

NIN SCIENTIFIC PUBLICATIONS 2013.

A PAPERS PUBLISHED IN SCIENTIFIC JOURNALS

1. Anand Kumar K., Lalitha A., Pavithra D., Padmavathi, IJN, Manisha Ganeshan , Rajender Rao K, Venu L.,Balakrishna N, Hari Shanker N, Umakar Reddy S, Chandak GR, Sengupta S, Raghunath M: Maternal dietary folate and/or vitamin B12 restrictions alter body composition (adiposity) and lipid metabolism in Wistar rat offspring. *J Nutr Biochem.* 24:25-31,2013.
2. Anil Kumar P, Bhanuprakash Reddy G: Nutrition & metabolic syndrome. *Rev Endocr Metab Disord.* 14:217, 2013.
3. Anil Kumar P, Swathi Chitra P, Bhanuprakash Reddy G: Metabolic syndrome and associated chronic kidney diseases: nutritional interventions. *Rev Endocr Metab Disord.* 14:273-286,2013.
4. Ankulu M, Aparna N, Raju Naik V, Amol Shirfule, Khandare AL: Putative ligand-target docking studies of human AMPA selective ionotropic glutamate receptors reveal that β-ODAP has high binding affinity compared to tyrosine and glutamate. *Int Res J Biochem Bioinformatics.* 3:130-139,2013.
5. Arlappa N: Vitamin A deficiency control measures: importance of vitamin A supplementation as a public health policy in the Indian context. *J Pub Health Policy.* 34:538-548,2013.
6. Arlappa N, Aatif Qureshi I, Srinivas R: Fluorosis in India; an overview. *Int J Res Dev Health.* 1:97-102,2013.
7. Bailey PK, Charles RV Tomson, Sanjay Kinra, Shah Ebrahim, Radha Krishna KV , Hannah Kuper, Dorothea Nitsch, Yoav Ben-Shlomo : Differences in estimation of creatinine generation between renal function estimating equations in an Indian population: cross-sectional data from the Hyderabad arm of the Indian migration study. *BMC Nephrology.* 14:30, 2013.
8. Bailey PK, Charles RV Tomson, Sanjay Kinra, Shah Ebrahim, Radhakrishna KV, Hannah Kuper, Dorothea Nitsch, Yoav Ben-Shlomo: The Effect of rural-to-urban migration on renal function in an Indian population: cross - sectional data from the Hyderabad arm of the Indian migration study *BMC Nephrology.* 14:240, 2013.
9. Balakumar M, Saravanan N, Prabhu D, Bhaskaran Regin, Bhanuprakash Reddy G, Viswanathan Mohan, Mohan Rema, Balasubramanyam M: Benefits of early glycemic control by insulin on sensory neuropathy and cataract in diabetic rats. *Indian J Exp Biol.*51:56-64,2013.
10. Bamji MS, Murthy PVVS., Vishnuvardhana Rao M, Tara MS: Development of rural adolescent girls through scientific and social engineering and skill development. *Indian. J. Nutr. Dietet.* 50:102-110, 2013.

11. Bhat M, Kalam R, Qadri SS, Madabushi S, Ismail A: Vitamin D deficiency induced muscle wasting occurs through the ubiquitin proteasome pathway and is partially corrected by calcium in male rats. *Endocrinology*. 154:4018-4029,2013.
12. Bindu N , Rajanna Ajumeera, Anitha Chauhan, Balakrishna N, Raghunath M, Ayesha Ismail. *Murraya koenigii* leaf extract inhibits proteasome activity and induces cell death in breast cancer cells. *BMC Complement Altern Med.*.. 13:7,2013.
13. Chalamaiyah M, Jyothirmayi T, Bhaskarachary K, Vajreswari A, Hemalatha R, Dinesh Kumar B: Chemical composition, molecular mass distribution and antioxidant capacity of rohu (*Labeo rohita*) roe (egg) protein hydrolysates prepared by gastrointestinal proteases. *Food Res. Int.* 52:221-229,2013.
