



SFE India Chapter – A stepping stone in the field of Ethnopharmacology in India.
1st International Congress of SFE at Chennai, India.
Your Food can be your Medicine.
Annual Picnic of SFE



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The 12th International Congress of the International Society of Ethnopharmacology on “Traditional Medicines and Globalization–The Future of Ancient Systems of Medicine” was organized by the School of Natural Product Studies, Jadavpur University, Kolkata during February 17-19, 2012. Over 1000 delegates from 52 countries participated in this mega event and witnessed over 600 scientific presentations. The participants included scientists, academicians, students, researchers, along with the manufacturers of herbal preparations, phytomedicine and food supplements. Focusing on the Globalization of traditional medicine the essential and current issues on natural products, necessary for promotion and development were thoroughly discussed to exchange views amongst the participants.



The conference was inaugurated on February 17, 2012 at the Science City Convention Center, Kolkata by His Excellency Dr. A.P.J. Abdul Kalam, former President of India. Dignitaries on the Dias includes Shri Shekhar Dutt, His Excellency Governor of Chhattisgarh; Sri Partha Chatterjee, Hon'ble Minister in-Charge Commerce & Industries, Govt. of West Bengal; Prof. Luc Montagnier, the Nobel laureate in Medicine and the President UNESCO; Prof. Pradip Narayan Ghosh, Vice Chancellor, and Prof. Siddhartha Datta, Pro-Vice Chancellor, Jadavpur University; Prof. Marco Leonti, President, International Society for Ethnopharmacology; and Prof. B. Suresh, President, Pharmacy Council of India. Distinguished professionals, eminent scientists and technologists were conveniently interacted for exchange of ideas and concepts. The participants were enlightened and motivated for research from the presentations and discussions of the eminent researchers from different corners of the globe. Society for Ethnopharmacology, India (SFE-INDIA), an innovative Indian chapter of the International Society for Ethnopharmacology (UK) was created at Kolkata, and Dr. Pulok K Mukherjee, Director of the School of Natural Product Studies, Jadavpur University was chosen as the first Secretary of SFE-India.



SFE – India

Society for Ethnopharmacology (SFE), Kolkata, India is registered under the West Bengal Society Registration act 1961. SFE, India is constituted by the academicians, researchers and industrialists with a vision of providing an environment for sharing of knowledge among researchers, healthcare-practitioners, and decision-makers interested in medicinal plant research. SFE will serve as a platform with a view to materialize the concept of “Pharm to Farm”.

1st International Congress of SFE at Chennai, India.



SFE has organized its 1st International Congress at Chennai, from March 7-9, 2014, on “Globalizing traditional Medicine: Present and Future Prospects” at Sri Ramachandra University, Chennai, India. Being an active partner Sri Ramachandra University was hosted this Congress (www.icse-fop.org), with a focus on the understanding of the traditional medicine in the light of current scientific approaches for global standards and realization of its actual potential. This contemporary scientific event was assembled by more than 17 reputed International speakers from different countries and 20 National Scientific personalities. A pre-conference workshop on techniques for good publications was held by the editors of several peer reviewed International Journals along with 45 Scientific sessions, 62 Oral presentations and almost 150 Scientific Posters.



SRI RAMACHANDRA UNIVERSITY

(Declared under section 3 of the UGC Act, 1956)
Accredited by NAAC with 'A' Grade (CGPA 3.52 on 4 pointscale)
Porur, Chennai 600116

The prime focus of the conference was to reinforce the need to globalize traditional knowledge and reflect its present and future prospects. Critical issues on translation of this knowledge, in terms of useful ideas and products deliverables to tackle the rising global disease burden was addressed. Taking herbal drugs to the bedside requires an integrated

approach which can amalgamate sophisticated technological tools with traditional concepts of healing. The conference provided a launching pad for participants to interact, debate and disseminate their ideas with distinguished professionals, scientists and technologists. The Congress started with a pre-conference workshop on focused on essential techniques for effective writing and presentation of scientific information with valuable deliberations of the editors/editorial board members of various internationally acclaimed impact journals like Dr. Pulok K. Mukherjee, Prof. Michael Heinrich, Dr. Rudolf Bauer, Dr. T.K. Mukherjee and Dr. Y. K. Gupta.

