier PT, (Eds.), *Essential hypertension-an international symposium*. Berlin: Springer-Verlag, 1960: 53-65.

Dai S, McNeill JH. Fructose-induced hypertension in rats is concentration-and duration-dependent. *J. Pharmacol. Toxicol. Method* 1995; 33: 101-107.

Daly ME, Vale C, Walker M, Alberti KG, Mathers JC. Dietary carbohydrates and insulin sensitivity: a review of the evidence and clinical implications. *Am. J. Clin. Nutr.* 1997; 66: 1072-1085.

Danks AM, Oestreicher AB, Spruijt Gispen WH, Isaakson RL. Behavioral and anatomical consequences of unilateral fornix lesions and the administration of nimodipine. *Brain. Res.* 1991; 557: 308-312.

Dautzenberg FM, Kilpatrick GJ, Hauger RL, Moreau JL. Molecular biology of CRH receptor-in the mood. *Peptides* 2001; 22: 753-760.

Davis HP. *J. Comp. Physiol. Psychol.* 1989; 95 (4): 556-564.

Davis M. Animal models of anxiety based on classical conditioning: the conditioned emotional response (C'ER) and the fear-potentiated startle effect. *Pharmac. Ther.* 1990; 47: 147-165.

Davis M, Hitchcock JM, Rosen J B. Neural mechanisms of fear conditioning measured with the acoustic startle reflex. In: *Neurobiology of Learning, Emotion and Affect*. Madden. J (Ed.), Raven Press, New York. , 1991: 67-96.

Dawson R, Nagamhama S, Oparil S. Central serotonergic alterations in deoxycorticosterone acetate/ Nacl induced hypertension. *Neuropharmacology* 1988; 27: 417-426.

De Vries P, Villalón CM, Heiligers JPC, Saxena PR. Nature of 5-HT<sub>1</sub>-like receptors mediating depressor responses in vagosympathectomized rats; close resemblance to the cloned 5-HT<sub>7</sub> receptor. *Naunyn-Schmiedeberg's Arch. Pharmacol.* 1997; 356: 90-99.

De Vries P, Villalón CM, Saxena PR. Pharmacological aspects of experimental headache models in relation to acute antimigraine therapy. *Eur. J.Pharmacol.* 1999; 375: 61-74.

Deakin JF, Graeff IG. 5-HT and mechanisms of defence. *J. Psychopharmac.* 1991; 5: 305-315.

den Boer JA, Westenberg HGM. Critical notes on the locus coeruleus hypothesis of panic disorder. *Acta Neuropsychiatry* 1993; 5: 48- 54.

DeSouza EB. Corticotropin-releasing factor receptors: physiology, pharmacology, biochemistry and role in central nervous system and immune disorders. *Psychoneuroendocrinology* 1995; 20: 789-819.

Dews PB. The measurement of the influence of drugs on voluntary activity in mice. *Br. J. Pharmacol.* 1953; 8: 46-48.

Di Cicco D, Antal S, Ammassari-Teule M. Prenatal exposure to gamma/neutron irradiation: sensorimotor alterations and paradoxical effects on learning. *Teratology* 1991; 43: 61-70.

Dieterich KD, Lehnert H, De Souza EB. Corticotrophin-releasing factor receptors: an overview. *Exp. Clin. Endocrinol. Diab.* 1997; 105: 65-82.

Dimo T, Azay J, Tan PV, Pellecuer J, Cros G, Bopelet M, Serrano JJ. Effects of the aqueous

and methylene chloride extracts of *Bidens pilosa* leaf on fructose-hypertensive rats. *J. Ethnopharmacol.* 2001a; 76(3): 215-221.

Dimo T, Rakotonirina A, Tan PV, Dongo E, Dongmo AB, Kamtchouing P, Azay J, Abegaz BM, Cros G, Ngadjui TB. Antihypertensive effects of *Dorstenia psilurus* extract in fructose-fed hyperinsulinemic, hypertensive rats. *Phytomedicine* 2001b; 8(2): 101-106.

Dorow R, Horowski R, Paschelke G, Amin M, Braestrup C. Severe anxiety induced by FG 7142. A  $\beta$ -carboline ligand for benzodiazepine receptors. *Lancet* 1983; 2: 98- 99.

Dua PR, Shanker G, Srimal RC, Saxena KC, Saxena RP, Puri A and Dhawan BN. Adaptogenic activity of Indian *Panax pseudoginseng*. *Ind. J. Expt. Biol.* 1989; 27: 631-634.

Dunham NW, Miya TS. A note on a simple apparatus for detecting neurological deficit in rats and mice. *J. Am. Pharm. Assoc. Sci.* 1957; 46: 208- 209.

Dunn RW, Corbett R, Fielding S. Effects of 5-HT<sub>1A</sub> receptor agonists and NMDA receptor antagonists in the social interaction test and the elevated plus maze. *Eur. J. Pharmacol.* 1989; 169: 1-10.

Elam M, Yao T, Thoren P, Svensson TH. Hypercapnia and hypoxia. Chemoreceptor-mediated control of locus coeruleus neurons and splanchnic sympathetic nerves. *Brain Res.* 1981; 222: 373- 381.

Elisabetsky E, Costa Campos L. The alkaloid Alstonine: A review of its pharmacological Properties. *Evid Based Complement Alternat Med.* 2006; 3(1): 39-48.

Enberg G. A metabolite of buspirone increases locus coeruleus activity via  $\alpha_2$  receptor blockade. *J. Neural Transmission* 1989; 76(2): 91-98.

Ericson E, Samuelsson J, Ahlenius S. Photocell measurements of rat motor activity. *J. Pharmacol. Meth.* 1991; 25: 111–122.

Erlich Y, Rosenthal T. Effect of angiotensin-converting enzyme inhibitors on fructose induced hypertension and hyperinsulinaemia in rats. *Clin. Exp. Pharmacol. Physiol.* 1995; 22: S347–S349.

Erspamer V (1954). Pharmacology of indolealkylamines. *Pharmacol. Rev* 6: 425–487.

Erspamer V, Asero B. Identification of enteramine, the specific hormone of the enterochromaffin cell system, as 5-hydroxytryptamine. *Nature* 1952; 169: 800-801.

Evans WC. Trease and Evans Pharmacognosy; 15<sup>th</sup> ed, W.B Saunders Harcourt Publishers Ltd., 2002: 138-139.

Fanselow MS. The midbrain periaqueductal grey as a coordinator of action in response to fear and anxiety. In: *The Midbrain Periaqueductal Grey Matter: Functional, Anatomical and Neurochemistry* (Eds.), Depaulis, A. and Bandler, R. (Eds.), Plenum Press, New York. 1991: 151-173.

File SE, Wardil AG. Validity of head dipping as a measure of exploration in a modified hole board. *Psychopharmacol.* (Berlin) 1975; 44: 53-59.

Fischer RW, Kjaer SK, Dahl C, Asping U. Ginger treatment of hyperemesis gravidarum. *Eur. J. Obstet. Gynecol. Reprod. Biol.* 1991; 38: 19-24.

Franco B, Jana P, Donatella M. Do animal models of anxiety predict anxiolytic like effects of antidepressants? *Psychopharmacol.* 2002; 163 (2): 121-141.

Frankenhaeuser M, Jarpe G, Matell G. Effects of intravenous infusions of adrenaline and noradrenaline on certain psychological and physiological functions. *Acta. Psychol. Sc.* 1961;

51: 175-186.

Frazer GA, Lapiere YD. The effect of buspirone on panic disorder: a case report. *J. Clin. Psychopharmacol.* 1987; 7: 118-119.

Frishman WH, Grewall P. Serotonin and the heart. *Ann. Med.* 2003; 32(3): 195-209.

Gaddum JH, Picarelli ZP. Two kinds of tryptamine receptors. *Br. J. Pharmacol.* 1957; 12: 323-328.

Galipeau D, Verma S, Mc Neill J. Female rats are protected against fructose-induced changes in metabolism and blood pressure. *American Journal of Physiology- Heart and Circulatory Physiology* 2002; 283: H2478-H2484.

Garvey MJ, Tollefson GD, Orsulak PJ. Elevations of urinary MHPG in depressed patients with panic attacks. *Psychiatry Res.* 1987; 20: 183-187.

Geller I, Seifter J. The effects of meprobamate, barbiturates, d- amphetamine and promazine on experimentally induced conflicts in rats. *Psychopharmacologia* 1960; 1: 482-492.