14. Debolina Sarkhel, Manoj Kumar, Sudarshan Reddy V, Durgaprasad L, Hanumanth Reddy Ch, Hemalatha Rajkumar : Effects of active components of lactobacillus strains on cancer cell proliferation and inflammatory markers in vitro. *Int J Cell Sci. Biotechnol.* 1:111-115,2013.
15. Dinesh Kumar B, Uday Kumar P, Prasanna Krishna T, Kalyanasundaram S, Suresh P, Jagadeesan V, Hariharan S, Nadamuni Naidu A, Kamala Krishnaswamy: DNA vaccines: getting closer to becoming a reality: purified vero cell-derived inactivated rabies virus vaccine-safety evaluation-toxicology. *Indian J Med Res.*137:1027-1028,2013.
16. Dinesh Kumar B, Uday Kumar P, Prasanna Krishna T, Kalyanasundaram S, Suresh P, Jagadeesan V, Hariharan S, Nadamuni Naidu A, Kamala Krishnaswamy: Pre-clinical toxicity & immunobiological evaluation of DNA rabies vaccine & combination rabies vaccine in rhesus monkeys (*Macaca mulatta*). *Indian J Med Res.*137:1072-1088, 2013.
17. Durgaprasad L, Manoj kumar Hemalatha R, Ramakrishna Sistla, Naidu VGM, VenuT, Vinod Verma, Ravinder kaur N: Anti-Inflammatory treatments for Chronic Diseases - A Review. *Inflamm Allergy- Drug Targets.* 12:349-361,2013
18. Filippo Molinari, Vipin Gupta, Poornima Prabhakaran, Kristen M Meiburger, Luca Saba, U. Rajendra Acharya, Giuseppe Ledda, Radhakrishna KV, Gagandeep Kaur Walia, Sanjay Kinra, Andrew Nicolaides, Shah Ebrahim and Jasjit S Suri : Automated IMT estimation and BMI correlation using a low-quality carotid ultrasound image database from India. Conference proceedings IEEE Eng Med Bio Soc. 33:43-46, 2013.
19. Gangadhararao A, Dipankar Das, veerasami M, Ramachandran LakshmiKanthan, Senthilkumar, Munishkumar D, Ramalakshmi B, Vijay Bahekar, Falguni Mukherjee, Dev Chandran, Uday Kumarj P, Sesikeran B, Alwar Srinivasan V : Antemortem and postmortem examinations of the cattle calf naturally infected with *mycobacterium avium* subsp. *Paratuberculosis*. *Eur J Microbiol Immunol.*3:241-251,2013.

20. Goswami P, Hari Kumar R, Lakshmi Ramakrishnan, Shajan Mathew, Shreena Ramanahan, Bitra George, Rajatashuvra Adhikary, Venkaiah K, Hemalatha Rajkumar, Paranjape RS, Brahmam GNV: An assessment of a large-scale HIV prevention programme for high-risk men who have sex with men and transgenders in Andhra Pradesh, India: using data from routine programme monitoring and repeated cross-sectional surveys. *B r Med J.* open 3:e002183, 2013.
21. Grama CN, Suryanarayana P, Paatil MA, Raghu G, Balakrishna N, Ravi Kumar MNV, Bhanuprakash Reddy G: Efficacy of biodegradable curcumin nanoparticles in delaying cataract in diabetic rat model. *PLOS one.* .8:e78217,2013.
22. Hemalatha R,: Diet induced inflammation and potential consequences on fetal development. *J Nutr Disorders. Therapy.* 3:2013. <http://dx.doi.org/10.4172/2161-0509.1000125>.
23. Hemalatha R, Ramalaxmi BA, Swetha E, Balakrishna N, Mastromarino P. Evaluation of vaginal pH for detection of bacterial vaginosis. *Indian J Med Res.* 138:354-359,2013.
24. Khandare AL, Udaykumar P, Priyanka Shankar, Shanker Rao : Copper ameliorates fluoride toxicity in fluoride and molybdenum fed rabbits. *Biomed Environ Sci.* 26:311-313,2013.