The main congress was inaugurated on March 07, 2014 at the main auditorium of the Sri Ramachandra University, Chennai by Shri Shekhar Dutt, the Honourable Governor of Chhattisgarh, Sri V. R. Venkatachallam. Other respected dignitaries who attended the program were Chancellor, Sri Ramachandra University, Chennai, Dr. H. Devraj, Deputy Director, University Grants Commission, New Delhi, Prof. S. Datta, Pro-Vice-Chancellor, Jadavpur University, Kolkata, Prof. Anna Jagar, President, International Society for Ethnopharmacology, Dr. Pratim Banerji, President, Society for Ethnopharmacology, Kolkata,



Dr. Pulok K. Mukherjee, Secretary, Society for Ethnopharmacology, Kolkata, Prof. S S Handa, Former Director Indian Institute of Integrative Medicines, Jammu, Dr. Michael Heinrich, Centre for Pharmacognosy and Phytotherapy, School of Pharmacy, University of London, UK, Dr. Partha Sarathi, Sri Ramachandra University, Chennai, Dr. S. P. Thyagrajan, Sri Ramachandra University, Chennai, Dr. D. Chamundeeswari, Organizing Secretary, ICSE 2014.

The special lectures and the plenary sessions of the congress were divided into different sessions. A galaxy of eminent scientists and researchers from all over the world presented their speech in those sessions. The stalwarts included Dr. Gail B. Mahady, USA, Dr. Pradip Paul, USA, Prof. Rudolf Bauer, Austria; Prof. Elin Yulinah Sukandar, Indonesia;

Prof. Anna Jäger, Denmark; Brazil; Dr. R. S. Ramaswamy, India, Dr. Y. K. Gupta, India, Dr. R. Soundarajan, India, Dr. Ramesh K. Goyal, Dr. Michael Heinrich, UK, India, Dr. S. P. Thyagarajan, India, Dr. Alexander D. Crawford, Luxembourg, Dr. D. K. Mitra, India, Dr. V. Aridhasan, India, Dr. Tuhinadri Sen, India, Dr. S. P. Subramanian, Dr. Sitesh C Bachar, Bangladesh, Dr. K. M. Manikkavasagam, India, Dr. Mukhlesur Rahman, UK, Dr. Debprasad Chattopadhyay, India, Dr. Mukesh Doble, India, Dr D. C. Katoch, India, Dr. S. K. Maulik, India, Dr. James Oluwagbamigbe, Brazil, Dr. Ciddi Veeresham, India, Dr. A.K.S. Rawat, India, Dr. H.N. Shivaprasad, India, Dr. Anjan Adhikari, India, Dr. Olatunde Peter Ajagbonna, Nigeria and many other representatives of 20 countries of the world.

Awards from SFE: To recognize the outstanding contribution in the area of medicinal plant research and Ethnopharmacology, the Society has instituted several awards. SFE awards 2014 were conferred to eminent personalities for their contribution in these areas during the 1st International Congress of SFE at Chennai.

- 1) SFE Lifetime Achievement Award –
“Bisheswar Saha Memorial Award”- awarded to Prof. S S Handa
- 2) SFE Outstanding Ethnopharmacologist Award –
“Harihar Mukherjee Memorial Award”- awarded to Prof Y.K. Gupta
- 2) SFE Outstanding International Ethnopharmacologist Award -
“Dr Pranab Banerjee Memorial Award”- awarded to Dr. Michael Heinrich
- 4) SFE Merit of Excellence Award – awarded to Dr. S. P. Thyagarajan.



- 5) SFE - Herbal industry leader award –
awarded to Natural Remedies Pvt Ltd, India.
- 6) SFE - Best Entrepreneur Award –
awarded to Mr Biren Kumar Sarkar
- 7) SFE Outstanding Service Award –
awarded to Dr. D. Chamundeeswari
- 8) SFE Best Poster Presentation Award –
“Manjusree Pal Memorial Award”- awarded to
- 9) SFE Best Oral Presentation Award – awarded to
- 10) SFE Travel Grant Award – awarded to

Nominations are invited for the above awards of the Society for Ethnopharmacology, Kolkata (SFE) for the year 2015 which will be conferred during its 2nd Congress at Nagpur during February, 2015.

Your Food can be your Medicine.

“*Let food be thy medicine and medicine be thy food*” – Hippocrates.