Gentil V, Tavares S, Gorenstein C, Bello C, Mathias L, Gronich G, Singer J. Acute reversal of flunitrazepam effects by Ro 15-1788 and Ro 15-3505: inverse agonism, tolerance and rebound. *Psychopharmacology* 1990; 100: 54-59.

George DT, Nutt DJ, Rawlings RR, Phillips, MJ, Eckardt MJ, Potter WZ, Linnoila M. Behavioural and endocrine responses to clomipramine in panic disorder patients with and without alcoholism. *Biol. Psychiatry* 1995; 37: 112- 119.

George DT, Nutt DJ, Dwyer BA, Linnoila M. Alcoholism and panic disorder: is the comorbidity more than coincidence. *Acta. Psychiatr. Sc.* 1990; 81: 97- 107.

Germine M, Goddard AW, Woods SW, Charney DS, Heninger GR. Anger and anxiety responses to *m*-chlorophenylpiperazine in generalized anxiety disorder. *Biol. Psychiatry* 1992; 32: 457-461.

Geyer MA, Puerto A, Dawsey WJ, Knapp S, Bullard WP, Mandelkern AJ. Histologic and enzymatic studies of the mesolimbic and mesostriatal serotonergic pathways. *Brain Res.* 1976; 106: 241-256.

Ghayur MN, Gilani AH, Afridi MB, Houghton PJ. Cardiovascular effects of ginger aqueous extract and its phenolic constituents are mediated through multiple pathways. *Vascular Pharmacology* 2005a; 43(4): 234-241.

Ghayur, MN, Gilani, AH. Ginger lowers blood pressure through blockade of voltage-dependent calcium channels. *J. Car. Pharmacol.* 2005b; 45: 74-80.

Ghosal S *et al.* Fenugreekine, a new steroidal sapogenin-peptide ester of *Trigonella foenum-graecum*. *Phytochemistry* 1974; 13: 2247-2251.

Giacchetti G, Sechi LA, Griffin CA, Don BR, Mantero F, Schambelan M. The tissue renin-angiotensin system in rats with fructose-induced hypertension: overexpression of type 1 angiotensin II receptor in adipose tissue. *J. Hypertens.* 2000; 18: 695-702.

Gibson EL, Barnfield AM, Curzon G. Evidence that *m*CPP induced anxiety in the plus maze is mediated by postsynaptic 5-HT<sub>2C</sub> receptor but not by sympathomimetic effects. *Neuropharmacology* 1994; 33: 457-465.

Giles TD, Sander GE. Comparative cardiovascular responses to intravenous Capsaicin, Phenylbiguanide, Veratrum alkaloids and enkephalins in the conscious dog. *J. Auton. Pharmacol* 1986; 6 (1): 1-7.

Giri J *et al.* Effect of ginger on serum cholesterol levels. *Ind. J. Nutr. Dietet.* 1984; 21: 433-

Glinsmann WH, Bowman BA. The public health significance of dietary fructose. *Am. J. Clin. Nutr.* 1993; 58(suppl): 820S–823S.

Goldberg MR, Hollister AS, Robertson D. Influence of yohimbine on blood pressure, autonomic reflexes and plasma catecholamines in humans. *Hypertension* 1983; 5: 772- 778.

Gorman JM, Fyer MR, Goetz R, Askanazi J, Liebowitz MR, Fyer AJ, Kinney J, Klein DF. Ventilatory physiology of patients with panic disorder. *Arch. Gen. Psychiatry* 1988; 45: 31-39.

Gorman JM, Goetz RR, Dillon D, Liebowitz MR, Fyer AJ, Davies S, Klein DF. Sodium D-lactate infusion in panic disorder patients. *Neuropsychopharmacology* 1990; 3: 181- 189.

Goyal RK, Umrani DN, Bodiwala ND and Dhalla NS. Atherosclerosis, Hypertension and Diabetes, In: Pierce GN, Nagano M, Zahnadka P and Dhalla NS (Eds.), Kluwer Academic Publisher, Boston., 2003: 317.

Goyal RK. *Practicals in Pharmacology*, 2<sup>nd</sup> Ed, B. S. Shah Prakashan., 1999: 48.

Goyal RK, Natvar MP. *Practical Anatomy and Physiology*, 7<sup>th</sup> Ed, B. S. Shah Prakashan., 2002: 32

Graeff FG. Brain defence systems and anxiety. In: M. Roth, GD Burrows, & R Noyes (Eds.), *Handbook of Anxiety*, Vol. 3. Amsterdam: Elsevier., 1990: 307-357.

Graeff FG, Viana MB, Tomaz C. The elevated T-maze, a new experimental model of anxiety and memory: Effect of diazepam. *Braz. J. Med. Biol. Res.* 1993; 26: 67-70.

Graeff FG, Guimeras TS, De Andrade TG. Role of 5-HT in stress, anxiety and depression. *Pharmacol. Biochem. Behav.* 1996; 86: 334- 338.

Graeff F, Netto C, Zangrossi HJ. The elevated T- maze as an experimental model of anxiety. *Neurosci. Behav. Rev.* 1998; 23: 237-246.

Graeff FG. Animal models of aversion. In: *Animal Models of Psychiatric disorder*, Simon P, Soubrie P, Widlocher D (Eds), Karger. Basel., 1988: 115-141.

Graeff FG, Ferreira Neto C, Zangrossi H. The elevated T- maze as an experimental model of anxiety *Neurosci. Biobehav. Rev.* 1998; 23: 237-246.

Graeff FG, Viana MB, Mora PO. Opposed regulation by dorsal raphe nucleus 5-HT pathways of two types of fear in the elevated T- maze. *Pharmacol. Biochem. Behav.* 1996; 53: 171-177.

Grandhi A, Mujamdar AM, Patwardhan BA. Comparative Pharmacological investigation of Aswagandha and Ginseng. *J. Ethnopharmacol.* 1994; 44: 131-135.

Gray JA. *The Neuropsychology of anxiety: an Enquiry into the Septo-Hippocampal System.* Oxford University Press, Oxford., 1982.

Gray JA. Neuropsychology of anxiety, In: Broadbent DE, Mc Gaugh JL, MacKintosh NJ, Posner MI, Tulving E, Weiskrantz L (Eds.), Clarendon Press, Oxford., 1987: 15.

Gray JA. Neural systems, emotion and personality. In: *Neurobiology of learning, Emotion and Affect*, Madden, J. (Ed.), Raven Press, New York., 1991: 273-306.

Greenberg S, Heitz DC, Long JP. Testosterone induced depression of adrenergic activity in the perfused canine hindlimb. *Proc society of Experimental Biology and Medicine* 1973;

142: 883-888.

Griebel G, Perrault G, Sanger DJ. A comparative study of the effects of selective and non-selective 5-HT<sub>2C</sub> receptor subtype antagonists in rat and mouse models of anxiety. *Neuropharmacology*. 1997; 36: 793-802.

Griebel G. 5-Hydroxytryptamine interacting drugs in animal models of anxiety disorders: more than 30 years of research. *Pharmacol. Therap.* 1995; 65: 319-395.

Griebel G. Variability in the effects of 5-HT related compounds in experimental models of anxiety: evidence for multiple mechanism of 5-HT in anxiety or never ending story? *Pol. J. Pharmacol.* 1996; 48: 129-36.

Griez E, Lousberg H, Van Den Hout MA, Van Der Molen GM. Carbon dioxide vulnerability in panic disorder. *Psychiatry Res.* 1987; 20: 87- 95.

Gronived A, Brask T, Kamskard J, Hentzer E. Ginger root in seasickness. A controlled trial in the open sea. *Acta. Otolaryngol.* (Stockh) 1998; 105 (1-2): 45-49.

Grosz HJ, Farmer BB. Blood lactate in the development of anxiety symptoms. *Arch. Gen. Psychiatry* 1969; 21: 611- 619.

Grove G, Coplan JD, Hollander E. The neuroanatomy of 5-HT dysregulation and panic disorder. *J. Neuropsychiatry Clin. Neurosci.* 1997; 9: 198- 207.

Hakim ZS, Goyal RK. Comparative evaluation of different rat models with coexisting diabetes mellitus and hypertension. *Indian J. Physiol.. Pharmacol..* 2000; 44: 125- 135.

