

The Evolving Transformation

SEVAMED, the Quarterly Update on Infectious Disease Research and Traditional Medicine was born in April 2000, thanks to DBT for the grant support to establish Bioinformatics Center at JB Tropical Disease Research Centre (JBTDR) at MGIMS. Infectious and parasitic diseases take a toll of 17 million people each year constituting 33% of total deaths (World Health Forum Vol.18, 1997). The tropical diseases are considered as 'Diseases of the poor', 'neglected diseases' or 'orphan diseases' without much attention and research support in advanced countries. Department of Biochemistry and JBTDR were actively involved for three decades in research related to filaria and tuberculosis. BIC decided to publish SEVAMED with research update on tropical diseases from its inception to be useful for boosting research in Medical colleges relevant to our health problems. Vast amount of Biomedical information is poured into computer by three thousand and odd journals published in the world raising number of questions – (1) Who has easy access to computer? (2) Who has time and patience to sit in front of computer and search? (3) Who is fortunate to have continued internet connectivity in small towns in those years? 'SEVAMED Quarterly' was born to answer these questions making the relevant information in diagnostics, vaccines, pathogenesis and drugs available at finger tips for promotion of medical research.

The BIC is thankful to our Founder Director Dr. Sushila Nayar and current President of Kasturba Health Society Shri. Dhuru S. Mehta for encouragement and support by absorbing key posts of BIC and Department of Biotechnology for continuation of grant support for all these years.

With increasing healthcare costs and disillusion in successful management of chronic diseases by orthodox or allopathic medicine, patients seeking a cure and general practitioners seeking positive

clinical results are turning towards complementary and alternative medicine (CAM) in advanced countries. The reemerging field of holistic medicine or mind – body medicine considers body, mind and spirit as a whole while trying to give relief from ailment. Keeping this in view, SEVAMED added bibliography update on alternate systems of medicine. Thanks to Globalization. Consumeristic and self-centric living style with sedentary and addictive habits causing serious lifestyle disorders with increased risk of cardiovascular diseases, cancer, chronic respiratory diseases and diabetes. Keeping with the recent trend, SEVAMED added a section on Lifestyle diseases for stimulating research and better healthcare, bringing science closer to spirituality. With this in mind, SEVAMED added Inspiring Quotes and Divine Thoughts for Spiritual growth. SEVAMED Editorials touch the current topics in brief covering in depth and of relevance to human health and development bringing transformation from Science to Spirituality with customers' patronage and support. We hope SEVAMED will continue to work to fulfill the readers' aspirations.

Science and Spirituality have very close and intricate relationship and often complement each other. Science is experimental wisdom while spirituality is experiential wisdom. Science is understanding based on matter while spirituality is understanding based on mind or consciousness. Core objective of science and spirituality is the same – The Quest for Truth. While science deals with outer world, spirituality deals with inner world.

Noble prize winner in Chemistry 2000, Alan G MacDiarmid says "I now feel very strongly that prayer and power of mind can be very great and important on body chemistry and immune system". Willians D. Phillips (Noble prize in Physics 1997) says "My scientific appreciation of the coherence, the delightful simplicity of physics strengthens my belief in God". A researcher in computer science and artificial intelligence for over twenty years, Amy Lansky says 'As my work as a computer scientist

became more and more practical, my inner life became increasingly meta physical. When Science reaches pinnacle, then Spirituality begins.

DNA is not static. It continuously evolves based on the experience and exposure and reflects in personality. For this reason, the spiritual masters always advise ‘ Think Positive and Do Positive’. Training the mind can have beneficial health effects. A recent study by researchers in Wisconsin, Spain and France reports the evidence of specific molecular changes (epigenetic alterations) in the body following intensive mindfulness practice. Meditation (Mindfulness) has been integrated into the mainstream of medicine and healthcare for treating the patients suffering from stress related problems.

Motivating the medical teachers and post graduate students for innovative research is a challenging proposition to the research managers and health administrators in India. In the new millennium it is unfortunate, voicing concern over India lagging in innovation by both President and Prime Minister. There is continuous degradation of quality of research in India. As per UNESCO Global Science Report 2010, as many as 36261 research papers were published in 2008 with a workforce of 154827 research and development professionals. 85% of the scientists and researchers publish just for publishing. Only 10% of them work for industry and a meager 5% work for specific social goals. That is why our innovations and discoveries do not reach the ground level. The need is to integrate education with research and innovation. According to Bharat Ratna CNR Rao, India’s performance is satisfactory neither in quality nor in quantity compared to South Korea and China. Rao says salary will become secondary if scientific temper of the new generation is built and people are given good work environment (Salvage Science, Down to Earth, Dec. 2013, P. 9-10). It is a challenge for research funding managers to recognize talent amongst medical teachers and excite and motivate them for commitment for health problem solving and for innovation in biomedical research.

*I am grateful to our dynamic President Shri. Dhiru Mehta and DBT for the support. My deep appreciation and thanks to all the dedicated staff at BIC, all guest contributors to SEVAMED and members of Advisory board for smooth publication and continuation of SEVAMED for fourteen years. We are pleased to bring out the book of compiling “**SM Editorials and Divine Thoughts for Spiritual Growth**” and place in your hands on this occasion of Inauguration of National Symposium.*

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Healthy Yoga Lifestyle – the need of the Day

YOGism in brief - live Simple, live Spiritual and live to Serve (Seva).

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Emotional Intelligence & Spirituality

Globalization like vaccine promotes empowering with skills and tutoring workshops to come out successful in the modern competitive world. Depending on innate powers alone is not sufficient. This is confirmed by proliferating tutorial institutes for 10th class onwards to competitive examinations for medical, engineering, business management, administration etc. Recently 'Emotional Intelligence' (EI) has attracted one and all with workshops for personality development, leadership training and management. Its importance is being emphasized in successful management of one's life, profession or business. DST sponsored programme on "Emotional Intelligence at workplace for scientists / technologists" from Centre for Organization Development is one of that type. EI is considered a critical leadership quality for facing challenges at a workplace to prevent emotional disturbances in the form of frustration, anger, anxiety etc. affecting one's productivity. Thus it has become important to develop and strengthen Emotional Intelligence.

The term 'Emotional Intelligence became widely known with the publication of Goleman's book titled 'Emotional Intelligence – Why it can matter more than IQ' in 1995 and the concept was applied to successful business leaders in global companies with measurable correlation. Large companies today have employed trained psychologists to develop models for identifying, training and promoting business leaders. However questions are raised whether EI is a type of intelligence? A suggestion was made that it should be re-labeled and referred to as a skill. The current measure of EI is the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) is based on a series of emotion based problem-solving items. It is modeled on ability-based IQ tests. However it is argued that unlike the tests of cognitive ability, the MSCEIT tests knowledge of emotions but not necessarily the ability to perform tasks. Research of EI and job performance shows mixed results. The fact that major corporations now test for EQ shows that raw

intelligence is of little value if you are emotionally impaired. No one denies that emotional strengths and social abilities often contribute to social and occupational success (www.en.wikipedia.org).

Emotional Intelligence consists of four attributes (www.helpguide.org) namely:

(1) Self awareness (recognizing one's own emotions, strengths and weaknesses); (2) Self management (ability to manage emotions with positive responses and adapting to changing environment); (3) Social awareness (understanding the emotions, needs and concerns of other people); (4) relationship management (know how to develop and maintain good relationships, inspire and work well in a team). In brief Emotional Intelligence refers to the ability to perceive, control and evaluate emotions, "The subset of social intelligence that involves the ability to understand one's own and others' feelings and emotions to guide one's thinking and actions" (<http://.psychology.about.com>).

It is of interest and surprising that researchers dealing with Emotional Intelligence are reluctant to study and understand the relationship between emotion and spiritual health or spirituality. Spiritual health is an important component of an individual's well being. In simple words, spiritual health can be defined as finding meaning, seeking peace and having faith in the process of life. It encompasses a belief in higher reality, a Great Spirit or God and includes attributes such as dedication, devotion, unconditional love, forgiveness, patience, compassion, hope & faith. We manifest our spirituality simply by breathing and coexisting with nature and other people. As individuals, we have a degree of control over our thoughts, emotions and actions. Spirituality means cultivating an active sense of connectedness to all living beings (Deppti Hooda et.al. J. Ind Acad. of Applied Psychology, July 2011) and (<http://achievetruehealth.com>). Meditation is the way to calm the mind and promote positive emotions. Through meditation we come to know our inner self. Meditation shows us the way to love, the way to serve and to maintain harmonious relationships. **Meditation / Mindfulness should help in strengthening Emotional Intelligence positively which deserves thorough study.**

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BCH

Innovation in Indian Research – “Conscience Deficit”

Voicing concern over India lagging in innovation, President Pranab Mukherjee made a strong plea to step up expenditure on research which is only 0.9% of the GDP which is much below than that of China, UK and Israel. Dr. Mashelkar addresses the scientific community and asks when can we create products that are first to the World? and suggests for creation of National Innovation Foundation. Observing continuous degradation of quality of research in India, Dr. Kokode suggests for creation of generation of researchers dedicated to innovative research. These pious statements are to be seen in the light of realistic situation in India as observed by Parliamentary Committee that higher education in India suffers from poor quality of curriculum, instruction and teachers lacking passion for teaching and research. It is also important to recollect Padma Shri Professor Pramod Tandon, Chairman of 96th Indian Science Congress lamenting that the delegates are more interested in sight seeing than attending the lectures or technical sessions. In each Indian Science Congress, delegates are seeing the same faces of the scientists in the country and there is nothing new and exciting in their lectures. The country has not produced the second line of scientists to inspire the youth. It is true indeed and is confirmed by repeated extensions of senior science research administrators in India. **It is most unfortunate that personal interest rules over national interest in India. Shri. Ratan Tata rightly diagnosed the disease affecting India as “Leadership deficit”. I like to call it ‘Conscience deficit’ and lack of concern to Nation and fellow citizens.** It is affecting every arena of activity in India, thanks to political ideology and interference, compromising independence in thinkers and educational planners thus pandering to a mediocrity as a norm in the past six decades. There were attempts to import scientists from abroad but without significant breakthrough in establishing innovative biomedical research centers of excellence. Merit as sole criteria should be supported and encouraged with constant and

vigorous monitoring. In-breeding should be reduced to bear minimum. As per Qs World University Rankings, no Indian university is seen in World’s top 200 list with MIT grabbing the top slot and Harvard at No.2 position. IIT (Delhi), comes in way down at No.222, dropping from 212 last year. Continued monitoring and more effort is needed to maintain position and get into top ranks. There is need to study the scientific environment in advanced countries in particular in top ranking Institutions in biomedicine. To be innovative or creative, one has to put the Soul into the task, which requires sincerity and commitment to the problem followed by open mind, curiosity, inquisitiveness, intuition and imagination without ego and attachment. There will be very few fortunate who reach the goal. Even treading this path, one gets immense satisfaction of exploration making positive contribution. It is a real task for research funding managers to spot and cultivate committed researchers. We have too many self centered and leg pulling mosquitoes which affect the growth in self reliance of our country. National interest over self interest should prevail to make life meaningful. We lack role models in innovative research in biomedicine. We have plenty of communicable diseases of developing country along with increasing burden of non communicable or lifestyle diseases with economic progress and development. Research on nutrition, environment, commerce and fast life factors contributing to non communicable diseases and aggressive lifestyle intervention should be top research priority before globalization engulfs our country. With ancient wisdom and tradition, we must be able to demonstrate the need for nature friendly lifestyle against self destructive consumerism.

The countries which were destroyed in Second World War have raised from the dust and have become models of hard work and growth. In spite of number of growth and self reliance models in the developed countries in front of us, the politicians, bureaucrats and the intellectuals too have failed the country in the six decades after independence in allowing villages deserted along with growing slums in cities with miserable and inhuman living conditions. Basic needs and priorities are

not worked out giving rise to very poor and very rich populations with decreasing middle class, which had been moral strength of the country. It is not sufficient to state **Vasudeva Kutumbakam** as our philosophy but practice it and should become a role model to the World.

Our country has great potential as shown with the successful test fire of intercontinental ballistic missile Agni-5, an important mile stone achieved by the Defence Research and Development Organisation (DRDO) of India. It is important to think of future than living in glorious past. Compare Calcutta, Bombay and Madras universities which were founded in 1857, celebrating 150 years of their existence with Massachusetts Institute of Technology (MIT) in USA that was founded four years later grabbing the top slot in university rankings. We have to seriously analyze the pathetic state of higher education and innovative research in a large country of more than one billion people. Delhi is not India to centralize all thinking and decision power. Decentralization of research funding agencies (South, North, East, West and Central) is essential to spot talent and nurture individuals and institutions throughout Indian subcontinent.

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BCH



What Ails Indian Research?

Recently I came across, ‘Reinventing India’ a very thought provoking compendium of lectures by Dr. Raghunath Mashelkar (RM), a distinguished scientist & administrator. Indian Science and Technology has contributed its mite in post independent India, in particular in the areas of space, defense and atomic energy with advanced satellites, missiles, super computers and nuclear reactors. IT revolution brought India into limelight on the international scene. However as RM being a compulsive dreamer and positive thinker, asks when will we create products that are first in the world? He also wonders why India is not able to produce Noble laureates in biomedical research on Indian soil in post independent India even though Dr. C.V. Raman could get in 1930s. Other Indians namely Dr. H. Khorana, Dr. S. Chandrasekhar and Dr. V. Ramakrishnan, could get Noble prizes, working abroad.

The question arises why do Indian Genes can express in Silicon Valley and not on Indian soil. These observations point to what is ailing Indian research? Some possible reasons are work culture and management systems. Except for clamoring to increase the budget for scientific research, Task force approach in research thrust areas and rigorous monitoring and recognizing the talent and support are lacking, leading to stagnancy in research in spite of crores of rupees spent in post independent India. The story is that of fence eating away the crop. More amount is spent on its own institutes and intramural research than looking for talent and developing expert groups in University departments and professional colleges. On any one research topic very few experts are actively and deeply involved in a big country like India. Our research funding agencies are too centralized and located in the capital close to power centres and vulnerable to political pressures. They are satisfied with spending money and accounting. In Russia excellent research centres in Physical, Mathematical and Biological sciences are scattered throughout the country. After sixty years after independence, our Prime

Minister is asking for **innovation in research**. So far we are doing mostly confirmatory or complementary research in the name of research. We suffer with catching syndrome aping the West with import of sophisticated technology which becomes obsolete in three to five years. We remain consumers and not developers, discoverers or inventors. The western world wants us to be just that and not more. This explains for lack of innovation in Indian Research. Managers of Research funding agencies and national institutes are appointed and continued like clerical posts up to retirement. These visionary and managerial positions should be of five to ten year tenure positions. It is strange observation in India in changing the name of the institute as soon as a new director is appointed. He or she boasts of increased number of publications in high impact journals as if that is the end of research. Thrust on innovation is lacking. Instead of single centralized entity in capital, research funding agencies should be established in east, west, south, north and central divisions making them semi autonomous to search, recognize and support the talent in large country like India. Science managers are lacking vision, imagination and commitment to deliver. Every one or two decades introducing schemes for attracting scientists from abroad under **reverse brain drain** will not serve the purpose, unless ideal scientific environment is created on Indian soil for nurturing and blossoming the scientific talent to deliver. This is a challenge for research managers. The need of the day in the present globalization is for devotion, commitment and excitement. We need managers who are excited about their role to build research centres of excellence. Lots of decentralization and accountability at every stage are required.

I happened to be one of the **reverse brain drain** candidates. Being born and brought up in low income middle class family in a village, I had the opportunity to do Ph.D and Post Doctoral study at prestigious Washington university (private institute with noble laureates) in United States with fellowship from Oklahoma State University and travel support under Fulbright programme. When I decided to return to India in 1970 after six year stint in United States, I had a very welcoming offer of pool officer from CSIR and ICMR before reaching India, to join desired Institute and adjust to settle in India. Very efficient way of functioning

and encouraging those days with commitment to strengthen Indian research. However Dr. Sushila Nayar's affectionate letter to join Mahatma Gandhi College of Medical Sciences (name changed to Institute afterwards) to start and develop biochemistry department in newly started medical college as Gandhi Centenary project in 1969 attracted me to plunge. In my research student days, I came across scientists abroad concentrating research on one area or one topic in depth for life and generating new knowledge with devotion and excitement making it possible for advances in life sciences and health care. My Professor's son Dr. Venkatraman Ramakrishnan, was a boy playing in front of us at Baroda in 1962, could get Noble prize in 2009. Thanks to MRC Laboratory of Molecular Biology, Cambridge, UK for the opportunity provided for excellence in research.

I had enlightening exposure to the process of research grant handling by WHO & Indian agency. In seventy and eighties, there were no deadlines for research grant release and receiving progress reports in India. At the same time though I received a research grant of Rs.6000/- or so, United States Educational Foundation in India had stipulations and deadlines for progress report etc. Further the scientist in small institute is bothered with import duty regulations, approval of foreign exchange, purchases and accounting which consumes considerable time and discourage teachers in professional institutes to venture into research field. I used to receive required foreign instruments without any problem through WHO grant direct to the department through WHO SEARO in Indian environment. Further research is not important for consideration of promotion in professional colleges. Period of service is only the criterion. I recall an instance of receiving gift parcel of immunoglobulins for research from WHO in 1974. As it was kept in cold storage, the demurrage charges were increasing day by day due to problems of customs clearance and finally it was to be dumped in sea. Our duty regulations are such that diagnostic kit is imported duty free and not components used in the kit inhibiting enthusiasm of industry to manufacture a kit. The in-charges at every point are never serious in doing home work in finding bottlenecks in developing self reliance or promoting export in national interest. Unless this environment changes,

any number of schemes of **reverse brain** will not succeed. Was there any attempt to study the problems and output of foreign returned scientists by any research granting agency? Our bureaucracy is satisfied with routine running without milestones of achievement. Who are serious in our country to innovate? I did see disease sera banks in CDC, Atlanta to provide to scientist when needed for research. Research funding agencies abroad always look for ways and means to help a scientist get excited and productive in research.

There is always debate on basic Vs applied research. Often switching to recent and glamorous topics need not necessarily productive. It may help in personal prospects but not national development. Another jargon is publications in journals with high impact factor and patents which may not lead to product development for use unless one pursues to logical development. We leave research with mentioning potential but never realizing it and seeing the fruit. We blindly see **impact factor** and not **translational research value** of the piece of work for problem solving or product development and thus contribution to national development. The mindset to imitate latest research areas gets one caught up in catching syndrome but not be productive to solve an identified problem. Many scientists opt for this glamorous costly investment at the cost of nation for personal prospects, which is unfortunately promoted by research funding agencies. For example in biomedical research crores of rupees were spent for recombinant antigen, monoclonal antibodies, gene / protein sequencing technologies without significant leads to problem solving or product development. Within three to five years, more advanced technology costing crores comes up like new model of TV or computer. The thrust should be on translational research in problem solving or product development to assess the output of the research in developing country like India. There is need to develop interface research for product development from intellectual input by scientists.

I do recall attending Wet Workshop organized by WHO/TDR in Lille, France in 1981 to evaluate filarial antigens. Three antigens, one from our Centre, one from USA and one from Australia showed promise. The ones from abroad could be developed into diagnostic kits by industry

abroad. We do not have local industry in India with know how to produce a kit. The companies are satisfied with import of diagnostic kits and making little money. Our MOUs and understanding to prepare diagnostic kit with Span, Cadilla, Lupin, Reddy Labs and Transasia did not take off. No industry in our country is interested in spending time and resources in developing prototype kit. While abroad, industries look for innovations for product development. I am pleased that Bhat Biotech India Pvt. Ltd. is coming out with TB screening kit. Who is interested in innovation in national interest? At JBTDRC, we have been using microfilarial ES antigens for decades in SEVA FILA CHEK screening test for suspected filarial patients thus helping in diagnosis and better management. Blood samples for testing were also received from other parts of India. Similarly we have developed SEVA TB ELISA after two decades of research for screening of suspected patients of pulmonary and extra pulmonary tuberculosis which was well received by our clinicians for diagnosis of suspected TB cases. Bhat Biotech India Pvt. Ltd., Bangalore is associated in development of TB diagnostic kit. We find mycobacterial ES-31 serine protease, good antigen and also drug target which is being exploited in screening potential TB drugs from marine algal samples in collaboration with CSIR-Central Salt & Marine Chemicals Research Institute, Bhavanagar. We are also excited that GeNext Genomics Pvt. Ltd., Nagpur is actively associated with characterization of ES-31 serine protease and production of monoclonal antibody for use in biotherapy against tuberculosis. This is possible with small core funding support and encouragement for research at JBTDRC by our Founder Director, Late Dr. Sushila Nayar and present dynamic President Shri. Dhiru S. Mehta. Research grant support from Unichem Mody Foundation, USEFI, ICMR Task Force, DST, CSIR, WHO/TDR, UGC, Indo-US STI, TB Association of India and Filaria Repository Project by Department of Biotechnology thus supporting filaria and TB research throughout four decades from 1970 onwards and presently by CSMCRI and GeNext Genomics is gratefully acknowledged and appreciated.

June 13, 2013

BCH



Energy Medicine & Healing

National Centre for Complementary and Alternative Systems of Medicine (NCCAM) has classified CAM as (1) Alternative medical Systems (Ayurveda etc.); (2) Mind-Body interventions (meditation, prayer, music etc.); (3) Biological based therapies (herbal medicine, special diet etc.); (4) Manipulative and Body-based methods (chiropractic approaches); (5) Energy therapies (Qi gong, Reiki etc.) Soul, Consciousness, Life force or Spiritual energy is omnipresent and all pervading in body organs and systems like electrical energy flowing through electrical wire to different gadgets. Consciousness illumines the mind directly and (through the mind) the physical body and external world. In the waking state Mind is both an object and instrument (Tattvaloka, March 2013). Thus Mind is consciousness conditioned by objects such as sense organs, the body and sense objects. Mind is thinking power / mental energy of the Soul which is responsible for thoughts, emotions, attitudes and memories and is considered as Anathma. When mind is purified to thoughtless state by meditation, then what remains is pure consciousness or Soul (Aathma).

Mind-body connection is very strong and Mind-body medicine focuses on the interactions among the brain, mind, body and behaviour and on the powerful ways in which emotional, mental, social, spiritual and behaviour factors can directly affect health.

The term 'Energy Medicine' derives from the premise, now scientifically documented that there are subtle, biological energies that surround and permeate the body. These energies can be accessed through non-invasive diagnostic and therapeutic interventions, thus addressing the individual as a whole, and not just focusing on the diseased area. Energy medicine practitioners in India, China and rest of the world have been saying for many centuries that there is a physical body and an energy body. They are not mutually exclusive. The bio-energy body is

said to surround and penetrate the physical body and interact with it. Energy medicine practitioners therefore provide treatment through the energy body. Dr. Streeter, Director of the Centre for Biofield Sciences at Pune uses EIS (Electro Interstitial Scan, FDA approved) for measuring 69 different physiological parameters and with the help of software, advises different treatment options in yoga, homeopathy, acupuncture and offers diet plan and suggests life style changes (Vijayalakshmi Nadar, Life Positive, February, 2013).

Energy medicine, energy therapy or energy healing is an emerging field of therapy wherein a healer can channel healing energy into the person seeking help by different methods such as Biofield energy healing, Reiki, Qi gong, Pranic healing etc. (www.enwikipedia.org/wiki/energy-medicine). Though early reviews in the scientific literature on energy healing were equivocal, more recent reviews have concluded that there is no evidence supporting clinical efficacy, criticizing the theoretical basis of energy healing by conventional medicine practitioners, repeating the story which started in the past with 'complementary and alternative systems of medicine'.

Energy medicine often proposes that imbalances in the body's 'energy field' result in illness, and that by re-balancing the body's energy-field health can be restored.

The US-based National Centre for Complementary and Alternative Medicine (NCCAM) distinguishes between healthcare involving scientifically observable energy (magnetotherapy, light therapy etc.) which it calls "Veritable Energy Medicine" and healthcare methods which invoke physically undetectable or unverifiable "energies", (eg. Reiki, Qi gong etc.) which it calls "Putative Energy Medicine". Yoga for instance has historically been believed to modify the body's subtle energy pathways – The Prana – within the body by pranayam, meditation etc.

The book 'Energy Medicine: The Scientific Basis by James L. Oschman' appears to provide an acceptable explanation for the energetic

exchanges that take place in all energy therapies. It addresses a growing interest in the field of mind-body medicine and role of natural “energy forces” within the body in maintaining normal health and well being (www.amazon.com/energy-medicine).

The idea of the Biofield comes mostly from the Chinese System of Medicine. Acupuncture and Acupressure are two aspects of the Chinese system which are extensively in use in healthcare. The complete Biofield system include: Polarities, Subtle Bodies, Chakras, Directional Energies, Meridians and Elements.

In the early 1900s, Dr. Albert Abrams developed the idea that all parts of the body, including diseased body parts, had a specific vibration rate. If the vibration rates of diseased part could be determined, then the same frequency could be sent back into the body and cure the disease under Radionics concept. Similar to the principle of dowsing, the SE-5 1000 works, and is a research electronic device known as Radionics. One does not have to be a proficient dowser to make it work. SE-5 (Subtle energy – 5th model) helps balance Intrinsic Data Fields (Subtle Informational fields) which is our body energy. SE-5 1000 not only detects and measures the strength of these subtle fields, it can also send information to try and balance the IDFs as well and thus cures the disease (Regaining wholeness through the Subtle Dimensions; where science meets magic by Don Paris). Radionic device for medical use in diagnosis or treatment has not been approved by FDA, necessitating for more evidence based research to prove its efficacy of this approach in healing sickness (www.en.wikipedia.org/wiki/Radionics).

In the kosha system of yogic tradition, the sages have talked of subtle fields of consciousness as a result of their direct experience and not proven by scientific methods. Shy Tubaly has mapped the same in unique way (www.the-whitelight.com). Basic layer of consciousness is the **material-physical** field. (memory of brain & natural survival activity of brain); 1st subtle field is the **electromagnetic field** (Pranic body); The 2nd subtle field is **Mental emotional field** (accumulated memory

connections); The 3rd subtle field is **Mental – spiritual field** (no time and no memory, become free from past experiences. **Real Self** separated from any experience resulting in a stream of non-casual emotions such as joy and love from within). It is the field of initial spiritual awakening. This field is also the source of intuition, insight, and spiritual intelligence. The 4th subtle field is the **Cosmic-Soul field**. In this state one experiences oneness with the entire universe; the 5th subtle field is, **Field of pure awareness** in which one begins to realize the divine self-identity.

Simple and Spiritual living with intense meditation will lead one through subtle fields of consciousness to state of enlightenment.

March 28, 2013

BCH



Healthy Lifestyle – the Need for Global Movement

Thanks to automation in the name of convenience and comfort, nuclear family with modern living style has affected human physical, emotional and spiritual health. Fast paced life and excess use of junk foods and modern gadgets namely the car, TV, cell phone, microwave oven, refrigerator, air conditioner etc. with cordless & remote controls leading to sedentary and addictive lifestyle, causing serious health problems with life threatening morbidity and even death. Environmental pollution due to automobile exhausts and industrial effluents, electromagnetic radiation and stressful living are distancing the man away from nature contributing to increased risk of non communicable diseases namely cardiovascular diseases (heart attack and stroke), cancers, chronic respiratory diseases (COPD and asthma) and diabetes. Unhealthy diets, physical inactivity, tobacco and alcohol consumption are other contributing factors for lifestyle diseases. Globalization of unhealthy lifestyles away from nature will lead to increased cardiovascular disease and diabetes. Tobacco accounts for almost 6 million deaths every year. About 3.2 million deaths annually can be attributed to insufficient physical activity. Approximately 1.7 million deaths are attributed to low fruit and vegetable consumption. In terms of attributable deaths, the leading NCD risk factor globally is elevated blood pressure (to which 13% global deaths are attributed) followed by tobacco use (9%), raised blood glucose (6%), physical inactivity (6%) and overweight and obesity (5%) (www.who.int/mediacentre/factsheets/fs355/en/index.html).

Role of industrial farming and production of foods with extensive use of insecticides, storage and processing of fast foods with chemical cocktail followed by excess consumption, need extensive study in understanding the possible reasons for the increase in cardiovascular diseases and diabetes.

Rapid rise in lifestyle diseases with increased healthcare costs to

individuals and nations will increase the poverty and affect the progress towards UN Millennium Development Goals. The 2008-2013 Action plan of the global strategy by WHO for the prevention and control of non communicable diseases suggests anti-tobacco measures, reduce alcohol consumption, promote healthy diets and physical activity, challenging tasks indeed in the consumerism driven market economy.

There is urgent need to emphasize the importance of **Healthy Lifestyle** in prevention and control of non communicable diseases. Gandhiji's Simple Living and High Thinking is the mantra for healthy lifestyle. YOGism, the Yoga Way of Living summarises the healthy lifestyle as **live Simple**, close to Nature, **live Spiritual** with positive thoughts and actions and **live to Serve** the needy. Childhood and adult obesity have become endemic in developed and developing countries due to consumerism aggressively pursued by processed food industry with chemicals acting as slow poisons. Stress, a man made health problem is increasing due to competitive, fast moving and ambitious lifestyle. Obesity, stress, wrong food habits, lack of exercise, sedentary lifestyle are playing a major role in causing type 2 diabetes, hypertension and cardiac problems. To lower the death toll due to chronic diseases global movement is needed to emphasize on prevention by regulating diet, healthy food habits, yoga exercises and meditation by doctors, NGOs and Governments. A natural healthy lifestyle involves intake of only natural and organic foods, right amount at the right time. It also involves daily discipline for the mind and the body. Yoga Way of Life – means the way of life based on the vision of Oneness. It is a complete science for living a simple life in harmony with nature and whole creation. Nature, they say heals. It is a stress buster too.

December 20, 2012

BCH



The Elusive & Invisible Conscience

“The Voice of Conscience is the Voice of God”

– Mahatma Gandhi

‘In the Inner World, all knowing tends to being;

when you try to know your own nature, you realize that you are that’

– Swami Ranganathananda

I simply followed (my teacher’s) instruction which was to focus the mind on pure being ‘I am’, and stay in it. I used to sit for hours together, with nothing but the ‘I am’ in my mind and soon peace and joy and a deep all-embracing love became my normal state. This brought an end to the mind; in the stillness of the mind I saw myself as I am – unbound.

– Nisargadatta Maharaj

“That in whom reside all beings and who reside in all beings, who is the giver of grace to all, the Supreme Soul of the Universe, the limitless being ... I am that”

– Amritbindu Upanishad

Real Nature of God, Atma, Sakshi or Self is **Pure Consciousness**, one and non dual which is beyond body-mind complex and beyond cause and effect determinism. All living organisms manifest consciousness reflecting presence of Divinity in all of us which is the basis of Conscience. However why different people / leaders behave differently causing untold suffering and unrest in the World? When I said that this is possibly due to the clouded or compromised consciousness, my daughter-in-law ascertained that consciousness cannot be polluted which put me in puzzle, how to explain.

In Vedic thought, Self or Atma is emphasized as **Pure** consciousness. It is further explained that due to errors and actions committed in previous life (cause and effect of Karma siddhant), the Pure consciousness (Atma) associates with some attributes of mind such as raga / dvesha and thus considered as anatma and we become subject to samsara and experience of pleasure and pain. Our scriptures, comprising the Upanishads and the Gita, provide guidance that Atma is Nirvikara (free from modification), Nirguna (free from attributes), Chetana (conscious) and Satyam (absolute reality) while anatma is Savikara (subject to modification), Saguna (subject to attributes), Jada (inert) and Mithya (conditional reality). In an example to clarify, the attributes of the body-mind complex are erroneously superimposed on Atma just like the attachments of wealth or ornaments worn by a person being falsely attributed to him or her. Another example of attribute is ahankara as part of anatma, which is realized by a wise person. Once one is free from attributes of mind, then he becomes enlightened, with peace, joy, love and compassion (Upadesa Sahasri-6, Tattavalo, May 2012).

In Buddhism one mentions of purification of mind to make it free from defilements by Path of Vipassana meditation leading to liberation or enlightenment.

Mind, according to Vedanta is distinct from the physical body on the one hand, and the Spiritual Self on the other. Vedanta stresses development of mind for physical, intellectual, aesthetic and moral development. Mind is the source of freedom, as also of bondage. Vedanta suggests meditation on Real Self which will heighten one’s Self-consciousness to become pure, stronger, wiser and happier (Mind according to Vedanta, Swami Satprakashananda, Tattavalo, May 2012).

Jill Bolte Taylor is a brain scientist at Harvard at the age of 38 yrs had intense headache which soon made her loose all her left brain functions like speech, comprehension and self consciousness due to large blood clot in her left brain which was removed. It took her eight years to go back

to work again on human brain. That morning she had unique opportunity to learn the brain functions inside out, while the left brain thinks linearly, the right thinks holistically. The left brain understands the present, past and the future, the reason why we all feel miserable. The right brain on the contrary, connects us with this whole universe as a speck in the omnipotent universal consciousness. That morning Jill felt real “Nirvana” in her own words. Whenever her dying left brain gives a problem for attention, soon she will fall back into that blissful **Satchitananda** of the disconnected right brain that connects her only to her maker, the universal consciousness. She says why worry about the past or future, when one could live blissfully in the present trying to help others live well too. Human mind is intangible but is a wonderful wonder. Mind is only energy at the subatomic level of every single human cell of which there are one hundred thousand billions in all. By stimulating our right brain functions through Pranayama and Meditation with constant practice one could get enlightened and liberated (B. M. Hegde, Hindu, Sept. 2012).

September 24, 2012

BCH



The Good and Bad of Infection, Inflammation, Allergy & Immunity

Law of Nature is that anything in right proportion is helpful and in excess is harmful, proves the Good and Bad sides of infection, inflammation, allergy and immunity.

Infection is the invasion and multiplication of harmful microorganisms such as bacteria, viruses and parasites that are not normally present within the body. Bacteria that normally live within the mouth and intestine are not infections. A short-term infection is an acute infection. A long-term infection is a chronic infection. Infected hosts fight infections themselves via their immune system, the body’s defense system. Mammalian hosts react to infections with an innate response, often involving inflammation, followed by an adaptive response.

The more we learn about our immune system, the more is its complexity. This may be compared to the story of big elephant and four blind men describing it. In 70s we tried to explain adaptive immunity in terms B and T cells and four interleukins (secreted proteins / signaling molecules). Now the number of interleukins have raised to 36 with intricate regulatory mechanisms in the immune system. If we could work out the evolutionary history of innate and adaptive immunity, this could help us to understand the intricacies of how our **immune system functions and sometimes dysfunctions.**

Effective cellular and humoral immune responses by T and B cells, respectively, require the participation of various phagocytic cells, dendritic cells (DCs), natural killer (NK) cells and other types of innate immune cell and humoral components, which have important inductive or effector roles to provide protective immunity. Two interactive lymphocyte arms are a fundamental feature of the adaptive immune system that was selected to provide balance and self-regulation. This view is also important for understanding inflammatory and autoimmune

diseases and for designing ways to alleviate harmful immune responses (1).

Inflammation is a mechanism of innate immunity. Acute inflammation is the initial response of the body to harmful stimuli or pathogen and is achieved by increased movement of plasma and leucocytes from the blood into the injured tissues. It is a protective attempt by the organism to remove the injurious stimuli and to initiate the healing process. **Without inflammation, wounds and infections would never heal. It is good side of it.** In chronic inflammation, the bad side of it, inflammatory response is out of proportion to threat it is faced. Many experts see inflammation as arising from an immune system response that's out of control as observed in asthma, rheumatoid arthritis etc. with formation of antibodies to self antigens or persistent antigens in chronic infections. To reduce inflammation, body's balance is advised by going "back to basics" with both diet and lifestyle (2).

Allergy is hypersensitivity disorder of the immune system or an exaggeration of the body's natural immune defenses. Allergic reactions occur when immune system is exposed to normally harmless substances such as pollen or certain foods called allergens. All individuals may not be allergic though live in the same environment. Allergic reactions are distinctive because of excessive activation of certain white blood cells called mast cells and basophils by a type of antibody called IgE.

The 'hygiene hypothesis' claims the urban 'Western' life style with its relatively limited exposure to infectious agents during childhood, might be behind the post-war epidemics of asthma, eczema and food allergies. Explosion in allergies in the developed world may not be simply explained? Sanitary living conditions disrupt the delicate balance between our bodies and a complex ecology of microbes and parasites with which we co-evolved, and through which our immune systems are balanced and regulated. A study in India and China, trying to understand how socioeconomic factors, diet, lifestyle and geographic variation can influence food allergies, showed that in India virtually there were no food allergies (3). Is it possible that food is not yet polluted enough with

industrial farming, use of pesticides, food storage and processing with variety of chemicals and fast life for causing increased food allergy? **Maintaining healthy diet and exercise, leading a simple, disciplined and living close to nature may make one allergy free.**

June 20, 2012

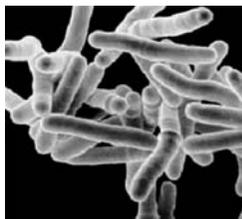
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Science & Commerce of the TB Diagnostics – The tiny microbe laughs



Scanning Electron
Micrograph of M.tb bacilli

The story of Tuberculosis is an interesting saga of Mycobacterium tubercle bacillus fighting all the way from ancient times to modern times, for survival and in the process becoming stronger and laughing away at the mismanagement of human effort. According to WHO, India accounts for one-fifth of the global TB problem with about 8 lakhs of new infectious cases each year, resulting in two deaths per three minutes. HIV infection increased the incidence and severity of active TB and in particular increase in extra pulmonary tuberculosis cases. Emergence of multidrug resistance TB (MDR-TB) and extensively drug resistance TB (XDR-TB) is causing concern in eradicating the disease, highlighting the importance of tools namely diagnostics, vaccines and drugs for control of tuberculosis.