25. Khandare AL, Uday Kumar, Shanker Rao, Rima Devi, Tulja, Srinivasa Reddy Y: Effect of high dose fluoride administration on brain antioxidant enzymes and bone parameters in aging rats. *Int.J.Curr.Res.Aca.Rev.*1:2013
26. Koletzko B, Bhutta ZA, Cai W, Cruchet S, El Guindi M, Fuchs GJ, Goddard EA, van Goudoever JB, Quak SH,Kulkarni B, Makrides M, Ribeiro H, Walker A. Compositional requirements of follow-up formula for use in infancy: recommendations of an international expert group coordinated by the Early Nutrition Academy. *Ann Nutr Metab.* 62:44-54,2013.
27. Kulkarni B, Kuper H, Taylor A, Wells JC, Radhakrishna KV, Kinra S, Ben-Shlomo Y, Smith GD, Ebrahim S, Byrne NM, Hills AP. Development and validation of anthropometric prediction equations for estimation of lean body mass and appendicular lean soft tissue in Indian men and women. *J Appl Physiol.*115:1156-1162,2013.
28. Kumar M, Hemalatha R, Rajesh Kumar, Ravinder N, Devraj JP, Vinod Verma, Pradip Behare, Mal G, Singh B : Epigenetics, probiotic metabolites and colon cancer prevention: an overview of progress, opportunities and challenges. *Med. Epigenet.* 3:60-69,2013.
29. Laxmaiah A, Arlappa N, Balakrishna N, , Mallikarjun Rao K, Gal Reddy Ch, Sharad Kumar S, Ravindranath M, , Brahmam GNV: Prevalence and

- determinants of micronutrient deficiencies among rural children of eight states in India. Ann Nutr Metab. 62:229-239,2013.
30. Manoj Kumar, Shruti Rakesh, Ravinder N, Hemalatha R, Ramakrishna A, Sudarshan V, Ramesh Ramagoni, Mohd Shujauddin, Vinod Verma, Ashok Kumar, Tiwari Akhilesh, Birbal Singh, Rajesh Kumar: Probiotic lactobacillus rhamnosus GG and Aloe vera gel improve lipid profiles in hypercholesterolemic rats. Nutrition. 29:574-579,2013.
 31. Manoj Kumar, Ravinder N, Vinod Verma, Ashok Kumar, Navrinder Kaur, Hemalatha R, Sanjeev K.Gautam, Birbal Singh: Probiotic metabolites as epigenetic targets in the prevention of colon cancer. Nutr. Rev.7:23-34,2013.
 32. Mansoori T, Kalluri Viswanath, Balakrishna N: Incidence and risk factors for secondary ocular hypertension after intravitreal triamcinolone acetonide injection in Asian Indian eyes. Acta Ophthalmologica. E79-e80, 2013.
 33. Mansoori T, Viswanath Kalluri, Balakrishna N: Quantification of retinal nerve fiber layer thickness after unilateral acute primary angle closure in Asian Indian eyes. J Glaucoma 22:26-30,2013.
 34. Mrudula T, Prashanth A, Vajreswari A, Giridharan NV, Radha A, Bhanuprakash Reddy G: Vitamin A supplementation ameliorates obesity-associated retinal degeneration in WNIN/Ob rats. Nutrition 29:298-304,2013.
 35. Murthy PVVS, Bamji MS, Vishnuvardhan Rao M, Prasad VLK: *Promotion of back yard poultry for augmenting egg consumption in rural households*. Indian. J. Nutr. Dietet. 50, 150-155,2013.
 36. Muthenna P, Raghu G, Akileshwari C, Sinha SN, Suryanarayana P, Bhanuprakesh Reddy GB: Inhibition of protein glycation by procyanidin-B2 enriched fraction of cinnamon:delay of diabetic cataract in rats. IUBMB Life. 65:941-950,2013.