Han KH, Choe SC, Kim HS, Sohn DW, Nam KY, Oh BH, Lee MM, ParkYB, Choi YS, Seo JD, Lee YW. Effect of red ginseng on blood pressure in patients with essential hypertension

and white coat hypertension. *Am. J. Chin. Med.* 1998; 26(2): 199-209.

Handley SL, Mithani S. Effects of alpha-adrenoceptor agonists in a maze-exploration model of "fear"-motivated behaviour. *Naunyn Schmiedeberg's Arch. Pharmacol.* 1984; 327: 1-5.

Handley SL. 5-Hydroxytryptamine pathways in anxiety and its treatment. *Pharmacol. Ther.* 1995; 66: 103-148.

Handley SL, McBlane JW. 5-HT drugs in animal models of anxiety. *Psychopharmacol.* 1993a; 112: 13-20.

Handley SL, McBlane JW. Serotonin mechanisms in animal models of anxiety. *Braz. J. Med. Biol. Res.* 1993b; 26: 1-13.

Harborne JB. *Phytochemical Methods*, 2nd edition, Chapman and Hall, New York., 1973: 100-141.

Hascoet M, Bourin M, Nic Dhonnchadha BA. The mouse-light-dark paradigm: a review. *Prog Neuro-Psychopharmacol. Biol. Psychiatry.* 2001; 25: 141-166.

Hasenohrl RU, Topic B, Frisch C, Hacker R, Mattern CM, Huston JP. Dissociation between anxiolytic and hypomnesic effects for combined extracts of *Zingiber officinale* and *Ginkgo biloba*, as opposed to diazepam. *Pharmacol. Biochem. Behav.* 1998; 59: 527-535.

Hikino H, Kiso Y, Kinouchi J, Sanada S, Shoji J. Antihepatotoxic effects of ginsenosides from *Panax ginseng* roots. *J. Med. Plant Res.* 1985; 1: 62-64.

Howard JL, Pollard GT. Effects of drugs on punished behaviour: Preclinical tests for anxiolytics. In: *Psychopharmacology of anxiolytics and antidepressants*. File, SE (Ed.), Pergamon Press: New York., 1991: 131-153.

Hoult JR, Paya M. Pharmacological and Biochemical actions of simple coumarins: natural products and therapeutical potential. *Gen. Pharmacol.* 1996; 27: 713-722.

Hoyer D, Clarke DE, Fozard JR, Hartig PR, Martin GR, Mylecharane EJ, Saxena PR, Humphrey PP. International Union of Pharmacology classification of receptors for 5-hydroxytryptamine (Serotonin). *Pharmacol. Rev.* 1994; 46: 157-203.

Hsou- Mou Chang, Pui-Hay P. Pharmacology and application of Chinese Materia Medica. 1986; 1: 17-31.

Huang Q, Iwamoto M, Aoki S, Tanaka N, Tajima K, Yamahara J. Anti-5-hydroxytryptamine effect of galanolactone, diterpenoid isolated from ginger. *J. Chem.Pharm. Bull.* 1991; 39: 397-399.

Hwa- Young Cha, Jeong- Ju Seo, Jeong- Hill park, Kang- Ju Choi, Jin- Tae Hong, Ki- Wan oh. Anxiolytic effects of total saponins fraction from ginseng Radix Rubra on the elevated plus-maze model in mice. *J. Ginseng Res.* 2004; 28(3): 132-135.

Hwang IS, Ho H, Hoffman BB, Reaven GM. Fructose-induced insulin resistance and hypertension in rats. *Hypertension* 1987; 10: 512– 516.

Iismaa TP, Biden TJ, Shine J. G protein-coupled receptors; Heidelberg, Germany: Springer-Verlag. , 1995.

Imaizumi M, Suzuki T, Machida H, Onodera K. A fully automated apparatus for a light/dark test measuring anxiolytic or anxiogenic effects of drugs in mice. *Jpn. J. Psychopharmacol.* 1994; 14: 83-91.

Irwin S, Taber RI, Fox JA, Roth FE. Comparison of perfenazine and fluphenazine enanthates in rats. *Psychopharmacologia* 1968; 12: 441-447.

Iversen SD. 5-HT and anxiety. *Neuropharmacology* 1984; 23: 1553- 1560.

Jackson HC, Nutt DJ. Effects of benzodiazepine receptor inverse agonists on locomotor activity and exploration in mice. *Eur. J. Pharmacol.* 1992; 221: 199- 204.

Jacobs BL, Azmitia EC. Structure and function of the brain serotonin system. *Physiol. Rev.* 1992; 72: 165 -229.

Jayaweera DMA. Medicinal Plant. Part III. Former Supritendent, Royal Botanic Gardens. Peradenia, Srilanka. , 1981: 255.

Jean-Marie L, Guillaume B, Dominique B, Jacques C, Doo-Sup C, Sylvain L, Luc Maroteaux. ras involvement in Signal Transduction by the Serotonin 5-HT<sub>2B</sub> receptor. *J. Biol. Chem.* 1996; 271: 3141-3147.

Jenck R, Martin RJ, Moreau JL. Animal models of panic disorder – emphasis on face and predictive validity. *Eur. Neuropsychopharmacol.* 1996; 6 (suppl. 4): S4- S47.

Jeon BH, Kim CS, Park KS, Lee JW, Park JB, Kim KJ, Kim SH, Chang SJ, Nam KY. Effect of Korean red ginseng on the blood pressure in conscious hypertensive rats. *Gen. Pharmacol.* 2000; 35(3): 135-141.

Jha NK. *Trigonella foenum-graecum*: Fenugreek: Methi. *Phytopharm* 2003; 4: 3-15.

Jones GH, Hernanadez TD, Kendall DA, Marsden CA, Robbins TW. Dopaminergic and serotonergic function following rearing in rats. *Pharmacol. Biochem. Behav.* 1992; 43: 17-35.

Jones M, Mellersh V. A comparison of the exercise response in anxiety states and normal controls. *Psychosom. Med.* 1946; 8: 180- 187.

Juan CC, Fang VS, Hsu YP, Huang YJ, Hsia DB, Yu PC, Kwok CF, Ho LT. Overexpression of vascular endothelin-1 and endothelin-A receptors in a fructose-induced hypertensive rat model. *J. Hypertension* 1988; 12: 1775-1782.

Jung NP, Jin SH. Studies on the physiological and biochemical effects of *Korea red ginseng*. *J. Ginseng. Sci.* 1996; 20 (4): 431-471.

Kahn RS, Van Praag HM, Wizler S, Asnis GM, Barr G. Serotonin and anxiety revisited. *Biol. Psychiat.* 1988a; 23: 189-197.

Kahn RS, Wetzler S, van Praag HM, Asnis GM, Strauman T. Behavioural indications for receptor hypersensitivity in panic disorder. *Psychiatry Res.* 1988b; 25: 101- 104.

Kalkman HO, Engel G, Hoyer D. Three distinct subtypes of serotonergic receptors mediate the triphasic blood pressure response to serotonin in rats. *J. Hypertens.* 1984; (Suppl. 2): S143-S145.

Kasture VS, Deshmukh KV, Chpode CT. Anxiolytic and anticonvulsive activity of *Sesbania grandiflora* leaves in experimental animals. *Phytother. Res.* 2002; 16: 455- 460.

Katholi RE, Naftilon AJ. Importance of renal sympathetic tone in development of DOCA-Salt hypertension in rat. *Hypertension* 1980; 2: 266-272.

Kennett GA. Mechanisms of serotonin affect control. In: Kynurenine and serotonin pathways, Schwartz, R. Young SN and Brown PR (Eds.). Plenum Press. New York. 1991: 231-243.

Kennett GA, Whitton P, Shah K, Curzon G. Anxiogenic effects of *m*CPP and TFMPP in animal models are opposed by 5-HT<sub>1C</sub> receptors antagonists. *Eur. J. Pharmacol.* 1989; 164: 445.

Khandelwal KR. Practical Pharmacognosy, Techniques and experiments; 10<sup>th</sup> edition; Nirali Prakashan. , 2003: 7-10, 13-31, 149-153.

Kim DS, Chang YJ, Zed KU, Zhao P, Liu YQ, Yang CR. Dammarane saponins from *Panax ginseng*. *Phytochemistry* 1995; 40(5): 1493-1497.

Kim HS, Jang CG, Lee MK. Antinarcotic effects of standardized ginseng extract G115 on morphine. *Plant. Med.* 1990; 56(2): 158-163.