Tuberculosis, as a protean disease is believed to have been present in humans for thousands of years. Skeletal remains of prehistoric humans (4000 BC) and spines of Egyptian mummies (3000 – 2400 BC) with tubercular decay show presence of tuberculosis. During ancient times and in the past two centuries, the diagnosis of TB was purely clinical that too in the late phase with bad prognosis. However Hermann Brehmer, a Silesian botany student suffering from TB was advised by his doctor to seek out a healthier climate. He went to Himalayas and returned cured. In 1854, he presented his doctoral dissertation titled ‘TB is a curable

disease’ giving introduction to the ‘Sanatorium cure’ with fresh air and good nutrition (<http://www.caaglop.com/robbenisland-blog/health/tb/>).

In 1882 Dr. Robert Koch isolated Mycobacterium tubercle bacilli responsible for TB. A century later, in 1993 WHO declared TB a global emergency, the first such declaration by the organization.

WHO had supported maintenance of banks of recombinant TB antigens and monoclonal antibodies for tubercular antigens under TB research programme as soon as high techniques such as Hybridoma and recombinant technology arrived on the scene. Perkins had explored a cocktail of recombinant antigens and wrote Editorial – Admitting defeat in International Journal of Tuberculosis and Lung Disease (2006). Matthys et al (2009) commented ‘not so smart’ on the global targets for TB control, adopted by World Health Assembly, which are to cure 85% of the newly detected smear positive TB cases and to detect 70% of the estimated incidence of sputum smear positive TB cases. The sensitivity of sputum smear microscopy has been observed to be 45% requiring >10000 bacilli per ml of sputum and further not useful in extra pulmonary tuberculosis and paediatric tuberculosis. Rapid automated liquid culture systems reduce the time required but expensive, requiring expertise and infrastructure. WHO funded research projects on rapid techniques did not yield encouraging results. Over the past decade, the involvement of agencies such as stop TB Partnership’s New Diagnostics working group, WHO, TDR, FIND (Foundation for Innovative New Diagnostics), GLI (the Global Laboratory Initiative), several industry partners, non governmental agencies has led to resurgence of interest in the development of new diagnostics. However breakthrough on development of simple, rapid and cost effective diagnostic kit for mass use is still evading the health administrators for successful TB control. In spite of considerable effort and good science, TB diagnosis has been a challenging problem. I wonder why potential Nobel laureates do not touch these health problems of immense interest to public health. The tiny bug is laughing the way TB diagnosis problem is tackled by our scientists and research granting agencies in developed and developing

countries and the people getting exploited by commercially interested industries and for the extra margin by some doctors and laboratories. Our research granting agencies and scientists are happy with 'Me too' catching syndrome with new word jargon, using high technology and sophisticated and costly gadgets which become obsolete in 3-5 years in spite of having plenty of clinical material at our door steps. Crores of rupees have been spent by our research agencies without a Task Force approach. Vision 2020 document on TB is gathering dust. We may announce lofty ideals but without rigorous monitoring and taking corrective steps, no significant outcome will be realized. TB diagnostic research in India is reviewed by Haldar et al (2011) recently in Tuberculosis journal with some progress in hospital patient evaluation studies which needs support and further evaluation.

Seeing the vacuum in availability of reliable diagnostic kits and the eagerness of the doctors to have rapid tests, the industries and laboratories exploited the situation by releasing the kits without proper evaluation. This resulted in supply of 60 test kits in rapid format and 13 kits based on ELISA (Singh & Katoch, 2011). Out of these 24 kits are from China and 15 from USA. How US companies with rigorous standards have become party to this exploitation? The question arises how they were allowed to be imported? Why the imported kits are not evaluated by Drug Controller General of India or research funding agencies, like it is done in Brazil? This will open pandora's box for other infectious disease rapid diagnostic kits.

WHO in its first – ever negative policy recommendation called on governments to immediately ban commercial tests to detect PTB and EPTB. In the diagnosis not only we come across pathogen, immune status of infected host but we also face the clinician's judgment of the case adding complexity to diagnosis (Harinath, 2010). Immunodiagnostic test is an indirect test and can not be gold standard in substituting sputum smear / culture. But the latter suffers with sensitivity or delay and not convenient to the patient attending a tertiary care hospital. Evaluation in hospital setting and feedback by the clinician on

the usefulness of the test in supporting clinical diagnosis and monitoring in suspected PTB, EPTB, Paediatric TB and smear negative tuberculosis cases will be helpful. Otherwise we may face unnecessary empirical drug trials under 'Response to Therapy', leading to drug toxicity in man and increased resistance of the micro organism.

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Reverse Consumerism is the panacea for worsening Global Economy

Communism failed. Socialism never took roots. Growth powered & unregulated Capitalism is collapsing. No amount of bail out appear to bring global economy on track. The main culprit is the greed of multinational corporations fueled by consumerism beyond one's means by individuals and Nations. The developed World is paying for the excess syndrome, which is affecting developing countries as well. Now there is talk of austerity measures and observation of World thrift day. Any –ism devoid of divinity is doomed to fail in bringing justice in Society.

There is an urgent need for 'Reverse Consumerism' or going back to Nature. Yoga Way of Simple living (YOGism) and Self reliance will solve the problems of Global economy to a great extent avoiding exploitation of the weak which is responsible for the tensions between the rich and the poor affecting the World peace and security.

There is need for drastic change in the mind set from self centric to thinking of World as one family – Vasudevakutumbakamu, from the western democratic concept of "Dignity of Man" to Indian concept of "Divinity of Man" and from the concept of "Survival of the fittest" to the "Survival of the weakest". The qualities of sacrificing and sharing should predominate the nature of man. Service driven activity becomes divine and useful to society while commerce driven activity becomes demonic and is harmful to society. There is need for spiritual ambience in the society. A spiritual person irrespective of any religion in the true sense of the word, should exhibit the qualities of compassion, contentment, charity, forgiveness, truthfulness, gentleness, simplicity, purity, sacrifice, sharing, service to community and love to God and His creation, the Nature. It is easier said than done. Desire and effort to attain Spiritual nature, must be cultivated. Yoga Way of Living or YOGism is an art of living in harmony with Nature and concern to the whole humanity.

In brief live Simple, live Spiritual and live to Serve. YOGism should be made a movement with its eternal values and universal characteristics. All activities should be treated as service to the people and charge for sustenance and not as business making enormous profit by exploiting the masses.

India is a fine example of unregulated and non monitored democracy resulting in wide gap between the rich and the poor. With divine culture and Ramarajya concept, India's democracy should have been founded upon the recognition of Divinity of Man as a model for the democratic World. Non-corporate sector dominates Indian economy with large population providing 93% of employment in the country. Share of non-corporate sector in domestic savings is 24%, while corporate sector's contribution is 8% (P.Kanaga Sabhapathi, Yuva Bharati, Aug 2011). It was not given the importance it deserves. Instead the "Unholy Trinity" of the World Bank, the IMF and the WTO and the financial institutions under their control have taken the advantages of weaknesses of developing countries, imposed on them the so called package of economic reforms of liberalization, privatization and globalization otherwise known as structural adjustment programme i.e. fiscal discipline, strict money policies, deregulation, dismantling public projects and programmes, reduced role of state, low tariffs and removal of barriers to private investment, all aimed at making them a part of the free market world economy (PR Dubhashi, Bhavan's Journal, April 2009). "Occupy Wall Street" (OWS) protests are spreading World wide. The people are putting up a united fight against the economic model called neoliberalism, run for the benefit of 1% based on "free-market" economic model.

India, home of World's largest number of poor people with almost 33% of the population living with an average daily income of less than Rs.100 per day while the rich parade luxury cars costing crores of rupees and flock to Lady gaga concert, buying a ticket for Rs.40000/-. A shameful amount of Rs.32 / day has been decided as cut off for poverty line by planning commission, an insult to the citizen of India. Indians are

poor but India is not a poor country says one of the Swiss Bank's directors. Lacks of crores of black money are slashed away by Indians in foreign banks, making the common Indian poor and starving. According to a study by Wealth X, a global wealth intelligence and prospecting company, India has 8200 UHNW (ultra high net worth) individuals with combined wealth amounting to whopping US\$945 billion while India's foreign exchange reserves are around \$300 billion.

Super rich who constitute less than 5% of the population, is living princely life enjoying imported entertainment options as 'Formula 1' car racing, Lady Gaga Raga, maddening Metallica, sexy cheer girls, are not only mocking at but insulting Indian poor indebted farmers committing suicide. 5 star culture should be taxed heavily in developing countries along with better vigilance and strong punishment to the corrupt if democracy has to deliver social justice.

December 2, 2011

BCH



Bright & Dark Sides of Mobile – Wonder Toy of 21st Century

Mobile phone, the twenty first century wonder toy in the hands of children, men, women and senior citizens becoming versatile with each day with multiple functions than mere communication with one another. One may call it mobile epidemic or mobile mania. Today 5.3 billion people possess mobile phone, almost 77% of the World population. China and India with large population lead the mobile growth. Globally 76% have access to mobile phone while 17% to land lines. More than 40% of 100 people have broadband subscriptions in developed World.

A small hand-held phone which was used earlier merely for incoming and outgoing calls when one is out of home or office, its ease of use in terms of memory dialing and memory storage, missed call handling and organiser has attracted one and all. Other features are that it works as digital camera, a voice and video recorder, data transmitter, an internet browser, play games and as a music player – all rolled into one. Mobile is overtaking PC as the most popular way to get on to the web. Lots of new handsets support 3G (fast internet). Most popular mobile destinations are m-banking, travel, shopping, local info, news, video, sports and email. SMS is the king of mobile messaging. 8 trillion text messages will be sent in 2011 (www.mobithinking.com).

Mobile phones in healthcare are connecting doctors, patients and information in creative and innovative ways. For example 'text4baby' provides health tips by SMS text messages for expectant mothers and new moms. 'My Diabetes Guide' steps patients through healthy living with diabetes, while 'Mednet', a provider of cardiac monitoring products and surveillance services is helping doctors and patients by wireless monitoring of patient devices via Bluetooth enabled cell phones (www.infocellphones.com). Mayo Clinic Meditation, launched in early January, focuses on the mind-body connection to stay in harmony for

good health, is currently available for \$2.99 on iTunes (www.mayoclinic.org). In a lighter vein, Maran a telecom professional brings analog of mobile phone to understand the Gita. “The body is like the handset and the Prāna can be compared to the battery. The SIM card will then be the equivalent of the vasanas, the impressions stored in the mind. The jīvātmā is like the electromagnetic signal inside the phone, while Paramātmā is like electromagnetic signal in the air (Tapovan Prasad, March 2010).

Today, a multi-tasking mobile phone is not just a reality but also a necessity for many. When TV came with its 24 hour broadcasting it drastically affected the social get together and family meetings. Mobile is over taking TV and further isolating the people, in particular the children and teens cornered to their individual nests affecting social connection and communication. **It is further hastened by the addictive nature of mobile with its playing music and video movies giving birth to mobile culture and mobile phone etiquettes when in gatherings.**

While it is exciting to go through the rapid developments in mobile phone, it is equally discouraging to go through the dark side of the mobile. **It is important to realize early than suffer later for whole life.** Prof. Girish Kumar (www.itasindia.org/GK-EMR-cell-tower.pdf) in his elegant review on radiation hazards from cell phones / cell towers, brings out common features between cell phones and cigarettes of 21st century. Both are produced by Multi-Billion \$ companies, products are linked to illness and Industries deny any health problems.

Electromagnetic radiation (EMR) emitted from cell phones, cell phone towers, Wi-Fi, computers, Laptops, TV and FM towers, microwave ovens etc. cause significant health hazards on human, animals, birds, plants and environment. A cell phone transmits 1-2 watts of power. In USA, SAR (specific absorption rate) for cell phone is 6 minutes. A person should not use cell phone for more than 18-24 minutes per day. People living within 50 to 300 meter radius from mobile tower, are more prone to ill effects of EMR.

In excess mobile users, due to changes in the electrical activity of the brain, there are complaints of concentration, memory, behavior, sleep disruption, headache and appetite loss. Increased incidence of Alzheimer’s disease, free radical formation, DNA damage, increase in cancer risk, infertility in males, eye and ear troubles have been reported. Children are more vulnerable and carry bigger risk of health problems. International Agency for Research on Cancer, WHO specialized agency has classified electromagnetic fields produced by mobile phones as possibly carcinogenic to humans. Studies on harmful effects of mobile phone use over time period longer than 15 years are lacking. WHO will conduct a formal risk assessment from EMR exposure by 2012 in particular on children and adolescents. Solutions to avoid excess radiation needs research by industry as well.

Take home lessons on mobile phone are, use mobile less, use for shorter duration, keep away from the body (Blackberry warns that the device should be kept at least one inch from the body, and should not be worn or carried on the body) and use “hands free” device where possible. Several nations have advised moderate use of mobile phones for children. Before mobile causes serious and irreversible health problems, there seems to be an urgent need for anti smoking type movement for judicious use of cell phone.

September 20, 2011

BCH



The Debate “FOR & AGAINST” Vaccines, Clouded by Commerce and Big Money

The Medscape one-on-one dialogue with Dr. Paul Offit, the author of the book ‘Deadly Choices: How the Anti-vaccine Movement Threatens Us All’ brought my attention to the indiscriminate vaccination boosted by commerce and big money insulting Nature’s delicate immune system. Paul Offit is Co-inventor of the Rota Teq(R) vaccine, an immunologist and virologist becomes more emotional and critical of Dr. Wakefield at personal level who reported development of autism in children within a month of immunization with MMR vaccine (combination of measles, mumps and rubella vaccines) and Anti-vaccine groups (National Vaccine Information Centre, Safe Minds, Moms Against Mercury and Generation Rescue) stating that it is not proved in larger studies. Dr. Mehmet Oz, one of the authors of the book, ‘YOU: Having A Baby’ feels strongly against vaccines and believes that vaccines may be doing more harm than good, that children should not get as many as they do. Celebrities like Jenny McCarthy, Kelly support anti-vaccine movement, demanding researchable statistics for assessing vaccine risk and not ubiquitous hand outs dished out at Pediatrician’s office stating world wide statistics – like rotavirus killing 500000 children annually. Kelly writes that our children are plagued with chronic illness today and parents are going to be looking at all aspects of their child’s environment – including vaccine. Whether you like it or not, the more vaccines that are added to the already packed schedule, the more stats and proof parents will want their children really are facing life threatening risks, adds Kelly. One mother politely waits for a physical health officer to explain the idea of herd immunity and her decision not to have her own child vaccinated could cause others to fall sick. There are 16 diseases on the US childhood and adolescent vaccination roster, adds US Centre for Disease Control. Further Bill and Melinda Gates Foundation announced that it will commit US \$10 billion over next 10

years for research and development and delivery of vaccines to the world’s poorest. The poor people require better nutrition than controversial vaccines and becoming guinea pigs in the developing countries with weak healthcare infrastructure. With the increase in number of immunizations in pipeline, the research and statistics should be more transparent and accountable to convince the increasing population with skepticism in the need for vaccines for each and every disease prevention. Dr. Kim Mulholland, Professor of Child Health and Vaccinology at London School of Hygiene and Tropical Medicine, points out lack of research into the public health effect of pneumococcal conjugate vaccines in developing countries to prevent pneumonia, says: ‘The vaccines are being rolled out without appropriate supportive research and with major doubts about their effectiveness in the field (www.thelancet.com, 10,150,2010). CDC is concerned that the new H1N1 flu virus could result in a particularly severe flu season this year. CDC hopes that people will start to go out and get vaccinated against seasonal influenza. It is unlikely to provide protection against novel H1N1 influenza. As soon as H1N1 vaccine is ready in the fall, the same is advised along-side seasonal flu vaccine to identified vulnerable groups (www.cdc.gov/h1n1flu/vaccination/acip.htm). Can we afford to administer so many vaccines similar to pain killers in each season and disturb the intricate defense (immunity) system? A rational analysis suggests the need for research in developing a therapeutic vaccine than prophylactic vaccine for disease control and management. This requires immediate attention by the industry and support by the funding agencies.

Living organisms are endowed with survival instinct and empowered to survive against odds and unhelpful environment. It is important not to disturb immunological balance or homeostasis. By our ignorance of Nature’s ways of survival, let us not give rise to new monsters in bacteria and viruses. The concept of immunity has intrigued mankind for thousands of years. Innate (non specific) immunity refers to the basic resistance to disease, the first line of defense against infection. Adaptive immunity may be natural or acquired. Natural immunity occurs

through contact with a disease causing agent, when the contact was not deliberate, whereas acquired immunity develops through immunization involving production of antigen specific antibody and release of various cytokines by sensitized cytotoxic T-lymphocytes. Some of the lymphokines are double edged weapons with regulatory function in immune responses to infection. There is a delicate balance between different immune components. The less we interfere with the subtle defense system the better we are.

Coming to the vaccine trials in the home front, there was a news item that 14000 tribal girls in the 10-14 age group in Khammam were administered controversial HPV vaccine which is claimed to prevent cervical cancer. Four died after they allegedly developed complications but reported as suicides. Glaxo Smith Kline (GSK) announces that US, FDA has approved cervarix for the prevention of cervical pre-cancers and cervical cancer associated with oncogenic human papillomavirus (HPV) types 16 and 18 for use in girls and young women (aged 10-15). Further states that cervarix does not protect against disease caused by all HPV types. Approximately 100 types of HPV have been identified to date and of these, approximately 15 virus types are known to cause cervical cancer. However, aggressive marketing and canvassing starts by drug firms for its mass use for prevention in spite of its limitations. While cervarix offers superior protection against cervical cancer, Gardasil provides protection against general warts too. The doctor faces the dilemma of advising prophylactic vaccine and that too with increasing number each day knowingly that it is not full proof against prevention. It is time to ponder over whether it is justified to disturb the immune balance and give rise to increase in health problems of allergy, asthma, immune tolerance, inflammation, susceptibility to infection and creation of more virulent and resistant viruses and bacteria.

June 03, 2011

BCH



Integrative Medicine – the Future of World Healthcare

Integrative medicine is the combination of the practices and methods of Complementary and Alternative medicine (CAM) with conventional medicine. Integrative medicine offers nutritional and **preventive treatment** programmes **customized for each patient** to promote wellness and **intrinsic healing** in the **whole person - body, mind and spirit** for a healthy and vibrant life. After complete health assessment, a physician directed wellness plan of therapies is provided for **optimizing one's health** or treating chronic medical conditions

As per WHO report, CAM is used by 40 - 70% of population globally in different countries with highest in UK, North Ireland, Belgium, Chile with as much as 70% while 40% of population in USA, France and Australia. Most CAM therapies globally used are for **chronic diseases** such as Neuromuscular disorders, Life style disorders, allergies, arthritis and insomnia, HIV/AIDS, cancer and so on. The main topics covered of the 3rd European Congress for Integrative Medicine in December 2010 were cancer, pain, mental disorders, atopic diseases, patient and physician relationship and placebo, primary care, education and various other topics.

National centre for Complementary and Alternative Systems of Medicine has classified CAM as (1) Alternative Medical Systems (Ayurveda etc.); (2) Mind-Body Interventions (meditation, prayer, music etc.); (3) Biological Based Therapies (herbal medicine, special diet etc.); (4) Manipulative and Body-Based Methods (Chiropractic approaches) and (5) Energy Therapies (Qi gong ('chee gung') etc.).

38% of U.S. adults aged 18 years and over (about 4 in 10) and 12% children (about 1 in 9) use some form of CAM in US. Recent statistics on CAM costs in the United States showed 83 million adults spent \$33.9 billion out-of-pocket on CAM (2007). Pediatric Expenditures on CAM visits and remedies were \$127M and \$22M respectively (Yussamn,

Ambul Pediatr, 2004). In 2007, 37% of US hospitals have one or more alternate therapies available. Massage, Acupuncture, Therapeutic touch, guided imagery are most common being (*Health Forum Survey, 2007*).

A consortium of 44 medical schools who have support of their Deans have a mission to help transform medicine and healthcare through rigorous scientific studies, new models of clinical care, and innovative educational programs that integrate biomedicine, the complexity of human beings, the intrinsic nature of healing and the rich diversity of therapeutic systems. Majority of US universities (Harvard, UCSF, Maryland, Duke, Georgetown, Columbia, etc.) and three Canadian universities (Alberta, Calgary, Laval, McMaster) are associated in this mission (*A. Prasad, YOGism Symposium, 2010*).

In 2007, National Health Interview Survey found that yoga is one of the top 10 CAM modalities used among U.S. adults. An estimated 6 percent of adults used yoga for health purposes in the previous 12 months. Hatha yoga, the most commonly practiced in the United States and Europe, emphasizes two of the eight limbs: postures (**asanas**) and breathing exercises (**pranayama**). Some of the major styles of hatha yoga include Ananda, Anusara, Ashtanga, Bikram, Iyengar, Kripalu, Kundalini, and Viniyoga. The 2007 NHIS survey found that more than 13 million adults and 1.5 million children used yoga for a variety of health conditions including anxiety disorders or stress, asthma, high blood pressure, and depression. People also use yoga as part of a general health regimen—to achieve physical fitness and to relax (*A. Prasad, YOGism Symposium, 2010*).

In the Summit on Integrative Medicine & the health of the public Washington DC, Feb 2009, Senator Harkin says “We don’t have a health care system in America, we have a sick care system.” We spend about 3% of our healthcare dollars for prevention and 45 million Americans do not have health insurance. The summit states that the disease – driven approach to care has resulted in spiraling costs as well as fragmented health system that is reactive, episodic, inefficient and impersonal. The integrative approach puts the patient as the centre addressing not just

symptoms but the real causes of illness. It is care that is preventive, predictive and personalized. The health care “should account for differences in individual conditions, needs and circumstances, and engage the patient as a partner in addressing all the factors that shape wellness, illness and restoration of health”. The progression of many chronic diseases such as cardiac disease and cancer can be reversed and sometimes even completely healed by making **lifestyle modifications**. There are some success stories in Yoga. Dean Ornish proved that Yogic way of life, vegetarian diet and stress management showing reduction in angina and coronary risks but also angiographically proved the reversal of blockages in the coronary arteries. (Published in JAMA in 1995). A new era has started in the management of coronary heart disease with Saaol Heart Program. Dr. Dean Ornish is Advisor to the President of USA.

Based on Vipassana (Buddha’s technique for self realization) and Yognidra (Yogic Practice), **Mindfulness** (non judgment moment to moment awareness) was first developed in 1979 by Dr. Kabat – Zinn and is being practiced under **Mindfulness Based Stress Reduction Programme (MBSR)** in over 200 hospitals in US and is currently the focus of a number of research studies funded by NCCAM. Mindfulness meditation has been clinically shown to be effective for the management of stress, anxiety, chronic pain, depression and a wide array of medical and mental health related conditions.

The Yoga Research in US suggests that yoga might (1) Improve mood and sense of well-being; (2) Counteract stress; (3) Reduce heart rate and blood pressure; (4) Increase in lung capacity; (5) Improve muscle relaxation and body composition; (6) Help with conditions such as anxiety, depression, and insomnia and (7) Improve overall physical fitness, strength, and flexibility. Research studies supported by NCCAM have been investigating yoga’s effects on Blood pressure, Chronic low-back pain, Chronic obstructive pulmonary disease, Depression, Diabetes risk, HIV, Immune function, Inflammatory arthritis and knee osteoarthritis, Insomnia, Multiple sclerosis and Smoking cessation (*A. Prasad, YOGism Symposium, 2010*).

In India AYUSH of Central Health Ministry has identified Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy for research and development.

The concept of Body, Mind and Soul is the very basis of Yoga. Yoga is oldest and time tested holistic system for mind-body fitness. Yoga & Naturopathy aim at purification of mind (mental) and body (physical) i.e. removing negativity of mind and helps in detoxification of body. Yoga way of Living (YOGism – live Simple, live Spiritual and live to Serve) is **strongly preventive** and therapeutically effective in reversing Life style health problems in early stages. There is need for integrative research on Yoga in India. Presently Swami Vivekananda Yoga Anusandhana Samsthana (SVYASA, Bangalore); Dev Sanskriti Vishwavidyalaya, Gayatrikunj, Hardwar; Patanjali Yogpeeth, Hardwar; All India Institute of Medical Sciences, New Delhi and The Yoga Institute, Santacruz, Mumbai and many more are involved in Yoga research.

Meditation (Vipassana, Yognidra or Mindfulness) have become important component of mind-body medicine for promotion of optimal health and showing beneficial effects in reduction of stress, hypertension, anxiety, depression etc. Goal of mind-body techniques has been to activate the **relaxation response** and reduce the **stress response**. When relaxed, the immune system becomes more efficient improving resistance to infection.

Supportive laboratory evidence for beneficial effects of Yoga has shown that meditation could bring down raised cortisol in stress, elevate brain biochemicals GABA and serotonin levels in anxiety and depression and boosts innate immunity as shown by increase in NK cells and resistance to infection.

In researches abroad, supportive laboratory evidence for beneficial effects of yoga are (1) Therapeutic intervention in diet, lifestyle, stress care, exercise and psychological support changed the expression of over 500 genes in men with early stage prostate cancer. (2) Oncogenes associated with breast & prostate cancer, heart disease, oxidative stress

and inflammation were down regulated & protective genes are “turned on” by Life style changes. (3) Acupuncture and mind-body practices helped in reduction of lower back pain, with significant reduction in **pain medication** intake (Ford Motor company – corporate study). (4) In Corporate employee health program in preventive cardiology, smoking cessation, stress management, weight management – decreased medical costs on employees. (5) In research trials by Health Insurance companies – Therapeutic Yoga & Meditation reduced health care costs.

Wellness Institute of Cleveland Clinic has started Life style 180 programme for a fee of \$1500 addressing 25 million Americans with chronic disease, to reclaim their health and vitality by making positive changes in their life style under guidance of experts on nutrition education, exercise and stress management with specific achievable goals.

There is urgent need in India for health research and educating public and conventional medical practitioners on the beneficial effects of Yoga & Naturopathy by (1) Research in Life style diseases and publications from Yoga & Naturopathy colleges; (2) Collaboration with allopathic practitioners with joint publications; (3) Support of research protocols for multi – centric trials in management of Life style health problems in collaboration with allopathic practitioners and (4) Staging the health problems (Hypertension, Obesity, Diabetes, Heart disease, Back pain etc.) and therapeutic intervention with Yogasana, Naturopathy, Nutrition, Exercise, Meditation etc.

March 10, 2011

BCH



YOGism – the Need of the Day for World Peace

YOGism – Simple living in harmony with Nature and concern for whole Universe is the need of the day for sound health of individuals and Nations. It is the only solution for the ills of the World, i.e. self - aggrandisement, exploitation, violence and terrorism. Consumerism as growth promoter is not the solution. Simple living with reduction in wastage of earth's resources may be the ideal solution in the long run for promoting universal brotherhood and peace. Now it is being realized that Austerity is the road for Prosperity. Poverty is the root cause of all ills in the Society – illness, ignorance, illiteracy, crime etc. Ed Begley, Jr in British Medical Journal says that **'We must live simply, so that others may simply live'**.

Yoga based on Sanatana Dharma is the gift of Rishis to the World community to follow, practice and experience. Yoga is an eternal (ageless) and Universal science of living. It is flexible to accommodate all emotions. Four paths are described in Yoga for peaceful life and enlightenment. An intellect starts with Jnana Yoga. Emotional people opt for Bhakti Yoga. Active Person opts for Karma Yoga. People with will power and discipline opt for Raja Yoga. One becomes complete in all these four elements gradually.

Importance of Naturopathy and components of Raja Yoga namely Yogasanas, Pranayama and Meditation in servicing the body (sophisticated biological machine), harnessing the breath (revitalizing our system with Prana), purifying the mind with meditation is being recognized worldwide for promotion of physical and spiritual health and rapid scientific advances are being made in integrative medicine with inclusion of yoga practices and meditation for better healthcare and disease management.

Maintaining a natural life style by intake of natural and organic foods, right amount at the right time and always with positive thoughts

and appreciation of beauty of Nature, help promote positive health by strengthening innate immunity and resistance to disease.

Simplicity, Service and Spirituality are the three pillars of YOGism. Yoga way of simple living (YOGism) harmonizes the body, mind and spirit and connects to the **Oneness** of the Universe. Referring to Service, Smt. Hansa Jayadeva Yogendra said that it is one's Dharma or duty to serve the disadvantaged people and thus serve the nation and the World. Spirituality is following Yama & Niyama and showing love, compassion, forgiveness etc. In brief Yoga is culture of consciousness. YOGism is not a cult. Deep meditation makes you, your own master, follower of nobody but your own conscience, expressing divinity of human nature. The time is ripe to make YOGism with its 3S (Simplicity, Service and Spirituality) as a movement irrespective of one's religion or race for the cause of World Peace.

The International Symposium held on YOGism during December 6-7, 2010 at Arogyadham was a success with participation of 32 Guest Speakers and 107 delegates from Australia, USA, New Zealand, Nepal, Belgium & South Korea and from different regions of India (visit www.arogyadham-seva.com). The success in the first attempt to present concept of 'YOGism' and its reception by Yoga experts and spiritual vibrations experienced in the Symposium is beyond our expectation. We feel that it is possibly due to the inherent spiritual element in the noble word 'YOGA'.

December 12, 2010

BCH



Yogi or Bhogi: the Choice is Yours

(Simplicity, Service and Spirituality - The Three Pillars of YOGism)

The difference between Yogi and Bhogi is as much as the lifestyle of Sura and Asura, simple & natural living vs consumerism & exhibitionism; regulated & disciplined vs unregulated & undisciplined; long lasting mental happiness vs short living physical happiness and optimal & positive health vs negative health with lifestyle problems.

Silence, fasting, slow and steadiness are the weapons of Yogi while making noise & boasting vulgar consumption in lifestyle and fast life with inbuilt pitfalls are the weapons of the Bhogi. While Yogi is quite and calm like centre of the sea, Bhogi is excited with sensual pleasures like waves on the edges of ocean. Yog needs control of indriyas and mind. Bhog is addictive with restless mind. The advanced countries are paying for promoting consumerism in the name of rapid growth, which is not a sustainable economic model for peaceful world. Living in luxury more than one can afford, breeds corruption and degrades the society at the cost of high moral values. The difference between rich and poor widens causing unrest, insecurity and violence in the society. Corruption in politics, bureaucracy and all spheres of activities, the unrealistic cut & paste cinema culture and commerce and betting of cricket, taking their toll by making the country's youth restless & confused and keeping the poor illiterate, backward and exploited.

Yoga is the culture of consciousness and a way of ideal living. It instills self discipline and positive attitude in life. It is said that 75% of life is spent in earning money and remaining 25% of life is spent in spending the money for keeping good health. On the day of retirement the first fear is about health care in old age and affordability. Yoga aims at balanced development of the mind and the body making it free from diseases and helps in greater relaxation and mental peace and stability.

Yoga is not mere asanas (exercises) but is a science of Holistic Living

featured by health, wealth and growth in tune with environment leading to harmony, happiness and peace. Raja Yoga primarily aims at perfection of the mind mainly based on the technique of meditation, presently practiced abroad as mindfulness in health care centres. Meditation has been very helpful in treating headache, hypertension, stress, anxiety and chronic pain. Maharshi Patanjali compiled the classic 'Sutras' on Raja yoga, divided Raja yoga into eight limbs or parts. The first two are Yama and Niyama aimed at socially responsible living, the next two are Asanas and Pranayama. The next three are different stages (Pratyahara, Dharana and Dhyana) of meditation. The eighth and final limb is 'Samadhi', product of meditation.

Old culture of simple living and high value system are to be brought in the society. YOGA way of living in brief consists of simple and contented living in harmony with nature, with 6-7 hr sleep (early rise and early to bed), 30 min to 60 min of yogic asanas, meditation and introspection, regulated eating at definite times, regular walking and entertaining positive thoughts and community service and putting the soul into the job undertaken.

YOGism, the conscious (living in the present moment with awareness and cessation of thoughts on the past or future) and conscientious way of living makes one realize the purpose of life with concern to nature and Universe. Thus whole world gets connected. Yoga lifestyle is the best preventive medicine for lifestyle diseases. **Simplicity, Service and Spirituality are the three pillars of YOGism or Yoga way of living.** There is an urgent need today for YOGism for the world peace and Yoga lifestyle for individual's optimal physical and mental health.

We look forward to the International Symposium on YOGism in December for enriching ourselves with personal experiences and wisdom of Yoga lovers and Practitioners.

September 6, 2010

BCH



YOGism and Afterthoughts

When I received invitation to be the Chief Guest at seventh Convocation of prestigious SVYASA Yoga University, I was elated. The next sentence requesting for the Convocation address within seven days brought me flat to the ground. I know Yoga is beneficial but I have yet to develop an expertise to deliver an oration. Then I recalled our National Symposium on Holistic Living in 2006 without precise definition of 'Holistic Living' at that time in online databases. Then we did explain Yoga as Science of Holistic Living. When we see the websites now, we see holistic living associated with luxurious nature / health resorts, again missing the corner stone of yoga i.e. simple living close to Nature.

At the end of Holistic Living Conference in 2006, we defined Holistic Living and requested for comments from SEVAMED readers. We are very grateful and fortunate to receive enlightening and thought provoking comments from Respected Dr. Jayadeva Yogendra, President, The Yoga Institute, Santacruz (E), Mumbai. The same is reproduced for information of readers.

Dear Dr. Harinath,

Many Thanks for your letter of 2nd March. I appreciate the spirit behind the article on "Holistic Living". I enclose my thoughts herewith. Hope it is useful.

In our so-called "Holistic Living", we miss out the central core of the "human being" who is essentially spiritual. We may extend our definition of health to physical, mental, moral and spiritual well-being but we have very little to offer under the spiritual heading. In fact in our present material culture we clearly skip spiritual contents by bringing in concepts like "Total", "Fullest development" etc. The belief in a non-material reality is difficult to comprehend or accept. We cannot go beyond the concept of cessation of mental activity. Consciousness remains beyond meditation or thinking and its stoppage is hard to understand. It is even harder to materialize someone who lives at a spiritual level. We suspect the yogi and the fakir and the mystic. They are difficult to understand for us and they appear sometimes to us as of unsound mind!

Take away the spiritual content and the word "holistic" is an empty word.

We may meet individuals who claim to be holistic, integrated and spiritual but in their life and style of living we see lot of materialistic content. They may be just clever salesman of the concept "holistic living" without necessarily being in their living.

A man who has truly renounced material objects totally and lives a very simple life remains unknown since he does not proclaim himself or herself as a Guru or a Swami or a Maharaja etc. He or she may be highly concentrated, fully aware and integrated and totally disinterested in material things. Such individuals come closer to the "holistic ideal" and need to be understood more.

Our best wishes to you,

Yours in Yoga

Dr. Jayadeva Yogendra

The Yoga Institute,

Santacruz East, Mumbai

March 5, 2007

After these words of Wisdom from Dr. Yogendra, I thought why not we have 'Symposium on YOGism' which is Indian discovery and very relevant to the problems, the world is facing in these times. Most of the –isms, though well intended have to stand the test of time. Communism based on secrecy and fear has failed. Capitalism based on consumerism and greed is not sustainable. Already cracks are seen. Socialism is a glamorous hybrid, but never worked. **All these lack spiritual element.** YOGism is simple living in harmony with Nature, connecting to the **Oneness** of the Universe, is the need of the day for bringing peace in the world. It takes care of not only the health of the individual but that of whole world. It fits well the aspiration of New Age Movement showing a direction to the restless youth of modern world to live in peace and be creative. One should question the broader goal of life than incentive based self growth. YOGism, the conscious (living in the present moment with cessation of thoughts) and conscientious way of living makes one realize the purpose of life with concern to Nature and Universe. Thus whole world gets interconnected.

When we tried to see the definition of YOGism online, the freedictionary.com states YOGism, as an orthodox Hindu Philosophical system concerned with the liberation of the self from its non eternal

elements or states. Though it is true as the ultimate goal, YOGism or Yoga way of living for peaceful and successful living is not deliberated thus keeping the common man away from YOGism. Many other websites mentioned YOGism as practice of yoga. Urbandictionary.com attributes Yogi – ism to famous New York Yankee Catcher, Yogi Berra, making mockery (unintentional) based on calling him Yogi by a childhood friend and leading to malapropism English language phrases so called YOGisms. It is most unfortunate that the westerners never realized the greatness of YOGI, living simple and thinking for universal betterment. In this context, YOGism Symposium is the need of the day for extensive deliberation.

Based on eternal Vedic wisdom of

1. *Unity in Diversity (Visualize a flower garden)*
2. *Vasudeva Kutumbakam & Sarve Jana Sukhino Bhavanthu (whole World is one family and let all people be happy)*
3. *Poornamadah Poornamidam Poornaatpoornamudachyat Poornasya Poornamaadasya Poornamevavashishyate*

- *Ishopanishad*

(Whole Universe (living and non-living) has got an integral existence. It is interrelated, interdependent and cohesive in nature).