FOODs serve many roles in our living and well being. Thus, the concept of foods should be looked as a whole, not just something to eat to satisfy hunger. *Food as Medicine* is a pragmatic and accessible reference that sets us on the right nutritional path. The use of natural organic foods as medicine can help to reverse the progress or diminish the symptoms of many diseases, including the lifestyle disorders Cancer, Diabetes, Obesity, Osteoporosis, Osteoarthritis, cardiovascular and Neurodegenerative diseases and even Hepatitis C. The foods are the fuels, process by the body through digestion, absorption, circulation and elimination (DACE). Digestion breaks down food into its tiniest form for absorption, while through circulation the blood carries the nutrients to the cells and after assimilation it eliminates the wastes and toxins from the body through the kidneys, bowel and skin. When this cycle works properly it promotes good physical health and keeps most degenerative disease at bay. Thus, food can be categorized into 3H: health, healing and hunger. There were no man-made medicines in the beginning of human civilization, and everything on the earth give us wholeness including health healing foods and drinks, medicinal herbs, and water.

Good health is not the absence of disease, but a state to enjoy energy, vitality and benefits of life. The key to good health is to use the power of healthy foods that positively affect feelings, energy, length and quality of life.

Medicine (Latin *ars medicina*, means *the art of healing*) is the applied science of healing by diagnosis, treatment, and prevention of disease. It encompasses a variety of health care practices to maintain and restore health by the prevention and treatment of illness (Garrison, 1966). Contemporary medicine applies health science, biomedical research, genetics and medical technology to diagnose, treat, and prevent injury and disease, through medication or surgery, along with psychotherapy, physical, prostheses, biologics, pharmaceuticals etc. The Greek physician Hippocrates (Ca. 460 BCE-Ca. 370 BCE), *the father of medicine* laid the foundation for a rational approach to medicine by introducing the **Hippocratic Oath** for physicians, which is still relevant today. It categorizes illnesses as acute, chronic, endemic and epidemics (Garrison, 1966; Marti-Ibáñez, 1961); while Galen, performed operations, including brain and eye surgeries. This Greek tradition declined after the fall of the Western Roman Empire (Grammaticos and Diamantis, 2008). During the 1st millennium BC the Hebrew medicine originates from the Torah (Five Books of Moses) containing health related laws and rituals that contributed to the development of modern medicine by Asaph (Vaisrub *et al.*, 2008).

The main problem for modern medicine is its accessibility to the poor and its long term toxicities (Farmer, 2001). Medical errors, overmedication and iatrogenesis are also the complaints with modern medicine. Health is treated as “wholeness” or holiness (living fully with rhythm) and anyone living in part of his or her being becomes “un-whole” or “unhealthy”. The cause and effect of most ill health is the rundown state of the body. *Five early warning signs of diseases are tiredness, loss of energy, mental confusion, indigestion, and irritability.* Presently, half of the global population are interested in disease prevention; while other half are quite ill, and interested to improve and regain their health at this spa-style health retreat.



Modern Food: Industrialized world have created many processed, low quality foods that fail to provide sufficient nutrition to run our bodies at optimum levels, putting a burden on the elimination process. In addition our health is affected by medication, drugs, drinks, smoke etc. Body cells try to function effectively but improper functioning create problem. Basically the ineffective digestion results in malabsorption that prevents the vital nutrients to enter the cells. While poor circulation prevents the transportation of blood

that carries absorbed nutrients to all cells; and poor elimination result in the cells that bathed in the wastes and toxins, due to poor excretion, resulting in degenerative diseases. Moreover, genetic inheritance caused poor health and symptoms may skip in generations. Additionally stress can inhibit the DACE process and forces the cells to work harder; while cooking oil by heating undergoes oxidation of oil into harmful rancid lipids that leads to clogged arteries and increased body weight. Foods that are best for human can act like medicine, by boosting immune system and warding off illnesses including most life style

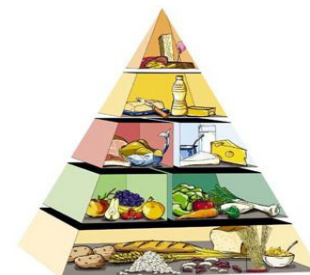
disorders. As foods are complex packages of natural chemicals, they don't deliver a single biological punch, like pharmaceutical drugs, designed to accomplish a specific purpose. Instead, the right foods can have a much broader effect on a variety of health problems than its raw or lightly cooked form, as cooking destroys many of their protective chemicals.



However, no matter how beneficial these foods may be, they're no substitute for a doctor's care. Food as medicine outlines several principles for healthy eating, ailment-specific nutritional plans, and delicious recipes that promote overall well-being. After all, food is not only the medicine, gifted by Nature- it's the best medicine.