Kimura T, Saunders PA, Kim HS, Rheu HH, Oh KN, Ho IK. Interactions of ginsenosides with ligand bindings of GABA<sub>A</sub> and GABA<sub>B</sub> receptors. *Gen. Pharmacol.* 1994; 25(1): 193-199.

Kirtikar KR, Basu BD. Indian Medicinal Plants. 2nd Ed. Vol. 1, Lalit Mohan Basu, Allahabad. , 1993a: 700.

Kirtikar KR, Basu BD. Indian Medicinal Plants. 2<sup>nd</sup> Ed. Vol. 4, Lalit Mohan Basu, Allahabad, 1993b: 2436.

Kiuchi F, Iwakami S, Shibuya M, Hanoka F, Sankawa U. Inhibitors of Prostaglandin biosynthesis from ginger. *Chem. Pharm. Bull.* 1982; 30: 754-757.

Klein DF. False suffocation alarms, spontaneous panics, and related conditions: an integrative hypothesis. *Arch. Gen. Psychiatry* 1993; 50: 306 -317.

Klein E, Zohar J, Geraci MF, Murphy DL, Uhde TW. Anxiogenic effects of mCPP in patients with panic disorder: Comparison to Caffeine's anxiogenic effects. *Biol. Psychiatry* 1991; 30: 973-984.

Klint T. Effects of 8-OH -DPAT and buspirone in a passive avoidance test and in the elevated plus-maze test in rats. *Behav. Pharmacol.* 1991; 2: 481-489.

Ko GN, Elsworth JD, Roth RH, Rifkin BG, Leigh H, Redmond E. Panic-induced elevation of plasma MHPG levels in phobic-anxious patients, effects of clonidine and imipramine. *Arch. Gen. Psychiatry.* 1983; 40: 425-430.

Koob GF, Henrichs SC, Pich EM, Menzaghi F, Baldwin H, Miczek K. The role of corticotrophin-releasing factor in behavioral responses to stress. *Ciba Found Symp.* 1993; 172: 277-289.

Kostich WA, Chen A, Sperle K, Largent BL. Molecular identification and analysis of a novel human corticotrophin-releasing factor (CRF) receptor: The CRF<sub>2γ</sub> receptor. *Mol. Endocrinol.* 1998; 12: 1077-1085.

Kostowki W, Dyr W, Krzascik P. The effects of 5-HT<sub>1A</sub> agonists in animal models of anxiety and depression. *Psychopharmacol.* 1990; 101: S31

Kozicz T, Yanaihara H, Arimura A. Distribution of corticotropin-like immunoreactivity in the central nervous system of the rat. *J. Comp. Neurol.* 1998; 391: 1-10.

Kruk MR. Ethology and pharmacology of hypothalamic aggression in the rat. *Neurosci. Behav. Review* 1991; 15: 527- 538.

Kshama D, Hrishikeshavan I, Shanbhogue R, Munonyedi US (1990). Modulation of baseline behaviour in rats by putative serotonergic agents in three ethoexperimental paradigms. *Behav. Neural. Biol.* 54: 234-253.

Kulkarni SK, Arzi A, Kaul PN. Modification of drug induced catatonia and tremors by quipazine in rats and mice. *Jap. J. Pharmac.* 1980; 30: 129-132.

Kumar S, Sharma A. Anti-anxiety activity studies on homeopathic formulations of *Turnera aphrodisiaca*. *Evid. Based Compliment. Alternat. Med.* 2005; 2 (1): 117-119.

- Kuntz E. Classification and clinical picture of arterial hypertension. *Munch Med Wochenschr* 1970; 112 (41): 1839-1846.
- Ledoux JE, Iwata J, Cicchetti P, Reis DJ. Different projections of the central amygdaloid nucleus mediate autonomic and behavioural correlates of conditioned fear. *J. Neurosci.* 1988; 8: 2517-2529.
- Lee C, Rodgers RJ. Effects of buspirone on antinociceptive and behavioral responses to the elevated plus maze in mice. *Behav. Pharmacol.* 1991; 2: 491- 496.
- Levy FO, Gudermann T, Perez-Reyes E, Birnbaumer M, Kaumann AJ, Birnbaumer L. Molecular cloning of a human serotonin receptor (S12) with a pharmacological profile resembling that of the 5-HT<sub>1D</sub> subtype. *J. Biol. Chem.* 1992; 267: 7553-7562.
- Liebowitz MR, Fyer AJ, Gorman JM, Dillon D J, Appleby I L, Levy G, Anderson S, Levitt M, Palij M, Davies SO, Klein DF. Lactate provocation of panic attacks: I. Clinical and behavioral findings. *Arch. Gen. Psychiatry* 1984; 41: 764-770.
- Lingjaerde O. Lactate-induced panic attacks: possible involvement of serotonin reuptake stimulation. *Acta. Psychiatr. Scand.* 1985; 72: 206- 208.
- Lister RG. The use of plus maze to measure anxiety in the mouse. *Psychopharmacol.* 1987; 92: 180-185.
- Louie AK, Lannon RA, Ketter TA. Treatment of cocaine induced panic disorder. *Am. J. Psychiatry.* 1989; 146: 40-44.
- Lovenberg TW, Liaw CW, Grigoriadis DE, Clevenger W, Chalmers DT, De Souza EB. Cloning and characterization of a functionally distinct corticotrophin-releasing factor subtype from rat brain. *Proc Natl Acad Sci.* 1995; 92: 836-840.

Lovick TA. Interactions between descending pathways from the dorsal and ventral periaqueductal gray matter in the rat. In: *The Periaqueductal Grey matter*. Depaulis A and Bandler R (Eds.), Plenum Press, New York. , 1991: 101-120.

Lovick TA. Integrated activity of cardiovascular and pain regulatory systems: role in adaptive behavioural responses. *Prog. Neurobiol.* 1993a; 40: 631-644.

Lovick TA. The periaqueductal gray-rostral medulla connection in the defence reaction: efferent pathways and descending control mechanisms. *Behav. Brain Res.* 1993b; 58: 19-25.

Lovick TA. Serotonergic influence from nucleus obscurus on neurones in the rat periaqueductal grey matter in the rat. *Behav. Brain Res.* 1993c; 606: 93-98.

Lovick TA. Influence of the dorsal and median raphe nuclei on neurons in the periaqueductal gray matter: role of 5-hydroxytryptamine. *Neuroscience* 1994; 59: 993-1000.

Luchtefeld R, Kostoryz E, Smith RE. Determination of ginsenosides Rb1, Rc and Re in different dosage forms of ginseng by negative ion electrospray liquid chromatography – mass spectroscopy. *J. Agri. Food Chem.* 2004; 52(16): 4953-4956.

Lumb AB. Mechanism of antiemetic effect of ginger. *Anaesthesia* 1993; 48: 1118

Luscombe GP, Mazurkiewicz SE, Heal DJ. The 5-HT<sub>1A</sub> ligand BP 554 mimics the anxiolytic activity of buspirone, gepirone and ipsapirone in the elevated plus maze in rats. *Br. J. Pharmacol.* 1992; 106 (Suppl.): 130.

Lydiard RB, Brawman-Mintzer O, Ballenger JC. Recent developments in the psychopharmacology of anxiety disorders. *J. Consult. Clin. Psychol.* 1996; 64: 660-668.

Maier SF, Grahm RE, Kalman BA, Sutton LC, Wiertelak EP, Watkins LR. The role of the

amygdala and dorsal raphe nucleus in mediating the behavioral consequences of inescapable shock. *Behav. Neurosci.* 1993; 107: 377 -388.

Marahi N, Laguzzi R. Cardiovascular effects of 5-HT<sub>2</sub> and 5-HT<sub>3</sub> receptor agonist stimulation in the nucleus tractus solitarius of spontaneously hypertensive rats. *Brain Res.* 1995; 669 (1): 130-134.

Maranon G. Contribution a l'etude de l'action emotive de l'adrenaline. *Rev. Francaise d'Endocrinologie* 1924; 2: 301- 325.

Martin FJ, Miguez JM, Aldegunde M, Atienza G. Platelet serotonin transport is altered in Streptozotocin-induced diabetic rats. *Life Sci.* 1995; 56: 1807-1815.

Martin GR. Vascular receptors for 5-hydroxytryptamine: distribution, function and classification. *Pharmacol. Ther.* 1994, 62: 283-324.