We defined **YOGism** as ‘Simple living in harmony with Nature and concern for whole Universe’. Yoga way of living (YOGism) harmonizes the body, mind and spirit and connects to the **Oneness** of the universe.

Yoga has the complete diet for peaceful and successful living. Basically Yoga is spiritual with noble goal of enlightenment, but it also takes care of earthly needs of man, namely physical, mental and emotional health. Yoga is strongly preventive. Yogasanas, Pranayama, Meditation have been shown to be useful in purification of body and mind and thus help in promotion of positive health and resistance to disease. Therapeutic Lifestyle modification has shown promise in better management of chronic diseases such as allergy, diabetes, heart disease etc. Thus yoga irrespective of race, religion and philosophies of the world, is being integrated with conventional medicine. Crores of people

are practicing yoga and meditation throughout the world for stress free life. New disciplines such as Lifestyle medicine and Mind-body medicine are being developed. Medical schools abroad are establishing division of Integrative Medicine which is healing-oriented medicine that takes account of the whole person (mind, body and spirit) including all aspects of Lifestyle to provide customer oriented, preventive services and medical care in a healing environment by integrating conventional and complementary medicine and by nurturing the intrinsic healing whole person-body, mind and spirit.

Yoga and Nature :

With fast – paced life and excess use of junk foods and modern electrical and electronic gadgets namely the car, TV, cell phone, air conditioning, microwave oven, refrigerator etc and cordless & remote controls and environmental pollution distanced the man away from nature, causing number of lifestyle health problems causing life threatening morbidity and even death.

Yoga way of life – means the way of life based on the vision of Oneness. It is a complete science for living a simple life in harmony with Nature and whole creation. The human race is simply a part of Nature, one amongst millions of creatures. There is only **Nature** left when you have exhausted all the Gurus and -isms, all those meditations, breathing and other techniques. Hindu way of life nurtures Nature. We worship the sun, wind, land, trees, plants and water which is the very base of human survival.

We take for granted, the natural beauty of flower garden or fruit trees. Varieties of shapes and colors. Just be aware and observe the flowering of buds, the maturing and ripening of fruits, eating and playing of birds. Nature, they say heals. It is a stress buster too. Nature is macro and also micro. It is gross and also subtle. It is simple and also complex. That is the beauty of Nature. Sparing sometime for watching and appreciation of Nature’s beauty in variety of flowers (shapes & fragrance), fruits (sight & taste) and birds (sounds and movement) produce subtle joy and relaxation and strengthen the innate immunity.

June 2, 2010

BCH

Seventh Convocation of SVYASA Yoga University, Bangalore January 12, 2010

Theme: YOGism

CONVOCATION ADDRESS

By Dr. B.C. Harinath

Dr. B.C. Harinath did his PhD from Oklahoma State University (1964-68) and his post doctoral fellowship from Washington University School of Medicine, St. Louis (1968-70) under Fulbright programme. He joined as Associate Professor of Biochemistry in 1970 at Mahatma Gandhi Institute of Medical Sciences, started as Gandhi Centenary project in 1969. He became Professor & Head, Dept. of Biochemistry in 1976, was Director – Professor & Head from 1992 to 2002 and Dean from 1993 - 94, Silver jubilee year of MGIMS. He has been felicitated with many prestigious Awards & Recognition, few include Dr. B.C. Roy National Award for development of specialty, MCI in 1992; Awadesh Saran Memorial Oration award, ACBI in 1992; PA Kurup Endowment Award for Biomedical Research, SBC in 1991; and AJ Thakur Award for Distinguished Clinical Biochemist, ACBI in 2009. He has guided 17 Ph.D and 8 M.D students with more than 170 research publications. He was President, Indian Immunology Society (1990-92) and Association of Clinical Biochemist of India (1994-95). His research interests are Infectious Disease Diagnostics, Life Style Health Problems and Medical Informatics. Currently he is Director, Jammalal Bajaj Tropical Disease Research Centre established on the campus and Coordinator for Bioinformatics Centre (Supported by DBT) and Arogyadham (supported by KHS and CCRYN) with Yoga & Nature Cure Centre and Herbal Garden. In addition to diagnostic research on filaria and tuberculosis, Dr. Harinath is actively involved as Editor of SEVAMED, Quarterly Update on Infectious Disease Research and Traditional Medicine and developing Medical Informatics and Arogyadham on medical campus.

Address :

Distinguished Vice Chancellor Dr. H. R. Nagendra, dedicated Physician and Dean Dr. R. Nagarathna, committed faculty, invited dignitaries, Dr. Goel, Shri. Karthickeyan and the distinguished guests, graduating students and friends.

My Hearty Congratulations to the accomplished outgoing graduates, faculty, administration and other staff and students of SVYASA on this Seventh Convocation of SVYASA University.

When I received the invitation to be the Chief Guest on this occasion, I wondered for a minute whether is it not a computer error in the e-mail message. I am still a beginner in Yoga science and all the time trying to explore on how to make it as primary intervention by the treating physicians in management of health problems. Possibly that may be one reason for inviting me to this function. I feel honoured to participate in this prestigious SVYASA Convocation as Chief Guest. I am delighted to be here and share my experience on how I got into Yoga and meditation.

Paying Back to Motherland:

From humble village, I could go to UNITED STATES under Fulbright programme in 1964 and completed my Ph.D. on Chlorpromazine metabolism at Oklahoma State University and Post Doctoral study on Aryl sulfactases in human brain at Washington University School of Medicine in 1970. Under Fulbright grant regulation, I had to leave United States at least for two years and then reenter if desired to become immigrant. I was keen to come back and see what I can do in our country. Dr. Sushila Nayar, Gandhiji's associate started Institute of Medical Sciences which was started as Gandhi Centenary Project in 1969 at SEVAGRAM as the first rural medical college in Kasturba Hospital started by Mahatma Gandhi. It was a big contrast from St. Louis to Sevagram. Excepting for a small colorimeter and balance, the department had no sophisticated equipment. Hospital biochemistry laboratory was yet to be established. Filaria was endemic in the villages surrounding Sevagram. I decided to work on filariasis. During the last forty years, Biochemistry department was developed into advanced Research Centre with sophisticated biomedical equipment resulting in establishment of Jammalal Bajaj Tropical Disease Research Centre on the medical campus. We could get patents for filarial and tuberculosis excretory – secretory antigen proteins and introduced two

diagnostic tests: SEVA FILA CHEK for filariasis (only Lab in India) and SEVA TB ELISA for tuberculosis for benefit of patients. When people ask how do you interact with scientists in a rural setting, I narrate Eekalavya story. I like to tell this story to young friends to show that with faith in God, Commitment and Devotion always pays in return. SVYASA is another fine example. During process of development against odds, one develops blood pressure. This is natural phenomenon, in particular if one is not used to yoga way of living. In 1991 I had blood pressure and then was advised to do Meditation. In 1992 I attended Vipassana meditation course and thus entered the arena of yoga and meditation. Thanks to Dr. Naveen, I visited SVYASA in 1996 or so. Since then I have great admiration for Dr. Nagendra and Dr. Nagarathna and associates for creation of this excellent Institution. I used to witness favourable consideration of grant application of SVYASA for advanced centre in ICMR-SAG meetings. I am very happy that it resulted in establishing a prestigious University for advancement of Yoga research.

Yoga - the Complete Diet for Peaceful and Successful Living :

Yog is union of individual self with the universal self. Basically yoga is spiritual with noble goal of liberation, but it also takes care of earthly needs of man, namely physical, mental and emotional health. Rishi Patanjali has beautifully presented Asthanga-Yoga to the entire world. Yoga is art and science of living. In International context, it is Holistic Living – simple living in harmony with Nature and thinking as part of and with concern to the whole universe. The spiritual oneness of the whole creation helps the world for ushering in universal brotherhood. I recall visiting Russia behind iron curtain in 1981. God is replaced by fear of ‘Secret agent’ and loss of freedom in communism. As Marxist ideology was diluted with time, corruption and selfishness became rampant, people could not tolerate and revolted when the moment arrived. Similarly God is replaced by consumerism and greediness in commerce driven capitalism. It is not a sustainable model. The world is experiencing the down turn in the economy bubble, boosted by ‘excess syndrome’ of Western world propagated by aggressive marketing. No

wonder Peace has deserted the world. Spiritual globalization is only the weapon for all the ills of universe and insecurity. Yoga way of living or we can call **YOGism** with inbuilt spirituality is the right way to the new generation of youth abroad saturated with affluence and consumerism searching for new direction.

Dr. Pranav Pandya, Dr. Nagendra and Dr. Deepak Chopra will agree that India should lead the world in spiritual globalization with ushering of ‘**YOGism**’ – yoga way of living in West’s New Age Movement awakened by mass consciousness to deeper realities. In a conference on ‘Holistic Living’ at Sevagram, Swami Dayananda Saraswati questioned the audience that when Coca cola can reach mountain tops of Himalayas, how is that YOGism can not spread in all corners of the world for betterment of humanity.

Yoga Research :

SVYASA University under guidance of Dr. Nagendra has been doing excellent work in Yoga research and therapy at its advanced research centre in yoga and neurophysiology and yoga therapy home in collaboration with national and international institutes. Similarly Dev Sanskriti Vishwavidyalaya under guidance of Dr. Pranav Pandya, doing advanced research on various aspects of Divine Indian culture for three decades. Recently Patanjali Vishwavidyalaya (Yogpeeth) under guidance of Swami Ramdev has been doing research on beneficial effects of Pranayam.

Yoga way of living is strongly preventive by promotion of innate immunity. Innate or nonspecific immunity refers to the basic resistance to disease, the first line of defense against infection involving inflammation, complement system, mast cells, phagocytic cells namely macrophages, neutrophils, dendritic cells, granulocytes, natural killer cells etc., by various mechanisms.

Business of Vaccines :

Natural immunity occurs through contact with a disease causing agent, when the contact was not deliberate, where as acquired immunity

develops through immunization by vaccine.

It will be of interest to compare Drugs Vs vaccines. Drugs, the specific killers or inhibitors of microorganisms are used once the infection is set in. However the vaccine is proposed to be used to boost specific immunity against anticipated entry of infective organism. In other words we are intravening with natural and subtle defense system, that too knowing that microorganisms may develop resistance due to inept handling. Similar to drug, vaccine may be used as therapeutic intervention alone or in combination in treatment of disease. It is important to consider whether indiscriminate use of variety of vaccines, aggressively marketed by multinationals will be beneficial in the long run in the prevention of the infections without causing new health problems. No wonder we are already facing the challenge of new and reemerging infectious diseases due to changes in life style, environmental pollution and climate change. Intravention with Nature's defense system should be as minimum as possible, restricting to death causing microorganisms.

With problems of drug resistance and inhibitory costs of development of new drugs, multinationals are moving towards \$21 billion Global vaccine market expected in 2010 by creating fear of disease and other aggressive marketing techniques which is a danger signal affecting the intricate immune balance with dangerous consequences to human health such as a Autism. In the interest of disease management, research may be directed towards development of therapeutic vaccines.

Number of infections have been identified as vaccine-preventable diseases for biomedical research and development of vaccines for intravention. As soon as new infection appears in the community, business interests create fear and push for a vaccine such as Bird flu, Chikungunya etc. as if it is simple solution, without concern of disturbing subtle mechanisms of defense system. The FDA says that 15% of the 1,23,000 adverse events reported since 1990 involved life threatening

conditions, hospitalization, permanent disability, or death, which may or may not have been truly caused by an immunization. Hence for monitoring of vaccine safety, Vaccine Adverse Event Reporting System (VAERS) as a post-marketing safety surveillance programme in United States is collecting information about adverse events (possible side effects) that occur after administration of vaccines. There are also efforts to increase funding to push forward vaccination programmes in developing countries by borrowing money from international markets to provide under development aid and charging interest.

Vaccine intervention should be more carefully implemented in developing countries in particular, due to the problems of storage and transport (cold chain), poor economic status and malnourished poor children. Large population and market potential should not be criteria for pushing vaccines by market forces without rigorous monitoring of the efficacy trials and significant beneficial effects. Yoga way of living will decrease the need for vaccination.

Life Style Medicine :

Thanks to automation in the name of convenience and comfort, living style in modern times has become detrimental to human physical, emotional and spiritual health, giving rise to new branches of Medicine known as Life Style Medicine and Mind-Body Medicine. With fast-paced life and excess use of junk foods and modern electrical and electronic gadgets namely the car, TV, cell phone, air-conditioning, microwave oven, refrigerator etc. and cordless & remote controls and environmental pollution distanced the man away from nature, causing number of lifestyle health problems causing life threatening morbidity and even death. Lifestyle factors such as tobacco smoking and chewing, alcohol, stressful living and electromagnetic radiation seem to cause clinical infertility.

Lifestyle Medicine is the use of Lifestyle interventions such as nutrition (diet), exercise, stress management, smoking cessation and a variety of other non-drug modalities in the treatment of disease. The field

of Lifestyle Medicine (LM) has been growing by leaps and bounds over the last two decades. LM is becoming the preferred modality for not only the prevention but the treatment of most chronic diseases, including type-2 diabetes, coronary heart disease, hypertension, obesity, insulin resistance syndrome, osteoporosis and many types of cancer. While LM interventions typically do not emphasize prescription medications, they frequently require re-titration and/or reduction of medications prescribed before the lifestyle intervention. The American College of Lifestyle Medicine (ACLM) is the first national professional society for clinicians specializing in the use of lifestyle interventions in the treatment and management of disease. Recent clinical research provides a strong evidential basis for the preferential use of lifestyle interventions as first-line therapy eg. The Lifestyle Heart Trial. The research is moving lifestyle from an intervention used to 'prevent disease' to an intervention used to 'treat disease'. The presence of morbidity constitutes a sufficient medical indication for applying an intervention proven to improve, reverse or ameliorate the disease or its symptoms. Recently published articles illustrate the abundance of scientific evidence that lifestyle intervention can be as effective as pharmaceutical interventions, but without the risks and unwanted side effects of more invasive interventions eg. a diet rich in fruits, vegetables and low fat dairy foods in lowering blood pressure in stage I hypertension. Comprehensive lifestyle changes may be able to bring about regression of even severe coronary atherosclerosis after one year, without use of lipid-lowering drugs.

Mind-Body Medicine is an approach to healing that uses the power of thoughts and emotions to positively influence physical health. Most ancient healing practices, such as Traditional Chinese medicine and Ayurvedic medicine emphasize the important links between the mind and the body. Today, there is renewed interest in age-old traditions such as Yoga and Meditation. No longer viewed with suspicion, mind-body programs are now established at prestigious medical schools in the United States and around the world. The key to mind-body technique is to

“train” the mind to focus on the body without distraction. Most commonly practiced techniques are 1. Biofeedback for tension / migraine headache and chronic pain, 2. Cognitive behavioral therapy for changing dysfunctional thought patterns, 3. Relaxation techniques (mindfulness meditation for stress reduction), 4. Hypnosis for treating people with addiction, anxiety disorders, phobias etc. and 5. Spirituality (qualities like faith, hope, forgiveness and prayer) on improving health and healing.

The goal of mind-body techniques is to activate the relaxation response and reduce the stress response. When relaxed, the levels of stress related hormones are reduced and immune system becomes more efficient improving resistance to infection. Thus the mind-body medicine is helpful in treating High Blood Pressure, Asthma, Coronary heart disease, Obesity, Cancer (pain and nausea / vomiting related to chemotherapy), Insomnia, Anxiety, Diabetes, Stomach and Intestinal disorders, Fibromyalgia and Depression

Wellness Institute of Cleveland Clinic has started Life Style 180 programme addressing 25 million Americans with a chronic disease, to reclaim their health and vitality by making positive changes in their lifestyle. The program lasts six weeks with shared learning and support for a fee of \$1500. Groups of 10 to 16 people meet and engage in four-hour sessions twice a week taken by medical wellness experts on nutrition education, exercise and stress management with setting specific achievable goals for personal health and well being.

Medical schools abroad are establishing division of Integrative Medicine which is healing-oriented medicine that takes account of the whole person (mind, body and spirit) including all aspects of Life style to provide customer oriented, preventive services and medical care in a healing environment by integrating conventional and complementary medicine and by nurturing the intrinsic healing whole person-body, mind and spirit. Our Government is proposing to start Rural Medical Course of three and half years. Why not we take one step further and associate doctors trained in yoga therapy and develop integrative medicine units.

I also wonder at the research and standardization work gone into, to make Osteopathy and Chiropractic as degree programmes abroad. Yoga for Health and Education Trust in association with the University of Bedfordshire in UK has started first Yoga degree course, mainly self study, still to be validated. We should study the modalities to make yoga therapy a degree programme abroad if not done already. Considerable research work is being done on meditation as mindfulness with number of research studies in health care programme. It is heartening to note that SVYASA has done pioneering work in starting degree courses in Yoga therapy. These doctors should be employed by Government in rural areas in integrative medicine units.

We established Arogyadham, a Centre for promotion of positive health on medical campus in 2001. We are trying to associate doctors in allopathic medicine with doctor of Yoga and Naturopathy in management of life style health problems. There is considerable inhibition in allopathy medical practitioners to explore complimentary systems of medicine in our country. As integration is happening abroad, considerable effort has to be made by Yoga centres to motivate allopathy medical practitioners to associate with CAM doctors in providing best health care to the patients.

With increasing incidence of life style health problems, we have started web portal on Life Style health problems at our Bioinformatics Centre. Our objective should be to explore yoga therapy as a primary intervention in disease management as soon as the health problem such as hypertension, diabetes, depression is detected so that life long administration of drugs may not be required, which saves from enormous costs and side reactions of the drugs.

National Youth Day and Heritage Day :

Swami Vivekananda's Jayanti is observed as National Youth Day since 1984. It is heartening to note that SVYASA is having convocation on this day each year, reminding Swami's teachings and our duty to the Nation. Further UGC has asked universities to observe January 12 as

Heritage Day from this year to sensitize the students for protection of cultural and archaeological monuments. It is also important that we become spiritual and protect our culture.

Lastly I like to say one word to the outgoing graduates. During study period it is always comfortable with in four walls. Once you enter the wide world, the road will not be smooth sailing. You have been given training for facing obstacles if any. I can only say that you have enormous potential to make your life a success. Whenever you think of a plan and your potential, just remember that a tiny seed of mustard size giving rise to large Banyan tree. I always quote to my students about Dr. David Baltimore, molecular biologist getting Nobel Prize at the age 37 years. It is also pleasure to inform you that my Professor's son Dr. Venkataraman was awarded Nobel Prize last year. He switched from Physics to Biology. In 60s when I was doing research at Baroda, he was young boy of 10 years playing in front of us. It makes you to think that nothing is impossible. However I like to caution here, that the more important is that you should be excited and enjoy the work. That gives great satisfaction making the life a happier one.

I am sure you would meet these challenges with self-confidence and determination and carve a name for yourself and your alma-mata SVYASA.

My best wishes to you all for a bright future in the spirit of Karmayoga.

Thank you.

January 12, 2010



BCH

Probiotic back to Nature

 One old adage says that we have to eat a peck of dirt for better immunity. It means that exposure to a little dirt and few harmless microorganisms is beneficial to health. Recent studies have suggested that lack of contact with bacteria in early life is partially responsible for a less robust immune system. This is corroborated with the hygiene hypothesis by Strachan in 1989, linking increased incidence of atopic disorders to modern hygienic life style (use of detergents and antibacterials) in rich countries.

The body is full of bacteria, in and on the skin, mouth, upper respiratory tract, urogenital tract and in the gut. There are ten times more bacteria than human cells in our bodies. We are more microbe than human. The gut (upper GI tract, ileum and colon) microflora constitutes a large biomass of 10^{10} to 10^{12} per gm content, with close to 500 different species. In this world we are not alone. Billions of bugs live within us and they are crucial to good health. Friendly bacteria are vital to proper development of the immune system, protection against pathogenic microorganisms and to the digestion and absorption of food and nutrients. Before a baby is born, the intestinal tract is sterile. We start accumulating our resident microbes during the birth process. During vaginal birth, the neonate is colonized by the mother's vaginal and fecal bacteria. Colonization is delayed in infants born via caesarean section. Similarly formula-fed infants have not demonstrated the same succession of microorganisms as seen in their breast-fed counterparts. The microbiota dominated by bifidobacteria is beneficial to health (Probiotics in the pediatric practice www.everidis.com).

WHO and FAO of United Nations defined Probiotics as the live microorganisms, which when administered in adequate amounts, confer a health benefit on the host. They are similar to beneficial microorganisms found in the human gut and are called friendly bacteria

and good bacteria. Evidence is mounting that an early and intimate interaction between gut microbes and host defense mechanisms are key to the maintenance of a balance between tolerance of innocent exposures and ability to mount an inflammatory response. Probiotics are available to consumers mainly in the form of dietary supplements. Prebiotics are non-digestible and non-absorbable food ingredients in upper GI tract such as oligosaccharides, dietary fibres, proteins etc. that selectively stimulate the growth and / or activity of beneficial organisms already in people's colons. When Probiotics and Prebiotics are mixed together, they form symbiotic.

Probiotics are available in foods such as yogurt, fermented and unfermented milk, Japanese meso, Tempeh, some cheeses, soy beverages, bananas, garlic and onions which can also help repopulate levels of good bacteria in the intestine. Medical antibiotics, drinking of alcoholic beverages, birth control pills and many allopathic drugs contribute to destruction of the intestinal flora.

Gut microbiota produce antimicrobial peptides and molecules, which have the effect of killing enteric pathogens and inhibiting pathogen – host cell interactions. There is a normal dynamic balance between good and bad bacterial population in the gut. When this is disturbed by intake of chemicals, antibiotics etc. which result in eco-imbalance i.e. replacement of beneficial micro-flora by pathogenic bacteria like clostridia causing disease. Recent evidence supports that disturbances in the bacterial microbiota result in dysregulation of adaptive immune cells and this may underlie disorders such as inflammatory bowel disease eg. ulcerative colitis (Nature Reviews/Immunology, May 2009;313). Probiotics are useful in treating diarrhea, infections of the urinary tract or female genital tract, irritable bowel syndrome and in management of atopic dermatitis (eczema) in children (www.nccam.nih.gov/health/probiotics/).

Most frequently studied probiotic species are the lactobacilli and bifidobacteria. A good probiotic supplement will contain millions of live bacteria to bolster and replenish levels of health promoting good bugs in

our digestive tract. These will improve the digestion and absorption of food and stimulate and support the immune system (www.healingdaily.com/probiotics.htm). Probiotic products are taken by mouth as dietary supplements and are manufactured and regulated as foods, not drugs. Americans' spending on probiotic supplements, for example, nearly tripled from 1994 to 2003. Intake of natural foods having probiotics is advised by nutritionists, compared to dietary probiotic supplements in the form of capsules, tablets and powders.

December 17, 2009

BCH



Lifestyle Medicine – the Gift of Modern Living

Thanks to automation in the name of convenience and comfort, living style in modern times has become detrimental to human physical, emotional and spiritual health, giving rise to new branches of Medicine known as Life Style Medicine and Mind-Body Medicine. With fast-paced life and excess use of junk foods and modern electrical and electronic gadgets namely the car, TV, cell phone, air-conditioning, microwave oven, refrigerator etc. and cordless & remote controls and environmental pollution distanced the man away from nature, causing number of lifestyle health problems causing life threatening morbidity and even death. Lifestyle factors such as tobacco smoking and chewing, alcohol, stressful living and electromagnetic radiation seem to cause clinical infertility (IJEB, Aug 09).

Lifestyle Medicine is the use of Lifestyle interventions such as nutrition (diet), exercise, stress management, smoking cessation and a variety of other non-drug modalities in the treatment of disease. The field of Lifestyle Medicine (LM) has been growing by leaps and bounds over the last two decades. LM is becoming the preferred modality for not only the prevention but the treatment of most chronic diseases, including type-2 diabetes, coronary heart disease, hypertension, obesity, insulin resistance syndrome, osteoporosis and many types of cancer. While LM interventions typically do not emphasize prescription medications, they frequently require re-titration and/or reduction of medications prescribed before the lifestyle intervention. The American College of Lifestyle Medicine (ACLM) is the first national professional society for clinicians specializing in the use of lifestyle interventions in the treatment and management of disease. Recent clinical research provides a strong evidential basis for the preferential use of lifestyle interventions as first-line therapy eg. The Lifestyle Heart Trial. The research is moving lifestyle from an intervention used to 'prevent disease' to an intervention used to 'treat disease'. The presence of morbidity constitutes a sufficient medical indication for applying an intervention proven to improve,

reverse or ameliorate the disease or its symptoms. Recently published articles illustrate the abundance of scientific evidence that lifestyle intervention can be as effective as pharmaceutical interventions, but without the risks and unwanted side effects of more invasive interventions eg. a diet rich in fruits, vegetables and low fat dairy foods in lowering blood pressure in stage I hypertension. Comprehensive lifestyle changes may be able to bring about regression of even severe coronary atherosclerosis after one year, without use of lipid-lowering drugs (www.lifestylemedicine.org).

Mind-Body Medicine is an approach to healing that uses the power of thoughts and emotions to positively influence physical health. Most ancient healing practices, such as Traditional Chinese medicine and Ayurvedic medicine emphasize the important links between the mind and the body. Today, there is renewed interest in age-old traditions such as Yoga and Meditation. No longer viewed with suspicion, mind-body programs are now established at prestigious medical schools in the United States and around the world. The key to mind-body technique is to “train” the mind to focus on the body without distraction. Most commonly practiced techniques are 1. Biofeedback for tension / migraine headache and chronic pain, 2. Cognitive behavioral therapy for changing dysfunctional thought patterns, 3. Relaxation techniques (mindfulness meditation for stress reduction), 4. Hypnosis for treating people with addiction, anxiety disorders, phobias etc. and 5. Spirituality (qualities like faith, hope, forgiveness and prayer) on improving health and healing.

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how we have today that’s actually toxic to our mental health? The fact earlier generations somehow less susceptible to depressive symptoms point to lifestyle factors that will help rebuild our resilience and emotional well being.

Wellness Institute of Cleveland Clinic has started Life Style 180 programme addressing 25 million Americans with a chronic disease, to reclaim their health and vitality by making positive changes in their lifestyle. The program lasts six weeks with shared learning and support for a fee of \$1500. Groups of 10 to 16 people meet and engage in four-hour sessions twice a week taken by medical wellness experts on nutrition education, exercise and stress management with setting specific achievable goals for personal health and well being (http://my.clevelandclinic.org/wellness/reclaim_your_health.aspx).

National Centre for Complementary and Alternative Medicine (NCCAM) is one of the 27 institutes and centres that make up the National Institutes of Health (NIH) of USA. NCCAM is exploring and promoting research in Naturopathy, Traditional Chinese medicine, Ayurveda, Meditation, Prayer, Mental Healing, Art / Music / Dance therapy, Reiki, Electromagnetic therapy etc.

US Federal Government’s Integrated Neural Immune Programme will spend \$16 million on mind-body research next year and private foundations will spend millions more. Hospitals are opening Mind-body clinics and yoga / meditation classes are spreading from health clubs into shopping malls. According to a recent government survey, nearly half of all Americans used Mind-body interventions in 2002 (Newsweek, Sept. 2004).

Food, sunshine, air, rest, exercise and creativity, when consciously inculcated into our lifestyle, it can become the bridge between how we nurture ourselves and how nature intended us to be. This is the key to wellness reflecting Oneness of Nature, says Dr. Vijaya Venkat. Yoga is Science and Art of Living defining the best lifestyle as simple and spiritual living with moderation in food intake, adequate exercise and positive thinking in harmony with Nature and thinking as part of and with concern to whole Universe.

September 11, 2009

BCH

Science & Spirituality of Consciousness

'In the Inner World, all knowing tends to being; when you try to know your own nature, you realize that you are that'

- Swami Ranganathananda

As we struggle with the words 'Conscious' and 'Conscience' so often in this competitive and exploitative world, I was keen to find out Science and Spirituality of Consciousness. To quote Gandhiji, 'Voice of Conscience is the voice of God and it is the final judge of rightness of every deed and every thought'. If so why different leaders endowed with the same conscience act in opposite directions leading to peace less world. Is purity of Conscience, anything to do with it. As per the age old **Upanishads**, in which our great sages engaged in, God, Brahman or Atman is the nature of infinite, **pure consciousness** or **Cit Svarupa**, one and nondual which is beyond body-mind complex and beyond cause and effect determinism. Brahman or Atman is present in the Universe and the evolution of the Universe, first cosmic, then organic and finally spiritual, is a gradual manifestation of the Atman or Brahman. The uniqueness of the human species is that it has developed the capacity to realize Brahman, the very source of the whole Universe. There is unity behind this diversity. That can be discovered first by studying nature outside followed by the study of the inside of nature as revealed in the human being.

All living organisms manifest consciousness. Consciousness is all pervasive and not located in anyone part of the body. Something like electricity supplied to different instruments interconnected but with various functions in a house and also connected to external source. Consciousness is the see-er in the eye, the mind in the mind, the speaker in the speech etc. It is that part of our life which related to our Soul (consciousness), which from a spiritual perspective is connected to the

Divine. French philosopher Peirre Teilhard de Chardin remarked, "We are not physical beings having a spiritual experience, but spiritual beings having a physical experience". Theosophy teaches that the human cycle of reincarnation which decides the fate of the Soul has for its greatest influence the perception by the Soul that it, and none else, is the maker of destiny. That conviction is starting point of success. In Swami Vivekananda's views – This Universe, described as a macrocosm, is a limitless repository of infinitely many microcosms. Vedanta describes as "*Anu me Vibhu*" – the existence of the ultimate in the subliminal; like that of the ocean in the tiny droplets of water. While modern scientific approach proceeds from matter to energy, the Vedic Sciences were derived from realization of the infinite expressions of the universal consciousness – force and decipheration of its manifestation in energy and matter.

The concept of consciousness and 'awareness' as in Hindu Cosmology, is totally absent in modern science which treats it as a part of psychology and deals with only materialistic matters. It requires a cosmic mind to make any research in cosmology and our ancient wise men did develop such cosmic Mind by extensive meditations, etc to reveal cosmic attributes including the cosmic time, cosmic consciousness and its vibrations and cosmic evaluation ruling over the entire universe.

Recent developments in neuroscience, artificial intelligence, experimental psychology, mind-body medicine and quantum mechanics have catapulted the idea towards understanding the consciousness in a scientific perspective. Lesion studies, EEG, MRI scan and other imaging techniques have suggested the necessity of the presence of the physical brain in order to exhibit conscious behavior. However consciousness gives us no physical signals or clues about its location in the body. It is not a thing in space and time and therefore not measurable. Human psyche is more complex than was previously thought. The involvement of many variables has made it difficult for scientists to study the functioning of brain during the process of creative thinking. Consciousness is not a thing in the brain that information is poured into. It is the struggle of different

neuron circuits to hold the stage for a second says Dr. Gazzaniga, Director of the Sage Centre for the Study of Mind at University of California.

A researcher in computer science and artificial intelligence for over twenty years, Amy Lansky says 'As my work as a computer scientist became more and more practical, my **Inner life** became increasingly metaphysical. Over the years, I have come to believe that much more exists than meets our limited awareness'.

June 9, 2009

BCH

[This write up is based on numerous articles on spirituality published in Bharatiya Pragna, Akhand Jyoti, Splendour, Tattvaloka, Life Positive, Discovery, New Scientist etc.]



The Strongly Emerging Spiritual Science

In a recent meeting of Informatics experts, when I said that one should not wait till sixty to think of spirituality, the Chairperson cautioned that he is also spiritual but does not feel appropriate to bring Spirituality in a scientific meeting possibly associating with religion. It is also true that there is always debate on Science vs Spirituality and the notion is that scientific attitude only contributes to productivity and economic prosperity. However spirituality is equally important for social justice, harmony and advancement in the society. While science is sensory perception and demonstrable, spirituality is extra sensory perception and experiential. Science is exciting and stressful while spirituality is calming and blissful. While science deals with outer world, spirituality deals with inner world. Metaphysics refers to that which is beyond the realm of physics, which implies that it is also beyond the reach of scientific explanation. The explanations of metaphysics rely entirely on logic and coherence for their meaning even though they refer to things that might only exist in our imagination. Spirituality and Science are fundamentally different and thus scientific explanation for spirituality may not always be possible. Limitations of scientific explanation and the importance of recognising the unknown is a significant part of the operation of our mind. When science reaches pinnacle, then spirituality begins. Let us see, what some Noble Laureates have to say on Spirituality-

Ala G. Mac Diarmid (Noble Prize in Chemistry 2000): I now feel very strongly that Prayer and power of mind can be very great and important on body chemistry and immune system. **Williams D. Phillips** (Noble Prize in Physics 1997): My scientific appreciation of the coherence, the delightful simplicity of physics strengthens my belief in God. **Roger D. Kornberg** (Nobel Prize in Chemistry 2006): It is truism that both science and religion seek to explain the fundamental mysteries of our existence and of the universe. **Dalai Lama** (Noble Prize in Peace 1989): It is very

important to ensure that inner spiritual development goes together with external or scientific development.

What is Spiritual Science? The word “Spirit” derives from the Latin Spirare, meaning “breath, the animating force within living beings, the Soul”. Spiritual science is a process whereby knowledge of the Soul is derived from a systematic study of what we perceive with our six senses – sight, sound, taste, touch, feeling and intuition. **Spiritual science is an open – ended system of thought. It is a disciplined, philosophical way of life emphasizing the practice of meditation and conscious living**, it demands constant observation of one’s own thoughts, words and deeds.

Spiritual Science encompasses the seven branches of philosophy: 1. Metaphysics (Theology, Cosmology and nature of being); 2. Logic (the doctrine of reasonableness); 3. Ethics (morality and character); 4. Psychology (the whole field of mental phenomena); 5. Epistemology (the essential nature of knowledge itself); 6. Esthetics (Reactions to beauty, harmony, elegance and nobility); 7. Theurgy (doing the work of God). This discipline expands awareness and understanding of the laws of nature and the Universe itself (www.revamandatate.com). Interestingly Spiritual research is being conducted through advanced sixth sense i.e. by extra sensory perception by establishing a link with the subtle Mind and Intellect (www.spiritualresearchfoundation.org). **This has been shown possible by intense meditation by our Sages.** The ‘Truth’ in modern sciences constantly undergoes changes as new things are being discovered and invented. The ‘Truth’ found in spirituality is absolute and eternal and beyond time. **For this reason holy scriptures such as Vedas have reprints but no revised editions.**

Less than 3% of total DNA form Constitutive Genes (House Keeping Genes) and are involved in synthesis of proteins of biological requirement of the living organism. More than 97% of DNA is non coding, the so called “Junk DNA” is involved in regulating gene expression and adaptation to environment. Number of Genes associating with behaviour, emotions and feelings have been reported. Life style changes and nutrition do affect the genes and genetic expression. DNA can be influenced and reprogrammed by **Words** and the frequencies

without cutting out and replacing single genes. The latest Russian Scientific research directly or indirectly explains phenomena such as clairvoyance, intuition, spontaneous and remote acts of healing, self healing, affirmation techniques, unusual light / auras around spiritual masters, the mind’s influence on weather patterns and much more. The non coding “Junk DNA” in living tissue (not in vitro) will always react to language – modulated laser rays and even to radio waves, if the proper frequencies are being used. This explains why affirmations, autogenous training, hypnosis and the like can have such strong effects on humans and their bodies. **Esoteric and Spiritual teachers have known for ages that our body is programmable by Language, words and thought.** (www.experiencefestival.com/a/Spirituality_and_Science//id/4161). Epigenetics (switching on or off certain genes) introduces the concept of ‘free will’ into our idea of genetics. Epigenome can change in response to the environment through out an individual’s lifetime. Hamer, A molecular geneticist who studied 2000 persons through series of a questioner and genome analysis identified a gene named VMA2, so called ‘God gene’ associated with spiritual nature of the individual. **DNA is not static. It continuously evolves based on the experience and exposure and reflects in personality. For this reason, the Spiritual masters always advise ‘Think Positive and Do Positive’.** Physicists have come close to finding the elusive Higgs Boson particle, the so called “God Particle”, which they hope could one day explain why particles have mass, the US Department of Energy’s Fermi National Accelerator Laboratory has announced. **Mindfulness meditation derived from Yognidra / Vipassana has been integrated into the mainstream of medicine and health care for treating the patients suffering from stress related problems.** Thus Spiritual Science is emerging stronger in understanding and management of life style health problems and help in better creativity and efficiency. Vedic and Scientific Research Foundation (VSRF), Bangalore and Brahma Varchas Shodh Sansthan, Haridwar are conducting research on scientific interpretation of vedic methodology like, Yagnas, Pujas and Sadhanas and their benefits to society.