Sources of Food: The basic energy liberating food carbohydrate is converted to simple sugars that set off a chain reaction to the brain of wanting to consume more foods to bring on comfort eating, weight problems, stress, migraines, energy shortfalls and onset of diseases like diabetes and obesity. Consuming nutrition less foods leads an energy shortfall that lead the body to accumulate toxins, pesticides etc which results allergies, digestive problems and immune suppression. As per the Food Standards Agency 10g of sugar per 100g of body weight is a lot and many foods exceed this.



A constant bombarding of sugar results in: raised blood sugar, unstable insulin production and a sharp increase and rapid drop in energy causing fluctuating blood sugar and fat storage, as the body burn the sugar first and over a period of time it increase the body weight, leading to obesity, diabetes, high blood pressure, cholesterol, digestive problems, asthma, and cancer. The selected nutrient that prevent the major lifestyle disorders are depicted in Table 1.

Table 1. Selected nutrients, their sources in major lifestyle disorders.

| Disorder | Name of Disease | Selected Nutrient | Source |
|--|---|---|---|
| Disorders of Ears, Eyes, Nose, Throat | Age-Related Macular Degeneration | Vitamin C, E, β -carotene, Taurine, Omega-3, Zinc, α -Lipoic acid, Lutein | Nuts, seeds, olive oil, green leafy vegetables, Sea fish. |
| | Chemosensory Disorders | Vitamin B12, A, Zinc, Scopolamine, Caffeine | Henbane, <i>Datura</i> , <i>Brugmansia</i> , <i>Duboisia</i> |
| Cardiovascular, Hematologic, Pulmonary Disorder | Dyslipidemia | Coenzyme Q10, Carnitine, Vitamin E, D, Omega-3, Selenium, Curcumin, Kaempferol | Green Tea, Orange, Pomegranate Juice, Sesame Seeds, Soy, Sea fish |
| | Hyperviscosity Syndrome | Eicosapentaenoic acid, Phospholipids, Aspirin | Sea fish, vegetables |
| | Hypertension | Omega-3, Pycnogenol, Zinc, CoQ10, Linolenic acid, Vitamin C, B6, E | Garlic, Soy, Celery, Hawthorne berry, Sea vegetables, Fiber |
| | Congestive Heart Failure | D-Ribose, CoQ10, L-Carnitine | Beef, Salmon, Mutton, Chicken liver, Lamb, Pork, Poultry |
| | Anemia | Iron, Vitamin A, B12, C | |
| Endocrine and Dermatologic Disorders | Obesity | Protein, fiber, L-carnitine, CoQ10, Vitami B12, D, Fiber, Minerals | Green leafy vegetables |
| | Diabetes and Insulin Resistance | Fiber, Protein, Omega-3, L-carnitine, Vit B12, E | Green vegetables |
| | Acne | Omega-3, Zn gluconate, Vitamin E, C, Pyridoxal-5-phosphate, Selenium | Green leafy vegetables and fruit |
| Neurologic and Psychiatric Disorders | Cognitive Decline, Parkinson's Disease, Sleep Disturbance | Vitamins B6, B12, C, D, Folic acid, CoQ10, α -lipoic acid | Green leafy vegetables and fruit |
| Neoplasms | Cancer | Magnesium, Chromium, Multivitamin, Omega-3, Cinnamon, Curcumin, Berberine, Resveratrol, Bitter melon, Fenugreek, Gymnema, Protein | Whole grains, nuts, Legumes, Green tea, vegetables. |

Thus, foods have a powerful impact on our body and system, as many foods can alter our biological functions. The right nutrition rich foods that produce required energy for growth, repair, maintenance, production of blood and prevent diseases is essential for

optimum health. Certain foods can dramatically affect the body by upsetting the biological function leading to the degenerative diseases.

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Annual Picnic of SFE

On the 8th of February, 2014, the Society for Ethnopharmacology (SFE), Kolkata organized a picnic at Nalban-I, a scenic spot at Bantala, near the Basanti Highway. It was a splendid day out, with enthusiasm of the members and their families. Apart from engaging in games like cricket, football and badminton, the members also had fun in boating. Lunch was a merry meal, because sitting together and eating has its very own happiness. There was also a discussion about the Society and how its future can be a better and brighter. There was also a special discussion about the Society's First Congress at Sri Ram Chandra Medical University, Porur, Chennai. The Society thanks the Serene Group, especially Sevabrata Das for helping in organizing this wonderful picnic at this picturesque location.