Martinez FJ, Rizza RA, Romero JC (1994). High-fructose feeding elicits insulin resistance, hyperinsulinism, and hypertension in normal mongrel dogs. *Hypertension* 23: 456-463.

Maryadele J, O'Neil, Ann Smith, Patricia EH, John RO, Jo Ann RG, Mary Ann D'Arecca. The Merk Index. 13<sup>th</sup> Edition, Merck and Co., INC. Whitehouse station, NJ., 2001: 786,1813.

Masahiro I. Animal models of anxiety based on exploratory behaviour in rodents. *Meth. Find. Exp. Clin. Pharmacol.* 1996; 18 (Suppl.A): 31-38.

Matsumura Y, Hashimoto N, Taira S, Kuro T, Kitano R, Ohkita M, Opgenorth TJ, Takaoka M. Different contributions of endothelin-A and endothelin-B receptors in the pathogenesis of deoxycorticosterone acetate-salt induced hypertension in rats. *Hypertension* 1999; 33: 759-765.

McKinney WT. Animal models in psychiatry and neurology, In: Hanin I and Usdin E (Eds.), Pergamon Press, Oxford., 1979: 117.

Mendham J, Denney RC, Barnes JD, Thomas M. Vogel's Quantitative Chemical Analysis; 6<sup>th</sup> Ed, Pearson Education Ltd., 2002: 753-755.

Mills SY. Essential book of herbal medicine, Penguin Books Ltd, London., 1991: 530-536.

Montgomery KC. The relation between fear induced by novel stimulation and exploratory behaviour. *J. Comp. Physiol. Psychol.* 1958; 48: 254-260.

Morris RG. Spatial localization does not require the presence of local cues. *Learning and Motivation* 1981; 12: 239-260.

Morton JF. Mucilaginous plants and their uses in medicine. *J. Ethnopharmacol.* 1990; 29: 215-266.

Moser PC. An evaluation of the elevated plus maze test using the novel anxiolytic buspirone. *Psychopharmacol.* 1989; 99: 48-53.

Nagai Y, Nishio Y, Nakamura T, Maegawa H, Kikkawa R, Kashiwagi. Amelioration of high fructose-induced metabolic derangements by activation of PPARalpha. *Am. J. Physiol. Endocrinol. Metabol.* 2002; 282(5): E1180-E1190.

Nagawa M, Nasjletti A. Plasma kinin concentration in deoxycorticosterone hypertension. *Hypertension* 1988; 11: 411-415.

Nakatsu K, Owen JA. A microprocessor-based animal monitoring system. *J. Pharmacol. Meth.* 1980; 3: 71-82

Nashold R S, Wilson N P, Slaughter CS. Sensations evoked by stimulation of the midbrain in man. *J. Neurosurg.* 1969; 30: 14-24.

Nutt DJ, Cowen PJ. Diazepam alters brain 5-HT function in man; implications for the acute and chronic effects of benzodiazepines. *Psychol. Med.* 1987; 17: 601- 607.

Nutt DJ, Glue P, Lawson C, Wilson S. Evidence for altered benzodiazepine receptor sensitivity in panic disorder: effects of the benzodiazepine receptor antagonist flumazenil. *Arch. Gen. Psychiatry* 1990; 47: 917-925.

Nutt DJ, Glue P. Clinical pharmacology of anxiolytics and antidepressants: a psychopharmacological perspective. *Pharmacol. Ther.* 1989; 44: 309- 334.

Ogawa T, Linz W, Scholkens BA, deBold JA. Variable renal natriuretic factor gene expression in hypertension. *Hypertension* 1999; 33: 1342-1347.

Ogren SO. Central Serotonin neurons and learning in rat. In: Osborne NN (Ed.), *Biology of serotonergic transmission*, Chichester: John Willey and Sons., 1982: 317.

Oh JS, Park CW and Moon DY. Effects of *Panax ginseng* on the central nervous system. *Kor. J. Pharmacol.* 1969; 5: 23-28.

Oksenberg D, Marsters SA, O'Dowd BF, Jin H, Havlik S, Peroutka SJ, Ashkenazi A. A single amino-acid difference confers major pharmacological variation between human and rodent 5-HT<sub>1B</sub> receptors. *Nature* 1992; 360: 161-163.

Oliver B, van Wijngaarden I, Soudijn W. 5-HT<sub>3</sub> receptor antagonists and anxiety: a preclinical and clinical review. *Eur. Neuropsychopharmacol.* 2000; 10: 77-95.

Paintal AS. Sensory mechanisms involved in the Bezold-Jarisch effect. *Aust. J. Exp. Biol.*

*Med. Sci.* 1973; 51: 3-15.

Pal BC, Achari B, Yoshikawa K, Arihara S. Saponins from *Albizzia lebbeck*. *Phytochem.* 1995; 38: 1287-1291.

Parent A, Descaries I, Beaudct A. Organisation of ascending serotonin systems in the adult rat brain. A radioautographic study after intraventricular administration of [H] 5-hydroxytryptamine. *Neuroscience* 1981; 6: 115 –138.

Patil PN, Gulati OD, Balaraman R. Topics in the history of Pharmacology. In: Ayurveda through the ages, 1<sup>st</sup> Ed, B. S. Shah Prakashan., 2005: 18

Pellow S, Chopin P, File SE, Briley M. Validation of open: closed arm entries in the elevated plus-maze as a measure of anxiety in the rat. *J. Neurosci.* 1985; 14: 149-167.

Pellow S, File SE. Anxiolytic and anxiogenic drug effects on exploratory activity in an elevated plus maze: a novel test of anxiety in rats. *Pharmacol. Biochem. Behav.* 1986; 24: 525-529.

Pellow S, Johnston AL, File SE. Selective agonists and antagonists for 5-Hydroxytryptamine receptor subtypes and interactions with yohimbine and FG7142 using the elevated plus maze in the rat. *J. Pharm. Pharmacol.* 1987; 39: 917-928.

Peroutka SJ, Snyder SH. Multiple serotonin receptors: differential binding of [3H] 5-hydroxytryptamine, [3H] lysergic acid diethylamide and [3H] spiroperidol. *Mol. Pharmacol.* 1979; 16: 687-699.

Perrin M, Donaldson C, Chen R, Blount A, Berggren T, Bilezikjian L. Identification of a second corticotrophin-releasing factor receptor gene and characterization of a cDNA expressed in heart. *Proc. Natl. Acad. Sci.* 1995; 92: 2969-2973.

Pharand C, Ackman ML, Jakevicious CA, Paradiso-Hardy FL. Use of OTC and herbal products in patients with cardiovascular disease. *Ann. Pharmacother.* 2003; 37(6): 899-904.

Pitts FM, Allen RE. Biochemical induction of anxiety. In W. E. Fann, I. Karacan, P. Porkorny, & R. L. Williams (Eds.), *Phenomenology and Treatment of anxiety*, New York: Spectrum Publications., 1979: 125-140.

Pitts FM, McClure JN. Lactate metabolism in anxiety neurosis. *N. Engl. J. Med.* 1967; 277: 1329- 1336.

Price LH, Goddard AW, Barr LC, Goodman WK. Pharmacological Challenges in anxiety disorders. In: Bloom FE and Kupfer DJ, editors. *Psychopharmacology: the Fourth Generation of Progress*, New York: Raven Press., 1995: 1311-1323.

Primus RJ, Yevich E, Baltazar C, Gallager DW. Autoradiographic localization of CRF<sub>1</sub> and CRF<sub>2</sub> binding sites in adult rat brain. *Neuropsychopharmacology* 1997; 17: 308-316.

Pyke RE, Greenberg HS. Norepinephrine challenges in panic patients. *J. Clin. Pharmacol.* 1986; 6: 279- 285.

Qian DS, Liu ZS. Pharmacological studies of anti motion sickness actions of ginger. *Chung Kuo Chung Hsi I Chien Ho Tsa Chih* 1992; 12 (2): 95-98.

Rabbani M, Sajjadi SE, Rarei HR. Anxiolytic effects of *Stachys lavandulifolia* on the elevated plus maze model of anxiety in mice. *J. Ethnopharmacol.* 2003; 89: 271-276.

Rainey JM, Pohl RB, Williams M, Knitter E, Freedman RR, Ettetdgui E. A comparison of lactate and isoproterenol anxiety states. *Psychopathology* 1984; 17 (suppl.1): 74 -82.

Ramage AG. 5-HT receptors -an understanding. Excerpt from 38<sup>th</sup> IPS-05, Chennai. Topic: Role of central 5-HT receptors in the control of the heart., 2005.