March 25, 2009

BCH



Nature – the Best Medicine

Man has so much to learn from Nature that a new field of study known as Biomimetics or Biomimicry has arisen to understand nature systems, processes and elements and take creative inspiration from them to find solution to man's problems. The first suspension bridge across the Niagara came after looking at the suspension web of a spider. The new science, which has been largely enabled by nanotechnology – the manipulation and construction of materials at atomic and molecular levels. Nature is a great teacher of we will spare time to observe and learn. Albert Einstein said “look deep into nature, and then you will understand everything better”. Stephen Covey in his book, the ‘Seven Habits of Highly Effective People’ mentions the law of the harvest as an example to show right time for each activity, planning, sowing etc to get desired results. The processes of Nature are harmonious and rhythmic. The trees that grow all around express spontaneously this harmony. The birds with their varied melodious chirpings are in perfect tune with their surroundings and live in each other's company in playful mood without bitterness. The trees and birds behave according to their instincts. There is no reasoning or thoughtful decision. But man acts less by instinct but more by thinking and rationalizing. Instinct never errs. It is a gift of nature which can never make a mistake. By thought and reasoning, man can interfere with the nature's processes, violate them and commit mistakes. When we distance from nature's harmony, it causes disharmony and disease. One simple example is chewing tobacco, smoking a cigarette, or drinking alcohol. At the first instance the man's natural instincts / senses reject them but when he indulges and makes a habit, he gets addicted and gets into serious health problems namely liver cirrhosis, oral and lung cancer. This is man's own making.

Childhood obesity and adult obesity have become endemic in

developed countries due to consumerism aggressively pursued by processed food industry with chemicals acting as slow poisons. Stress a man made health problem, is increasing due to competitive, fast moving and ambitious life style. Allergy and Asthma, gifts from junk foods and polluted environment, are increasing in the recent years. Obesity, stress, wrong food habits, lack of exercise, sedentary life style are playing a major role in causing type 2 diabetes, hypertension and cardiac problems. A drive has been launched to lower the death toll due to chronic diseases with emphasis on prevention by regulating diet, healthy food habits, yoga and other exercises under ‘help your body’ initiative with the help of doctors, NGOs and pharma companies. Mohan Gupta an advocate of natural healing says that by maintaining a natural life style, one can beat the most chronic and severe ailments. This involves intake of only natural and organic foods, right amount at the right time. It also involves a daily discipline for the mind and the body. Yoga way of life – means the way of life based on the vision of Oneness. It is a complete science for living a simple life in harmony with Nature and whole creation. The human race is simply a part of Nature, one amongst millions of creatures. There is only Nature left when you have exhausted all the Gurus and isms, all those meditations, breathing and other techniques. Hindu way of life nurtures Nature. We worship the sun, wind, land, trees, plants and water which is the very base of human survival.

We take for granted, the natural beauty of flower garden or fruit trees. Varieties of shapes and colors. Just be aware and observe the flowering of buds, the maturing and ripening of fruits, eating and playing of birds. Nature, they say heals. It is a stress buster too. Nature is macro and also micro. It is gross and also subtle. It is simple and also complex. That is the beauty of Nature. Sparing sometime for watching and appreciation of Nature's beauty in variety of flowers (shapes & fragrance), fruits (sight & taste) and birds (sounds and movement) produce subtle joy and relaxation and strengthen the innate immunity.

December 17, 2008

BCH



Mind-Body Medicine, an integrated approach for disease management

The concept that the mind is important in disease treatment has been the integral part of healing approaches of traditional Ayurvedic and Chinese medicine, dating back more than 2000 years. However developments in the western world by the 16th and 17th centuries led to separation of human spiritual or emotional dimensions from the physical body. With technological advances (e.g. microscopy, the stethoscope, BP apparatus etc.) and discovery of bacteria and antibiotics, curing an illness became a matter of Science (i.e. technology) and took precedence over healing of the soul. The disease-based model, the search for a specific pathology and identification of external cures became paramount in disease management.

During World War II, the importance of ‘belief’ reentered the web of healthcare. On the beaches of Anzio, morphine for the wounded soldiers was in short supply, and Dr. Beecher, discovered that much of the pain could be controlled by saline injections. He coined the term “Placebo effect” and observed that up to 35 percent of a therapeutic response to any medical treatment could be the result of belief. Since 1960s, mind-body interactions have become an extensively researched field after experimenting with body medicine for over two hundreds years.

Mind-body medicine focuses on the interactions among the brain, mind, body and behaviour and on the powerful ways in which emotional, mental, social, spiritual and behavioural factors can directly affect health. Mind-body medicine typically focuses on intervention strategies that are thought to promote health, such as relaxation, hypnosis, visual imagery, meditation, yoga, biofeedback, taichi, gi gong, cognitive behavioural therapies, group support, autogenic training and spirituality. In 2002 mind-body techniques were used by about 17 percent of adult US population. Prayer was used by 45 percent of the population for health reasons. Certain mind-body intervention strategies such as group support

for cancer survivors, mindfulness are well integrated into conventional healthcare (www.nccam.nih.gov).

Thus Mind-body therapy focuses on the connection between mind, body and behaviour problems which may affect health and Mind-body therapies used are meditation, muscle relaxation, hypnosis, biofeedback and a type of counseling called Cognitive behaviour therapy. (Am Fam Physician. 2007 Nov 15;76(10):1523-4.).

Meditation has become an important component of Mind-body therapy or Mind-body-spirit Medicine (www.jaapa.com) for promotion of optimal health and showing beneficial effects in reduction of stress, hypertension, anxiety etc. and helps in cultivating ‘present moment awareness’ and equanimity (being undisturbed in changing circumstances of life). Meditation or Dhyana is one of the Patanjali’s system of eightfold yoga and launching pad for the seeker of spirituality. However in the west, yoga is converted into gymnastic exercise and commercialized, devoid of its divine connectivity. For example a residential Vipassana meditation course for ten days is taught free even in United States giving it a divine touch. This can be explained by the following observation. The sense organs, the body and the sense objects are all projections of the mind. Mind is nothing but consciousness conditioned by objects. Every thought has two aspects – Awareness and the Object. Every thought has the knowledge of some object. If we can take away the object aspect of the thought (i.e. thoughtless state), what remains is consciousness (objectless awareness) alone, which is all pervading through out whole creation. This is also termed as purification of mind and the mind becomes one with the Self and is creative. As Swami Vivekananda said, “Every Soul is potentially divine”.

Based on Vipassana (Buddha’s technique for self realization, www.vipassana.org) or Yognidra (Yogic practice), ‘Mindfulness’ (present moment awareness) was first developed in 1979 by Kabat–Zinn at the University of Massachusetts Medical Centre and is being practiced under Mindfulness Based Stress Reduction Programme (MBSR) in over 200 hospitals in United States and is currently the focus of a number of

research studies funded by the National Centre for Complementary and Alternative Medicine (www.wikipedia.org). Mindfulness Meditation has been clinically shown to be effective for the management of stress, anxiety and panic, chronic pain, depression, obsessive thinking, strong emotional reactivity and a wide array of medical and mental health related conditions. Recent research studies suggests that mindfulness-based cognitive therapy can be used to prevent suicidal behaviour from recurring in cases of severe mental illness. Meditation done inside a Pyramid is thrice more powerful and helps in better concentration.

September, 2008

BCH



Disease Elimination and Vaccine Business

Eliminating a disease from the World is not an easy task. Smallpox eradication has been a highly significant and remarkable success in the history of disease control in the universe. Similarly child immunization has been effective in protecting children from life threatening diseases. A recent study in USA on 13 Vaccine Preventable Diseases: whooping cough; tetanus; measles; mumps; rubella (German measles); invasive haemophilus influenza type b (Hib); acute hepatitis B; hepatitis A; chicken pox; strepto-coccus neumoniae; and small pox revealed that for immunization developed prior to 1980, there was a 92% reduction in vaccine preventable illnesses and a 99% or greater decline in deaths due to vaccine preventable diseases. For Vaccines (hepatitis, Hib and chicken pox) introduced after 1980, there was an 80% or greater decline in illnesses and deaths. (USA – Health Day News, Nov. 13, 2007). With the success, during the 1970's and 80's, the US Government established goals for achieving high vaccination rates (97%) offering federal grants to states. During this period, the number of mandated vaccines gradually increased (from 8 in 1980 to 22 in 2000) as vaccination became a requirement for a much younger population (the majority of all 30 childhood vaccines are administered before the age of 18 months). This resulted in alarming increase in reporting of autism (one in 150) in children compared to one in 10000 in 1970s, thus shaking the faith of public in safety of vaccine in promotion of health. Autism, an incapacitating developmental disability is a disease involving the brain, the immune system and the gastrointestinal tract, attributed to the chemical toxicity of mercury in thiomersal used as preservative a common vaccine ingredient in MMR, HIV, hepatitis B and DTP vaccines given in the first 18 months. (www.know-vaccines.org). Adjuvants are typically used to boost immune response. Adjuvants are sometimes called the dirty little secret

of vaccines in the scientific community, as not much is known about how adjuvants work.

At this juncture, it is of interest to consider the development of immunity, the defense system and how the survival instinct in humans resists infection in nature by innate and adaptive immune responses. The concept of immunity has intrigued mankind for thousands of years. With Louis Pasteur's Germ theory of disease that the fledgling science of immunology began to explain how bacteria caused disease, and how, following infection, the human body gained the ability to resist further insults. **Innate (nonspecific) immunity** refers to the basic resistance to disease, the first line of defense against infection involving inflammation, complement system, mast cells, phagocytic cells namely macrophages, neutrophils and dendritic cells and granulocytes, natural killer cells etc. by various mechanisms. **Adaptive immunity** is often subdivided into two major types depending on how the immunity was introduced. Natural immunity occurs through contact with a disease causing agent, when the contact was not deliberate, whereas **acquired immunity** develops through immunization. **Adaptive immunity** is further divided as (1) **humoral immunity** is the aspect of immunity that is mediated by secreted antibodies, whereas (2) **Cell-mediated immunity** is an immune response that involves the antigen-specific cytotoxic T-lymphocytes, and the release of various cytokines in response to an antigen. There is delicate balance between different immune components. **Herd immunity (or community immunity)** describes a type of immunity that occurs when the vaccination of a portion of the population (or herd) provides protection to unvaccinated individuals. Virologists have found that when a certain percentage of a population is vaccinated, the spread of the disease is effectively stopped. This critical percentage, called the herd immunity threshold, depends on the disease and the vaccine.

Statistics from the government agencies of the U.S., the British Commonwealth and the UK show that between the 1800s and the time various vaccines were introduced, the incidence of the diseases for which

vaccines were provided were reduced by 70% - 90%. For some, this prompts the question as to whether the reduction in the morbidity and mortality due to these diseases is owed to improved sewage systems, better nutrition, and improved home and work environments, all of which occurred during the same period.

It will be of interest to compare Drugs Vs vaccines. Drugs, the specific killers or inhibitors of microorganisms are used once the infection is set in. However the vaccine is proposed to be used to boost specific immunity against anticipated entry of infective organism. In other words we are intravening with natural and subtle defense system, that too knowing that microorganisms may develop resistance due to inept handling. **Similar to drug, vaccine may be used as therapeutic intervention alone or in combination in treatment of disease.** It is important to consider whether indiscriminate use of variety of vaccines, aggressively marketed by multinationals will be beneficial in the long run in the prevention of the infections without causing new health problems. No wonder we are already facing the challenge of new and reemerging infectious diseases due to changes in life style, environmental pollution and climate change. **Intravention with Nature's defense system should be as minimum as possible, restricting to death causing microorganisms.**

With problems of drug resistance and inhibitory costs of development of new drugs, multinationals are moving towards 21 billion Global vaccine market expected in 2010 by creating fear of disease and other aggressive marketing techniques which is a danger signal affecting the intricate immune balance with dangerous consequences to human health such as a Autism. In the interest of disease management, research may be directed towards development of therapeutic vaccines.

Number of infections have been identified as vaccine-preventable diseases for biomedical research and development of vaccines for intravention. As soon as new infection appears in the community, business interests create fear and push for a vaccine such as Bird flu, Chikungunya etc. as if it is simple solution, without concern of disturbing

subtle mechanisms of defense system. The FDA says that 15% of the 1,23,000 adverse events reported since 1990 involved life threatening conditions, hospitalization, permanent disability, or death, which may or may not have been truly caused by an immunization. Hence for monitoring of vaccine safety, Vaccine Adverse Event Reporting System (VAERS) as a post-marketing safety surveillance programme in United States is collecting information about adverse events (possible side effects) that occur after administration of vaccines. There are also efforts to increase funding to push forward vaccination programmes in developing countries by borrowing money from international markets to provide under development aid and charging interest.

Vaccine intervention should be more carefully implemented in developing countries in particular, due to the problems of storage and transport (cold chain), poor economic status and malnourished poor children. **Large population and market potential should not be criteria for pushing vaccines by market forces without rigorous monitoring of the efficacy trials and significant beneficial effects.**

Let us realize that all is not well with vaccines. Discrimination on its essential requirement along with constant monitoring of the efficacy of the vaccine will be necessary in preventing new and complex health problems.

June, 2008

BCH



Sanatana Dharma tunes the Art and Science of Living

[I always used to wonder how Hinduism survived for thousands of years in spite of onslaughts by other faiths and cultures. Possibly its strength lies in its having Sanatana Dharma as its core. I tried to explore and share the information with the readers in this article. I gratefully acknowledge Bhavan's journal, Life Positive, Yuva Bharati, Tattvaloka and other Spiritual Magazines. - Ed.]

Vamadeva (Daid Frawley) writes in Bharatiya Pragna that Hinduism has the devotional theism of Western religions, the Karma Theory and Meditation practices of Buddhism, and the Nature worship of Native traditions, all unified at a deep philosophical and experiential level into one harmonious fabric. The power of Sanatana Dharma continues behind the Hindu tradition, particularly in its Yoga and Vedanta spiritual forms, providing it with a depth, breadth and vitality that perhaps no other spiritual tradition on earth is able to sustain. One can find in Hinduism all the main religious teachings of the World from Nature Worship to theism, to the **formless Absolute**. Hinduism is not anchored to any single Prophet, book or historical revelation that can tie down the expanse of its vision. Hinduism is the religion in which Sanatana Dharma has best survived. But Sanatana Dharma is relevant to all peoples and must be recognized through out the World for the planet to achieve its real potential for the unfoldment of consciousness.

Sanatana (eternal) Dharma stands for universal spiritual truths / values in the past, present and future based on Upanishadic principles which are compatible with science and not based on Historical characters. The sublime principle of Sanatana Dharma is - **the whole existence is the expression of the Divine and hence, the family, society, nation and the whole creation – ever expanding circles of consciousness – are linked to each other**. This secular and non sectarian principle of Vedanta – the spiritual oneness of the whole universe helps the World for ushering in universal brotherhood. Each Soul is potentially divine and the goal of life is to manifest that divinity by Jnana (philosophy), Bhakti (worship), Karma (work) or Raja yoga (psychic control), by one or more or all of these. Different paths have been suggested to achieve the goal based on the nature of an individual, namely intellectual, emotional, hard worker

or strong willed showing built in diversity of Vedanta for universal application. Hence Sanatana Dharma is not a religion similar to Islam, Christianity and Judaism. Vedic or Sanatana Dharma has no founder or date of its creation. In religion, if you question, you commit blasphemy; but in Sanatana Dharma questioning or enquiry is education, not blasphemy.

The Sanatana Dharma philosophy is treated by Vedanta as a link between the physical science and science of spirituality (Spiritual science). Vedanta calls this Science of Spirituality as “Adhyatma Vidya” which is experiential by various techniques such as Vipassana, Transcendental meditation, Pranayama, Sudarshan kriya, Practice of Rajayoga, Devotion to Work, Devotion to Almighty etc.

Yog is union of the individual Self with the Universal Self i.e. union of the body, mind, emotions and intellect. Yoga concretizes the wisdom of Upanishads to our Day-to-day life by systematic practices coupled with understanding. Yoga doctrine may be said to have been handed down from prehistoric-times. Patanjali Rishi gathered together and codified the principles that were scattered in many philosophical texts. His focus is on the development of the mind so that it is able to attain the ultimate state of super consciousness.

The discipline of Yoga is divided into eight parts and thus called Asthanga Yoga namely Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana and Samadhi. Yama and niyama enumerate ethical rules with rigorous training in physical habits and daily routine. Asana deals with physical exercise focusing on the spine. Pranayama is control of nervous energy (vital energy) of the body by breathing techniques. Pratyahara is the withdrawing of our senses and mind away from the outside World. By practice of Dharana (concentration), he gets to the next stage of Dhyana (meditation) which culminates in Samadhi (liberation). Thus yoga takes a normal person from his unenlightened limited status by training and by graded steps to a state of Supreme Power and Knowledge with miraculous powers. Thus yoga is non-sectarian and is a science of Holistic / Natural living, universally applicable for promotion of physical, mental and spiritual health.

March 14, 2008

BCH

ALLERGY – An Emerging Global Health Problem

During the orientation camp in 1964 for Fullbright scholars at Indianapolis, we were received by American families on the weekends. I was starved of spicy food though American Cafeterias are full with bland foods and desserts. When the hostess asked me, whether I like to cook, I jumped and offered to cook spicy Upma and asked for an onion. She immediately said that she is allergic to onion. It was a big surprise to me that food can be allergic and I became skeptic that these rich people are too delicate. Now a days use of ‘allergy’ word has become so common that we do hear that one saying that he or she is allergic to certain people. 35 million Americans suffer from hay fever formally known as “Seasonal allergic rhinitis”. Food allergies affect 3 million and potentially deadly. More than 50 million Americans suffer from allergies making them the sixth leading cause of chronic disease, costing \$10 billion a year on allergy medicines, increasing to \$ 18 billion after inclusion of hospital and doctor visits.

The word allergy is derived from the Greek words “allos”, meaning different or changed and “ergos” meaning work or action. Thus allergy refers to misguided and harmful hypersensitivity reaction by our immune system to certain normally harmless foreign substances the so called allergens, such as pollens, ragweed, dust mite, molds, drugs and certain foods. Allergens in certain individuals cause production of specific type of antibody IgE in large amounts, which when reacted with the allergen, leads to release of histamine and other chemicals by the cells, causing inflammation and typical allergic symptoms such as itching, redness of the skin or a rash, coughing, sneezing, nasal congestion, wheezing, joint pain, abdominal distress or cramping etc. In non-allergic individuals, the allergens are removed by other classes of antibodies (IgA, IgM, IgG, and IgD).

In adults most common foods causing allergic reactions include shrimp, crayfish, peanuts, daal (chick pea), while in children, eggs, milk

and soyabean products, peanuts etc. In Japan rice allergy is more frequent. Increasing incidence of food allergy is due to processed foods containing food additives, synthetic flavors, preservatives & colours and number of known and unknown ingredients. Air pollution with organic carbon due to emissions from gasoline and diesel exhaust, nitrogen dioxide is another cause for increasing incidence of allergy. Thus allergy is likely to become a marker of fast life, environmental pollution, junk food consumption, commercialized hygiene chemical products and modernization distancing away from simple and natural living. Compromised natural resistance is the price we pay and depend on drugs and health aids for survival.

The 'immunocap' specific IgE blood test using the appropriate regional respiratory allergy profile (Quest Diagnostics) provides a convenient method of confirming allergy and identifying the allergen so that one may be cautious in not exposing to or avoiding consumption of allergic substance.

Though there is a dramatic decline in many previously-common childhood infections, considerable rise in prevalence of diseases like asthma is observed. Scientists call this the "hygiene" hypothesis, with lack of exposure to viruses and other environmental factors to build up resistance. Most common colds and infections such as chickenpox provide a level of protection. The challenge is to find ways of reproducing the protective effects of childhood infections while reducing burden of getting these infectious diseases. Food companies have come up with probiotic dairy (fruit flavoured) drinks with helpful microorganisms (live *Lactobacillus casei* and other species) to strengthen body's defense system.

Alternate therapies such as NAET (www.naet.com) seem to help in successful management of Allergy. Yogic exercises like Yogamudra and Anuloma-viloma Pranayama are also found to be beneficial. Living in a clean dust-free environment, maintaining a healthy diet and leading a simple life with regular exercise are essential to make one allergy free.

Wishing all the readers 'ALLERGY' Free 2008.

December 22, 2007

BCH

The Challenge of this Century – Battle of the Bulge, The Obesity Epidemic



Americans are not only rich but fatty too, with obesity rates ranged from more than 17% in Colorado to more than 30% in Mississippi. Rate of adult obesity now exceed 25% in 19 states. The rate of childhood obesity more than tripled from 1980 to 2004 with approximately 25 million children are now either obese or overweight. Childhood obesity is showing increasing trend in developing countries with growing economy, thanks to fast food and beverage companies.

Obesity is a symbol of unethical consumerism aggressively pursued by processed food industry aimed at growing company's profits with least concern to human health. The weak and poor become prey to obesity and whole society has to pay for it. It is very clear that not only calories but chemicals as well are the culprits causing obesity and affecting health. Metabolic Syndrome, a cluster of symptoms and signs that represent a step on the path towards diabetes. Raising of health care costs due to the chronic health problems such as Diabetes Mellitus, high blood pressure, heart disease etc. associated with obesity is going to cripple New Zealand's health system, the government fears. Global war on fast foods and changes in life style are inevitable for reducing healthcare costs and maintain better health.

Eating too much and lack of exercise are not only the reasons for people gaining weight, genetics, metabolism and environmental factors do explain how large your appetite is and how efficiently your body uses the food you eat.

Obesity has given rise to Nutrigenomics, a science of health and balanced diet and tells how food influences turn on / off genes associated with weight gain or loss. Management of obesity has become a business with diet plans, books on losing weight and being healthy, gastric bypass surgery, steroids and other anti-obesity drugs (Xenical blocking

absorption of fat, Rimonabant blocking cannabinoid receptors with serious side-effects).

Studies show there are genetic links to obesity, thus obesity is hereditary and is acquired. Review of genetic data by DNA Micro array analysis on more than 38,000 children and adults in UK & Europe showed certain variations in the FTO gene was associated with extra body fat, obesity and Type II diabetes. About 56 genes have been linked to obesity in rodents but 10 are accepted widely as having any influence in humans. Most explored are concerned with the hormones ghrelin, which stimulates appetite and leptin, which helps regulate fat storage in the body.

The anti-obesity groups such as 'Fight the Obesity Epidemic (FOE)', 'Obesity Action Coalition (OAC)', 'Trust for America's Health', advocate a concerted effort to fight obesity by banning or strongly regulating advertisements and decreasing consumption of fast foods by children, a difficult proposition which is resisted by Food & Beverage Industry and Grocery Manufacturers Association.

Prof. Banzhaf (www.banzhaf.net) has been in the news about using legal action against the problem of obesity in some of the same ways he pioneered against the problem of smoking. So far, number of FAT lawsuits against growing epidemic of obesity have been successful against McDonald's French fries, Big Daddy's Diet ice-cream, Pirate's Booty diet food, Kraft's Oreo cookies, McDonald's & KFC's Transfat, Nation's bottler's sugary soft drinks in schools, paying millions of dollars to Plaintiffs by the Food & Beverage companies for misrepresenting facts on the food labels and misguiding consumers.

September 20, 2007

BCH



Food Industry – Profit vs Human Health

The rejection of two bills by Senate committee of US State of New Mexico, demanding a ban on the use of aspartame, an artificial sweetener in food items which is said to increase the risk of cancer, is revealing and exposes the strong hold of Food Industry on the law makers. The simple reason for rejection was that about 6000 food products such as cough syrups, chewing gum, candy, desserts, soft drinks etc. contain aspartame and the bills would be an invitation to **commercial chaos** (Down to Earth, April 15, 2007). A study by researchers from Cesare Maltoni Cancer Research Centre in Italy, showed that the Aspartame (a dipeptide of aspartic acid and a methyl ester of phenyl alanine, produced by Mon Santo) can cause cancer on rats at levels approved for human consumption (Down to Earth, December 31, 2005). As expected, the industry contested the results and the way the study was conducted. Public witnessed similar drama before banning carcinogenic **Cyclamate**, a sugar substitute used in the food beverages in the past. Morando Soffritti, Scientific Director of Ramazzini Foundation (Italy) stuck to his research results and agreed to share with regulatory bodies which plan to reassess aspartame's safety. Other non-caloric artificial sweeteners namely Sucralose (a chlorinated sucrose derivative) under the brand name Splenda (Patented by Johnson and Johnson) has entered Indian market. Soft drink manufactures have decided to use Splenda in their diet drinks. Doubts are being raised on its safety and long term use may contribute to serious chronic immunological or neurological disorders. (www.sweetpoison.com) The sane advice is to avoid use of chemical artificial sweeteners in the interest of one's own health.

The story of artificial sweeteners opens up the Pandora's box on junk foods causing the problems of obesity, diabetes, asthma and other health problems. The consumption of junk food places a greater burden on

health care systems than Natural and Healthy food. Doctors at Belfast BMA meeting recommended that Food manufacturers should be forced by law to adopt a “traffic light” system to signal nutritional content of food products, green symbol to indicate healthy and red symbol for foods in which most ingredients are not nutritious meaning that this food should be eaten only occasionally. A report from US Institute of Medicine says that Junk food and the advertising that promotes it are serious threats to health of young Americans. The Australian Divisions of General Practice, whose research found 99% television food commercials during children’s viewing periods were for sweets and soft drinks. Australian Government threatens tighter regulation on junk food advertising. The European commission is stepping pressure on the food industry to phase out junk food advertisements targeted at children to reverse the growing trend of obesity among young people. The European Union approved legislation on food labeling to set new standards for the claims that food manufacturers make about their products i.e. use of false or misleading terms such as “fat free”, “high fibre” or “low alcohol” etc.

The first lawyer to sue the tobacco industry, Professor John Banzhaf is predicting a series of similar suits against the fast food industry for its role in the obesity epidemic. Eric Schlosser in his book ‘Fast food Nation’ accuses the Fast Food Industry of many things: advertising to children and playing a leading role in the Nation’s obesity epidemic. He portrays how US as a Nation radically altered economic and social policies to accommodate the manufacture and consumption of fast food. He writes that Americans spend more on fast food than on movies, books, magazines, newspapers and music – combined. In 1970, Americans spent about \$ 6 billion on fast food; in 2000, they spent more than \$ 110 billion.

Prof. Philip James has been driving force behind Britain’s Food Standards Agency, has been convinced that something “very dramatic and different” had to be done to strengthen the weak links in the Food Chain. There is urgent need for food safety: from **plough to plate** which involves industry farming, synthetic fertilizers, pesticides, food

processing using various chemicals to present food more attractive and addictive for increasing consumption and make profit. Lobbies of industries succeeded in making State legislatures to enact “**Common Sense Consumption**” law to discourage litigation.

There is a feeling in the public that ministers, producers and retailers are patronizing, misleading and stemming more from a desire to protect profits than to protect the public health (www.bmj.com). Adding salt to injury, a study suggests spread of multidrug-resistant Salmonella enterica Schwarzengrund from chicken meat to persons in Thailand and from imported Thai food products to persons in Denmark and the United States (Emerging Infectious Diseases, May 2007). Indeed, true globalization of spreading diseases through food products. Future of food appears to be more challenging and fearful with introduction of genetically modified foods claiming the power to improve health, prevent disease, delay senility, boosting our mood etc. (The Future of Food by Brain J.Ford)

Let us learn from advanced countries on the pitfalls of management of Food industry, and make ‘food’ labour intensive service and cottage industry, keeping away from MNCS. Let us make and present food natural, fresh and homely, for human health is more precious than economic gain. Good and tasty food does not need advertisement.

(The author thankfully acknowledges the information of public health interest in the web www.bmj.com.)

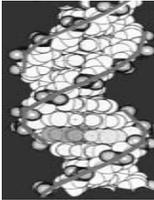
June 15, 2007

BCH



Nature vs Nurture – The Dancing Genes

F lucidation of DNA structure as right handed double helix by Watson and Crick in 1953, who were awarded Nobel Prize in 1962, was a milestone in the era of modern biology. Human Genome Project was conceived in 1984, started in 1990 and completed in 2003. Two teams were involved namely



1. International Human Genome Sequencing consortium (IHGSC) headed by Francis Collins involving research groups from USA, UK, France, Germany, Japan and China and
2. Celera Genomics - private company at Maryland led by Craig Venter. Human Genome has 3 billion base pairs with 34000 genes coding for proteins (less than 3% of total DNA). More than 97% of DNA is non coding (so called Junk DNA) involved in regulating gene expression during development, differentiation and adaptation to environment.

Gene is DNA, carries genetic information from one cell to the offspring. It determines morphological, chemical and metabolic characteristics of individual cell or organism. Mammalian cell possesses about 1000 times more genetic information than does the bacterium *E. coli*. Humans have same DNA to the extent of 99.9%. Fraction of a percent gives individuality (intelligent, dullard, aggressive, mild, normal, disabled etc.). Further Humans share 98% DNA sequence with monkeys, 57% with cabbage. Only 300 genes of humans had no recognisable counter part in the mouse. Humble weed plant, *Thalea cress* (*Arabidopsis thaliana*) carries 30% of its genes with notable similarities to humans. **The commonness of some genes shows subtle connection between all living systems.**

After decoding Human Genome, there is considerable awareness and expectation in the public. It is not a surprise to see the scientists,

scientific journals and magazines with sensational news on Genes. Geneticists, Psychologists, Psychoneuroendocrinologists are excited and actively involved in Genomic Research. Number of Genes associating with behaviour, emotions and feelings have been often reported. To name a few Gene *NeuroD2* with dare devil behaviour, *CYP2A6* with addiction, *ISIG2* with obesity, *DRD4* with sexual desire & performance, Variants of *DRD2* with anorexia, *AVPR1A* and *SLC6A4* with creative / dance performance. God Gene - *VMAT2* with human spirituality, *GCH1* with chronic pain, *TREK - 1* with happiness, *BDNF* with depression, *gpr 54* with puberty, and 10 Genetic mutations in *SIR3*, *SIRT1*, *IGF - 1*, *Lamin A (Pr)* etc with longevity (life span). **Presence of a particular Gene is not sufficient. Its expression is important.** Genes may be Constitutive Genes (house keeping genes) for synthesis of proteins required for the cell, expressed at more or less constant rate in all the cells. Some genes are regulated (induction or repression) by various molecular signals.

Gene Regulation in Eukaryotes is more complicated and is brought out by several mechanisms like gene amplification, gene rearrangement (light chain and heavy chain Ig), small RNAs as enhancers / silencers and deacetylation of histone protein, methylation of DNA in inactivation of genes.

Although > 99% of human DNA sequences are the same across the population, difference between individuals are largely due to SNPs (**Single Nucleotide Polymorphisms**). **About 3 million SNPs are believed to be present in the Genome.** It involves the replacement of one nitrogen base by another ($C \rightarrow T$ or $A \rightarrow G$ etc). Sickle cell anemia is due to a single nucleotide change ($A \rightarrow T$) in the β -globin gene of hemoglobin. **SNP maps of human genome can help in determining the likelihood of some one developing a particular disease (cancer, diabetes etc.).** SNP map project is of interest in pharmacogenomic studies (effect of drugs in individuals) and hence number of drug companies have funded to find new SNPs. Studies at University of Pennsylvania on Gene activity of 4197 genes in white cell lymphoblastoid, showed Europeans and Chinese expressed 939 at significantly different levels while Europeans and Japanese

expressing 756 differently. **This is due to SNPs showing how tiny changes in the basic DNA code can significantly affect the expression of whole genes.** Populations that differ in their susceptibility to diseases such as type 2 diabetes and high BP carry different SNPs and the specific genes may be targeted with drugs. Gene sequences alone do not tell the whole story. Svante Pääbo (Director of Evolutionary Genetics, Germany) observed **differences in gene expression** by measuring mRNA in autopsied brains, possibly playing a role in creating the gap between the chimp and human brains. Pääbo recently began a project to breed mice laced with human – specific genes involved with brain growth and development. The first of these humanized mice are now being born in Germany Discover Dec, 2006).

Epigenetics is the Study of heritable changes in gene function that occur without a change in the DNA sequence. Epigenetic mechanisms such as DNA methylation, histone acetylation, RNA interference, Gene imprinting and silencing play important role in gene activation and inactivation and in phenotype transmission and development, the so called **epigenetic inheritance**. **A simple environmental effect could switch genes on or off – and this change could be inherited.** The idea that inheritance is not just about which genes you inherit but whether these are switched on or off is a whole new frontier in Biology. **Genes and the environment are not mutually exclusive but are inextricably intertwined, one affecting the other.** ‘Incorrect’ epigenetic changes to tumor suppressor genes and oncogenes are some of the first steps in cancer initiation. Studies at Mount Sinai School of Medicine on the effect of stress on pregnant women who were inside or near the World Trade Center during tragic events on September 11, 2001 suggest that stress effects can pass down generations. Another study at Washington State University points to toxic effects, causing biological changes in rats exposed to pesticides persist for at least four generations.

Different studies brought a paradigm shift in scientific thinking how life style and family relationships affect individuals and also their children and grand children in decades to come. If you liken the genome to the hardware of a computer, the epigenetics is the software. There are

number of research studies using Holistic Medicine for prevention and management of cancer. **Studies at McGill University showed that nutrients and supplements changed genetics by switching on or off certain genes in rodents.** L-methionine, a common amino acid and food supplement, when injected into the brains, the amino acid methylated the glucocorticoid gene, and the animal’s behaviour changed. Green tea helps in silencing HER-2 genes that fuels breast cancer in some women. Turmeric suppresses genes (COX-2) that ratchet up inflammation. **Nutrition and Genetics is catching up.** Within a decade, doctors will be able to take genetic profiles of their patients, identify specific diseases for which they are at risk and create customized nutrition plans accordingly.

Nature Vs Nurture has been debated often. DNA is not destiny. **“Gene as fate” has been conventional wisdom. Through the study of epigenetics, that notion may be proved outdated.** Unlike genetic mutations, epigenetic changes are potentially reversible by switch on and off mechanisms (methylation or demethylation). One epigenetic drug, 5-azacytidine has been approved by FDA for treating myelodysplastic syndrome (pre leukemia). Similarly studies on development of drugs for other cancers are under testing.

Epigenetics introduces the **concept of ‘free will’** into our idea of genetics. **Epigenome can change in response to the environment throughout an individual’s lifetime.** Now everything we do – everything we eat or smoke can affect our gene expression and that of future generations. The environment (diet, behaviour, family relationship, lifestyle and surroundings) has a role to play in changing our genome, **bridging the gap between social processes and biological processes.**

In this scenario definition of **Holistic Living** in the recent Symposium held at Sevagram may be of interest. **Holistic Living is defined as Simple, spiritual, purposeful, peaceful and productive living with moderation in food intake, adequate exercise and positive thinking and attitude to life. Holistic Living is an art of living in harmony with nature and concern to the whole universe.**

March 15, 2007

BCH



Holistic Living – Defined & Dissected

The term ‘Holistic Living’ is often in use but interestingly no precise definition is given in online directories. It has been possibly left to Scriptures and Spiritual masters to explain, thus it has acquired Spiritual aura and is treated as philosophy and not as practical necessity for a peaceful life and world peace.

The deliberations in the Symposium on Holistic Living held at Arogyadham, MGIMS, Sevagram during November 16-17, with active participation and blessings of revered spiritual masters, Sri Swami Dayananda Saraswati, Founder, Arsha Vidya Ashram and Gurukulam, Rishikesh; Dr. H. R. Nagendra, VC, Swami Vivekananda Yoga Anusandhana Samsthana University, Bangalore; Dr. Pranav Pandya, Chancellor, Dev Sanskriti Vishwavidyalaya, Haridwar & Brahmashri Subhash Patri, Founder, The Pyramid Spiritual Societies (India), Hyderabad; eminent medical teachers and yoga experts gave us more insight into understanding of the Holistic Living.

Vedic view of life is stated as :

Poornamadah Poornamidam Poornaatpoornamudachyate

Poornasya Poornamaadasya Poornamevavashishyate

Whole universe has got an integral existence, It is interrelated, interdependent and cohesive in nature. We are not isolated beings. We are part of universe and thus inter connected. Man is not body alone. He is breathing and thinking being too, Unique individual made up of complex emotions, appetites and desires. Holistic Living harmonizes the body, mind and spirit.

Patanjali’s Yoga consisting of Yama (truthfulness, nonviolence, non-stealing, chastity and non possessiveness); Niyama (cleanliness, self study, hard work, contentment and trust in God); Asanas (various physical postures); Pranayama (regulated breathing); Pratyahar (internalization of the senses); Dhaarna (concentration); Dhyana (meditation) is broadly the Science of Holistic Living.

During our adult life, we are both consumers and contributors. We need to contribute to this world in the form of harmony, mutual respect, welfare, love, compassion, spiritual health, environment etc. Our life is greatly affected by immediate and remote environment. We always pray for peace by chanting Shanti, Shanti, Shanti. In spite of this, we face misery because we live several characters in one Life – father, mother, brother, sister, employee, employer etc. We are unable to come out of character and that is main cause of our pain and misery. In Holistic Living we try to dissociate ourselves from all these relative terms and get attached to Atma (soul) which is free from all problems. Then there is joy and blissfulness.

In simple terms we may define **Holistic Living as simple, spiritual, peaceful, purposeful and productive living in harmony with Nature and concern to the whole universe.**

Holistic Living is essential for one to live in peace with himself or herself and with the surroundings. It has become even more important, as human life expectancy is increasing to 80-100 years due to better nutrition and healthcare. Healthy, productive and peaceful ageing is the need of the day.

The World Social Forum and Association of the World Citizens are looking for alternatives to religious fanaticism, greed, consumerism, conflict and violence driven world, for creating a new world with emphasis on peace, social and economic justice, mutual respect, respect for life and environment. Holistic Living based on eternal values (Sanatana Dharma) or Secular ethics free from religion and sectism may be universally acceptable and a better tool to create new world order with peace and happiness.