 37. Nair KM, Brahmam GNV, Radhika MS, Dripta RC, Ravinder P, Balakrishna N, Chen Z, Hawthorne KM , Abrams SA. Inclusion of guava enhances non-heme iron bioavailability but not fractional zinc absorption from a rice-based meal in adolescents. J. Nutr. 143:852-8,2013.
 38. Nair KM, Chowdary D, Dripta Roy : Zinc nutrition in health and diseases. J SAT Agric. Res. 11:1-6,2013.
 39. Naveena N, Bhaskarachary K: Effects of soaking and germination of Total and Individual Poly Phenols content in the commonly consumed millets and legumes in India. International J Food Nutr sci. 2:12-19,2013.
 40. Nirmala K, Panpatil VV, Vishnuvardhan Rao M,Kalpagam Polasa: Effect of feeding turmeric on benzo(a)pyrene induced dominant lethal mutations. J Genet Study. Do.10.7243/2054-1112-1-2, 2013.

41. Palika R, Mashurabad PC, Kilari S, Kasula S, Nair KM, Raghu P: Citric acid mediates the iron absorption from low molecular weight human milk fractions. *J Agric. Food Chem.* 61:11151-7,2013.
42. Panpatil VV, Shalini T, Nirmala K, Nimgulkar C, Kalpagam Polasa: In vitro evaluation on antioxidant and antimicrobial activity of spice extracts of ginger, turmeric and garlic. *J Pharmacog Phytochem.* 2:143-148, 2013.
43. Prachi Gupta, Abhinav Kanwal, Uday Kumar , P Yogesh Bulani, Bhavesh Sojitra, Tarak Nath Khatua, Madhusudana K, Sanjay Kumar Banerjee: Cardioprotective effect of ritonavir, an antiviral drug, in isoproterenol induced myocardial necrosis: a new therapeutic implication. *J Transl. Med.* 11:80,2013.
44. Pragney Deme, Tirupathi Azmeera, Sanjit Kanjilal, Padmaja J, Vijaya Saradhi Upadhyayula. LC-MS/MS Determination of organophosphorus pesticide residues in coconut water. *Food Anal. Methods.* 6:1162-69,2013.
45. Prathibha B, Hemalatha Rajkumar, Venkata Prasad U, Giridharan NV: Role of leptin in immune dysfunction in WNIN obese rats. *Endocrinol Metab & synd.* . 2, 2013.
46. Priyanka Shankar, Sudip Ghosh, Bhaskarachary, K, Venkaiah K, Khandare AL: Amelioration of chronic fluoride toxicity by calcium and fluoride free water in rats. *Br J Nutr.*110:95-104, 2013.
47. Radhakrishna KV, Hemalatha R, Babu Geddam JJ, Ajey kumar, Balakrishna N, Veena Shatrugna: Effectiveness of zinc supplementation to full term normal infants: a community based double blind, randomized, controlled, clinical trial. *PLOS One.* .8, issue 5/e61486.
48. Rajesh kumar, Hemalatha R, Manoj Kumar, Sudarshan Reddy V, Ramakrishna A, Mohd Shujanddin, Ramesh R, Narendrababu K: Molecular cloning, characterization and heterologous expression of bile salt Hydrolase (Bsh) from *Lactobacillus fermentum* NCDO394. *Mol Biol Rep.* 40:5057-66,2013.
49. Rajkumar S, Vasavada AR, Praveen MR, Ananthan R, Reddy GB, Tripathi H, Ganatra DA, Arora AI, Patel AR: Exploration of molecular factors impairing superoxide dismutase isoforms activity in human senile cataractous lenses. *Invest Ophthalmol. Vis Sci.* 54:6224-6233,2013.
50. Ramakrishna UV, Dineshkumar B, Sinha SN, Ratna Priya: Phytochemical screening and polyphenol estimation by HPLC of Terminalia arjuna. *Int J Res Pharmacol Pharmacotherap.* .2 :471-482,2013.