Rapport MM, Green AA, Page IH. Serum vasoconstrictor (serotonin). IV. Isolation and characterization. *J. Biol. Chem.* 1948; 176: 1243-1251.

Rathod SP, Shah N, Balaraman R. Antihypertensive effect of dietary calcium and diltiazem, a calcium channel blocker on experimentally induced hypertensive rats. *Indian J. Pharmacol.* 1997; 29: 99-104.

Reaven GM. Role of insulin resistance in human disease. *Diabetes* 1988; 37: 1595-1607.

Reaven GM, Ho H, Hoffman BB. Effects of a fructose-enriched diet on plasma insulin and triglyceride concentration in SHR and WKY rats. *Horm. Metab. Res.* 1990; 22 (7): 363-365.

Redfern WS, Williams A. Acute effects of the centrally acting drugs on the behaviour of rats in an elevated X- maze and a partially shaded holeboard. *Br. J. Pharmacol.* 1989; 98 (Suppl.): 683.

Redgrave P, Dean P. Tectal inputs to PAG. In: The Periaqueductal Grey Matter. Depaulis A and Bandler R (Eds.), Plenum Press. New York., 1991: 199-221.

Redmond DE, Huang Y. Current concepts: II. New evidence for a locus coeruleus-norepinephrine connection with anxiety. *Life Sci.* 1979; 25: 2149- 2162.

Rehfeld JF. Neuronal cholecystokinin: one or multiple transmitter. *J. Neurochem.* 1985; 44: 1- 10.

Reid JC. Central and peripheral autonomic control mechanisms. In R. Bannister (Ed.), *Autonomic Failure*, Oxford Univ. Press., 1983: 17-35.

Reiser S. Effects of dietary sugars in metabolic risk factors associated with heart disease. *Nutr. Health* 1985; 3: 203–216.

Ribes G. Effect of fenugreek seeds on endocrine pancreatic secretions in dogs. *Ann. Nutr. Metab.* 1984; 28: 37–43.

Richey JM, Si X, Halter JB, Webb RC. Fructose perfusion in rat mesenteric arteries impairs endothelium-dependent vasodilation. *Life Sci.* 1998; 62: PL55–PL62.

Ritter JM, Dokotor HS, Benjamin N. Paradoxical effect of bicarbonate on cytoplasmic pH. *Lancet* 1990; 335: 1243–1246.

Roca J, Artaiz I, Delrio J. 5-HT<sub>3</sub> receptor antagonists in development as anxiolytics. *Exp. Opin. Invest. Drugs* 1995; 4: 333–342.

Rodgers RJ, Cole JC. The elevated plus-maze: pharmacology, methodology and ethology. In: Cooper SJ, Hendrie CA, (Ed.), *Ethology and Psychopharmacology*, Chichester: John Wiley and Sons Ltd., 1994: 9–44.

Romanski LM, Ledoux JE. Equipotentiality of thalamo-amygdala and thalamo-corticoamygdala circuits in auditory fear conditioning. *J. Neurosci.* 1992; 12: 4501–4509.

Romanski. LM, Clugnet MC, Bordi F, Ledoux JE. Somatosensory and auditory convergence in the lateral nucleus of the amygdala. *Behav. Neurosci.* 1993; 107: 444–450.

Rosen JB, Hitchcock JM, Miserendino MJD, Falls WA, Campeau S, Davis M. Lesions of the perirhinal cortex but not of the frontal, medial prefrontal, visual, or insular cortex block fear-potentiated startle using a visual conditioned stimulus. *J. Neurosci.* 1992; 12: 4624–4633.

Rosen P, Ohly P, Gleichmann H. Experimental benefit of moxonidine on glucose

metabolism and insulin secretion in the fructose-fed rat. *J. Hypertension (Suppl)* 1997; 15(1): S31-S38.

Rothstein JD, Garland W, Puia G, Guidotti A, Weber R J, Costa E. Purification and characterisation of naturally occurring benzodiazepine receptor ligands in rat and human brain. *J. Neurochem.* 1992a; 58: 2102- 2115.

Rothstein JD, Guidottie A, Costa E. Release of endogenous benzodiazepine receptor ligands (endozepines) from cultured neurons. *Neurosci. Lett.* 1992b; 143: 210-214.

Russell A, Banes A, Berlin H, Fink GD, Watts SW. 5-HT<sub>2B</sub> receptor function is enhanced in N<sup>o</sup>- nitro-L-arginine hypertensive rats. *J. Pharmacol. Exp. Therap.* 2002; 303: 179-187.

Sanders E, Bush SE. 5-hydroxytryptamine (Serotonin) receptor agonists and antagonists. In: Godman and Gilman's The Pharmacological basis of Therapeutics. 9<sup>th</sup> international edition, McGraw Hill., 1996: 249-269.

Sanderson WC, Rapee RM, Barlow DH. The influence of an illusion of control on panic attacks induced via inhalation of 5.5% carbon dioxide-enriched air. *Arch. Gen. Psychiatry* 1989; 46: 157- 162.

Santhoshkumari KS, Devi KS. Pharmacological and biochemical effects of few indigenous drugs. *Indian J. Pharmacol.* 1991; 23: 160-163.

Satyavati GV. Some traditional medical systems and practices of global importance. *Indian J. Med. Res.* 1982; 76: 1-26.

Sawchenko PE, Swanson LW. Organization of CRF immunoreactive cells and fibers in the rat brain: immunohistochemical studies. In: DeSouza EB, Nemeroff CB (Eds). Corticotropin-releasing factor: basic and clinical studies of a neuropeptide, Boca Raton, FL,

CRC Press., 1990: 29-52.

Saxena PR. The effects of antimigraine drugs on the vascular responses by 5-hydroxytryptamine and related biogenic substances on the external carotid bed of dogs: possible pharmacological implications to their antimigraine action. *Headache* 1972; 12: 44-54.

Saxena PR. Serotonin receptors: subtypes, functional responses and therapeutic relevance. *Pharmacol. Ther.* 1995; 66: 339-368.

Saxena PR, Villalon CM. Cardiovascular effects of serotonin agonists and antagonists. *J.Cardiovasc. Pharmacol.* 1990; 15: S17-S34.

Saxena PR, Villalon CM. 5-Hydroxytryptamine: a chameleon in the heart. *Trends Pharmacol. Sci.* 1991; 12: 223-227.

Saxena PR. Cranial arteriovenous shunting, an in vivo animal model for migraine. In *Experimental headache models*. Olesen J and Moskowitz MA (Eds.), Philadelphia: Lippincott-Raven Publishers., 1995: 189-198.

Seibyl JP, Krystal JH, Price LH, Woods SW, D'Amico C, Heninger GR, Charney DS. Effects of ritanserin on the behavioral, neuroendocrine and cardiovascular responses to meta-chlorophenylpiperazine in healthy human subjects. *Psychiatry Res.* 1991; 38: 227-236.

Seyle H, Bois P. The hormonal production of nephrosclerosis and periarteritis nodosa in the primate. *Br. Med. J.* 1957; 1: 183-186.

Shader RI, Greenblatt DJ. The pharmacotherapy of acute anxiety. In: Bloom FE and Kupfer DJ (Eds.), *Psychopharmacology: the Fourth Generation of Progress*, New York: Raven Press. 1995: 1341-1348.

Shami J, Gold Schmied A, Ahronson Z, Sulman FG. Hypoglycemic effect of *Trigonella foenum-graecum* and *Lupinus termis* (Leguminosae) seeds and their major alkaloids in alloxan diabetic and normal rats. *Arch. Int. Pharmacodynamics Ther.* 1974; 210: 27-36.

Sharma M, Shukla S. Hypoglycemic effect of ginger. *J. Res. Ind. Med. Yoga Homeopath.* 1977; 12: 127-130.

Sharma ML. Antihypertensive activity of scoparone. *Indian J. Pharmacol.* 1985; 17: 219-22.

Sharma RD. An evaluation of hypocholesterolaemic factor of fenugreek seeds (*Trigonella foenum-graecum*) in rats. *Nutr.Rep.Int.* 1986; 33: 669-677

Sharma SS, Gupta YK. Reversal of Cisplatin induced delay in gastric emptying in rats by ginger (*Zingiber officinale*). *J. Ethnopharmacol.* 1988; 62 (1): 49-55.