Holistic Living may be practiced with constant review of the following check list and observe the progressive changes in one’s behaviour and living.

1. **Living:** simple living with essentials and contentment. Without vulgar consumption / excess syndrome. Day to Day Living consciously (i.e with awareness) and conscientiously (with

conscience); Child like (innocent, happy and without reaction); Taking each challenge in life as an opportunity to learn and show dynamic action and following **hear no evil, see no evil, speak no evil**. Gandhiji's Simple living and high thinking is the mantra of Holistic Living. Control over food brings control over senses, yogasanas will make the body relax, and Pranayama will slow down breath and Meditation will calm down the mind.

2. **Ahar (Food):** Vegetarian, freshly cooked food, plenty of vegetables and fruits. Good breakfast, moderate lunch and light supper before 8 PM. Fasting once a week (start with one night and increase to a day).
3. **Vihar (Exercise):** Walking for 20-30 min daily with awareness and appreciating the nature. (the trees, leaves, flowers, fruits, birds, clouds, sun, moon, stars etc)
4. **Vicha (Thinking):** Cultivate positive thinking. Read good books with wisdom and listen to noble people.
5. **Achar:** Right action. Doing good work or deed.
6. **Hard work and commitment** to the task undertaken (putting soul into it).
7. **Yogasana, Pranayama and Meditation** for 30 min. in the morning and / or night for Integration of Body–Mind - Soul.
8. **Detachment and treating things equanimously**
9. **Sharing and Sacrifice** (A small percentage in earnings may be kept aside for charity)
10. **Grateful service to the community showing Gratitude for all the blessings in life.**
11. **Cultivating love and compassion**

PRAYER to Almighty as per one's faith.

Introspection at night for the day in silence for 10 min.

Live a whole O, Sampurna or Natural and experience divinity.

December 24, 2006

BCH



Holistic Living and Its Global Relevance

Wikipedia, the free encyclopedia defines Holistic Health as a non-medical philosophy of well being that considers the physical, mental, emotional and spiritual aspects of life as closely interconnected and balanced. Holistic Medicine takes holistic approach involving allopathic and complementary systems of medicine for treatment of patients. Interestingly 'Holistic Living' has not been defined either in Wikipedia or in Oxford dictionary. Possibly it has been left to Scriptures and Spiritual teachers to come out with a definition. All religions have spelled out on the goal of life. Christianity and Islam emphasize on Prayer and Submission to God, for salvation or entry into Heaven. Hinduism shows several paths such as Bhaktiyoga (devotion), Karmayoga (selfless action), Jnanayoga (knowledge), Rajayoga (physical & mental, self control by meditation) and of course belief in God for Moksha or liberation from material existence and cycle of birth and death and join "Universal spirit" which is an ultimate goal of life. Buddhism addresses the suffering or misery of living and guides one towards enlightenment or Nirvana for Peace and Bliss. All the religions do emphasize on getting rid of egoism, hatred, greed and selfishness and harbour qualities of love, compassion, spirit of service etc at emotional and intellectual level but how to imbibe these qualities at experiential level is the crux of the problem, that too in consumeristic environment. Going to Temple, Church, Mosque or Satsang have been ritualized without life transformation. There is need for spending a few minutes in silence for introspection on divine nature and purpose of life. In this Globalization era, day to day living with contentment, peace and productivity has become a challenging problem, necessitating the need for a definition and meaning of Holistic Living applicable at Global level.

There are number of religions and faiths in the world. 75% of the humanity (4.5 billions) belong to major religions namely Christianity, Islam, Hinduism and Buddhism with about 16% being secular / atheist

(Wikipedia). We have amalgamation of rich & poor, educated & illiterate, intelligent & dullard, ambitious & quiet, hot & cold people in the world. Holistic Living has become even more important, as average human life span is increasing due to better nutrition and health care. Life expectancy is 80 years in developed world today compared to 55 years, a century ago. With anti-ageing research picking up largely in repairing cellular and molecular damage, the time has arrived to 'slow ageing' in humans says gerontologist Olshansky. Five technology areas ranging from genetic engineering to replacement of body parts including drugs for enhancing physical performance, cognition etc. have been identified to enhance normal human functioning by the US National Science Foundation. According to some reports, around 10% of US university students regularly take Ritalin as smart drug to boost their attention and concentration. The wakefulness promoter modafinil is increasingly being used. Cosmetic surgery originally used to treat injuries is becoming popular and socially acceptable. The first humans to reach a happy, healthy 150th birthday may already have been born, says Graham Lawton (New Scientist, May 2006). All these new developments make the living a challenging one in the coming years, giving us the option of drugs or drug free holistic living to lead a stress-free healthy and purposeful life. To define and practise Holistic Living without hurting religious sentiments and in the face of aggressive consumer culture is a challenging proposition.

We have a very long history of Rishis (Seers) and visionaries who have explored understanding of human creation, purpose and life beyond and documented for posterity while modern science with sophisticated technology is just moving farther to understand the higher and deeper dimensions of Reality.

Based on Sanatan dharma and Vedic wisdom we may broadly define -

'Holistic Living as Simple, Spiritual, Peaceful, purposeful and productive living in Harmony with Nature' or simply

'Holistic Living is an art of living in harmony with Nature and concern to the whole universe'.

Patanjali's Asthanga yoga is science and art of living based on the

principles of Ahār (food), Vihār (exercise) and Vichār (thinking). Live in moderation free of excess syndrome and without vulgar display of wealth. Cultivate moderation in food intake, have adequate exercise and positive thinking and attitude to life. The popular techniques which have been helpful in Holistic Living of millions of people are Rajayoga (Yogasana, Pranayama, Meditation), Sudarshan yoga etc. Meditation is taught as Aāna pāna, Vipāssana, Transcendental meditation etc. and practiced with beneficial effect. Regular daily (morning or evening) Yogasana, Pranayama, Meditation (TM, Aāna pāna sathi / Vipassana) at least for 30 minutes on week days help in physical and mental health which are important for healthy body and sound mind. Disciplined life (regularity in day to day activities), Fasting, Prayer (Thanking God for all the blessings) and introspection in silence (30 min. a day in the night) with questions – 'Who am I ?' and 'What is the purpose in this life ?' will help in promoting Spiritual health generating a feeling of sacrifice, sharing and spirit of service to the needy and less fortunate. Lastly one has to think of how better he or she contributes in one's own way for making this world a better one.

Further in the morning or evening on weekends, one should spend an hour appreciating the Nature. Sun is giving bright light without charge. Clouds pour rains for sustenance of life. The plants churn the dirty mud and selflessly provide beautiful flowers and delicious fruits to enjoy. We have to learn selfless and disciplined life from birds and animals with regularity in their getting up, eating, movements etc. and how they maintain health. We are hopeful of thorough deliberations in the November Symposium, and **coming** out with a definition and module for 'Holistic Living' applicable in life and acceptable to the whole world.

It is nice that 2005 Nobel Prize for World peace was awarded to IAEA institution and its Director General for their efforts to use nuclear energy for peaceful purposes. India and its Spiritual teachers deserve next Nobel Prize for peace, for presenting wisdom culture based on Yoga (Yogasana, Pranayama and Meditation), the 'Art and Science of Living' to the world.

September 5, 2006

BCH

Science, Spirituality & God Gene

In recent times there is considerable interest to find common ground and connect between science, spirituality and religion. If the Spirituality is the soul, the religion is the body with different shapes, colors and practices. Religion is like natural river. At the point of origin, it is pure and clean. On the way it gets contaminated. Great Saints and visionaries started religion based on noble thoughts in the best interests of community living. The ardent and jealous followers made them compartments creating divisions in the people. With time, the religion has become dominant and individualistic, creating sects and conflicts, destroying the very basis of its foundation ie. the Spirituality which it is supposed to propagate. Hence there is considerable dialogue on Science and Spirituality nowadays.

Science and technology have provided considerable comforts but still no peace on earth, questioning the limitations of science and justifying the need for imbibing spiritual values of love, compassion, sacrifice and concern to Nature and environment. Science is objective experience with limit sense perception and demonstrable while Spirituality is subjective experience based on individual effort and extra sensory perception. Hence the Truth of Science itself got limited to only that knowledge which was gained through limit senses.

Science is understanding based on matter while spirituality is understanding based on mind or consciousness. Spirituality is one step beyond science and hence all great scientists and scholars become spiritual. Core impulse of science and spirituality is the same - The Quest for Truth. Hence, Science and Spirituality should complement each other for individual growth and understanding of Nature's creation, which is happening today.

The one area that has great potential for collaboration between Science and Spirituality is the study of the mind, consciousness and human behaviour. The findings show that, "The monks (during

meditation) showed greater signal in every part of the brain compared to control group (new meditators), especially in parts of the brain related to attention", says Prof. Davidson.

The MBSR (Mindfulness - Based Stress Reduction) Programme, a pioneering effort at university of Massachusetts Medical Centre, USA, that integrated mindfulness meditation practice into the mainstream of medicine and health care for treating the patients suffering from stress related problems. His Holiness the Dalai Lama - has become involved in a modern - day dialogue between Science and Spirituality under the aegis of the 'Mind and Life Institute', on various topics such as Sleeping, Dreaming, Dying, Compassion, Cosmology, Destructive emotions, Nature of matter, Nature of life etc.

In India, Science and Spirituality have always gone together. Besides knowledge of the external world, there is knowledge of the inner world or knowledge of our true nature. Yogic science includes gathering of inner knowledge through reason and experimentation. It includes practices such as asana, pranayama, ritual, mantra and meditation. It can reveal knowledge not only of our ordinary body and mind, but of all aspects of the collective and cosmic minds, extending to the very processes of creation.

In the light of Quantum theory elementary particles were not real like other objects of daily life and verge on the borderline of existing and non-existing. Max Planck's idea of consciousness in material reality, Tablot's concept of an omnijjective universe, Wheeler's concept of self-organising systems - all removed the age-old division between mind and matter, pointing to the possibility of Consciousness as Creator (Kundan MN, TOI, Jan 05).

Nanduri says that Science of Cosmic Philosophy attempts integration of Science of Philosophy (Vedas, Upanishads & Yoga) and the philosophy of science (Plasmas, electromagnetic field and cosmology).

When Time (Oct 25, 04) magazine came out with an article 'Is God in our Genes?', in the worlds of science and religion, provocative questions

were raised, which came first, God or the need for God? If some people are more spiritual than others, is it nature or nurture that has made them so? There is a growing sense that humans may not be able to survive without religion / spirituality. Hamer, a molecular geneticist who studied 2000 persons through series of a questioner and genome analysis, identified a gene named VMAT2, associated with voluntary and involuntary movements of the body through the release of mood altering chemicals or neurotransmitters. He claims that human spirituality is an adaptive trait and also inherited genetic component and the tendency to be spiritual is part of genetic make up. He found that with a single nucleotide polymorphism out of 3.4 billion nucleotide bases contained in the human genome showed marked reduction in self-transcendence in the person concerned.

Age-old Indian philosophy accepts the existence of inherited traits or vaasanas in humans. Spirituality may not be attributed solely to a single or group of genes. The casual body or the kaarana sarira that vedic literature spoke of, is analogical to genes (Kurup, Bhavan's Journal, April 2006). These vaasanas (a term which can not be literally translated as genes) are responsible for the functioning of mind and intellect, and are comparable to the building blocks (or genes) of modern-day genetics. However, vaasanas would lie beyond comprehension of sense organs unlike genes which are conceived through data collected by sense organs. The Infinite can be perceived, but not through sense organs and it is in this sense that science and Vedanta disagreed with each other. The vedic culture categorically accepts the fact that everything is divine in nature. Possibly this is where, meditation helps in purification of mind thus in turning bad man into a good man. Further refinement of the vedantic tenet takes one to the concept of 'consciousness' which is nothing but the all pervading Brahman, formless, attribute less, pure and transcendent, in other words, God.

[This write up is based on numerous articles on spirituality published in Life Positive, Tattvaloka, Bhavan's journal, Akhand Jyoti, Time Magazine, Yoga Sudha, Yog Sandesh, Tapovan Prasad, Yoga the Science, Yuva Bharati and The Speaking Tree, TOI.]

June 9, 2006

BCH

India at Crossroads – Economic Globalization Vs. Spiritual Globalization

“Our knowledge of science has already outstripped our capacity to control it. We have many men of science, too few men of God... Man is stumbling blindly through spiritual darkness while toying with the precarious secrets of Life and Death. The world has achieved brilliance without wisdom, power without conscience.”

-Omar N Bradley

Indians in general are spiritual and live on ‘hope for better future’ as observed by the presence of slum dwellers living in inhuman conditions for generations, around 5- star hotels, posh localities and city’s railway tracts. Our faith in philosophy of past karma makes us insensitive and blind to the miserable living conditions of unfortunate brothers and sisters. Politicians exploit the misery of the poor for their own power games at the cost of economic development. After independence, we embraced communism with cosmetic changes and five year plans in the name of socialism but never critically monitoring the goals achieved. Poor people still live and die with hope. I recall visiting Russia behind iron curtain in 1981 to attend a Workshop. In the period of about 40 years, communism could provide a comfortable living condition for all the people irrespective of rich or poor, though unfortunately behind fear of ‘secret agent’ and loss of freedom. I do remember telling our Director, Dr. Sushila Nayar that Gandhian trusteeship is really in practice in Russia. She did not appreciate saying that it is implemented by force. As Marxist ideology was diluted with time, corruption and selfishness became rampant, people could not tolerate and revolted when the moment arrived.

Now we have started embracing commerce driven capitalism and consumerism at the cost of spirituality without least inkling, where it will lead our country with vast population. When will we use our ancient wisdom to devise means and conditions for universal well being, with ‘Live and let live’ policy in place of competitive exploitation of one

another. India is truly at cross roads to accept either economic globalization or spiritual globalization. Where as the economic globalization serves the interests of western industrialized countries, the spiritual globalization represented by New Age is truly for universal benefit.

Deepak Chopra suggests that to survive, the human species must move from information and knowledge-based culture to a wisdom-based culture. Wisdom is knowledge and information that could heal the ecosystem, resolve conflicts, bring about economic empowerment of the poor, and through leadership, training and empowerment of women, drastically reduce the incidence of diseases like AIDS. Chopra asks whether India is ready to lead the world into a wisdom-based civilization? Everything we need, we already have: Technology, education, cultural diversity, a collective imagination from a vibrant living mythology and a historical context which has drawn upon every possible spiritual and religious tradition – Hinduism, Jainism, Islam, Christianity.. the list is endless. These are the raw materials and ingredients for the perfect recipe for a wisdom-based society (TOI, Feb 2006).

Dr. Pranav Pandya, Vice Chancellor, Dev Sanskriti Vishwavidyalaya sees in the young graduates, crusaders for spread of the message of Hope, Harmony, Happiness and Peace amongst all humanity and says that the Time Spirit has decreed that India will have to play a very significant role in the ushering of the New Era. I realize this truth when I see the new generation of youth abroad saturated with affluence and consumerism, looking for a new direction, enthusiastically involving in Satsangh and social service activities of Spiritual Gurus Ramakrishna, Vivekananda, Swaminarayan, Athawale, Chinmaya, Saibaba, Sri Ravishankar, Sri Goenka, Amritamayi inspired organizations and many more.

Under guidance of Dr. Nagendra, Vice Chancellor, Swami Vivekananda Yoga Anusandhana Samsthana has been doing excellent research on Yoga – The science of holistic living for better health and in disease management in collaboration with MD Anderson Cancer Centre, Johns Hopkins Univ. and Harvard University, USA. Recently held 15th

International Conference on ‘Frontiers in Yoga Research and Its Applications’ at VYASA, Bangalore and World Conference on ‘Expanding Paradigms: Science, Consciousness and Spirituality’ at AIIMS, New Delhi are good examples of excellent research being done in India and abroad on Sudarshan kriya, Yoga, Pranayam and Consciousness with active participation of number of scientists from well known institutions. J. Watumull Global Hospital & Research Centre, Mount Abu in collaboration with DIPAS and MDN Institute of Yoga showed Coronary Artery Disease Regression through Life Style changes and Rajyoga meditation. Vipassana or Yognidra under the name of MBSR (Mindfulness-Based Stress Reduction) is being used in management of stress related health problems at Massachusetts Medical Centre, USA. Swami Ramdev is teaching and doing research on pranayam and has become 5 am family physician bringing change in life style of millions of people watching TV every morning.

Quantum Physicists have started enlarging the scope of modern science by using consciousness-based approach, the essence of yoga, in contrast to the existing matter based approach. Our research funding agencies are more enthusiastic to look westward and support high tech driven research. It is time to look inwards and support projects related to Spiritual science with India’s strong knowledge base and Spiritual Gurus with mass support. Let us not wait to welcome consultants from abroad to teach us yoga, meditation, pranayam under different names.

Based on the ancient wisdom, let India define, practise and propagate the **Art of simple living in harmony with nature and concern to the whole humanity** replacing Star culture and consumerism dished out by aggressive marketing. It is the last opportunity to survive from the trap of economic slavery for next 50 years. Millions of people throughout the world are practising yoga and holistic living. The trio Dr. Deepak Chopra, Dr. Nagendra and Dr. Pranav Pandya may take the initiative to bring all the noble people preaching yoga, pranayam and meditation on one platform to mobilize masses to bring transformation in the country to embrace and lead the World in Spiritual globalization.

March 7, 2006

BCH

Allergy - the gift of FAST LIFE away from NATURE

 Allergy is an acquired state of harmful hypersensitivity reaction to a particular substance called allergen usually a simple or complexed protein. The word allergy is derived from the Greek words “allos” meaning changed and “ergos” meaning action. Thus allergy refers to “altered or misguided” reaction by our immune system in response to bodily contact with allergic substance in a particular individual. It is estimated that 50 million North Americans suffer from allergies, the sixth leading cause of chronic disease, with yearly medicine costs of ten billion dollars in United States. Hay fever affects about 35 million Americans, 6 million of whom are children. Asthma affects 15 million, 5 million of whom are children. The number of cases of asthma has doubled over the last 20 years. It was in 1964 when I visited a host family in US in the weekend after being starved with bland foods. When hostess asked me if I like to cook my dish, I offered to prepare upma and asked for wheat rava, onion etc. She spontaneously said that she is having hay fever and is allergic to onion. I was amazed to hear vegetable like onion can cause allergy. In addition to pollen, dust mites, we are aware of number of food items such as shellfish, peanuts, chana, soyabeans, almonds, walnuts, eggs, milk, food additives, tomatoes, strawberries etc. cause allergy. In Japan rice allergy is more frequent. Thanks to MNCs and TV advertisements, the people are so much afraid of foreign substances causing allergy, when we offered costly Kanjeevaram silk dress material to our hostess, she appreciated but did not have courage to stitch dress and wear.

The possible causes for increasing incidence of allergy are 1. air pollution, 2. too much of staying indoors (thanks to TV) with highly allergenic dust mites and 3. processing and modification of foods using many chemicals for color, flavour, additives for stability and preservation in sweets, candy, cold drinks and instant foods. Studies have

shown increase in asthma and allergy due to increase in consumption of fast foods. Organic carbon in the air, largely due to emissions from gasoline and diesel vehicles has been shown to enhance allergen induced – responses in human volunteers with allergy. One theory to explain the rise in asthma and allergy is “hygiene” hypothesis. With socioeconomic improvement in developed countries, households are so clean and sanitized that our bodies’ immune systems are not sufficiently exposed to viruses and other environmental factors to build up resistance. The challenge is to find ways of producing the protective effects of childhood infections while reducing the burden of getting these infectious diseases. Injectable allergens, which build up antibodies are used to treat severe forms of hay-fever and cat and venom allergies. Genetically modified rice based vaccine is being tested in Japan for allergy treatment, the oral vaccine containing only part of the allergen. Allergy incidence is likely to become a marker of FAST LIFE and modernization, unless healthy life style is practised with less of environmental pollution. Yogic practices, anuloma-viloma pranayama, meditation are beneficial in keeping allergies away. Living in a clean dust – free environment, maintaining healthy diet and exercise, leading a simple, disciplined and nature friendly life are essential to be free from allergy.

January 1, 2006

BCH



Chemicalized Life Style

Fast foods and fizzy drinks with number of chemicals to keep them stable, fresh and tasty, are causing havoc with the health of the community and in particular children with asthma, obesity and other health problems in epidemic proportions. No wonder the Governments and the public abroad are concerned with health care costs of these man made health problems. When USDA came up with nutrition advice on internet with flashy new food pyramid on what and how much to eat, the website <http://www.mypyramid.gov> received 48 million hits in the first 24 hours, showing the serious interest of the public on nutrition (Newsweek, May 9, 05). The result of the anger of the people is the voluntary withdrawal of Fizzy drinks by Coke and Pepsi companies from US school premises (TOI, Aug 22, 2005). When similar discouraging steps initiated on smoking in developed countries, the MNCs exported cigarettes to developing countries. I was shocked to see the children selling cigarette packets on the cross roads of Delhi.

There is a need for strong and nationalistic leaders in developing countries to arrest the vulgaric consumerist culture being imported from abroad in the name of economic advancement and modernization. Under the programme of **Global Realization**, MNCs organize workshops for globalization of their chemical based products, identifying children and teenagers as targets for indoctrination and addiction for life with variety of means including aggressive marketing (Fast Food Nation by Eric Schlosser). In the Polanyi tradition, the political redistributive logic (historically, the logic of the state) stands out as less destructive than the anarchist logic of the market itself. The movement of self-protection of society against the disruptive and destabilizing effects of the market economy is gaining momentum (Vital Connections. Ed- R. K. Srivastava). In addition to fast foods, in the name of hygiene and better packaging, the chemicals used in household products such as plastic

wraps, toys, metal cans, detergents, cleansing products, personal care products, (perfumes, nail polish, hair colors etc.) are attracting the attention of the geneticists and causing alarm. Pre packaged foods (popcorn & French fry boxes) which often have grease-resistant coatings that contain PFOA (Perfluorooctanoic acid) is likely to be a carcinogen. Hair products, deodorants, fragrances often contain chemicals, which are endocrine disruptors. Alkyl phenols present in detergents, paints, cleansing products affect sperm production and immune system. In a study, CDC researchers found that boys in neonatal intensive care unit had higher phthalate levels following FDA's warning that phthalate leaching out of plastics used in medical devices, carry health risk to baby boys (USA Today Aug 3, 05). In a study conducted by Clean Production Action a US-based NGO detected presence of most of the 44 toxic chemicals in significant amounts in the house dust collected from vacuum bags in American homes, which when inhaled or ingested may prove harmful (Down to Earth, April 30, 2005). However safety studies on chronic long-term health effects resulting from exposure to chemicals from products are seldom conducted though, chemical industry claims that lower doses pose no harm. More than 100000 chemicals are commonly used, with daily addition of 4 new chemicals introduced into everyday products such as cosmetics, household appliances, furniture and toys. From one million tonnes in 1930, the global chemical production now has reached more than 400 million tonnes. Six screenings tests (mutagenicity, ecotoxicity, acute and chronic toxicity, developmental / reproductive toxicity and environmental etc.) have been internationally agreed for high production volume (HPV) chemicals. Only 7% of 3000 HPV chemicals in the US have all the screening tests done. 93% of the HPV chemicals are missing one or more of the screening tests (Down to Earth, May 31, 2005). Clean Production Action (CPA) suggests an overhaul of regulations on chemicals using Europe as an example. Europe's new draft on chemicals management programme, entitled Registration, Evaluation and Authorization of Chemicals (REACH) is set for enactment in a year. According to the European

Commission, REACH would save an estimated 50 billion Euros in health benefits over the next 30 years and prevent as many as 4300 cases of cancer. American Chemistry Council (ACC), predicting loss of billions of dollars in US sales of these chemicals, is lobbying against REACH (Down to Earth, April 30, 2005). We have two options. Take it as it is dished out by MNCs in the name of modern life style or be judicious and exercise control over the situation.

October 1, 2005

BCH



Healthy Food should be a Service and not MNC business



After clean air and water, natural and healthy food is important for optimal physical and mental health. Obesity is assuming epidemic proportions in developed countries and is becoming a serious public health problem in developing countries as well with faster economic development and globalization.

Though automation, sedentary life style and lack of exercise do contribute to obesity problem, the real culprit is **addictive junk food** with increased sugar, salt, fat and chemicals dished out by the MNCs by aggressive marketing and targeting in particular children and teenagers. Now a days every magazine and news paper do publish reports of harmful effects of junk foods which are heavily neutralized by MNC's marketing manipulation write ups and advertisement using glamorous celebrities. For every dollar spent in the US on nutrition education, it is estimated that the food industry spends about US \$5000 on food advertising (Down to Earth, May 15, 2004). In Indian mythology, we are used to stories of God Shiva making Rakshasas powerful by blessing them and then worrying about their misdeeds. Food should not be treated as business and leave in the hands of MNCs. The sooner we realize the better will be our physical and mental health. How much of the proposed Food Safety and Standards bill by our rulers, laying standards to regulate manufacture, import, export, storage, processing and distribution of safe and wholesome food will be effective is debatable with the experience of America having obesity epidemic with two thirds of adults and 15% of school age children either overweight or obese due to consumption of fast food. In 2000, the economic cost of obesity in the United States was put at 117 billion dollars. I wonder whether the governments really are focusing on the real contributors to obesity. It is of interest to know that gut microbes (gut contains 1023 microbes of about 500 different species) are responsible for fat deposition in our body thus linking with obesity.

The scientists speculate that changes in microbial ecology promoted by **western diets (fast foods)** could be the environment factor affecting predisposition towards obesity (Shouche et al. Curr. Sci., Feb 2005). WHO is discussing the global strategy on diet, physical activity and health as a guideline which is supported by consumers International. But Food Industry lobbies are pressurizing the governments to support corporate interests over public health.

When Governments fail to understand and tackle the obesity problem, the consumer is waking up and taking the corrective measures. Here I must thank Dr. Wig for sending news item from BMJ about lawyers going to sue US junk food manufacturers. Professor John Banzhaf of George Washington university, the first lawyer to sue the tobacco industry is predicting a series of similar suits against the fast food industry for its role in the obesity epidemic. He predicts that many obesity related suits will be filed in the near future. Marion Nestle, Professor of Nutrition in her book 'Food Politics: How the food industry influences Nutrition and Health' states that food companies will make and market any product that sells, regardless of its nutritional value or its effect on health. In this regard, food companies hardly differ from cigarette companies (Fred Charatan Florida, BMJ 2002).

Two teenagers had filed a case against fast food giant Mc Donald's corporation blaming it for their obesity, were allowed by US court to move forward with the law suit. They can now demand secret company documents on food preparation and advertising (Down to Earth, Feb 28, 2005 P-12).

Central Board of secondary education at Kolkata has decided to junk **junk food** on campus at CBSE schools. Mike Adams has come up with e-Book, The Five Soft Drink Monsters; how to finally kick the soft drink habit for good. Governor of California Arnold Schwarzenegger has said that he wants to ban all sales of "junk food" in schools (Down to Earth, April 15, 2005, P-58).

Why not our country come up with novel ideas? In our culture we

consider guest as god and we like to give fresh food. Let us make supply of food, a service and not profitable business. Small food outlets and hotels supplying farm fresh and home cooked food and not stocking junk foods should be encouraged and exempted from income tax. More jobs will be created along with healthy food. Tasty food does not need advertisement. Advertising expenditure of MNCS should be taxed. All possible steps should be taken to educate masses and discourage consumption of junk foods in the interest of better human health and saving National health management costs.

July 1, 2005

BCH



Benchmarks of Globalization

Whether we like it or not, we have entered the era of globalization, which will be commanded by 63000 MNCs accounting for 80 percent of all world investments and 70 percent of all world trade without accountability to National sovereignties, sensibilities and interests according to Lord Bill Jordan, Global Trade Union Leader, UK. (Disha, Jan 2003). While globalization is seen as a boon by those frequenting multinational hotel chains and flaunting their imported cars, a vast majority sees it as a threat to their jobs and livelihood. Time only tell whether we achieve the cherished aim of well being of one and all.

It is said that Globalization will not be stopped, much less reversed. But it can and must be changed to suit national interests. Then the question raised in my mind. What are the benchmarks of globalization? From the trend setters, the weekend news media, I gather that the proliferation of motor vehicles, expansion of colas and junk foods to village level, mobile phone in each pocket with aggressive advertising and marketing by MNCs whether they are need based or not, are the symbols of globalization. Indiscriminate proliferation by MNCs will only affect national health and dignity.

The commercial beverages Coca-Cola and Pepsi with the World's yearly consumption in the order of 200 billion liters, are chemical cocktails without nutritive value. Andhra farmers are using cola drinks as more economic pesticides for their cotton and chilli crops. Still they are sold as modern soft drinks, without anyone raising a finger. Fast food preservatives and additives have a lot to do with triggering off allergies. Americans are beginning to recognise the disastrous effect of their junk foods and cola mania after realising that their obesity epidemic is adding to the national health bill. Lawsuits were filed against McDonald's chain by obese children blaming the fast foods for their obesity problem. New

Zealand government has proposed to ban junk food advertising aimed at children. WHO is working on diet norms and education to restrict excess use of sugar, salt and fat in junk foods and change dietary habits for better health.

The mobile phone has become a fashion than necessity, thanks to the aggressive marketing. Electromagnetic radiation emitted by mobile phones carrying in trouser pockets, found to cause male infertility, by decreasing sperm count. Mobile phone radiation can damage DNA within the brain cells and has been linked to brain tumour. Significantly UK's Radiological board advised the parents not to give cell phone to children below the age of 8 years. By 2009, India would be the second largest cell phone market in the world. A lot of scientific reports and research indicate the health hazards of using cell phones, though not conclusive. More and more government bodies and official agencies are issuing warnings against heavy use of cell phones. There could be a tobacco-style deluge of lawsuits facing mobile phone companies.

Another symbol of globalization is motor vehicle. There is a phenomenal increase in the number of vehicles on the road, thanks to the banks for easy loans. One can buy easily, but can a middle class family afford to maintain a car with white money, with increasing price of petrol? The population clogged towns and cities are already facing traffic jams and parking problems. Our priority should have been on mass transportation and affordable private transport. We just emulate the affluent countries and go through the same problems they faced. Can we not learn from their experience? Already there are suggestions of importing second hand costly brand cars from abroad, encouraging vulgar consumerism. The difference between the rich and poor widens, a good cause for increase in crime. Is there a place for self-dependent and sustaining Gandhiji's village model in the process of globalization for arresting mass migration from rural areas to cities?

Once we are hooked to modern gadgets and utilities, without developing self-reliance, we get into trap and become second hand users and recyclers. The UK exports more than a third of its waste paper and

plastic to China for recycling: government puts the annual figure at 2 lakh tonnes of plastic rubbish and 5 lakh tonnes of waste paper and card board, causing considerable pollution to the environment. In 2002 – 2003, India imported 6700 tonnes of explosive scrap and 79000 tones of plastic waste and imports nearly 2.5 million tonnes of steel scrap annually (Down to Earth, Oct 2004). Recyclers claim that metal scrap is imported into India due to shortage. We import the waste from the backyards of the rich countries and recycle here. Possibly this is what we bargained from globalization.

April 1, 2005

BCH



The Supreme Energy

While scanning the ‘Current Science’, I was intrigued with the postulates on Ātman, the immortal aspect of the mortal existence. Narasimhan states that the Ātman described in old Hindu scripts is possibly genetic material as it carries all the manifestations, behavioural characteristics and even memory as already programmed to the progeny from generation to generation (Narasimhan NS. Curr Sci. 2003; 85:1115-1116). However it does not meet the imperishable property of Ātman and explain how it migrates to another body, when the body dies as envisaged by saints. Crick states that one’s joy, sorrow, memories, ambitions, personal identity, free will are no more than the behaviour of vast assembly of nerve cells and their associated molecules (Crick F. The Astonishing Hypothesis. Maxwell Macmillan, 1994, P. 3). It does not spell out causative factor responsible for the heterogeneity in human taste, temperament, character, perception and performance. This brings us back to importance of **Nature Vs nurture** (effect of environment). Further Vedas say that the three principal gunas Satva, Rajas and Tamas blended in different proportions, influence the mind and intellect giving a distinct flavour to each personality. As the human being is energy centre – physical, biological, psychological and spiritual and all thoughts, words and deeds are expressions of these energies translated into work done, all actions obey the law of nature i.e. for every action there is an equal and opposite reaction. The Hindu doctrine of Karma is its moral equivalent. Karma – yoga, the path of right action with free will (work done in spirit of dedication and selflessness, beneficial to society without expecting any reward) helps in Self-realisation and thus breaking the birth – death cycle.

Swami Rama says that consciousness is energy, which circulates in the energy channels and is known as Prana (Swami Rama, www.hiitindia.org). As per Yoga Vasishta, the consciousness that tends towards thinking, on account of the movement of Prana, is known as the

mind. Movement of thought in the mind arises from the movement of Prana and movement of Prana arises because of movement of thought in consciousness. They thus form a cycle of mutual dependence. When cessation of thoughts of desire, greed, aversion etc. is brought in mind by meditation, the appearance of the World-illusion ceases leading to Self-realisation.

Advances in physical science seem to validate the concept of Brahman (derived by Metaphysical Science approach), a state of pure consciousness, the Universal spirit, sum totality of the Universe and its phenomena. Physicists are coming close to explaining, why, if everything is eventually made up one single substance, Energy, does nature provide different types of fields for energy to work its magic? Physicists now realize that these divisions of fields are nothing but different aspects of a single entity, the 'Unified field'. Yogananda stated that body is only a manipulatable form of condensed or frozen energy (Yogananda, Autobiography of a Yogi. P. 278). Chattopadhyaya is too simplistic in stating that our ancient wisdom derived by years of meditation by the Enlightened to explain physiological phenomena has no rational basis and does not carry conviction (Chattopadhyaya MK. Curr Sci. 2004; 86:626).

According to Tezman the Grand Unified theory explains every principle process that occurs in nature including diversity within human species by introducing 'energetic matter', which is composed of time, space and energy. Wave theory contends that energetic matter transmutes to other wave formations by means of its energetic path and phase transitions. It provides a theoretical and practical basis for the notion of 'Life after death', reincarnation or existence of "ghosts" (Tejman CH. <http://www.grandunifiedtheory.org.il/>). According to Nanduri, The Science of Cosmic Philosophy interlinks the human spinal cord with consciousness and the soul to the Cosmic Vision of the Universe and attempts integration of science of philosophy and the philosophy of science. Sa 187-188 in the L 204 complex has a structure similar to a human spinal cord projected by Yoga philosophers (Nanduri V. <http://ingeocities.com/vidyanand1941/>).

January 1, 2005

BCH

Business of Spirituality

The fast changing life style, ever increasing competition, growing urge to earn more and acquire more are destroying the peace of mind today making more people turn towards spirituality. Quest for the Divine and peace has resulted in organizing Millennium World Peace summit by religious and spiritual leaders and global alliance for new humanity by Global celebrities, Presidents, film makers and writers to create a compassionate world and instill softer values in business, entertainment and politics. Matters of spirituality and faith are no more personal preferences with usurping of globalization, liberalization and aggressive commercialization. Earlier business and spirituality were looked as different walks of life. Rapid growth in business is not possible with charity and ethics. Nowadays Corporates are opting for spirituality as one of the components of corporate culture with meditation rooms for their staff. However how a really meditated person works with ruthless competition and targets, a company demands, is to be seen. Commercialization of spirituality is making some spiritualists and Gurus earn millions and in the process the non-material and divine aspects of spirituality is suffering. As spirituality is turning into profitable activity, number of 'Gurus with Palacial Ashrams, Satsangs and Bhajan mandals are coming up with considerable organizing and marketing skills to attract devotees. **However some organizations are still working quietly maintaining its spiritual nature with emphasis on simplicity, divinity and service of humanity.**

Marketing opportunities have also engulfed spirituality with their beneficial and harmful effects. The market is flooded with books, music, insignia, VCDs and DVDs related to spirituality. Some TV channels in India with spiritual discourses, Bhajans and clips of holy places are enchanting the masses and at the same time flourishing with commercial advertisements on products and services, some spurious and with unproven claims. In America as per the International Association of Yoga

Therapists, 2.2 million Americans are practising yoga with 80 percent of commercial health clubs offering yoga classes. It is estimated that people were spending about \$20 billions a year on yoga and meditation. Five to six new yoga books are published practically every month. With American marketing touch, yoga is taking various shapes and styles. Yogic exercises are combined with eastern martial arts and conventional exercises, calling it “Fusion” yoga to suit sportspersons including weight lifters, according to a report in “The Washington Post”. Yoga is offered under various names, including yogabutt (squeezing a grapefruit size blue rubber ball between thighs), yoga - pilates - resist - a- ball; yoga bar for weight lifters, combining submerged yoga with tai chi and pilates, hot yoga done in a 105 degree room etc. with availability of Trendy yoga clothing. Twelve hundred modified yoga teachers met in Washington area and demonstrated their techniques, changing ancient discipline of yoga with its divinity for commercial exploitation. As the competition increases Gurus are going for trademarks and copyrights. The Art of Living (AOL) has registered the name ‘Sudarshan Kriya’ based on exercise of breath and its rhythm to ‘reestablish balance on life’. Only licensed instructor can teach it, possibly making it authentic. The founder of ‘Bikram Yoga’ in US plans to copyright Bikram books and Bikram yoga asanas, which are conducted in heated room. (Consumer Voice, Sep-Oct. 2004)

Positive aspect of globalization of spirituality is research using modern scientific tools to assess the beneficial aspects of yoga, meditation etc. in more objective fashion for reduction of suffering in chronic diseases, resulting in the development of discipline Body – Mind Medicine.