51. Ramesh A Vishnuvardhan Rao M, MadhavanNair K: Impact of iron-fortified foods on Hb concentration in children (≤ 10 years): a systematic review and meta-analysis of randomized controlled trials. *Public Health Nutr.* 17:579-586,2013.

52. Reddy VS, Raghu G, Reddy SS, Pasupulati AK, Suryanarayana P, Reddy GB: Response of small heat shock proteins in diabetic rat retina. *Invest Ophthalmol Vis Sci.* 54:7674-82,2013.
53. Saeed Akhtar, Tariq Ismail ,Sunethra Atukorala, . Arlappa N. Micronutrient deficiencies in South Asia-current status and strategies. *Trends in Food Sci Tech.* 31:55-62,2013.
54. Saeed Akhtar, Anwaar Ahmed, Randhawa MA, Sunethra A, Arlappa N, Tariq Ismail, Zulfiqar Ali : Prevalence of vitamin A deficiency in South Asia: causes, outcomes, and possible remedies. *J Health Popul Nutr.* 31:413-423,2013.
55. Sahu BD, Kuncha M, Uday Kumar P, Sistla R: Effect of metformin against cisplatin induced acute renal injury in rats: A biochemical and histoarchitectural evaluation. *Exp Toxicol. Pathol* 65:933-40,2013.
56. Samuel Joshua Pragasam, Vijayalakshmi Venkatesan, and Mahaboob Khan Rasool: Immunomodulatory and Anti-inflammatory Effect of p-Coumaric acid, a Common Dietary Polyphenol on Experimental Inflammation in Rats. *Inflammation.* 36:169-176, 2013.
57. Sanjay Basak, Das MK, Duttaroy AK: Fatty acid-induced angiogenesis in first trimester placental trophoblast cells:possible roles of cellular fatty acid-binding proteins. *Life Sci.* 93:755-762,2013.
58. Sanjay Basak, Duttaroy AK: Cis-9,trans-11 conjugated linoleic acid stimulates expression of angiopoietin like-4 in the placental extravillous trophoblast cells. *BBA* :1831:834-843,2013.
59. Sanjay Basak, Duttaroy AK: Effects of fatty acids on angiogenic activity in the placental extravillious trophoblast cells. *Prostaglandins, Leukotrienes and Essential Fatty Acids.* 88:155-162,2013.
60. Sanjay Kinra, Radha Krishna KV, Hannah Kuper, KV Rameshwar Sarma, Poornima Prabhakaran, Vipin Gupta, Gagandeep Kaur Walia, Santhi Bhogadi, Bharati Kulkarni, Aniket Kumar, Aastha Aggarwal, Ruby Gupta, D Prabhakaran, K Srinath Reddy, George Davey Smith, Yoav Ben- Shlomo, Shah Ebrahim: Cohort Profile: Andhra Pradesh Children and Parents Study (APCAPS). *Int J Epidemiol.* 2013.
61. Sasikala, GuduruVenkat Rao, Venkateshan Vijayalakshmi, Rebala Pradeep, SureshPothani, Pondugala Pavan Kumar, Sirisha Ganneru, Ramji Cheemalakonda, Chivukula Subramanyam, Seshadri Vasudevan, D. Nageshwar Reddy."Long-term functions of encapsulated islets grafted innonhuman primates without immunosupresssion :Transplantation. 96: 624-63,2013.
62. Shahnaz Vazir, Patrace Engle , Balakrishna N, Griffiths PL, Johnson SL, Creed-Kanashiro H, Fernandez Rao S, Shroff MR, Bentley ME. Cluster-randomized trial on complementary and responsive feeding education to

- caregivers found improved dietary intake, growth, and development among rural Indian toddlers. *Maternal Child Nutr.* 9:99-117,2013.
63. Shankar ReddyD, Arlappa N. An updated prasad's socio economic status classification for 2013. *Int J Res Develop Health.*1: 97-102,2013.
 64. Singh Himadri, Nappanveettil Giridharan, Ramesh Bhonde, Vijayalakshmi Venkatesan :Deriving at candidate genes of metabolic stress from pancreas of WNIN/GR-Ob mutant rats. *Islets* 5:133-138, 2013.