Save the Dates

May 11-14, 2014: Joint Society Conference: Society for Economic Botany & Society of Ethnobiology-Harrah's Casino, Cherokee, North Carolina. Theme: The Energy of People, Places, and Life.
<https://www.etouches.com/ereg/index.php?eventid=76360>

May 20-23, 2014: **First Annual Pan-American Congress on Phytocosmetics- International Society for Phytocosmetic Science**, Universidad Politecnica Salesiana, Quito, Ecuador. Themes: International Standards, safety, ethics and sustainable research, clinical trials. <http://phytoessence.org/ipc2014/>

June 1-7, 2014: **14th Congress of the International Society of Ethnobiology-** Ugyen Wangchuck Institute for Conservation and Environment, Lamai Gompa, Bumthang, Bhutan. Theme: Chi Nor Zom Bu Ling" Theme: One Earth for All: Regenerating Biocultural Ecosystem Resilience. <http://isecongress2014bhutan.org/>

August 31-Sep 5, 2014: **62nd International Congress and Annual Meeting of Society for Medicinal Plant and Natural Product Research**, University of Minho, Campus of Azur, Guimaraes, Portugal. <http://ga2014.bio.uminho.pt/>

Recent important publications link in the area of Ethnopharmacology

A Dihydro-pyrido-indole potently inhibits HSV-1 infection by interfering the viral immediate early transcriptional events. *Antiviral Res.* 2014 Feb 24. Doi: 0.1016/j.antiviral.2014.02.007. PMID: 24576908

Swertiamarin ameliorates inflammation and osteoclastogenesis intermediates in IL-1 β induced rat fibroblast-like synoviocytes. *Inflamm Res.* 2014 Feb 4. PMID: 24492951

Antioedematous and Analgesic Properties of Fertile Fronds of *Drynaria quercifolia*. *ISRN Inflamm.* 2014 Jan 20; 2014:302089. Doi: 10.1155/2014/302089. PMID: 24575313.

A Perspective on Natural Products Research and **Ethnopharmacology** in Mexico: The Eagle and the Serpent on the Prickly Pear Cactus. *J Nat Prod.* 2014 Feb 21. PMID: 24559070

Nepalese traditional medicine and symptoms related to Parkinson's disease and other disorders: Patterns of the usage of plant resources along the Himalayan altitudinal range. *J Ethnopharmacol.* 2014 Feb 17. Doi: 10.1016/j.jep.2014.02.016. PMID: 24556225

Biological Basis for Cerebral Dysfunction in Schizophrenia in Contrast with Alzheimer's Disease. *Front Psychiatry.* 2014 Feb 3;4:119. Review. PMID: 24550846

Polyphenols-rich *Cyamopsis tetragonoloba* (L.) Taub. beans show hypoglycemic and β -cells protective effects in type 2 diabetic rats. *Food Chem Toxicol.* 2014 Feb 10. Doi: 10.1016/j.fct.2014.02.001. PMID: 24525096.

Ethnopharmacological studies of indigenous medicinal plants of Saravan region, Baluchistan, Iran. *J Ethnopharmacol.* 2014 Feb 5. Doi: 10.1016/j.jep.2014.01.007. PMID: 24509152

An indole alkaloid from a tribal folklore inhibits immediate early event in HSV-2 infected cells with therapeutic efficacy in vaginally infected mice. *PLoS One.* 2013 Oct 22; 8(10):e77937. Doi: 10.1371/journal.pone.0077937. PMID: 24167591

Evaluation of the wound healing activity of *Shorea robusta*, an Indian ethnomedicine, and its isolated constituent(s) in topical formulation. *J Ethnopharmacol.* 2013 Aug 26; 149(1):335-43. Doi: 10.1016/j.jep.2013.06.045. Epub 2013 Jul 6. PMID: 23838474

Anti-herpes virus activities of *Achyranthes aspera*: an Indian ethnomedicine, and its triterpene acid. *Microbiol Res.* 2013 May 6; 168(4):238-44. Doi: 10.1016/j.micres.2012.11.002. Epub 2012 Dec 5. PMID: 23218996

Ethnopharmacology to drug design. *Commun Integr Biol.* 2013 Nov 1; 6(6):e27583. Doi: 10.4161/cib.27583. Epub 2014 Jan 8. PMID: 24567782

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