October 1, 2004

BCH



The Breath of Life and Beyond

The breath we breathe in and out without respite is termed as Prāna or the bioenergy or life force which endows man with an unlimited spiritual potential. Breath is a wireless connection to transcend the entire field of mind and matter by meditation and experience bliss. According to the yogic view, man is part of cosmic phenomenon and continuously exchanges bioenergy through his breathing with the cosmic power outside of him. Respiratory rate goes up in anger, after physical strain or under mental stress while it goes down when one is in relaxation or sleep. As roses and jasmine flowers spread out fragrance into the environment, it is possible that the regulated breathing by the chemicals produced by positive or negative emotions of man, do influence the environment at subtle level.

Pranayama, the controlled and conscious breathing helps in calming and purifying effects on the body-mind complex. Slow, relaxed and deep (abdominal) breathing reduces stress, deepens insight, expands consciousness and increases intuitive perception. The yogic disciplines such as abdominal breathing, shavasana and meditation admirably bring about a reduction in the sympathetic activity and increases the inner strength of the individual and foster the feeling of connectedness bringing reduction in stress. Constant awareness or concentration on normal breathing or parts of body as in Vipassana meditation or Yognidra, quietens mind and helps in coming over stressful situations. Mindfulness is defined as a non-judgemental moment-to-moment awareness without drifting into thoughts of the past or future. At University of Massachusetts Medical Centre, Mindfulness-Based Stress Reduction (MBSR) program through sitting meditation and body scan (full attention to the parts of the body) has been very helpful in decreasing chronic pain (low back, headache and neck / shoulder pain). Even a short programme of mindfulness meditation produces lasting positive changes

in both brain and the functions of the immune system (Davidson et al., 2004).

Asthma, a gift of junk foods, modern life style and polluted environment, is increasing in the recent years. The National Heart, Lung and Blood Institute of USA says that the prevalence of asthma around the world has doubled in the last 15 years. WHO estimates that between 100-150 million people around the globe have asthma with about two lakh deaths each year due to asthma. There are attempts to explore Alternate Systems of Medicine in management of asthma. In a study by Cooper et al. (Thorax, 2003), the Buteyko breathing technique improved symptoms and reduced bronchodilator use to some extent whereas use of Pink City Lung Exerciser (mimics Pranayama) did not show benefit. This is in contrast to the encouraging results observed at Yoga Institutes. The failure with objective prototype studies is possibly due to lack of spiritual element and positive attitude. Emotional involvement of individual along with yoga way of living may give better results.

July 1, 2004

BCH



STRESS: The Mind – body connection

Outer circumstances and events don't create stress

It is our response to them which creates stress.

- Phil Nuernberger



A degree of stress is necessary in life. A Sitar can not be played unless the strings are stretched tight to an extent. Stress adds zest to life, but too much of it can break us down. Whenever the mind feels uneasy, restless, disturbed, agitated and tense, one is said to be under stress. When the mind is feeling light, easy, cheerful, calm and quiet, one is said to be in relaxed state.

As a response to external stimuli, fight or flight response arouses sympathetic component of autonomous nervous system thus elevating Cortisol to provide sugar for instant energy, faster breathing to provide more oxygen, release of adrenaline and nor-adrenaline to produce a surge of energy in the body, increased heart beat, muscular tension etc. to meet the impending challenge. When one is peaceful and relaxed, parasympathetic nervous system takes over and helps in body chemistry return to normal.

Every sympathetic arousal is not stress. Stress occurs only when there is excessive or prolonged sympathetic arousal (due to worries, concerns, fears etc.) without relaxation thus resulting in autonomic imbalance. Symptoms of stress at earlier and reversible stage are anger, frustration, irritability, depressed mood, fear and anxiety, negative thoughts, lack of confidence, tension, headache, backache, sleep disturbance, reduced activity level, difficulty in concentrating etc. The stress induced disorders are anxiety neurosis, hyper tension and Ischemic heart disease, hyperglycemia & diabetic mellitus, peptic ulcer, irritable bowel syndrome, asthma, arthritis, obesity etc.

Stress is increasing due to competitive, fast moving and modern life style with ever-growing consumerism and ambition. Stress is man made health problem that too self made and individualistic. In other words the same situation may cause stress in one individual but not in the other. Stress is a result of combination of environmental and individual factors and how the individual reacts to them.

Stress can be successfully managed by looking positively, identifying and analyzing the problem with cool mind, being less ambitious, more realistic to one's capacity and learn to relax with exercise, yoga and meditation. No wonder considerable research is being done on the beneficial effects of life style change, yoga and meditation for stress free life. Transcendental meditation (TM) has shown significant decrease in the levels of nonepinephrine and epinephrine in TM group compared to control subjects (Infante JR et al). Assay of Cortisol, the "Stress hormone" which is released in the body during stressed states has been used for monitoring stress and found beneficial effects of MRT – Music compared to hormone drugs in pregnant women under threat of miscarriage. Relaxation or biofeed back techniques were found to lower elevated blood pressure, playing an important role in the development and course of essential hypertension (Hermann JM). Mind-body therapy (Yoga practice) has been found to be valuable in preventing adverse outcomes of coronary disease (Pandya DP). Nowadays there is considerable interest to study Alternate medicine in particular 'Yoga and meditation' for their beneficial effects in Stress management.

April 1, 2004

BCH



Battle of the Bulge (Obesity & Metabolic Programming)

In early seventies when I started teaching Biochemistry to medical Students, I proudly used to say that we have well understood what is ideal nutrition to combat malnutrition and importance of proteins, oils, fruits, vegetables in diet as sources of vitamins, fibre etc. One fine morning we ended up in a mess called 'Obesity'. Due to bulge, belly would appear like a big apple in male and as a pear in female. In America an obesity (Body – Mass index of at least 30-35) rate of nearly 1 in 3 or almost 59 million people has been reported. Childhood obesity is equally alarming, especially in the children belonging to the well-to-do families. Obesity has become a global problem with economic prosperity in developing countries funneled by fast food industry and supermarkets. It has become a matter of great concern to the medical world as nothing much is being done to prevent the scourge. Why is it in epidemic proportions these days? The reasons are – Excessive eating of high calorie, sweets & fat rich foods, processed and chemically polluted junk foods, sedentary life style, lack of physical activity, television, commerce and aggressive advertisement in foods. People have filed Legal suits against McDonald for deceptive advertising and thus causing obesity in children. Health problems associated with obesity include diabetes, heart disease, high blood pressure and arthritis, increasing the health care costs. The American Federal Department of Health and Human Services puts the health care cost of overweight and obese Americans at \$117 billion in 2000 and said that being overweight results in 30000 deaths a year.

Extensive epidemiological findings indicate that metabolic programming / adaptation during critical phases of early development occurs in humans emphasizing the importance of adequate maternal nutrition during pregnancy. In animal studies, Patel et. al. have shown that artificial rearing of 4-day-old rat pups on a high carbohydrate milk

formula up to Day 24 results in the immediate onset of hyperinsulinemia which persists through out the period of dietary intervention, sustains in the post weaning period and forms the basis of adult-onset obesity.

Nature has a way of tackling obesity though secondary to regulating the metabolic supply of nutrients. Excessive calorie intake is thought to be sensed by the brain, which then activates thermogenesis – converting food directly into heat, a process called diet induced thermogenesis. This seems to be determined by genetic make up of the individual and composition of the diet. Interestingly there are stories of individuals who survive on boiled water, sunlight or blessings of “Mataji”. Prahlad Jani, 76 year old man in Gujrat has baffled the medical fraternity by claiming that he has been blessed by Mataji at the age of ten and living in a cave near the Ambaji Temple without food and water for 65 yrs. When he was observed for 10 days in a hospital, he did not take food or liquid and did not pass urine or stool. DIPAS at Delhi would be conducting research in this case. Another case is of 64 year old mechanical engineer and Jain follower, Mr. Manek, who undertook his record breaking feast of sunlight. For 411 days he survived on just boiled water and sunlight. He was physically active carried out all his normal activities. Perhaps his body is undergoing ‘Chronic adaptation’ learning to survive on few calories, explains a neurophysician observing him. Manek was invited to USA by NASA to study his fasting technique.

Regulated diet and plenty of exercise seem to be the best weapons to fight obesity.

January 1, 2004

BCH



Searching For Alternatives

Change is Law of Nature. The fast life in the jet age with automation and speed in transport and communication, ready to eat junk foods, instant relief drugs, ever-growing ambition and desire to acquire latest gadgets has made the man restless and insecure finally pushing him to the wall to seek alternatives to live in peace. No wonder well intended organizations such as Art of Living, Science of joyful living, Science of spirituality, Vipassana movement have been coming up advising life style changes to live in peace in this competitive world. The change has also affected the allopathic medicine that mostly encompass drug therapy or surgery. Modern medicine which mainly treats the symptoms, often has no good answers for chronic health conditions like osteoarthritis, persistent headache, irritable bowel, allergies, fibromyalgia, sinus conditions, menopausal symptoms, anxiety, depression and chronic fatigue. A land mark report appeared in New England Journal of Medicine indicating that more Americans visited the office of alternative medical practitioner and again confirming the trend in follow up research in 1998.

Integrative medicine is widely accepted as applying least invasive procedures first and if not effective then move to conventional medicine namely prescription drugs and surgery. Acupuncture, Homeopathy, Yoga, Meditation, Physical medicine (occupational and rehabilitative therapy), Nutritional therapy are being increasingly accepted for use in management of health problems, though these are not covered by health insurance. We have come a long way since the days of Dr. Shelton in 1927, when he was arrested for violating Medical Practice Act and advocating Nature Cure. He was charged with practicing medicine without license. His book – The Science and Fine Art of Fasting was purchased by Mahatma Gandhi and kept close to his bed through out his days of fasting. Gandhiji invited Dr. Shelton to India to teach Principles

of Nature Cure at the Indian Universities. He was to accept but it did not materialise due to eruption of World War II (Nisargopchar Varta, August 2003).

Taking advantage of the mood of the people, commerce driven culture of America is boosting the proliferation of centres of holistic medicine with ayurveda, naprapathy, chiropractice, massage therapy, cryotherapy, thermal therapy, vibratory therapy, hydrotherapy, energy healing, botanical / herbal medicine, nutritional therapy, acupuncture, homeopathy, naturopathy etc. for management of chronic health problems with strong emphasis on disease prevention and well being.

Recognizing the importance of Complementary and alternative systems of medicine in health care, US National Institutes of Health is encouraging research to develop Evidence Based Medicine to cover all aspects of family health from prenatal to geriatric care. Hopefully, the next decade will see significant changes in life style and health care to make it more cost effective, less toxic and environmental friendly with emphasis on disease prevention and well being.

October 1, 2003

BCH



Human Genome Sequencing and After

Human Genome Sequencing is complete – announcement was made by the leaders of a Public Consortium of academic centres at the National Institutes of Health in April, 2003.

The project initiated in 1990 was expected to take 15 yrs. It has been completed two years ahead of schedule, thanks to automation and bioinformatics. The announcement was timed to coincide with the 50th anniversary of the discovery of the structure of DNA by Watson and Crick. The unfolding of human genome with about 3 billion base pairs arrayed in 23 chromosomes costing about \$800 million, is exciting enough to push biology into Biotechnology with great expectations in diagnostics, vaccines, new drugs, gene therapy and cloning. It is interesting to note that only less than 5% of DNA with 30000 genes codes for proteins. More than 95% of DNA is non coding and possibly involved in regulation of gene expression during development, differentiation and adaptation to environment. All humans have the same DNA to the extent of 99.9 percent, the 0.1% making the difference between the female and male, young and old, intelligent and dullard, aggressive and mild, normal and disabled thus emphasising the importance of understanding of DNA organization, regulation of expression, suppression and environmental adaptation. Comparative Genomics have shown that humans share 98% of their genetic sequence with monkeys and 57% with cabbage. The humble weed plant, Thale cross (*Arabidopsis thaliana*) has 30% of genes with notable similarities to humans. A long and difficult path is ahead. The genetic polymorphism, function of non coding DNA, regulation by biomolecules, proteomics are the challenging areas in the coming years to understand the nature and explain growth, differentiation, behavior and environmental adaptation.

July 1, 2003

BCH



Manipulation of Gene – Boon or Bane

Genetically modified organisms (GMOS), in particular microbes are being routinely used in the production of therapeutics. Recombinant bacterial products such as human insulin, plasminogen activator, interleukins, interferons are finding different clinical uses. Similar to bacteria, GM crops are also coming up very fast in agriculture with several genes available for designer crops. These crops are supposed to be endowed with higher yields, nutritional quality and resistance to insects and pests. Herbicide-resistant sugarbeet, insect-resistant cotton and tomato are in commercial use. In animal husbandry too, GM animals are on their way with designer eggs, salmon fish with human growth hormone, fast growing catfish, oysters subject to regulatory approval for human consumption. People are concerned with MNC controlled high-technology and commerce driven GM food for its safety and long term effects on human health and on the ecological environment. The merits of gene-tech insulin verses natural insulin are being debated. Dr. Teuscher, Founder President of the Swiss association for the preservation of natural insulin and other experts say as many as 10 to 20% of gene-tech insulin users can encounter a variety of such side effects, collectively termed as ‘hypoglycemia unawareness’ leading to death in diabetics during sleep due to severe blood sugar drop. (U.S. FDA rules require a warning about hypoglycemia to be printed on package). As production of natural insulin is more expensive, insulin producers are switching to gene-tech variety. Another example is that of genetically modified crop, the BT cotton. The first crop’s indifferent performance in Maharashtra, Gujrat, Karnataka and Andhra Pradesh has been disappointing, possibly due to lack of field studies in real field situation compared to optimal conditions in experimental fields. The BT cotton seed is costlier compared to good hybrid seeds and caused haevy losses to the farmers. Suman Sahai, President, Gene compaign, questions the

clearance and introduction of the GM crop by Mahyco-Monsanto without thorough study on its suitability to Indian conditions and long term implications. These experiences teach us to tread cautiously while working with manipulation of genes and introducing GM foods into normal diets, without surrendering to aggressive marketing strategies of MNCs.

April 1, 2003

BCH



Vaccinophilia: Boon or Bane

Success story in the Smallpox eradication by vaccination has enthused the Health Administrators to look towards vaccines for disease control. For various reasons smallpox model could not be repeated in other infectious diseases. After decades of use of BCG vaccine, there are conflicting reports on its effectivity. With recent genomic comparisons, existence of different BCG Strains differing from the original BCG first used in 1921 was reported. Cholera vaccine is being used for short-term protection. The range of possible use of active immunization is rapidly expanding to include the vaccines against infectious diseases that require cellular responses to provide protection (e.g. TB, Leprosy) therapeutic vaccines for chronic infections (e.g. HIV, Hepatitis B and C) and vaccines against non-infectious conditions (e.g. Cancer). Vaccine use is being justified in terms of societal and parental “costs” (mandays lost) rather than in straightforward morbidity and mortality costs. Paediatric immunization schedule is becoming crowded. The National Immunization schedule includes BCG, DPT, Oral Polio and Measles vaccine besides DT and TT. Many more vaccines such as Typhoid, Hepatitis A, influenza viral vaccine are freely available in the country. However there is no clarity about who should exercise the option. In this confusion, the marketing strategy of drug firms is creating undue panic about certain diseases and promoting vaccine sales by giving incentives to prescribing clinicians. Thus hepatitis B is included in India’s Immunization programme. Efforts are to promote Hepatitis C and other Vaccines. Multinational drug firms are advertising number of vaccines as next best to a mother’s protection. Use of recombinant peptide vaccine without extensive evaluation and monitoring, is adding to the complexity of the problem. Relatively little is known about the immune pathogenesis of even best characterized vaccine-associated adverse events (VAAE) causing considerable concern regarding

indiscriminate use of vaccines. Report from BBC News provided a timely warning that “weak vaccines strengthen disease”. In case of chronic diseases such as malaria, vaccines that are less effective have the potential to do more harm than good in creating more virulent forms of the disease. There is a feeling that not every infection need to be prevented by vaccination.

Each living organism is endowed with survival instinct when it comes into universe. It is empowered to survive against odds and unhelpful environment. It is important not to disturb the immune balance. We have to be exposed to certain number of infections in our life time and particularly during infancy. Systemic prevention of these exposures may not benefit the individuals or the species in long run. All this brings us to sit and objectively think about the use of the vaccine in cool mind before we are driven by market forces and made helpless..

Leaving vaccines to commercial interests will not serve the interest of humanity. WHO study has reported how industry sponsors can influence clinical trials to produce desired results. There is an urgent need for the extensive study on the identification of vaccines which are essential for prevention or therapy, long term monitoring on effectivity, adverse vaccine reactions and quality control. Vaccine for each organism, strain and sub strain is not justified. Attempts should be made to develop a vaccine to produce broad protection against number of infective organisms.

January 1, 2003

BCH



The Affordable Trio

When I recall my childhood days, I still remember the precious and valuable paisa of those days. The rupee was divided into 192 paise. The purchase value of the Copper paisa was so good, that I could get easily – rice and uduth flour bajjia for a paisa for my snack during the school class intervals. Everyone, the seller, the buyer and the onlooker look satisfied and contented. Nowadays our salaries are increased by 15-20 times, (forget the jobless which are increasing by the same speed) but still we feel our ever increasing requirements are not met.

In these days of not affordable things, I searched for what we can afford without incurring expenditure and gain in life. The trio, Silence, Fasting and Meditation appeared smiling at my ignorance for all these years for living in darkness. These are associated with energy conservation and charging, working as holistic medicines for physical, mental, emotional and spiritual health.

Fasting is the supreme medicine for body cleansing and within reach of everyone. It tones up the body and gives more energy to the body and also spiritual strength. During fasting, the body uses the reserved food and accumulated fluid, giving rest to the digestive system and helping the elimination of toxins. One can start with fasting skipping a lunch or supper in a day to complete one day fasting in a week.

Concept like quietness should be experienced by living in that state. It is part of Meditative process.

Meditation is the liberation of the mind from all disturbing emotions, thoughts and desires. Meditation is the means to reach the inner mind, where the thoughts originate and then the meditator reaches thoughtless state. Meditation opens up some of the energy centres in the body and promote love, compassion, joy and higher spiritual consciousness in the practitioner. In the morning or night one can start meditating for 15 minutes and increase to an hour a day for experiencing beneficial effects.

Thus the maintenance of silence, meditation and fasting do not cost a paisa but require only willpower and determination.

October 1, 2002

BCH

The Junk Foods & Children

I was astonished to see an advertisement in a local daily on 'Processed Food' by the Department of Food Processing Industries, Ministry of Agriculture (GOI). The advertisement says "Processed Food" a healthy way to a convenient life style issued in public interest. No doubt it is convenient but it's healthy way is questionable. The processed foods rightly called junk foods can never be healthy foods. In the name of simplification and convenience for fast life, the food industry mutilates the natural food and pollutes it with number of food additives and chemical supplements, such as sulphites, nitrates, synthetic flavours, artificial sweeteners, phosphates, silicates etc. as preserving, stabilizing, flavouring, antioxidation and thickening agents. It has been reported that allergy and asthma cases in the community have increased with increased consumption of junk foods. The soft drinks are nothing but chemical cocktails with zero nutrients. Recent study at BARC has found abnormally high levels of hydroxy methyl furfural (HMF) in cold drinks not stored properly for long periods. The HMF is neurotoxic, genotoxic, cytotoxic and tumorigenic. A global epidemic of obesity is brought by the fast foods, refined sugars and more consumption of fats reported in Lancet journal. All these reports and voices are silenced by attractive, aggressive, repetitive & brain washing television advertisements with offer of free gifts ranging from trip abroad to Cars, VCR and Television sets, announced by favourite film stars. Children are more vulnerable and readily seduced. One CEO of a Multinational confidently said that children and teenagers are their targets. Once they are addicted, the business will thrive without interruption.

So called disclosure of all the ingredients on the package is a lie. Only Harish Bharti, the famous Indian American Lawyer could go to court and win a \$10 million settlement from McDonald's for using beef extract and advertising that it is vegetarian. Now he has targeted Pizza Hut for similar

advertisement. The hamburger, a fast food American meal is the subject of 41000 Federal and State regulations from 200 laws touching meat production, starting with the grazing practices of cattle, use of growth promoters before slaughter etc. With the corruption endemic in India, will the rules be followed by multinationals in making fast food, is anybody's guess. Commerce entering food business changed food consumption pattern affecting health of the people. Some Governments have to issue dietary guide lines for the people to change their food habits, to cut down on processed and refined foods and go for more fresh and wholesome foods to prevent heart disease, cancer, strokes etc. Health Welfare board in some countries have advised Rulers to ban attitude – changing advertising of junk food and also to make junk foods more expensive and carry health warnings. There is an urgent need for movement against junk foods. Before it is too late, The Health Ministry may become wise and health educate and caution the people on the ill effects of junk foods and discourage their use in canteens in educational institutions.

July 1, 2002

BCH



The concept of Soul – Mind – Body Medicine



As a Biochemist, I am always perplexed about how to define life and death as we observe a very thin line between them. Now a days we talk of death of living man or organism and even we try to explain cell death by scientific experiments. Soon we shall understand the mechanism of molecular death as well. Otherwise how can one explain for the half life of a molecule. A body dies, organs like eyes or kidneys are transplanted. The organs become alive in another body. On separation, liver tissue dies, but we isolate protein molecules like enzymes which are functional. They function similar to what they do in the living body. Further one can go on to atomic level and explain. It is only organization and reorganization and no such thing as death at atomic level. Thus we may define that any organized structure with a function has life in it. That means we can talk of a man or a car having life in it. Thus you see life force or energy in every one, living or nonliving (measured by simple indicators of growth, movement etc). No wonder we do pooja to the tools we use. While sensory perception zeroes to life force or energy, extra sensory perception leads to the presence of soul or spiritual energy which is omnipresent and all pervading without beginning or end. Thus we say death of the body but not the soul.

SOUL (spiritual energy) is like electrical energy flowing through an electric wire, which can not be seen but can be experienced by knowledge or functioning of an electric bulb. Mind is thinking power / mental energy of the Soul. It has four components T.E.A.M. - Thoughts (T), Emotions (E), Attitudes (A) and Memories (M). Mind – body connection is very strong. Positive thought or emotion releases endorphins, encephallins, melatonin etc. and parasympathetic dominance which leads to feeling of well being, happiness and pooling of energy. Negative mental patterns (T.E.A.M.) lead to disease (Rai & Ram, Nisargopachar Varta, Oct 2001). The researchers using position emission tomography (PET) to measure

brain activity have shown an extra blood flow in the ventromedial prefrontal cortex in the individuals showing negative effect – bad moods such as irritability, anxiety or anger. Positive mood or ‘relaxation response’ results in decreased blood flow. Body Mind Programming (Krishnaswamy & Dham, Bhavan’s Journal, Oct 2001) helps in transforming ourselves from what we are to what we want to become and success in our set goals. Thus the concept of Soul-Mind-Body Medicine emphasizes importance of Spiritual health for physical health and well being. Yoga is gaining momentum in management of stress related ailments. Possibly for this reason there is global demand of Complementary and Alternative Systems of Medicine by Health care providers. SEVAMED has rightfully given importance for advances in Traditional Medicine. Taking this opportunity we appreciate the support of Shri. Nadir Godrej for Sevamed by sponsoring advertisement.

April 1, 2002

BCH



Health Care and Insurance – a Service or Business ?

Sophistication and Modernization in Health Care need considerable inputs and hence, Health Care services are becoming costly. As the quality of state – planned and funded health programme is deteriorating with time, sophisticated private hospitals are proliferating in all cities making Health care a business. The poor and middle class cannot afford costly private health care services. Under the circumstances, Health insurance will be one of the many ways where by the poor can have access to modern health care services. Presently the Indian health care industry in Private sector is worth Rs. 73000 crore and expected to rise to 100,000 crore annually according to a market study. Whether Privatisation of Health Insurance will solve the health care problems of the poor in a developing country like ours is debatable unless Health insurance is seen as Service than Business. Further entry of multinational Insurance companies who are mainly interested in capturing the insurance business than service by the wellknown techniques of MNCs, i.e. 1. by incurring losses by low premium in the first phase, destroying domestic players and then monopolizing and increasing the premiums at will and 2. by characteristic Supplier – induced demand thus increasing the health care costs making it prohibitive to economically disadvantaged groups. How much the Insurance Regulatory and Development Authority will be successful in controlling health care costs is questionable, as we have weak points in monitoring and regulating to achieve intended objectives in the best interests of the Nation.

WHO is taking leadership role in global thinking on health policy. Our country should seriously explore in integrating Health Service and medical education and strengthen Medical colleges to provide health care service affordable by masses. It is heartening to note that Revered

Sathya Sai Baba declaring that **Health care is not a Business** and providing free health care in Sathya Sai Hospitals.

Sevamed has completed two years of its existence with support and appreciation from esteemed readers. We are grateful to DBT for the support. We have made a small change in the title of the journal. The content page was also modified to reflect our appreciation and gratitude to our Founder Director Dr. Sushila Nayar for her encouragement and support.

January 1, 2002

BCH



The Rat Race

Now we too have the website. “Have the website and put all your information on website” we are repeatedly advised by one and all. We joined the ‘Rat Race’. Thanks to Anil and Swati Bhaskar of Techlogistics Solutions, Inc. USA for hosting the website free for JBTDRC. We prepared the material for the website and we thought we achieved everything. We can inform now that we too have website for JBTDRC www.jbtdrc.org. Then came the real challenge. Who will see? Why should they see? How many times would they visit? How to keep their interest to see JBTDRC repeatedly? One should work full time to catch viewer’s interests and also find new customers. We are used to and have expertise in down loading. Uploading new information is a real challenge. It demands a rapid expansion of the Research Centre with more committed band of workers to put hardwork to generate new information in the thrust areas of diagnostics and vaccines for better disease management and to sustain the interest of JBTDRC website browsers. Otherwise it will be added to history. This is where the bottleneck lies. Whether we succeed or not, only time will tell. However we are pleased that we could place ‘Sevamed Quarterly’ online through JBTDRC website making advances in "Infectious Disease Research and Traditional Medicine" available on fingertips. This is some satisfaction for the time being.

In India the Institutions have short history. The individuals grow bigger out of the institutions but the institutions stagnate after a few years. I visited my alma mater, The Washington University School of Medicine in 1998 after a gap of 25 years. I could not believe. Tremendous expansion with number of newer structures and facilities. I felt there is life in the buildings as well. Otherwise how one can explain continuous growth. The technique of bringing life into the Institution is a challenge to our managers. This is something which we have yet to learn from advanced countries.

October 1, 2001

BCH

Vision and Realization

III could learn that there is a long way between vision and its realization from the experience I had from one of the subscribers of Sevamed Q. The subscriber shot back a letter along with renewal of subscription, that the Sevamed Q should reach the subscriber in time. April issue has reached him probably in the last week of April in spite of our best efforts. I did get hurt when I saw the letter but then I took it sportively as a lesson in monitoring and geared the BIC staff to do better this time. But then what happened? We did not receive Ovid Medline CD till now in the year 2001. Possibly it is a new millenium gift. We made frantic calls but no avail. Ovid itself did not receive update until May. But ovid was kind enough to allow us to browse their website as soon as they got update. Then came failure in internet connectivity at Sevagram. We had considerable stress that how to satisfy our esteemed subscribers this time. One of our staff went to Wardha and did marathon sitting for 12 hours on medline search facing the problem of internet connectivity. We are relieved that we can go ahead with **Sevamed Quarterly** this time. This makes me wonder how other people manage to realize their vision. Some are lucky that they do not bother to have vision, live day to day and forget about future goals. Some are even luckier. They have vision but not bother to realize or monitor. No wonder, that number of vision documents are gathering dust without anybody bothering to touch them. Even ten percent of the time utilized in preparation of the document is spent for monitoring, our Institutions would have been more successful in achieving excellence and withstand liberalization and globalization. Possibly we believe in Vision but not in its Realization.

July 1, 2001

BCH



Complementary and Alternative Medicine

W ith increasing health care costs and disillusion in successful management of chronic diseases by orthodox or academic medicine, consumers seeking a cure and general practioners seeking clinical results are turning towards complementary and alternative medicine (CAM) in western countries namely Australia, Canada, Germany, Finland, Israel, UK and USA. This is one of the offshoots of globalization and post modernisation reflecting proliferation of consumer choice. “Clinical legitimacy” seems to override “Scientific legitimacy”. Studies conducted in Australia and USA showed significant proportion of population was using CAM. A lot of medicinal plants, traditionally used for thousands of years in Rasayana formulations in Ayurveda seem to have interesting antioxidant activities. In 1988, a new system of acupuncture, popularly known as Sujok Acupuncture was brought to the notice of the world by Prof. Sir Park Jae Woo of South Korea. Numerous courses in alternative medicine are regularly advertised in the journal of German Medical association. In September 1999 the National Institutes of Health (USA) announced the funding of five more specialized Centers of Research in complimentary and alternative medicine, bringing total number of centers to nine giving tremendous boost to the scientific investigation of CAM. The reemerging field of holistic medicine considers body, mind and spirit as a whole while trying to give relief from ailment. Keeping this trend in mind, we have added a new section in ‘**Sevamed Quarterly**’ having bibliography on Ayurveda and alternative systems of Medicine in April issue. We hope the same will be well received by the esteemed readers.

Lastly may I request you to spare few minutes and send subscription to ‘**Sevamed Quarterly**’ (see page 96) showing your interest in its continued publication and service to medical teachers and researchers.

April 1, 2001

BCH



SEVAMED

We are pleased to keep the January issue of 'Sevamed Quarterly' in your hands. With this fourth issue, the second volume of SEVAMED is entering the new Millennium. The year that has gone by, kept us on toes to release Sevamed in time. The young and energetic BIC staff and the faculty worked enthusiastically, updating the information from Databases, getting referred by clinical experts, preparing the material for printing and dispatching the finished product to reach you in time. The growing subscribers list is an indication of the interest, Sevamed generated in the readers. We very much appreciate and value the suggestions of our esteemed readers.

The year 2000 has seen breakthrough in modern biology, by deciphering Human Genome with lots of expectations and imaginations. Genome research is like atomic energy which can be used for good or bad. We hope and wish that the divine instincts of man dominate the demonic instincts, to use genomic research for betterment of the mankind. There is constant need to Question and understand the disease process for its successful management. With this objective in our minds, 'Sevamed Quarterly' continues to update and post you with advances in medical research. We look forward to your continued patronization and support. I take this opportunity to wish the esteemed readers a very Happy New Year in the New Millennium.

January 1, 2001

BCH

**SEVAMED**

Time and tide wait for no one. By the time we dispatch the July issue and take stock of the situation, the draft for the October issue has reached my desk. We are pleased that though trickling, appreciating letters and subscriptions started reaching us. There has been considerable concern at the highest level, that there is poor quality or lack of good Medical research in India, in particular in Medical colleges. Unfortunately this is true if the assessment is based on Research grant awards and publications, in spite of access to enormous clinical material and young and bright postgraduate students in Medical colleges. "Problem Solving for Better Health" (PSBH) is a global movement started by the Drefus Health Foundation which had a workshop organized through an Indian organization, 'Health Action by people' to sensitize and impart problem solving skills to young medical students. It was well received. Talent and interest is not lacking. Motivating the medical teachers and students for research is a challenging proposition to the Research Managers and Health Administrators in India. In our humble way we started 'Sevamed Quarterly' to high light the research problems being explored in Tropical Diseases and update the medical fraternity on Research Trends in Diagnosis, Pathogenesis, Vaccines and Drugs. Subscription particulars for bulk orders are given on page no. 117. We very much like to receive your support and also suggestions and comments for improvement.

September 16, 2000

BCH



SEVAMED

In spite of vast amount of Biomedical information poured into computer by three thousand and odd journals published in the world, there are number of questions remain unanswered. Who has easy access to computer? Who has time and patience to sit in front of computer and search? Who is fortunate enough in getting continued internet connectivity, in small towns in particular? It is also true that 'Time' is a precious commodity with serious hardworking doctors and scientists. 'SEVAMED Quarterly' is born to answer these questions. It is in your hands. In whatever position (sitting, standing or lying) and without strain to your eyes and mind, you can get to know the advances in your area of interest. In this issue we have extended to other areas such as Pathogenesis and Drugs in addition to Diagnosis and Vaccines for comprehensive understanding of disease process in Tropical health problems and successful management. We are thankful to Dr. Mehta, Dr. R. K. C. Gupta and Dr. Satish Kumar for helping us in scanning bibliography and separating grain from husk. Your suggestions and comments will help us in making SEVAMED useful and sought after. I am grateful to our esteemed Director Dr. Sushila Nayar for the encouragement to this activity and Department of Biotechnology for the financial support. We also appreciate the sponsorship of Transasia Biomedicals Ltd. to make SEVAMED available to the medical fraternity in the interest of Medical research and better health care.

July 1, 2000

BCH

**SEVAMED**

Infectious and Parasitic diseases take a toll of 17 million people each year constituting 33% of total deaths and the developing countries are affected most. (World Health Forum. Vol. 18, 1997). The tropical diseases are considered as 'Diseases of the poor' or orphan diseases without much attention and research support in advanced countries. Diagnostics play an important role in detection, monitoring and surveillance for effective control of infectious diseases. Department of Biochemistry and Jamnalal Bajaj Tropical Disease Research Centre have been actively involved in diagnostic research related to filaria and tuberculosis for three decades. Updating on diagnostic research is very important for developing more reliable and simple diagnostic tools. Further, vaccines have become important tools in disease prevention and control in the light of development of drug resistant infections. In this context Bioinformatics Centre has made a maiden venture in bringing 'SEVAMED' Quarterly Bibliography to update the medical teachers on advances in diagnostics and vaccines for tropical health problems. We hope SEVAMED will expand to other areas based on information needs of medicals teachers and help in boosting research in Medical Colleges relevant to our health problems. Our grateful thanks to our esteemed Director Dr. Sushila Nayar for her encouragement and support. The help of Dr. Satish Kumar and other staff in organizing the Training Course and preparing SEVAMED is appreciated.

April 5, 2000

BCH



Silence is Unceasing Eloquence

Solitude is an attitude. A man who adopts an attitude of detachment towards the external environment is always in solitude. It is possible that despite being involved in all sorts of worldly activity, a person may maintain perfect equanimity. The state that transcends speech and thought is mouna; it is meditation, the total absence of mental activity. Overcoming the mind, said Ramana Maharshi, is meditation; but deep meditation is eternal speech. Silence is the perennial flow of ‘language’. It is interrupted by speaking; for words obstruct this mute language. Silence, on the other hand, is permanent and benefits entire humanity in a subtle manner. True silence is unceasing eloquence – it is a state when words cease and powerful thoughts of the sage begin to penetrate the depths of the seeker, bringing about a change in his thought patterns.

Thought moves with tremendous velocity. Those who entertain sublime and pious thoughts help others who are in the vicinity and at a distance also. A saint who has overpowered his mind through meditation sends out into the world thoughts of harmony and peace. They travel with lightening speed in all directions and enter the minds of persons and produce in them also similar thoughts of harmony and peace. Whereas a worldly man who harbours thoughts of jealousy, revenge and hatred sends out discordant thoughts which are like wireless messages broadcast in ether, and are received by those whose minds respond to such negative vibrations.

According to the Maharshi, preaching is simple communication of language; it can really be done in silence only. A man who sits in a holy presence and goes away after some time with his outlook on life radically changed, is much better off.

Again, how does speech arise? From abstract knowledge emanates the ego; this, in turn, gives rise to thought, and thought gives rise to the spoken word. So it would not be wrong to say that the word is the

descendant of the original source. If the word can produce effect, consider how much more powerful must be preaching through silence? But most people do not understand this simple truth –the truth of their everyday experience. Rather, they are eager to know what lies beyond, about heaven, hell and reincarnation.

We may conclude with the following words of Ramana Maharshi: “Those who have discovered great truths have done so in the still depths of the Self. But really there are no others to be helped. For the realised being sees only the Self, just as the goldsmith sees only gold while valuing it in various jewels made of gold. When you identify yourself with the body, name and form are there. But when you transcend body-consciousness, the ‘others’ also disappear. The realised one does not see the world as different from himself.”

SM, Jan. 14

Anup Taneja

Abridged from Speaking Tree – TOI, June 06, 2013



The Blue Dot and ‘God’ Particle

Consciousness, in its purest form, remains undifferentiated and abides in eternity. However, when Pure Consciousness enters human consciousness, descending from the Spirit into the body suffused with material desires, it becomes polluted and so constantly flows downward and outward. Due to ignorance, we keep floating on this river of ignorance, drifting farther and farther away from the Pure Spirit.

Those who flow with the downward current, towards finite proclivities, are governed by material consciousness while those who are proceeding upstream, towards the Source, are said to have spiritual consciousness. Little wonder then that those being governed by material consciousness find the external world beautiful and enjoyable. They are unaware of the vast, inner realm of consciousness that is experienced in deep meditation. The inner Self, despite abiding within, remains remote

primarily because of the deep-rooted tendency of the mind to roam in the pleasure garden of the senses.