Shingala JR, Balaraman R. Antihypertensive effect of 5-HT<sub>1A</sub> agonist buspirone and 5-HT<sub>2B</sub> antagonists in experimentally induced hypertension in rats. *Pharmacology* 2005; 73: 129-139.

Shinozaki K, Kashiwagi A, Nishio Y, Okamura T, Yoshida Y, Masada M, Toda N, Kikkawa R. Abnormal biopterin metabolism is a major cause of impaired endothelium-dependent relaxation through nitric oxide/O<sup>2-</sup> imbalance in insulin-resistant rat aorta. *Diabetes* 1999; 48: 2437-2445.

Shukla YN, Thakur RS. Saponins and other constituents from the rhizomes of *Panax pseudoginseng* subs.himalaicus var.angustifolius. *Phytochemistry* 1986; 25(9): 2201-2203.

Shukla YN, Thakur RS. An acetylated saponin from *Panax pseudoginseng* subs. himalaicus var.angustifolius. *Phytochemistry* 1988; 27(9): 3012-3014.

Simiand J, Keane PE, Morre M. The staircase test in mice: A simple and efficient procedure

for primary screening of anxiolytic agents. *Psychopharmacol.* 1984; 84: 48–53

Smith A, Nutt D. Noradrenaline and attention lapses. *Nature* 1996; 380: 291.

Soderpalm B, Hijorth S, Engel JA. Effects of 5-HT<sub>1A</sub> receptor agonists and L-5-HTP in Montgomery's conflict test. *Pharmacol. Biochem. Behav.* 1989; 32: 259-265.

Southwick SM, Bremner JD, Rasmusson A, Morgan CA III, Arnsten A, Charney DS. Role of norepinephrine in the pathophysiology and treatment of posttraumatic stress disorder. *Biol. Psychiatry* 1999; 46: 1192-1204.

Srivastava KC. Aqueous extract of onion, garlic and ginger inhibit platelet aggregation. *Biomed. Biochem. Acta.* 1984a; 43: S335- S346.

Srivastava KC. Effects of aqueous extracts of onion, garlic and ginger on platelet aggregation and metabolism of arachidonic acid in the blood vascular system: in vitro study. *Prostaglandins Leukot. Med.* 1984b; 13: 227-235.

Stavro Mark, Minna Woo, Vladimir Vuksan. Korean red ginseng lowers blood pressure in individuals with hypertension. *Am. J. Hypertension* 2004; 17: S33.

Steimer T. Dialogues in clinical Neurosciences-Anxiety I. In: State of the art: The biology of fear and anxiety related behaviours. 2002; 4(3): 236-237.

Suekawa M *et al.* Pharmacological studies on ginger .V. Pharmacological comparison between (6)- shogaol and capsaicin. *Folia. Pharmac. Japonica* 1986; 88: 339-347.

Sullivan GM, Coplan JD, Kent JM, Gorman JM. The noradrenergic system in pathological anxiety: a focus on panic with relevance to generalized anxiety and phobias. *Biol. Psychiatry.* 1999; 46: 1205-1218.

Sun XB, Matsumoto T, Yamada H. Anti-ulcer activity and mode of action of the polysaccharide fraction from the leaves of *Panax ginseng*. *Plant Med.* 1992; 58 (5): 432-435.

Sung J, Han KH, Zo JH, Park HJ, Kim CH, Oh BH. Effect of red ginseng upon vascular endothelial function in patients with essential hypertension. *Am. J. Chin. Med.* 2000; 28(2): 205-216.

Sung-Ha Jui, Jin-Kyu Park, Ki-Yeul Nam, Sue-Nie park. Korean red ginseng saponins with low ratios of protopanaxodiol and protopanaxotriol saponin improve scopolamine induced learning disability and spatial working memory in mice. *J. Ethnopharmacol.* 1999; 66: 123-129.

Suzuki M, Nomura C, Odaka H, Ikeda H. Effect of an insulin sensitizer, pioglitazone, on hypertension in fructose-drinking rats. *Jpn. J. Pharmacol.* 1997; 74: 297-302.

Swanson LW, Sawchenko PE, Rivier J, Vale WW. Organization of ovine corticotrophin-releasing factor immunoreactive cells and fibers in the rat brain: an immunohistochemical study. *Neuroendocrinology* 1983; 36: 165-186.

Takagawa Y, Berger ME, Hori MT, Tuck ML, Golub MS. Long-term fructose feeding impairs vascular relaxation in rat mesenteric arteries. *Am. J. Hypertens.* 2001; 14: 811-817.

Takahashi LK, Kalin NH. Role of corticotrophin-releasing factor in mediating the expression of defensive behaviour. In: Blanchard RJ, Brain PF, Parmigiani S, (Eds.), *Ethoexperimental approaches to the study of behaviour*, Norwell, MA: Kluwer Academic Publishers., 1989: 580-594.

Tancer ME, Mailman RB, Stein MB, Mason GA, Carson SW, Golden RN. Neuroendocrine responsivity to monoaminergic system probes in generalized social phobia. *Anxiety* 1994; 1: 216-223.

Targum S. Differential responses to anxiogenic challenge studies in patients with major depressive disorder and panic disorder. *Biol. Psychiatry* 1990; 28: 21- 34.

Taylor DP, Eison M S, Riblet LS, Vandermaelen CP. Pharmacological and clinical effects of buspirone. *Pharmacol. Biochem. Behav.* 1985; 23: 687- 694.

Teeguarden R. Chinese Tonic Herbs, Japan Publishing Inc, Tokyo., 1994: 99.

Teng CM, Kuo SC, Ko FN, Lee JC, Lee LG, Chen SC, Huang TF. Antiplatelet actions of panaxynol and ginsenosides isolated from ginseng. *J. Biochem. Biophys.* 1989; 990(3): 315-320.

Thiébot MH, Soubrié P, Simon P, Boissier JR. Dissociation de deux composantes du comportement chez le Rat sous l'effet de psychotropes. Application à l'étude des anxiolytiques. *Psychopharmacologia* 1973; 31: 77-90.

Thomas P. Panic attacks, hyperventilation and hypertension. *J Clin Hypertens.* 2000; 2(4): 287-289.

Tinuper P, Montagna P, Cortelli P, Avonie P, Lugaresi A, Schoch P, Bonetti EP, Gallassi R. Idiopathic recurring stupor: a case with possible involvement of the gamma-aminobutyric acid (GABA) ergic system. *Ann. Neurol.* 1992; 31: 503- 506.

Tork I, Hornung JP. Raphe nuclei and the serotonergic system. In: G. Paxinos (Ed.), *The Human Nervous System*, Orlando: Academic Press., 1990: 1001-1022.

Traber J, Glaser T. 5-HT<sub>1A</sub> receptor-related anxiolytics. *Trends Pharmac. Sci.* 1987; 8: 432-437.

Tsang D, Yeung HW, Tso W, Peck H, Lay WP. Effect of saponins isolated from ginseng on the uptake of neurotransmitters in rat brain synaptosomes. *Neurosci. Lett.* 1983; 12 (suppl.):

S20.

Tsukamoto K, Kurihara T, Nakayama N, Isogai O, Ito S, Komatsu K *et al.* Pressor response to serotonin injected into the nucleus tractus solitarius of Sprague- Dawley rats and spontaneously hypertensive rats. *Clin. Exp. Hypertens.* 2000; 22(1): 63- 73.

Turner RA. Screening procedures in Pharmacology, New York: Academic Press., 1965: 22-41.

Turner RA. Screening procedures in Pharmacology, New York: Academic Press., 1972a: 99.

Turner RA. Screening procedures in pharmacology, New York: Academic Press., 1972b: 30-34.

Uhde TW, Boulenger JP, Vittone BJ, Siever LJ, Post RM. Human anxiety and noradrenergic function: preliminary studies with caffeine, clonidine and yohimbine. In: Proceedings of the Seventh World Congress of Psychiatry, Vienna , New York: Plenum., 1983: 693-698.

Une HD, Sarveiya VP, Pal SC, Kasture VS, Kasture SB. Nootropic and anxiolytic activity of saponins of *Albizzia lebbeck* leaves. *Pharmacol. Biochem. Behav.* 2001; 69: 439- 444.

Vale W, Spiess J, Rivier C, Rivier J. Characterization of a 41-residue ovine hypothalamic peptide that stimulates secretion of corticotrophin and  $\alpha$ -endorphin. *Science* 1981; 213: 1394-1397.