 65. Sinha SN, Dua VK, Venkatakrishna –Bhatt H: Infrared spectroscopic studies of some oxidative products of primaquine. *Int J Chem.* 2013
 66. Snehasree Saha, Sudershan RV, Vishnuvardhan Rao M, Subba Rao MG: Knowledg and practices of using food label information among adolescents attending schools in Kolkara, India. *J Nutr Edu Behav.* 45:773-779,2013.
 67. Sreeramulu D, Reddy CVK, Anitha Chauhan, Balakrishna N, Raghunath M: Natural antiaioxidant activity of commonly consumed plant foods in India: Effect of domestic processing. *Oxid Med Cell Longev.* ID. 369479. 2013.
 68. Sreenivasa Rao J, Devindra S, Bhaskarachary K, Longvah T: Determination of trace metal content in Indian marine fish using closed vessel micro wave digestion- ICP-MS. *Adv Fish Res.* VI: 187–190,2013.
 69. Sunitha,K, Bhaskrachary,K, Nimgulkar CC, Dinesh kumar B, .Manohar Rao D : Identification,quantification and antioxidant activity of secondary metaboties in leaf and callus extracts of Coleus forskohl II. *Internat J Pharm Bio Sci.* 4: (B) 1139 – 1149, 2013.
 70. Subba Rao GM, Smith KC, Rajiv N Rimal : A Case for refining the WHO Global strategy on food safety: perspectives from India. *The Lancet Global Health.* .1:e254-e255,2013.
 71. Subba Rao GM: Group quiz: A tool for nutrition education and self-assessment. *J Nutr Edu Behav.*45:380-382,2013.
 72. Subba Rao GM: Nutrition communication thus far and further: A critical examination of research and practice. *Indian J Sci. Communication.* 8:3-13,2013.
 73. Sudershan ,RV Subba Rao GM , Vishnuvardhana Rao,M, Pulkit Mathur Laxmaiah A: Use of food label information by urban consumers in India - A study among supermarket shoppers. *Public Health Nutr* (Published on line DOI: 10.1017/S1368980013002231, 2013)

74. Uday Kumar P, Ramalaxmi BA, Venkaiah K, Sesikeran B: Effect of maternal undernutrition on human fetal pancreas morphology in second trimester of pregnancy. Indian J Med Res. 137:302-307,2013.
75. Uma Rani P, Kesavan R, Raghu G, Avaneesh T, Uday kumr P, Bhanuprakesh Reddy G, Madhulika Dixit : Ellagic acid inhibits PDGF-BB-induced vascular smooth muscle cell proliferatin and prevents atheroma formation in streptozotocin-induced diabetic rats. J Nutr Biochem. 24:1830-1839,2013.
76. Vahini.J, Bhaskarachary K ;Effect of processing and cooking on Glycemic Index of Jowar varieties. International J Food Nutr Sci. .2:25-30,2013
77. Vijayalakshmi V, Madhira SL, Venkata MM, Maniprabha C, Shaik SN, Vasudevan Seshadri, Venkaiah K, .Bhonde RR, Giridharan NV: Obesity, insulin resistance and metabolic syndrome: a study in WNIN/Ob rats from a pancreatic perspective. BioMed Res.Int. ID 617569, 2013.
78. Vishnuvardhan Rao M, Sharad Kumar, Brahmam GNV: A study of the geographical clustering of districts in Uttar Pradesh using nutritional anthropometric data of preschool children. Indian J Med Res.137:73-81,2013.
79. William Johnson, Balakrishna N, Griffiths PL,. Modeling physical growth using mixed effects models. Am J Phy Anthropol. 150:58-67,2013
80. Yadagiri Reddy P, Giridharan NV, Balakrishna N, Vakdevi V, Raghu P, Bhanuprakash Reddy G : Increased risk of cataract development in WNIN- Obese rats due to accumulation of intralenticular sorbital. Int Union Biochem Mol Biol. 65:472-478,2013.