The Self is Eternal Consciousness which both pre-exists and survives the body. While the ego arises and subsides alternately in the waking, dreaming and deep sleep states, the Self that is both present and transcends the three states, remains unchanged and abides in satchitananda. As the seeker progresses in meditation, he perceives divine radiance that appears in four different colours – red, white, black and blue – corresponding to the four states of consciousness, namely, waking, dreaming, deep sleep and supra-causal states respectively. The Self is experienced in the supra-causal state in deep meditation. The ego in this state gets obliterated; therefore no duality of consciousness is observed.

Avadhoot Baba Nityananda, the sage of Ganeshpuri, says that the seeker whose ego gets merged with the Absolute experiences the entire universe as a blissful play of consciousness. Such an enlightened being, he further says, has a constant, uninterrupted experience of the dazzling blue rays of Consciousness that emanate from the Bindu and remains absorbed in a state of eternal bliss. Bindu is the scintillating Blue Dot – of the size of a sesame seed – that is experienced by advanced seekers in deep meditation in the highest spiritual centre, the crown chakra, as the sahasrara. Despite it being tiny, it is, in fact, the seed that contains the entire universe.

It appears that the Blue Dot is the spiritual counterpart of the God Particle, the Higgs Boson in science. On the basis of their research, scientists aver that the Higgs Boson subatomic particle has provided mass and energy to all matter since the time the universe came into being. It is precisely for this reason it has been nicknamed the ‘God’ particle. **Yogis too, on the basis of their experience in deep meditation, affirm that the entire universe has emanated from the Blue Dot.** It has been the experience of many advanced seekers that immediately before the attainment of final beatitude, the Blue Dot expands infinitely, and its effulgence encompasses the entire universe.

Avadhoot Baba Nityananda says: “The real heart is beyond the body

and senses and can be accessed through the crown chakra in the head. This chidakash or spiritual sky is a three-pointed triangle and is the seat of the Supreme Being and the abode of Shakti. It comprises light, vibration and sound and from that sound manifests Omkar.”

SM, Oct.13

- Anup Taneja

Abridged from Speaking Tree – TOI, August 08, 2013



Service with Detachment

Vedanta has never permitted escapism, although many uninformed people contend that it does. The earliest Upanishads emphasize that one who cannot live the noble life of renunciation and self restraint must strive to fulfill one’s desires through honest means; teaching oneself to live in the service of man and in the glorification of the Lord. Such actions involving service of mankind are necessary to prepare a student for the highest flights in the meditation.

Actions do not cling to one who intensively plunges into life, eager and anxious to meet its new challenges, at every turn keeping truth and purity as one’s standard. Such a one is living an entire lifetime in spirit of paying homage to Lord, detached from the ego-sense or from the anxiety for the results of those actions. When all activities, whether social, economic, political, or domestic are pursued in an attitude of detachment, they can never bind a person by their results.

The highest prayer in the world is service, the greatest devotion is loving the people around, and the noblest character trait is divine compassion for all living creatures.

SM, July 13

- Swami Chinmayananda

Courtesy – Tapovan Prasad, January 2011



Pranayama

Regulation of Prana (vital force) is called Pranayama. The Prana is not merely the breath. The breathing process, (inhalation, exhalation and retention) does not constitute the Prana by itself, but is an indication that the Prana is working. We cannot see the Prana as it is not a physical object. But we can infer its existence from the process of respiration. Air is taken in and thrown out by a particular action of the Prana. Some hold that there are many Pranas and others think it is one. The Prana is really a single energy, but appears to be many when viewed from the standpoints of its different functions. Pranayama is a method of harmonizing not only the breath, but also the senses and the mind. Through the practice of Pranayama, the body becomes strong and healthy. Too much of fat is reduced. There will be luster in the face of the practitioner who will be free from diseases like cold, cough, etc.

By the practice of Pranayama, the apices of the lungs will get proper supply of oxygen. There will be an improvement in the quality and quantity of the blood in the system. All the tissues and cells will be nourished with plenty of pure blood and lymph.

SM, April, 13

- Swami Chidananda

Courtesy - Splendour, July, 2009



Vedantic Humanism - The Future

Swami Vivekananda declared at the World Parliament of Religions at Chicago that the movement of Vedantic humanism has come of age. Vedantic humanism is fundamentally different from the humanist philosophies of the West in the sense that it is based on the fundamental unity of all existence manifested in the oneness of humanity.

Social Darwinism was the answer the West gave to Darwin's theory of evolution through natural selection. It is a social process which either

eliminates or elevates the 'lower races' through a very slow process of 'civilizing' that happens of course under colonization. Here it should be stated that Charles Darwin himself was not very comfortable with the idea of social Darwinism. However one finds in Swami Vivekananda and Sri Aurobindo the complete rejection of such Social Darwinist models of human society.

Today the evolution theory of the ancient Yogis will be better understood in the light of modern research. And yet the theory of the Yogis is a better explanation. The two causes of evolution advanced by the moderns, viz. sexual selection and survival of the fittest, are inadequate.... The result of this theory is to furnish every oppressor with an argument to calm the qualms of conscience. But the great ancient evolutionist, Patanjali, declares that the true secret of evolution is the manifestation of the perfection which is already in every being; that this perfection has been barred and the infinite tide behind is struggling to express itself

Swami Vivekananda rose against the tide of Social Darwinism and declared that human evolution is based on qualitatively different process. It was only after the Nazi holocaust and the horrors of mass killing of mentally challenged and physically challenged populations as well as elimination of the ethnic groups labeled as 'inferior' by Nazi state machine that the Western thinkers realized the immense folly of their upholding of social Darwinism.

As against these there have been voices in isolated isles of the West which spoke against social Darwinism and interestingly invariably these voices had a Vedantic connection. One such example is Pyotr Kropotkin. In 1900 he met Swami Vivekananda at Paris. Author P. Mukherjee writes: "The core of these meetings, I would like to believe (and believe) is to explore the distinctiveness of different shades of opinion, however, diverse they are or they might look to be."

Swami Vivekananda's observation, that the evolution of non-human organic life and human evolution making an organically united yet a qualitatively different process is accepted by evolutionists today. Sri Aurobindo took forward the vision of Swami Vivekananda and spoke of

supra-mental consciousness descending on the planet. And this vision never favored any specific race or culture but entire humanity. Both Sri Aurobindo and Swami Vivekananda recognized that all humanity owes its evolution to all humanity.

So what Swami Vivekananda set in motion on September 11 at Chicago is the continuing declaration of Vedantic humanist ideal which manifests itself when humanity liberates itself from the shackles of all artificial barriers it has built around it and realizes that it is part of the great Cosmic Divinity that permeates and animates all existence.

SM, Jan. 13

Aravindan Neelakandan

YB ET

Abridged from Yuva bharti, September 2012



The Power of Thought

Thought has been proven to be a powerful yet non-physical energy, which can influence other souls and also matter. On a limited scale, there are the experiments with ESP (extrasensory perception) and mental telepathy. On a more sensational level, some use the power of thought to such an extent that steel objects can be bent and heavy objects moved without any physical help. In the case of telepathy, communication over thousands of miles is possible in an instant when two souls are tuned to each other's mental wavelength, as if thought broadcasting and receiving is some sort of subtle (non-physical) radio system. Evil powers also invoke the power of thought, although for impure or egoistic motives and gains. **Thought can be regarded as the energy or subtle force which links the soul to physical matter through the souls' connection with the body.**

SM, Oct. 12

—Awakening with Brahma Kumaris

The World Renewal, August 2012



Time is Precious: Always do Good

Time is very important in a man's life. Without wasting a moment, it should be reserved for doing good deeds alone. If good deeds are to be done, thoughts also must be good.

Further, if bad thoughts are not entertained, bad actions will not take place and one will not have to suffer the bad effects. One who clearly understands this will, without wasting time, nourish good thoughts and keep on doing good deeds.

What is a good deed? That which results in benefits for the self and others is alone a good deed. Such a sattvic attitude will benefit all. Mutual affection and happiness will arise in all matters. Sri Sankara Bhagavatpada puts it beautifully:

आयुर्नश्यती पश्यतां प्रतिदिनं याति क्षयं यौवनम्
प्रत्यायान्ति गताः पुनर्नदिवसाः कालो जगद्वक्षकः ॥
लक्ष्मीस्तोय तरङ् भग्ङ्चपला विद्युच्चलं जीवितं ॥
तस्मान्मां शरणागतं करुणया त्वं रक्ष रक्षाधुना ॥

We see that our lifespan is diminishing day by day. Time swallows everything. Bygone days do not come back. Like the waves in the sea, wealth also is impermanent. Life comes and goes at lightning speed. Hence, let God, who is the embodiment of kindness, protect those surrender at this feet.

If we understand this well, we will utilise our lives for good actions.

SM, Jul. 12

H.H. Sri Bharati Tirtha Mahaswamiji

Tattvaloka, November 2010



Peace of Mind

We are part of one great Life, which knows no failure, no loss of effort or strength, which ‘mightily and sweetly ordering all things’ bears the worlds onwards to their goal. The notion that our little life is a separate independent unit, fighting for its own hand against countless separate independent units, is a delusion of the most tormenting kind. So long as we thus see the world and life, peace broods far off on an inaccessible pinnacle. When we feel and know that all selves are one, then peace of mind is ours without any fear of loss.

All our troubles arise from thinking of ourselves as separated units, and then revolving on our own mental axes, thinking only of our separate interests, our separate aims, our separate joys and sorrows. Some do this as regards the lower things of life, and they are the most dissatisfied of all, ever restlessly snatching at the general stock of material goods, and piling up useless treasures. Others seek ever their own separate progress in the higher life, good earnest people, but ever discontented and anxious. They are ever contemplating and analyzing themselves: ‘Am I getting on?, Do I know more than I did last year? And so on, fretting for continual assurances of progress, their thoughts centered on their own gain. Peace is not to be found in the continual seeking for the gratification of the separate self, even though the gratification be of the higher kind. It is found in renouncing the separated self, in resting on the Self that is One, the Self that is manifesting at every stage of evolution, and in our stage as much as in every other, and is content in all.

SM, Apr. 12

- Annie Besant

Splendour, August 2009



Vedanta Guides Your Thought

Vedanta trains you to think independently. It helps you probe into the essence of the human personality, directs you to study, reflect and realize the fundamental truth of life. In the past, generations put in effort to discover the real Self. Later on, some spiritual enthusiasts brought out their own abridged versions of truth. They were well meant but their reading of the original truth was feeble. People began to follow their teaching blindly. They lost their independent reflection and judgment. Spiritual education was no longer liberal, but led by the opinion of others. This has plunged people into ignorance, and the world is steeped in sorrow and suffering.

The root cause of suffering is that people do not look within. They hardly investigate the truth of life nor exercise their own judgment. They rely on outside forces to do their thinking. And they function predominantly on blind faith and mechanical ritual. This is spiritual suicide. Castes, creeds and sects are ghosts haunting us. The role of Vedanta is to free you from infatuation with celebrities and educate you on the eternities.

SM, Jan. 12

-Swami Parthasarathy

Splendour, March 2010



Gospel of Work

Let us work with our physical passions and emotional impulses dedicated unto the Lord, with a wakeful intellect, policing our lust, greed, pride, arrogance and other such lower urges. Let us work in love and charity, with deep sympathy and all tenderness. Work when undertaken in this attitude, becomes a rewarding fulfillment in itself, whatever be the final result. Inspired by the Lord, at the altar of our heart, when we work thus in love and joy, the achievement comes to

exhibit a glow, at once and divine and unique, bringing forth untold happiness to the world around us. Even if our plans break down, our schemes fail, our purpose gets shattered, our efforts become wasted, we shall find some miraculous power secretly pouring unending success into our fields and accomplishing things which we never planned showering blessings all around which we never conceived of. This then is the gospel of work.

SM, Oct. 11

- Swami Chinmayananda

Tapovan Prasad, June 2011



Reduce Your Ego

Ego is self-consciousness. It is a part of your subtle body which constitutes your inner personality. When you consider yourself distinct and separate from others, you are said to be “egoistic”. As long as you have an ego your mind will be disturbed. You will be under stress. Reduce your ego, you become free from mental agitation. Ego manifests in three distinct ways: (a) I am supreme (b) I alone exist (c) I-am-the-doer.

In the first instance, a person develops an exaggerated opinion that he is supreme. He believes himself superior to one and all. He has no regard or respect for others’ knowledge and experience. He becomes intoxicated with an egoistic feeling that he excels everyone in everything. That none can equal, much less surpass him. Extreme pride and vanity consume any trace of mental peace within him. Such a person’s mind will ever be disturbed.

The second phase of ego manifests as one develops a feeling ‘I alone exist’. An aspect of ego which makes a person consider himself all-important and that everyone around is meant only to serve him. He lives selfishly centering every interest towards his own welfare. He scarce recognizes the existence of others around him. Could not care less as to what happens to them as long as his own interests are catered to. Such a

gross, selfish and self-centered attitude produces mental agitation and suffering. In the entire world you will not find a selfish, self-centered person peaceful and happy. Conversely, you will never find an unselfish person mentally agitated and unhappy.

Ego also appears as the feeling ‘I-am-the-doer.’ A person with this egoistic concept takes his duties as a burden upon his shoulders. He slips into the feeling, ‘I have to do them all. They are my responsibilities.’ The I sticks out more than his work. He becomes attached and excited about his obligations to the world. He hurries and worries about his work. You must not fall prey to these surface emotions and excitements. Your foremost obligation in life should be to merely do whatever you ought to do. That is the beginning and end of all your obligations. You need not brood over or worry about your self-created duties and responsibilities. Your real duty in life is to keep yourself mentally self-sufficient, self-poised and self-pleased.

SM, Jul. 11

- A Parthasarathy

Splendour, July 2009



Why Do We Suffer Pain by Recreating it Moment to Moment?

Thought creates energy. If thought is negative, then energy is negative and that creates pain. A hurt body looks at the world through pain. A hurt body will try its best to sustain pain. It is a matter of survival. So, it loves to attract pain and sustain it. It will use logic to protect it. Look at unhappy people. They will convince you to be miserable. All that you can do is to create a bliss body in you. There are five layers in you: the physical body, the pranic body, the breath body, the mental body, the intellectual body and the bliss body.

All these layers in us have energies. It is in potential form. Just as there is latent fire in wood and by rubbing the wood it is invoked. In the same way, you have to awaken the physical body through exercise, yoga,

dance and a balanced diet. Keep the body alive and enthusiastic. You will then kindle a happy energy through the body.

The pranic or breath body has to be awakened. Breathe deeply by doing pranayama and find a different kind of joy. Shallow breathing creates lower energy field while deep breathing enhances one's aliveness. The mental body can be awakened if you keep your mind calm. A calm mind has a different joy; a noisy mind is an avenue for energy leakage. When your intellect is open and receptive, yet another dimension of blissful energy arises. One who is open and receptive is always learning. That's why children learn very fast. In deep sleep, the bliss body opens up naturally. In the waking state, if one is committed to be happy, the bliss center will be awakened.

SM, Apr. 11

- Swami Sukhabodhananda

Splendour, December, 2009



Hinduism is an Open-Source

The key point of differentiation between Hinduism and other faiths is not polytheism vs. monotheism. The key differentiation is that "Hinduism" is Open Source and most other faiths are Closed Source.

"Open source is an approach to the design, development, and distribution of software, offering practical accessibility to a software's source code."

If we consider god, the concept of god, the practices that lead one to god, and the ideas, thoughts and philosophies around the nature of the human mind the source code, then India has been the place where the doors have been thrown wide open and the coders have been given free reign to craft, invent, reinvent, refine, imagine, and re-imagine to the point that literally every variety of the spiritual and cognitive experience has been explored, celebrated, and documented.

The results of India's God Project - as I like to refer to Hinduism-have

been absolutely staggering. The body of knowledge-scientific, faith-based, and experience-based-that has been accrued on the nature of mind, consciousness and human behavior, and the number of practical methods that have been specifically identified to work with ones own mind are without compare.

At the heart of the Indic source code are the Vedas, which immediately establish the primacy of inquiry in Indic thought.

Since opening the floodgates on the divine question, Indic thought has followed a glorious evolutionary arc from shamanism, nature worship and sacrifice through sublime and complex theories on mental cognition, the nature of consciousness, and quantum physics.

One of Hinduism's defining factors is that the historic view of god, the nature worship and shamanism, never went away, so that god as currently worshiped exists simultaneously as symbol and archetype as well as literal embodiment.

Western and Middle Eastern monotheistic faiths have simply not allowed such liberal interpretation of their God. They continue to exist as closed source systems.

One of the defining facts of Christian history is that access to God has been viewed -- as in most closed source systems -- as a trade secret. The ability to reinterpret the bible, or the teachings of Christ, or the Old Testament, or to challenge the basic fundamental authority of the church has been nonexistent for most of the church's history. Those who dared to do so were quite often killed.

In Indic thought, there is no trade secret. The foundation of yoga is that the key to god, or the macrocosm, or the absolute ... lies within the individual and can be accessed through a certain set of practices. It's a beautifully simple but ultimately profound concept that has been allowed to flourish unchecked for millennia. The process of discovering and re-imagining the divine is in your hands: The God Project.

SM, Jan. 11

Josh Schrei

www.huffingtonpost.com

Yuva Bharati, October 2010



Ram Rajya: Gandhi's Vision of an Ideal Society

andhi outlined his concept of the ideal society in an article in Harijan in 1946.

“Indian independence must begin at the bottom. Thus every village will be a republic or a panchayat, having full powers.”

“It follows, therefore, that every village has to be self-sustained and capable of managing its affairs, even to the extent of defending itself against the whole world.”

“It will be trained and prepared to perish in the attempt to defend itself against any onslaught.”

“Thus ultimately, it is the individual who is the unit. But this does not exclude dependence on the willing help from neighbours or from the world.”

“It will be free and voluntary play of mutual forces.”

“Such a society is necessarily highly cultured in which every man and every woman knows what he or she wants and, what is more, knows that no one should want anything that the others cannot have with equal labour.”

“In this structure composed of innumerable villages, there will be ever widening, never ascending, circles.”

“Life will not be a pyramid with the apex sustained by the bottom.”

“But will be an oceanic circle, whose centre will be the individual always ready to perish for the village, the latter ready to perish for the circle of villages, till at last the whole becomes one life composed of individuals, ever humble, sharing the majesty of the oceanic circle of which they are integral units.”

“Therefore, the outermost circumference will not wield power to crush the inner circle, but will give strength to all within and will derive

its own strength from it.”

“I may be taunted with the retort that this is all Utopian and, therefore, not worth a single thought.”

“If Euclid's point, though incapable of being drawn by any human agency, has an imperishable value, my picture has its own for mankind to live...”

www.lifepositive.com/spirit/masters/mahatma-gandhi/Gandhi.asp

SM, Oct. 10

- Bhavan Australia,

July 2009



Living Excellence

very action of yours must be excellent. Excellent performance must give excellent result. It is the law of the universe.

True devotion brings about a lot of changes in the personality, integrates the mind and makes it more focused. One of the by-products of this process is success in the world outside. An integrated mind cannot but result in excellent performance.

Quieten the mind and then engage yourself in any activity, any work; you will see that the work yields the highest satisfaction, the greatest fulfillment and happiness to yourself. And the work also becomes a piece of art! Thus devotion is the core of religion, a technique by which you can quieten the mind. With a quietened mind, you progress not only on the spiritual path by contemplation on the Higher, but also achieve success in the material world. While contemplation helps to unfold your spiritual vitality, long before you reach vitality, long before you reach any conquests in the spiritual realm, you will start experiencing a greater reach of success in the material world.

SM, Jul. 10

- Swami Chinmayananda
Tapovan Prasad, December 2009



Concept of Dharma

Dharma, synonym of Rita in its primary sense, was the Cosmic Order which upheld the whole creation. Being one and indivisible, it is operated upon all planes, material, social, moral and spiritual, and everything that was created evolved according to its laws.

In its secondary sense, Dharma meant the pursuit of the Highest Good by a man trying to live in conformity with the Cosmic Order.

Dharma took its stand on the fact that man was neither the creature nor the victim of forces, either physical or supra-physical. He was certainly not the creature of environments, as held by some modern social philosophers. He was the meeting point of hereditary and environmental forces as well as of moral and spiritual forces operating through a series of lives.

By pursuing Dharma, therefore, he could operate the forces of the Cosmic Order, and by so doing, outgrow his limitations as well as alter the course of his present and future lives, as also change the shape of his social and material environment.

SM, Apr. 10

- Kulapativani

Bhavan's Journal, January 15, 2009



We Are All Hindus Now (By thought and belief!)

merica is not a Christian nation. We are, it is true, a nation founded by Christians, and according to a 2008 survey, 76 percent of us continue to identify as Christian (still, that's the lowest percentage in American history). Of course, we are not a Hindu—or Muslim, or Jewish, or Wiccan—nation, either. A million-plus Hindus live in the United States, a fraction of the billion who live on

Earth. **But recent poll data show that conceptually, at least, we are slowly becoming more like Hindus and less like traditional Christians in the ways we think about God, our selves, each other, and eternity.**

The Rig Veda, the most ancient Hindu scripture, says this: "Truth is One, but the sages speak of it by many names." A Hindu believes there are many paths to God. Jesus is one way, the Quran is another, yoga practice is a third. None is better than any other; all are equal. The most traditional, conservative Christians have not been taught to think like this. They learn in Sunday school that their religion is true, and others are false. Jesus said, "I am the way, the truth, and the life. No one comes to the father except through me."

Americans are no longer buying it. According to a 2008 Pew Forum survey, 65 percent of us believe that "many religions can lead to eternal life"—including 37 percent of white evangelicals, the group most likely to believe that salvation is theirs alone. Also, the number of people who seek spiritual truth outside church is growing. Thirty percent of Americans call themselves "spiritual, not religious," according to a 2009 NEWSWEEK Poll, up from 24 percent in 2005. Stephen Prothero, religion professor at Boston University, has long framed the American propensity for "the divine-deli-cafeteria religion" as "very much in the spirit of Hinduism. You're not picking and choosing from different religions, because they're all the same," he says. **"It isn't about orthodoxy. It's about whatever works. If going to yoga works, great—and if going to Catholic mass works, great - and if going to Catholic mass plus the yoga plus the Buddhist retreat works, that's great, too."**

Then there's the question of what happens when you die. Christians traditionally believe that bodies and souls are sacred, that together they comprise the "self," and that at the end of time they will be reunited in the Resurrection. You need both, in other words, and you need them forever. Hindus believe no such thing. At death, the body burns on a pyre, while the spirit—where identity resides—escapes. In reincarnation, central to Hinduism, selves come back to earth again and again in different bodies. So here is another way in which Americans are becoming more Hindu: 24

percent of Americans say they believe in reincarnation, according to a 2008 Harris poll. So agnostic are we about the ultimate fates of our bodies that we're burning them—like Hindus—after death. More than a third of Americans now choose cremation, according to the Cremation Association of North America, up from 6 percent in 1975. "I do think the more spiritual role of religion tends to deemphasize some of the more starkly literal interpretations of the Resurrection," agrees Diana Eck, professor of comparative religion at Harvard. **So let us all say "OM."**

SM, Jan. 10

- Lisa Miller

NEWSWEEK, August 31, 2009

You are blessed for saying "OM"

The mystic syllable OM (AUM) is a cosmophonic sound, contains the philosophy of existence and its chanting connects one to the cosmic rhythm and one starts thinking universally, it is said. - Ed.



Nine Beliefs of Hinduism

Reverence for our revealed scriptures: Hindus believe in the divinity of the Vedas, the world's most ancient scripture, and venerate the Agamas as equally revealed. These primordial hymns are God's word and the bedrock of Sanatana Dharma. Dharma, the eternal religion which has neither beginning nor end.

- **All-Pervasive Divinity:** Hindus believe in a one, all-pervasive Supreme Being who is both immanent and transcendent both Creator and Unmanifest Reality.
- **Three worlds and cycles of creation:** Hindus believe there are three worlds of existence – physical, astral and causal – and that the universe undergoes endless cycles of creation, preservation and dissolution.
- **The laws of karma and dharma:** Hindus believe in karma - the law of

cause and effect by which each individual creates his own destiny by his thoughts words and deeds – and in dharma, righteous living.

- **Reincarnation and Liberation:** Hindus believe that the soul reincarnates, evolving through many births until all karmas have been resolved, and moksha - spiritual knowledge and liberation from the cycle of rebirth – is attained. Not a single soul will be eternally deprived of this destiny.
- **Temples and the inner worlds:** Hindus believe that divine beings exist in unseen worlds and that temple worship, rituals, sacraments as well as personal devotionals create a communion with these devas and Gods.
- **Yoga guided by a satguru:** Hindus believe that a spiritually awakened master, or satguru is essential to know the Transcendent Absolute, as are personal discipline, good conduct, purification, pilgrimage, self-inquiry and meditation.
- **Compassion and noninjury:** Hindus believe that all life is sacred, to be loved and revered, and therefore practice ahimsa, “noninjury.”
- **Genuine respect for other faiths:** Hindus believe that no particular religion teaches the only way to salvation above all others, but that all genuine religious paths are facets of God's Pure Love and Light, deserving tolerance and understanding.

SM, Oct. 09

- Hinduism Today,

April-June 2009



The Leaves of the Lotus

Those who practice the yoga of knowledge, transcend all duality. They like nothing, and they dislike nothing; they desire nothing, and they fear nothing. They are free from the bondage of self-will. Ignorant people think that the **yoga of knowledge** and the **yoga of action** are utterly different, and even opposed; but wise people recognize that both lead to the same goal. The person who is adept in the yoga of knowledge, will attain the rewards of selfless action; the person who is adept in the yoga of action, will attain the rewards of divine knowledge.

The **yoga of knowledge** is difficult to practice without any action. So those who wish to make rapid progress on the path to God, dedicate themselves to the service of others. They learn to master the senses and to conquer selfish desires; and in this way, they perceive the soul in all living beings.

As people practice the **yoga of action**, a moment comes when they think: 'I am not performing these actions'. In seeing and hearing, smelling and touching, eating and walking, sleeping and breathing, even opening and closings the eyes, they realize that the body has become the servant of the soul.

The leaves of the lotus remain clean and dry even in the muddiest water. In the same way, those who practice the yoga of action, offering all their actions to God, cannot be touched by sin. In every situation, they remain pure.

SM, Jul. 09

-Bhagavad Gita

Courtesy: Splendour, August 2008



Freedom from Aversion and Attachment

Those who are focused on the objects of the senses, become attached to those objects. From attachment comes desire; and from desire comes anger; from anger comes confusion of mind; from confusion of mind comes loss of memory; from loss of memory comes loss of intelligence; and from loss of intelligence comes destruction.

But those who can move in the world of the senses, and yet be free from both attachment and aversion, experience inner peace, in which there is no sorrow or sadness. This is wisdom, which arises from knowledge of the soul.

If your mind is distracted by the senses, how can you meditate? If you cannot meditate, how can you experience inner peace? And if you cannot experience inner peace, how can you know joy? When you let your mind follow the senses, they carry away all wisdom – just as storms carry a boat from its course on the sea.

Devote yourself to freeing the senses from attachment and aversion alike. In this way, you will dispel the darkness of ignorance – which most people regard as day – and awake to the light of truth.

Rivers flow into the sea, but cannot make the sea overflow. In the same way, the streams of impressions from the world of senses will flow into your mind, but they will not make your passions overflow. On the contrary, you will remain calm and tranquil.

SM, Apr. 09

-Bhagavad Gita

Courtesy: Splendour, February 2008



The Essence of Yoga

The pleasures of the senses have a beginning and an end; for this reason they lead to misery. Do not look for happiness in them. When desire for pleasure rises up within your body, suppress it. When anger surges within the body, calm it. In this way, you will attain peace and joy; you will discover the light of God shining within you.

Sin and conflict are diseases, which destroy those who are afflicted with them. Heal yourself of sin and conflict by working for the well-being of others. This is what wise people have always taught. Free yourself from anger and desire, which are the causes of sin and conflict, and thereby make yourself whole. This is the essence of yoga; this is the means by which you come to know the soul, and thereby attain the highest spiritual state.

Learn to meditate. Close your eyes; calm your breathing; and focus your attention on the center of consciousness. Thus, you will master the senses, the emotions and the intellect - and thereby free yourself from desire and anger.

Meditate upon me. I am the friend of all living beings. I am the ruler of the universe. I am the object of all true worship. I am the goal to which yoga is directed. Through me, and me alone, you can find peace and joy.

SM, Jan. 09

- Bhagavad Gita

Courtesy: Splendour, October 2008



Hinduism is Thus Both a Civilisation and Conglomerate of Religions

The encyclopedia of Britannica writes: “In principle Hinduism incorporates all forms of belief and worship without necessitating the selection or elimination of any. The Hindu is inclined to revere the divine in every manifestation whatever it may be and is doctrinally tolerant leaving others-both Hindus and non-Hindus – whatever creed and worship practices suit them best. A Hindu may

embrace a non-Hindu religion without ceasing to be a Hindu, and since the Hindu is disposed to think synthetically and to regard other forms of worship strange gods and divergent as inadequate rather than wrong or objectionable, he tends to believe that the highest divine powers complement each other for the well-being of the World and the mankind. Few religious ideas are considered to be finally irreconcilable. The core of the religion does not even depend on the existence or non-existence of God or whether there is one God or many. **Since religious truth is said to transcend all verbal definition, it is not conceived in dogmatic terms, Hinduism is thus both a civilisation and a conglomerate of religions**, with neither a beginning, nor a founder, nor a central authority, hierarchy or organization”.

Encyclopedia of Britannica 15E Ed. Vol. 8 Page 888

SM, Oct.08

Courtesy: Yuva Bharati, September 2008



Hinduism - More than “A Way of Life”

It became hip and fashionable among some Hindus a few decades ago to say that Hinduism is just a way of life and not a religion. And this has been parroted by many without thinking ever since. Unfortunately, religions that do not wish Hinduism well have used this to its detriment by saying: “So, Hinduism is a way of life. This means you Hindus don’t have a religion. Your religion then can be our religion. Why don’t you adopt ours as your own? You may keep your way of life.” It is thus important for Hindus to insist that Hinduism is a religion, philosophy and way of life all rolled into one. These three are not mutually exclusive categories. A tradition can be all three at once as in the case of Taoism (Dao-de Jiao as the Chinese call it) in China and Shintoism (Kami-nomichi as the Japanese call it) in Japan. Usually, nationally-based religions tend to be all three at once, as opposed to the missionary religions. Why are some Hindus hesitant to call Hinduism a

religion when it has all the elements that characterize a religion? Let's check each of these characteristics: Deities, piety and worship, scriptures, doctrines, sacred space (sanctified places of worship and pilgrimage), sacred time (feasts and fasts), sacred persons (priests and monastics), liturgy and prayer, sacraments (sanctification of the important stages of life), miracles and mysticism, rituals, code of ethics, contemplative practices, humanism and a concept of salvation. Hinduism has them all. Over and above this is the culture. It is this cultural component that makes Hinduism more than a religion. It also becomes a way of life. One does not exclude the other. Hindus should celebrate their faith as all three (religion, philosophy and way of life) rolled into one as Taoists and Shintoists have done in China and Japan respectively over the centuries.

SM, Jul. 08

- B.N. Hebbar

Hinduism Today, Jan-Mar 2008



Mahatma Gandhi on Gandhism

For me the road to salvation lies through incessant toil in the service of my country. There is no such thing as 'Gandhism' and I do not want to leave any sect after me. I do not claim to have originated any new principle or doctrine. **I have simply tried in my own way to apply the eternal truths to our daily life and problems.** Truth and non-violence are as old as the hills. All I have done is to try experiments in both on as vast a scale as I could do.

I want you also to grow with me. I should not care to know what happens after I am gone. Forget me, therefore, cleave not to my name but cleave to the principles, measure every one of your activities by that standard and face fearlessly every problem that arises.

Truth and ahimsa will never be destroyed, but if Gandhism is another name for sectarianism, it deserves to be destroyed.

We have to make truth and non-violence not matters for mere individual practice but for practice by groups and communities and nations. That, at any rate, is my dream.

Mahatma

Pope's Call to Humanity: Restore Order and Harmony in the World

Everyone is indeed aware how the development and the application of any invention to a military purpose almost everywhere brings harm out of proportion, even in the political sphere, to the advantages which are derived from them and which could be secured by other paths at less cost and danger, or be quite simply postponed to a more convenient time.

Such quantities of material, such sums of money derived from saving and the result of restrictions and toil, such expenditure of human labour taken away from urgent needs, are consumed to prepare these new arms, that even the wealthiest nations must foresee the times in which they will regret the dangerously weakened harmony of the national economy, or are in fact already regretting it, through they endeavour to conceal the fact.

SM, Apr. 08

From the pages of Bhavan's Journal, January 31, 1958.



Deficiency of Noble Minds

To what disgusting venality politicians degenerate is becoming too evident from the competitive populist promises they make namely nine hours free electricity for farmers, free house sites and houses for the poor, waiver of farmer's loans – Rs. 30,000 crores, rice at Rs. 2/Kg, disburse Rs. 1,00,000 crores as loans to women.

Innocent Indians may be wondering as to how the vast programmes of poor-feeding, housing and clothing and welfare could be financed. Gone are leaders who extolled the virtues of work and thrift; who taught people that education, acquisition of skills and life-long learning alone

will make people and the country self-reliant and prosperous and powerful. True leaders must educate people as Gandhiji did; inspire them as Swamy Vivekananda and Lokamanya Tilak did. The present crop of leaders in their all-consuming hunger for power are competing to please voters, religious communities, caste-groups and even criminal gangs. They don't show any zeal to promote education for all and limiting family sizes limited to the parent's capability and means to bring them up as educated employable, aspiring, cultured citizens. The results are: deteriorating internal security, social and communal conflicts, growing crime and impunity to criminals, demands for rights and utter neglect of duties, all pointing to decline and destruction of India. India can still be saved from politicians if we remember and act on the wisdom of Edmund Burke's words. **"All that is necessary for evil to triumph is for good men to do nothing" and recall Gandhiji's words!** "Those who claim to lead the masses must resolutely refuse to be led by them, if we want to avoid mob law and desire ordered progress for the country. I believe that mere protestation of one's opinion and surrender to the mass opinion is not only not enough, but in matters of vital importance, leaders must act contrary to the mass of opinions if it does not commend itself to their reason".

"A great civilization is not conquered from without but it is destroyed by itself from within", said the American historian, philosopher, Will Durant about ancient Rome.

India's case by our political leaders in whom, in the words of former great President Dr. APJ Abdul Kalam "there is a deficiency of noble minds"!

SM, Jan. 08

Excerpt from Editorial, Bharatiya Pragna, October 2007



I Love India

I love India as the birthplace of the highest and best of all religions, as the country that has the grandest mountains, the Himalayas, the country where the homes are simple, where domestic happiness is most to be found, and where the women unselfishly, unobtrusively, ungrudgingly serve the dear ones from early morn to dewy eve.

India, is above all others, the land of great women. Wherever we turn, whether history or literature, we are met on every hand by those figures, whose strength She mothered and recognized, while She keeps their memory eternally sacred.

I believe that India is one, indissoluble, National unity is built on the common home, the common interest and the common love. I believe that the strength which spoke in the Vedas and Upanishads, in the making of religions and empires, in the learning of scholars, and the meditation of the saints, is born once more amongst us, its name today is NATIONALITY. I believe that the present of India is deep-rooted in her past, and that before her, shines a glorious future.

O! nationality, come thou to me as joy of sorrow, as honour or as shame! Make me thine own!!

SM, Oct. 07

- Sister Nivedita

Courtesy: Yuva Bharati, October 2006



Karma Doctrine

Why do bad things happen even to good people? Why is there so much suffering in the world?

"Suffering is not punishment but the prize of fellowship. It is an accompaniment of all creative endeavour"; "Suffering takes us to the

centre of things and away from trivialities of life".

The doctrine of karma offers a satisfactory solution to the riddle of suffering. According to it, God's creative act is in conformity with the law of karma. Though He is omnipotent, and can violate the law of karma, he does not do so because that would be inconsistent with His moral nature and violative of the principle of natural justice.

The Mundaka Upanishad explains creation with the allegory of different seeds sown in the earth. Just as sown seeds yield according to their kind, different plants and trees in turn yield different kinds of fruits and medicines. Just as the earth does not in any way interfere in the process of the growth of each seed, God also puts human beings in different positions according to their nature and karmas. God is not responsible for the evil, suffering and pain. Evil as well as good, are the outcome of one's own karmas of three types: Sanchita karmas, accumulated actions (from past lives as well as in this life) whose fruits have yet to be reaped; Prarabdha karmas, the karmas which have started yielding results; and Agami karmas, the future actions. Of these it is possible to avoid the consequences of Sanchita karmas and abstain from Agami karmas through religious practices and sadhana. But one cannot escape the consequences of Prarabdha karmas which have become operative. We have to live with the negative or positive outcome of these karmas. We alone, and not God, are responsible for the outcome.

SM, Jul. 07

-Ashok Vohra



India in 1835 – A proposal from LORD MACAULAY to British Parliament



an excerpt from Lord Macaulay's Address to the British Parliament, 2 February, 1835

"I have travelled across the length and breadth of India and I have not seen one person who is a beggar, who is a thief, such wealth I have

seen in this country, such high moral values, people of such caliber, that I do not think we would ever conquer this country, unless we break the very backbone of this nation, which is her **spiritual and cultural heritage**, and, therefore, I propose that we replace her old and ancient education system, her culture, for if the Indians think that all that is foreign and English is good and greater than their own, **they will lose their selfesteem, their native culture** and they will become what we want them, a truly dominated nation."