Van Den Hout MA, Griez E. Panic symptoms after inhalation of carbon dioxide. *Br. J. Psychiatry* 1984; 144: 503-507.

Vane JR. A sensitive method for the assay of 5-hydroxytryptamine. *Br. J. Pharmac.* 1957; 12: 344-349.

Vasdev S, Ford CA, Longrich L, Gadag V, Wadhawan S. Role of aldehydes in fructose induced hypertension. *Mol. Cell. Biochem.* 1998; 181: 1–9.

Vaughan J, Donaldson C, Bittencourt J, Perrin MH, Lewis K, Sutton S. Urocortin, a mammalian neuropeptide related to fish urotensin I and to corticotrophin-releasing factor. *Nature* 1995; 378: 287-292.

Verma S, Bhanot S, McNeill JH. Antihypertensive effects of metformin in fructose-fed hyperinsulinemic, hypertensive rats. *J. Pharmacol. Exp. Ther.* 1994; 271: 1334–1337.

Verma S, Bhanot S, McNeill JH. Decreased vascular reactivity in metformin-treated fructose-hypertensive rats. *Metabolism* 1996; 45: 1053–1055.

Viana MB, Tomaz C, Graeff FG. The elevated T-maze: A new animal model of anxiety and memory. *Pharmacol. Biochem. Behav.* 1994; 49: 549-554.

Villalón CM, Centurión D, Luján-Estrada M, Terrón JA, Sánchez-López A. Mediation of 5-HT-induced external carotid vasodilatation in GR127935-pretreated vagosympathectomized dogs by the putative 5-HT<sub>7</sub> receptor. *Br. J. Pharmacol.* 1997; 120: 1319-1327.

Vishwakarma SL, Pal SC, Kasture VS, Kasture SB. Anxiolytic and antiemetic activity of *Zingiber Officinale*. *Phytother. Res.* 2002; 16: 621-626.

Vita N, Laurent P, Lefort S, Chalon P, Lelias JM, Kaghad M. Primary structure and functional expression of mouse pituitary and human brain CRF receptors. *FEBS Lett.* 1993; 335: 1-5.

Vogel GH. Drug discovery and evaluation. Pharmacological Assays, 2nd Ed, Springer – Verlag, Berlin Heidelberg., 2002a: 176.

Vogel GH. Drug Discovery and Evaluation. Pharmacological Assays, 2nd Ed, Springer-Verlag, Berlin Heidelberg. 2002b: 122.

Vogel GH. Drug Discovery and Evaluation. Pharmacological Assays, 2nd Ed, Springer-Verlag, Berlin Heidelberg., 2002c: 172.

Vogel JR., Beer B, Clody DE. A simple and reliable conflict procedure for testing anti-anxiety agents. *Psychopharmacologia* 1971; 21: 1-7.

Wada T, Fakuda N. Effects of DN-2337, a new anxiolytic, diazepam and buspirone on exploratory activity of the rat in an elevated plus maze. *Psychopharmacol.* 1991; 104: 444-450.

Waeber R, Adler RH, Schwank A, Galeazzi RL. Dyspnea proneness to CO<sub>2</sub> stimulation and personality (neuroticism, extraversion, MMPI factors). *Psychother. Psychosom.* 1982; 37: 119- 123.

Wainscott D, Cohen ML, Schenck KW, Au JE, Nissen JS, Baez M, Kursar JD, Luca VL, Nelson DL. Pharmacological Characteristics of the newly cloned rat 5-HT<sub>2F</sub> receptor. *Mol. Pharmacol.* 1993; 43: 419-426.

Wainscott DB, Lucaites VL, Kursar JD, Baez M, Nelson DL. Pharmacological characterization of the human 5-hydroxytryptamine<sub>2B</sub> receptor: evidence for species differences. *J. Pharmacol. Exp. Therap.* 1996; 276: 720-727.

Walker LG. The measurement of anxiety. *Postgrad Med J.* 1990; 66(2): S11-17.

Wallis CJ, Lal H. A discriminative stimulus produced by 1-3(chlorophenyl) piperazine (mCPP) as a putative animal model of anxiety. *Prog. Neuropsychopharmacol. Biol. Psychiatry* 1998; 22: 547-565.

Watts SW. The development of enhanced arterial serotonergic hyperresponsiveness in mineralocorticoid hypertension. *J. Hyp.* 1998; 16: 811-822.

Watts SW, Baez M, Webb RC. The 5-hydroxytryptamine<sub>2B</sub> receptor and 5-HT receptor signal transduction in mesenteric arteries from deoxycorticosterone acetate-salt hypertension. *J. Pharmacol. Exp. Therap.* 1996; 277: 1103-1113.

Watts SW, Gilbert L, Webb RC. 5-Hydroxytryptamine<sub>2B</sub> receptor mediates contraction in the mesenteric artery of mineralocorticoid hypertensive rats. *Hypertension* 1995; 26: 1056-1059.

Weinshank RL, Zgombick JM, Macchi MJ, Branchek TA, Hartig PR. Human serotonin 1D receptor is encoded by a subfamily of two distinct genes: 5-HT<sub>1Dα</sub> and 5-HT<sub>1Dβ</sub>. *Proc. Natl. Acad. Sci.* 1992; 89: 3630-3634.

Weiss R. *Herbal Medicine*, Beaconsfield Publishers Ltd., Beaconsfield., 1988:176.

Westenberg H, den Boer J. Serotonin function in panic disorder effect of 5-hydroxytryptophan in patients and controls. *Psychopharmacology* 1989; 98: 283-285.

Wielosz M, Kleinrok Z. Lithium induced head twitches in rats. *J. Pharm. Pharmacol.* 1979; 31: 410-414.

Wilson MA. GABA physiology: modulation by benzodiazepines and hormones. *Crit. Rev. Neurobiol.* 1996; 10: 1- 37.

Wren RC. *Potter's New Encyclopedia of Botanical Drugs and Preparations*, C.W. Daniel Company, Saffron Walden, UK., 1988: 129-130.

Wurch T, Colpaert FC, Pauwels PJ. Chimeric receptor analysis of the ketanserin binding site

P/TH  
11472

in the human 5-Hydroxytryptamine<sub>1D</sub> receptor: importance of the second extracellular loop and fifth transmembrane domain in antagonist binding. *Mol. Pharmacol.* 1998; 54: 1088-1096.

Yamahara J *et al.* Chologogic effect of ginger and its active constituents. *J. Ethnopharmacol.* 1985; 13: 217-225.

Yamahara J, Mochizuki M, Rong HQ, Matsuda H, Fujimura H. The anti-ulcer effects in rats of ginger constituents. *J Ethnopharmacol.* 1988; 23: 299-304.

Yamahara J, Rong HQ, Iwamoto M, Naitoh Y, Kitani T, Fugimura H. Inhibition of cytotoxic drug induced vomiting in suncus by a ginger constituent. *J. Ethnopharmacol.* 1989; 27: 353-355.

Yerkes RM. Psychological examining in the United States Army. *Memoirs Natl. Acad. Sci.* 1921; 15: 1-16.

Yeung Him-Che. Handbook of Chinese herbs and formulas. Institute of Chinese medicine. Los Angeles., 1985.

Yocca FD. Current and future trends in anticonvulsant, anxiety and stroke therapy. In: Meldrum BS and Williams M (Eds.), Wiley-Liss, New York., 1990: 145.

Young R, Johnson DN. A fully automated light/dark apparatus useful for comparing anxiolytic agents. *Pharmac. Biochem. Behav.* 1991; 40: 739-743.

Zavaroni I, Sander S, Scott S, Reaven GM. Effect of fructose feeding on insulin secretion and insulin action in the rat. *Metabolism* 1980; 29: 970-973.

Ziegler DR, Cass WA, Herman JP. Excitatory influence of the locus coeruleus in hypothalamic-pituitary-adrenocortical axis responses to stress. *J. Neuroendocrinol.* 1999; 11:

361-369.

Zierer R. Prolonged infusion of *Panax ginseng* saponins into the rat does not alter the chemical and kinetic profile of hormone from the posterior pituitary. *J. Ethnopharmacol.* 1991; 34(2/3): 269-274.

Zohar J, Mueller EA, Insel TR, Zohar-Kadouch R C, Murphy DL. Serotonergic responsiveness in obsessive-compulsive disorder. *Arch. Gen. Psychiatry* 1987; 44: 946-951.