SM, Apr. 07

Courtesy: Dignity Dialogue, February 2007



Birth-Death Cycle

**Punarapi Jananam, Punarapi Maranam
Punarapi Jananeejathare Sayanam.**

Man is born again and again and again.

Birth is followed by death.

Adi Shankara, Bhaja Govindam.

Birth and death are two illusory scenes

In the drama of this world:

Really no one is born, no one dies,

No one comes, no one goes.

It is Maya's jugglery, It is play of the mind;

Brahman alone exists.

There is birth for the body alone,

Five elements combine to form the body;

The Atman is birth less and deathless;

Death is casting off the physical sheath.

It is like deep sleep; Birth is like waking from sleep;

Be not afraid of death, O Ram! Life is continuous.
 The flower may fade but the fragrance floats;
 The body may disintegrate,
 But the immortal fragrance of the soul Always will remain.
 Learn to discriminate The Real from the unreal;
 Think always of the Infinite
 That is birth less and deathless.
 Transcend Maya and Moha,
 Go beyond three Gunas,
 Give up attachment for the body.
 Free yourself from birth and death
 And merge in the Immortal Essence.

SM, Jan. 07

Upanishads



Free India - Vision and Reality

Sixty years after independence the picture of free India that emerges is not inspiring, not even reassuring, it is in fact depressing. The vision of freedom movement and the reality are poles apart. Seers like Sri Aurobindo prophesied that partition of India will go and a united Bharath would emerge out of the debris of chaos that was partition. India's gift of spirituality, he believed, will reach the four corners of the world and lift up human consciousness.

Two of Mahatma's visions of free India, which are fundamental to his life's philosophy have suffered serious setback after independence. One of them is eradication of poverty, particularly at the rural level by empowering the villages of India by reviving the ancient concept of autonomous villages to which Gandhiji gave the significant name "Gramswaraj". Strengthening the agricultural base and developing small

scale agro-industrial network in villages and instilling the spirit of self-help and Swadeshi was the very essence of Gandhian approach to rural India's all round development. That was the corner stone of his vision of "Ramarajya". Though Gandhiji was convinced that his philosophy was ultimately meant for all humanity across the world, he was realistic enough to realize that the process must spread from the soil of Rural India. Unfortunately India has now taken to the path of Globalization with the result that external economic and civilizational forces have swamped our farmers in the Indian villages. Rural India is today under the grip of poverty, famine, unemployment and illiteracy. The gulf between the rich and poor has multiplied manyfold. Suicide by farmers due to starvation has become a normal feature. Those whom Gandhiji expected to feed the rest of India are themselves dying for want of food. Vulgar Consumerism that Gandhiji severely condemned as immoral is now rampant. In the place of Swadeshi by Indians for Indians, multi-national corporations are ruling the roost, crippling and paralyzing the economy of vast masses of Indian population.

One has to seriously ponder over the causes for these mismatches between the vision and the reality. The partition of sacred Motherland left the people confused and disrupted. There was no unified will nor optimism so much required for a sound rebuilding of the nation on the basis of our eternal spiritual and cultural values. Those leaders who emerged as most powerful and who were supposed to execute the grand vision were themselves not fully imbued with the same. We have to retrieve our lost vision – the vision of Swami Vivekananda, Sri Aurobindo, Mahatma Gandhi and such like. India has to rediscover her soul, and also its "Swabhava" and work out its "Swadharma". Let us collectively pledge ourselves to follow the path of "Swadharma", which alone will lead to ultimate victory.

SM, Oct. 06

- P. Parameswaran

Yuva Bharati, August 2006

(abridged for SM, Ed)



Enlightenment & Terrorism

Enlightenment is an altered state of consciousness that can bring about a state of causeless unconditional love and limitless joy. It is a neurobiological phenomenon. One can attain illumination by being aware of certain spiritually awakening principles with the self-realisation that these need to be put in practice. When virtues of forgiveness, friendship, gratitude, silencing the mind, shedding ego, setting right one's relationships in all spheres of life, and witnessing without commentary are understood and realised, and they become a part of the individual's life, then he is on the path leading to illumination.

The prerequisites for attaining such a state can be summed up in four basic principles: Karma yoga in performing one's actions without expecting the fruits, forgiveness to set right relationships, total acceptance of the flow of life without questioning and analysis and above all, when it is the desire of the heart, Divine grace helps.

The attainment of this state can be accelerated by special techniques-breathing exercises to balance flow of energy, relaxation and meditation to silence the mind, samskara shudhi or freedom from negative life patterns and filling with positive life patterns, chakra dhyana to keep energy body in perfect health. When the vital centres chakras of the energy body are properly activated, aligned and rotate at the optimum frequency of 33 times per second, then the person is in a fit state to realise enlightenment.

An individual can attain illumination through understanding the principles of enlightened life and put them into practice. One such person will spread illumination to 1,00,000 persons in a cascading effect. If 60,000 people are enlightened in various parts of the world, then all six billion people will get enlightenment through the law of morphogenic fields. This will put an end to the menace of terrorism.

SM, Jul. 06

- Rajeshwar Nath

TOI, April 29, 2006



Daily Prayer

Lord, make me an instrument of Thy peace.

Where there is hatred, let me sow love;

Where there is injury, pardon;

Where there is doubt, faith;

Where there is despair, hope;

Where there is darkness, light;

and where there is sadness, let me sow joy.

O Divine Master, grant that I may not

So much seek to be consoled, as to console;

To be understood, as to understand;

To be loved, as to love;

For it is in giving that we receive;

It is in pardoning that we are pardoned;

And it is in dying that we are born to eternal life.

Amen!!

SM, Apr. 06

- Saint Francis



Sankalpa

Sankalpa is the seed out of which germinates and grows the tree of achievements. Sankalpa is small, subtle-almost invisible. The achievements can be big and mighty. In the Upanishads the Rishi asks the disciple to cut the Aswattha seed into two and asks him "What do you see?" The disciple said "Nothing, Sir". Then the Guru explains, "Out of the invisible seed grows the mighty Aswattha Tree."

Sankalpa can be defined as the 'firm will' and determination to

transform a desire into reality. The mind desires a thing, the intellect shapes it and the will executes it. If all the three are in total unison, then the power of the spirit lends its strength and desire gets transformed into a Reality. The dream becomes a fact. Vision becomes a tangible experience.

Sankalpa can be of two kinds. One, petty, selfish and ego-centric. Another, broad, unselfish and God-inspired. Both are powerful agents of creation. The difference is that the former is demoniac and the latter Divine. As per the Gita, the one is Asuri Sankalpa and other is Daivi Sankalpa. The Bhagavat Gita calls Asuri Sankalpa as “Kama Sankalpa”. Sankalpa born out of selfish or sensuous desires. Gita advocates action without selfish desire for fruit. That will sublimate Karma into Karma Yoga in which your selfish desires are subsumed by the Divine will.

All the mighty heroes of great achievements who were prompted by the Asuri Sankalpa became menacing threats to humanity and to the world order. Instead of Loka Sangraha they indulged in Loka Nigraha. They were men of great Sankalpa but their was Kama Sankalpa or Asuri Sankalpa. Nonetheless they had their rewards, their great achievements, and conquest of the three worlds. But ultimately they were destroyed – destroyed by the great Avatars who descended on Earth with the Daivi Sankalpa of maintaining the world order in tact, promoting Dharma and destroying Adharma. That had been the history of Bharath Varsha and the promise of the great Lord.

The Mantra was “Loka: Samastha: Sukhino Bhavantu”. That is the great Sankalpa, which had always been the inspiration of all our great men and great movements.

The wording of the Sankalpa is indicative of the cosmological perspective enshrined in the Hindu worldview. The immensity of the Sankalpa is reflected against the background of immeasurable time and space. Thus Sankalpa is a solemn and sacred commitment for a great collective endeavour.

Once you take a Sankalpa and seriously start living in accordance with that, immense strength comes to you. The inner reserves of strength

start coming into play. It is continuous, inexhaustible and almost irresistible. But there is also a sure chance of equally strong opposing forces getting simultaneously generated.

Taking Sankalpa means consciously inviting these obstacles. Undeterred by them you have to move on the path you have chosen, fully confident that the divine forces are behind you, ever ready to support you, provided you not lose heart and sit-back. As Swami Vivekananda wrote to his disciple Alasinga Perumal, “So long as you have faith in you and faith in God, nothing can stop you on your onward march”.

SM, Jan. 06

- P. Parameswaran

Yuva Bharati, November 2005

(abridged , Ed.)



India, the Sole Karmabhumi

Bharath alone is the Karmabhumi, a land of spiritual awakening, where evolved souls incarnate to work their final emancipation, in the process guiding others thirsting for liberation.

While the NRIs have to be appreciated for their tremendous effort in constructing temples abroad, any attempt to claim Kshetratvam or Sthalatvam for these foreign locals is far-fetched. In India, all temples are built on locations of some celestial events. Most are centuries old, and the murtis are svayambhus, indicative of divine will. There are divine powers in such locales, which help a spiritual aspirant in his progress.

Of course, God is universal and can be invoked at any place and time in murtis consecrated according to religious rites; but to accord the status of sthalam or kshetram certain prerequisites have to be fulfilled. What has taken cycles of chaturyugas to establish cannot be abridged in an ephemeral time frame of a few years and can neither be geographically relocated by frail human efforts, however noble the intention.

Sri Ramananda Sarasvati Swamiji, has said thus: The Hindu nation, whatever its temporal position, is the spiritual leader of the world. This is clear from the fact that its God is neither kama (worldly happiness) nor Artha (lucre) nor earthly Swarajya (state of political supremacy) but the supreme Self, the Sat-chit-ananda — reality in all.

This is the only land in world history which won its freedom not by blood-shed, but by spiritual might symbolised in the person on Mahatma Gandhi. This, at once, gives legitimacy to its claim as a Karmabhumi.

SM, Oct. 05

- M.C. Deviprasad
Tattvaloka, May 2005



The Pope and the Sannyasin

Two great religious leaders of the world have left us. Pope John Paul II, Head of the World Catholic Church and H.H. Swami Ranganathanandaji, President of the Sree Ramakrishna Mutt and Mission. Hinduism is non-monolithic and has no sole supreme head comparable to Pope. Incidentally, that points towards a crucially radical difference between the two world religions. The Pope is the head of a theocratic state with subjects loyal to him transnationally. The clout is, that the Pope wields on account of his religion, a political authority which he wields in a manner which has no parallel in contemporary history.

Leave alone International media, even the National media was reluctant and shy, if not apologetic, in giving proper coverage to Swami Ranganathanandaji's Mahasamadhi and also projecting the great personality and priceless contribution which was only his legitimate due. Pope's media coverage started long before his passing away and continued long after his successor was elected. The entire world's, attention was on Vatican for weeks together.

There is no need to get either excited about the one or worried about the other. Hinduism is a peaceful religion, poorly or not at all organized,

wielding no political clout, ruling no country or reigning over any transnational empire, true to its understanding of religion and spirituality. Swami Vivekananda had said that the impact of Hinduism is like that of a flower blossoming at the touch of the morning dew and spreading its fragrance unseen and unheard but bringing to blossom the fairest of flowers. This is in sharp contrast with the Roman Catholic Church backed by the Roman Empire whose military might enabled it to spread in the far off corners. In Hinduism, spirituality has a meaning and a value which is too subtle to be promoted by political and military power unlike Christianity which promoted it over theological empire followed by worldwide colonization. Vatican has inherited much of the tradition and also the regalia of Roman empire, whereas Hindu spiritual movements continue to deliver their message in a quite unostentatious way by personal touch and living models.

Swami Ranganathanandaji embodied the very spirit of Hinduism as exemplified by the great lives of Sree Ramakrishna Paramahansa and Swami Vivekananda. Swami Ranganathananda was known as the spiritual ambassador of India all over the world. Once he wrote, "The Bhagavad Gita is not a text to be worshipped in the pooja room but a manual to be followed in the battlefield of life".

SM, Jul. 05

- P. Parameswaran

Abridged from Yuva Bharati, June 2005



A Life That Matters

Ready or not, someday it will all come to an end.

There will be no more sunrises or sunsets, no minutes, hours, or days. All the things you collected, whether treasured or forgotten, will pass to someone else. Your wealth, fame, and temporal power will shrivel to irrelevance.

It will not matter what you owned or what you were owed. Your grudges, resentments, frustrations, and jealousies will finally disappear. So, too, your hopes, ambitions, plans, and to-do lists will expire.

The wins and losses that once seemed so important will fade away. It won't matter where you came from, or on what side of the tracks you lived, at the end. It won't matter whether you were beautiful or brilliant. Even your gender and skin color will be irrelevant.

So what will matter? How will the value of your days be measured?

What will matter is not what you bought, but what you built; Not what you got, but what you gave. What will matter is not your success, but your significance. What will matter is not what you learned, but what you taught.

What will matter is every act of integrity, compassion, courage or sacrifice that enriched, empowered or encouraged others to emulate your example.

What will matter is not your competence, but your character. What will matter is not how many people you knew, but how many will feel a lasting loss when you're gone.

What will matter is not your memories, but the memories that live in those who loved you. What will matter is how long you will be remembered, by whom and for what.

Living a life that matters doesn't happen by accident.

It's not a matter of circumstance but of choice.

Choose to live a life that matters. We make a living by what we earn but we make a life by what we give!!!

SM, Apr. 05



Purpose of Life

Life is a mixture of joys and miseries. One has the tendency to remember the difficulties or miseries for long, forgetting the joys the life has bestowed. The enlightened say that one should

use this life to liberate from the cycle of birth and death. How many have been liberated? Why the population is still growing? Possibly we have not followed the right path.

Nature has been kind enough that the ordinary person does not know what he or she was in the previous birth or what he or she will be in future to worry or excited about. In each life one starts a new chapter. It has an option to live like a noble man leading a spiritual life in harmony with nature or live like an animal and be materialistic. In simple terms, what is your duty to surrounding Nature and Society of which you are part and from which you breathe air, drink water and eat food for your existence.

Have a vision of what you wish to do with yourself and the world around you. Keeping the mind occupied with a goal in whatever you undertake, make best use of life and leave the World better than you found it. In brief ideal life should be based on simple living, value addition, spiritual thinking and serving the needy and society.

SM, Jan. 05



India, the Homeland of the Vedic Heritage

India must be protected and kept as the homeland of the Vedic heritage, Sanatana-Dharma, Hinduism. After a study of some forty years and more of the great religions of the world, I find none so perfect, none so scientific, none so philosophic, and none so spiritual as the great religion known by the name of Hinduism. The more you know it, the more you will love it; the more you try to understand it, the more deeply you will value it. Make no mistake; without Hinduism, India has no future. Hinduism is the soil into which India's roots are struck, and torn of that she will inevitably wither, as a tree torn out from its place. Many are the religions and many are the races flourishing in India, but none of them stretches back into the far dawn of her past, nor are they necessary for her endurance as a nation. Everyone might pass away as

they came and India would still remain. But let Hinduism vanish and what is she? A geographical expression of the past, a dim memory of a perished glory, her literature, her art, her monuments, all have Hindudom written across them. And if Hindus do not maintain Hinduism, who shall save it? If India's own children do not cling to her faith, who shall guard it? India alone can save India, and India & Hinduism are one."

SM, Oct. 04

- Dr. Annie Besant
Yuva Bharti, May 2004



Vedic Rashtra / Rama Rajya

Vedic Rashtra in an instrumentality for creating and sustaining the state of society under the world-view described here as the **Rama Rajya**. The creation of the Vedic Rashtra means neither harm to any community nor appeasement of any group, community, sex or individual. Creation of the Vedic Rashtra in Bharat is a matter of historical exigency.

The ideological basis of the existing civilization is essentially sensate (truth subjected to the testimony of sense organs), materialistic (an irrevocable denial of divine purpose and the spiritual meaning of life), inhilistic (reckless denial of everything worthwhile, meaningful, intrinsic, transcendental and purposeful), technocratic (practically making human dignity and freedom subservient to technology: man for machine) and market oriented (man treated at par with goods, commodities, objects: his value determined by the currency). Under the impact of its poisonous thoughtways man is increasingly growing into a beast in terms of his attitudes, feelings, interactions with his fellow-beings, and above all, in his thinking: survival of the fittest.

Stripped of his human attributes, man is reduced to a mere competitor, a money-maker, and worst of all, a robot. We are now witnessing a global insanity; drive for death and an increasing desensitization as regards the human feelings for the human beings. The psychological consequences are de-humanized societies and cultures

resulting in conflicts, wars, genocide and mental and psychosomatic disorders.

The philosophy of Rama Rajya derived from the Vedas and the Upanishads, counteracts this most destructive character of the existing civilization because it increases the distance between man and the beast, which is surely the goal of human evolution. The philosophy of Rama Rajya is therefore essentially evolutionary, and powerful enough to avert the crisis of our age, created by the anti-evolutionary forces.

The philosophy of Rama Rajya can effectively provide an alternative to Dialectical Materialism of Marx. I call it Dialectical Idealism. It gives us a wisdom contained in the Isa Upanishad. Hence, 'the wise man, who realizes all beings as not distinct from his own Self and his own Self as the Self of all beings, does not by virtue of that perception hate anyone'. LOVE, AND NOT HATRED, SHALL BE THE BASIS OF THE VEDIC RASHTRA.

SM, Jul. 04

Prof. Moazziz Ali Beg

Bhavan's Journal, April 2004



Yoga and Success in Life

Some of the qualities successful people have are concentration, steadiness, perseverance, inner motivation, acceptance, the ability to say 'No' and the ability to get along with other people.

By practicing yoga, one develops these qualities without inviting ulcers or courting angina or finding oneself in a psychiatrist's couch.

Yoga is the art of living. It helps one to achieve perfect health - physically, mentally, morally and spiritually. This state of complete health equips one to take on life's challenges with equanimity. A disturbed mind cannot solve any problem, personal or organizational. Yoga helps one to achieve a tranquil mind with energy, clarity and the sense of purpose to tackle problems successfully.

A successful person has an alert mind, is free from fear and anxiety and has positive attitudes that help in interpersonal relationships. His life is free from petty jealousy, prejudice and the feeling of insecurity. He is self-motivated and acts as a source of motivation for others. To achieve such an all-round development of personality, yoga has prescribed Yama and Niyama (code of ethics), Asanas (the right postures), Sattvik Ahar (the right food), Pranayama (control of bioenergy, the most easily recognized form of which is breathing) and Pratayahara (withdrawing the mind from sense objects).

Yoga says 'action' and 'reaction' are animal instincts. Stop reacting in life, but concentrate on action at the right time and in the right manner. Thus, yoga is a complete practical system of self-culture, working through the harmonious development of one's body, mind and dormant spiritual potencies.

SM, Apr. 04

- From: 'Yoga for All' of The Yoga Institute



Theory & Practice of Dharma



At Global DHARMA Conference, New Jersey in July 2003, DHARMA was interpreted in various ways by the Seers and Spiritual scientists. Some Dharmic quotes are -

- * Dharma is the matrix of norms and is the basis for human interaction with the world.
- * Dharma means the laws of nature and the duties that must be performed.
- * Dharma spells out the principles that govern human growth and happiness - natural laws.
- * Dharma is nothing but the real nature of an object. Just as the nature of fire is to burn and the nature of water is to produce a cooling effect, in the same manner, the essential nature of the soul is to seekself-

realization and spiritual elevation.

- * Dharma is universal. It transcends race, religion, gender and even species.

The Dharmic traditions of India (Sanatana or Eternal Dharma, Buddha Dharma, Sikh Dharma, Jain Dharma etc.) share the Core values of Dharma which are ethical principles like ahimsa, truthfulness, compassion and renunciation. They require a respect for all life as sacred and recognition of a single consciousness as pervading the entire universe, living and nonliving.

There is no radical difference in the opinions expressed by the Enlightened on the theoretical aspects of Dharma. However when institutionalized the Core Dharma was dressed up with rituals and practices in various ways to propagate as Religion by ardent followers. In the process with time, the outfit was given more prominence than Core part of it, thus creating intolerance between individuals and communities.

Practice of Dharma in simple terms boils down to few words 'Learn to Love and Serve all'. The Enlightened have shown the way-

1. Simple living in Harmony with Nature.
2. Not developing self- destructive anger, hatred, jealousy, self-centeredness, selfishness and greediness.
3. Performing one's duty with devotion and enjoying the work –big or small.
4. Having concern for less fortunate.
5. Extending helping hand and experiencing the joy of giving and
6. Sparing few minutes to meditate on the purpose of LIFE.

SM, Jan. 04

- BCH



The Technology of Yoga



All Yoga techniques require faith, discipline and concentration. The objective of all Yoga techniques is to make a change in man's values, attitudes and behavior. When proper discipline is applied it leads to a higher state of consciousness.

Karma yoga is a realization of the higher consciousness through selfless action and service. In our materialistic society where men and women lead an active life, the path of Karma yoga is one of the best paths for self-evolution.

Lord Krishna in the Bhagvad Gita says, "Your right is to work only, but never to the fruits thereof." This can happen when the individual forgets himself and loses himself in work, overcoming the sense of 'I' and completely surrendering to the higher reality God.

Jnana Yoga is gaining realisation of the universe and ourself through enlightened knowledge. This is based on enquiry and philosophical speculation. The individual is advised to constantly dissociate himself from all limitation.

Bhakti Yoga is a system of union and this is realised through love and devotion and is used by person of emotional nature. It has no intellectual demands.

Mantra Yoga is the path of sound and vibration which effects consciousness. Chanting of certain syllable has wonderful power to subdue many forces of nature.

Japa Yoga means union of the self with supreme being through repetition of name of God and the rotation of consciousness.

In **Tantra Yoga** lower energy is harnessed to awake the higher consciousness. The Tantrik must be in the highest state of physical development with his body under complete control.

Hathyoga is the path of mental mastery through physical development. It consists of the following disciplines 1. Asana (physical postures) 2. Pranayama (Breath control) 3. Mudra (gestures) 4. Bandha

(energy locks) 5. Satkarma (six purifying techniques).

Classical Yoga of Patanjali popularly called Rajayoga is the most systematic method of attaining the highest state of meditation and was propounded by Maharshi Patanjali. Rajayoga advocates, a technique with eight limbs, appealing to the mind, body and intellect of the aspirant. The eight limbs, appealing to the mind, body and intellect of the aspirant. The eight limbs of Rajayoga are Yamas (abstractions), Niyamas (observances), Asanas (Postures), Pranayama (breath control), Pratyahara (abstractions), Dharana (Concentration), Dhyana (meditation) and Samadhi (Super conscious state).

SM, Oct. 03

- Salim Jumma



Cyclic Existence

Daticca – samuppada of Buddhism deals with the cause of rebirth and suffering with a view to ridding life of all ills. It is also called the law of cause & effect.

"With the base of ignorance, reaction arises; with the base of reaction, consciousness arises; with the base of consciousness, mind and body arise; with the base of mind and body, the six senses arise; with the base of six senses, contact arises; with the base of contact, sensation arises; with the base of sensation, craving and aversion arise; with the base of craving and aversion, attachment arises; with the base of attachment, the process of becoming arises; with the base of the process of becoming, birth arises; with the base of birth, ageing and death arise, together with sorrow, lamentation, physical and mental sufferings and tribulations. Thus arises this entire mass of suffering". Ignorance of the reality of suffering, its cause, its end, and the path to its end, is the chief cause that sets the wheel of life in motion.

Buddha discovered that between the object and the reaction stands a missing link: sensation. We react not to the exterior reality but to the sensations within us. Whenever any of six sensory organs comes in

contact with ‘their’ objects, we “cognize” them, then our ‘perception’ evaluates the object on the basis of stored information and passes a value judgement. Based on this value judgement, pleasant or unpleasant sensations arise in the body. If the sensations are pleasant, we crave for them; if they are unpleasant, we develop an aversion to them.

So, three kinds of reactions are generated: The first is like a line drawn on water, which is temporary. The second reaction is like the lines drawn on sand, which are semi-permanent. The third reaction is like the lines drawn on a rock, which are enduring. They leave a lasting impression on the conscious mind. By observing our sensations objectively, we can control these reactions.

Change occurs every moment within us, manifesting itself in the play of sensations. **It is at this level that impermanence must be experienced.** Observation of constantly changing sensations permits the realisation of one’s own ephemeral nature. **We realise the futility of attachment to something that is so transitory.** Thus the direct experience of impermanence gives rise to a certain detachment. In this way one gradually frees the mind of suffering.

SM, Jul. 03

- S. Krishna



Fate & Free Will*

ften, we blame fate for our failures. Are our lives governed by fate? Can free will shape our lives? Which is stronger, fate or free will? Both are karma or action – fate is the result of past karma, and present karma is free will. So, the two are one. Fate is hidden. So it is called adrishta or unseen; its intensity is unknown.

Just as we created our own fate by exercising our free will in the past, it is within our power to overcome it by exercising our free will in the present. The attainability or otherwise of a particular thing is not an absolute characteristic of the thing itself but is relative and proportionate

to our qualification, capability and capacity to attain it at that time. By increasing the intensity of our present karma we can override the intensity of our past karma.

This is illustrated with the following analogy: Just as we do not know the length of a nail that lies inside a piece of wood that we had earlier driven into the wood, we do not know the extent of our fate created by our earlier karma. But with sufficient effort we can take the nail out of the wood. The intensity and number of attempts to pull it out must be greater than that of the strokes that drove the nail into the wood. Because we cannot see the length of the nail inside the wood, we do not know how much effort will be required to pull it out. Since fate is adrishta, before a venture, we will not know the quantum of effort required to succeed. So we must ignore fate and continue to exercise our free will till our objective is reached.

One is born with the vasanas accumulated from past lives. Retribution for a past act is unavoidable, but vasanas can be managed by exercising our free will correctly.

Scriptures and teachings of sages tell us which vasanas are bad and which vasanas are good. But with determination it is possible to overpower all vasanas and, in time, we will cease to be swayed by bad as well as good vasanas. At that point, when both fate and vasanas disappear, we become free, free from the results of our actions. This freedom is moksha or liberation.

- Sri Chandra Shekhara Bharati Mahaswami

**Always I used to wonder that if the fate is already determined based on the past karma then where is the scope for initiative to do better in this birth. The above message deals with relationship between Fate & Freewill or initiative. -Ed*

SM, Apr. 03



Life with Passion

When passion rules life, life's temporal passage wears thin. One hears the common exclamation: "How time flies, I hardly realised it." One is so immersed in what one is doing, that the burden of passing days is not felt. When such a blessing makes its visitation on a person, he can hardly wait to get up in the morning, for the heart aches to live the passion. In fact geniuses declare that man is a mere possibility, he does not exist; he is a latent force, if not blessed and driven by a passion – like the flint which awaits the shock of the iron before it can give forth its spark. But when the spark does fly, it is brilliant; and shows.

After all, what is passion? It is the becoming of a person. Are we not, the commoners amongst us, for most of our lives, marking time? Most of our being is at rest, un-lived. In passion, the body and the spirit seek expression outside of self. The Passion is all that is other from self. The more extreme and the more expressed that passion is, the more unbearable does life seem without it. It reminds us that if passion dies or is denied, we are partly dead and that soon, come what may, we will be wholly so.

History of Great people show that the memories of struggle to achieve success in reaching the goal gives more happiness than the success itself.

And surely there is some place where your specialties can shine. Somewhere that difference can be expressed. It's up to you to find it, and you can.

SM, Jan. 03

- Dr. Sheilu Sreenivasan



Religious Diversity

Hindu Dharma is one, which has survived the vicissitudes of time. It is not just another religious tradition but with its Vedic Vision, can adopt as its own any and every inclusive religious tradition. Swami Vivekananda had very beautifully described local faiths-indigenous traditions – viewed from Vedic perspective is Hindu Dharma or the Vedanta applied to the various ethnic customs and creeds of India, is Hinduism. Vedic Dharma is for preservation of religious diversity.

There should be an attempt to preserve religious traditions – the high cultures of the world.

Time has come for humanity to promote the basic human nature – compassion. Religious people have to speak responsibly in promoting human values not by resorting to conversion but by contributing to love, compassion and contentment. Every religious culture has a right to live and to contribute to the promotion of human values to make the world a better place.

Rejection of diversity violates natural law and goes against human nature. Such co existing together of the diverse religious traditions is as good as a garden with variety of beautiful flowers.

No animal species have been so hostile and cruel towards itself as Homo sapiens. Christianity and Islam have divided the humanity into the faithful and the infidels, the saved and the damned. More people have been either tortured or killed in the name of God than in any other cause.

It has long been a fashion to advocate religious unity, to assume that all religions speak of the same goal, teach same truths, and to stress commonalities rather than differences. That is a costly error, which will in no way help the survival of non-aggressive religions and cultures. The latter have celebrated life and generally seen humanity as one, with an equal divine potential.

Biodiversity is the law of nature. Theo-diversity is needed. Monotheism (talking of One True God) is the schizophrenia of humanity. Riverine cultures seek human values and not human rights. Human rights destroy biodiversity whereas human duties increase human values.

The real progress is to March towards Unity and not Uniformity. That irreversible march towards Unity by preserving the diversity has started.

SM, Oct. 02

-Wisdom from the deliberations of ‘World Congress for the Preservation of Religious Diversity’.



The Four Options

Now a days people are so busy with minigoals that they never have time to think of broad goal of understanding the meaning and to give a direction to life. The minigoals are namely, the education, finding a job or business, marriage, raising family, job promotion, acquiring possessions and finally entering the jaws of consumer culture and never to turn back and think for a moment. In this rat race, contentment and detachment become difficult propositions. At the evening of the life we do realise that something we missed resulting in vacuum and disturbed peace of mind. It is never early in life to develop spiritual enquiry for a moment in a day questioning oneself ‘who am I and what is the purpose of this life beyond satisfying mundane needs?’

The Indian tradition has identified various personality types and suggested different yoga practices for them. For instance knowledge or Jnana yoga is recommended for the philosophical or intellectual personality, action or Karma yoga for active and dynamic personality, devotion or Bhakti yoga for emotional personality and concentration or Raja yoga for mystical or psychic personality. For any significant progress in the chosen Yoga path for spiritual development, the prerequisite is simple living, detachment, selflessness, control of senses, positive inputs and thoughts of universal betterment. In other words one

should put soul into it. Otherwise it will be more of intellectual acceptance and mere ritualization.

SM, Jul. 02



Religion, Science & God

The universe has evoked either one of two responses in us humans: Fear of the unknown and awe, or a determination to find out more about the universe and how it works. From the first was born a belief in a God, which ultimately took form in the great religions of the world and from the second rose the long tradition of dispassionate scientific inquiry.

Most traditional religions assert that God is the ultimate Truth, while science, without admitting the existence of any personal God, claims that its motive force is the quest for Truth. Science and religion seldom see eye-to-eye; this is partly because science has played a big role in enhancing our material comforts. Science as an instrument purely for the acquisition of knowledge can not only be intellectually invigorating but can also eloquently justify the existence of an intelligent Creative Principle in the universe.

Isaac Newton had invited a scientist-friend of his, a man who professed atheism, to dine with him. Seeking to corner his friend with his own arguments, Newton placed a model of the solar system on his table and invited his friend to view it. The guest exclaimed, “What marvellous craftsmanship! Who fashioned this exquisite model?” Newton replied casually, “This model has no maker; it materialised from nothing”. Disbelief writ large on his face, the friend asked, “What do you mean?” To this Newton smilingly replied, “How can you, my friend, insist that this model has to have a maker, while vehemently denying the existence of a divine Creator?”

If the practice of science is looked upon merely as an exercise of the faculty of reason with an eye on temporal material gains, it falls woefully short of its expectations as an instrument of knowledge. On the contrary, if it is regarded as a tool that probes the working of the external and

internal world; if science can help us understand why we're here and how this whole cosmos came about; if with a scientific approach we can get closer to probing the mind of God- then it would more than fulfil its self-professed role of illuminating the human mind. Science would also then serve as something that invokes and inspires faith in God. In fact, science can even reinforce our faith in a Supreme Being. Physics and metaphysics are but the two sides of the same coin. Science has the power to ennoble us as much as religion can.

While the truly pious person loves God with his heart, a truly dedicated scientist loves God with his mind.

SM, Apr. 02

- Nelliah Hariharan



Spirit of Sacrifice

The spirit of sacrifice, love and righteousness that are found in Bharat are not present anywhere else in the world. This is Thyaga Bhumi, Yoga Bhumi, Karma Bhumi and Yajna Bhumi (land of sacrifice, land of spirituality, land of action and land of Yajnas). Such a sacred land is being converted into Bhoga Bhumi (land of pleasure) by modern youth. The bliss that one experiences from Thyaga cannot be obtained from Bhoga. Bhoga leads to Roga (disease) and Thyaga leads to Yoga (spirituality).

SM, Jan. 02

- Sri Sathya Sai Baba



MNC Culture

MNCs, using powerful weapons of money, gifts and aggressive advertisement convert humans into apes sacrificing individualism in the name of economy and quality. Even the innocent children are not spared in conversion into robots. Robots do not have any choice except what is dished out by the

masters. The MNC culture of rapid growth by any means has been evolved from imbalanced growth of physical & mental needs. Too much attention to physical luxuries and consumerism has helped in faster growth of economy but it has been at the loss of spiritual growth and mental peace. The net result is that selfishness, greediness, exploitation and violence have increased. Poverty could not be eliminated even in affluent countries in spite of vast resources at their command. Sacrifice, adjustment and restraint in word or action is never emphasized and shown in action and thus destroying the family system. In the name of democracy and freedom, we have mobocracy. In mobocracy, majority of ordinary people are manipulated and vote banks are created with clever articulation and help of powerful communication media to keep one's chair for ever.

SM, Oct. 01



The Purpose of Our Life is to 'Know'

CREATION is an ocean of surprises. Just see the little planet in the universe - our world, the earth! Count the variety of living and non-living things here! From the amoeba to the elephant, the variety is simply astonishing.

But there are five vital questions about creation. The first one is, who created this universe? The second question is, why has this universe been created? The third one is, when was this universe created? The fourth question is, out of what has this universe been created? Fifth and final question: 'What's our role in creation?'

How do we know? There are two methods: one of science, and other of religion. Science is the study of the external; religion is the study of the internal. The first is objective while the second, subjective. Scientists too thought they alone were right, but many are differing now. Consciousness and universe, they see, are interwoven. The mind, can't find answers to all our questions through the five senses.

This leads us to the second path-religion. Religion alone has declared that the universe is only an objective manifestation of the subjective.

Religion is the study of man-an in-depth study. This study leads to supreme knowledge of everything. How? It was Swami Vivekananda who experienced the grandest truth that 'The microcosm and the macrocosm are built upon the same plan.' To know the human being is to know the universe. But to know the human being you don't need instruments. The fine instrument called mind will suffice. Using it, we have to dive deep into ourselves: we should meditate. Meditation leads us to the hitherto unseen universe within. The inner universe, say saints, is astounding. This universe will reveal all the knowledge we need. This, again will free us. The knowledge of why, who, how, what, etc, will all become perfectly clear once we look within. Sri Ramakrishna declared: "A man attains everything when he discovers his true Self in himself that also is the purpose of assuming a human body".

Shankaracharya sang that human birth is the most precious gift of God. To utilize it to know is the greatest good. Therefore let's all sit down quietly for sometime every day, close our eyes, and dive deep within. This alone, and nothing else, will bring us knowledge, lasting peace and supreme happiness.

SM, Jul. 01

- Swami Sunirmalananda



Prana

Prana is the sum total of all energy that is manifested in the universe. It is the vital force, Sukshma. Breath is the external manifestation of Prana. By exercising control over this gross breath, you can control the subtle Prana inside. Control of Prana means control of mind. Mind cannot operate without the help of Prana. It is the Sukshma Prana that is intimately connected with the mind. Prana is the sum total of all latent forces which are hidden in men and which lie everywhere around us. Heat, light, electricity, magnetism are all the

manifestations of Prana. Prana is related to mind; through mind to the will; through will to the individual soul, and through this to the Supreme Being.

SM, Apr. 01

- Swami Sivananda



Energy

Prayer is the most powerful of energy one can generate. It is a force as real as terrestrial gravity. As a physician, I have seen men, after all other therapy had failed, lifted out of a disease and melancholy by the serene effort of prayer. Prayer like radium is a source of luminous, self-generating energy. In prayer, human beings seek to augment their finite energy by addressing themselves to the Infinite source of all energy. When we pray, we link ourselves with the inexhaustible motive power that spins the universe. We ask that a part of this power be apportioned to our needs. Even in asking, our human deficiencies are filled and we arise strengthened and repaired. Whenever we address God in fervent prayer, we change both soul and body for the better. It could not happen that any man or woman could pray for a single moment without some good result

SM, Jan. 01

- Dr. Alexis Carrel



Yad Bhavam Tad Bhavati

The Vedas say, Yad Bhavam Tad Bhavati (you become whatever you think). When you constantly think of others' faults, that evil enters you. How? When you have a camera in your hand, to whichever direction you turn and click, that is the picture you will capture. Your body is like a camera. Your vision is the lens, your heart is

the film and your thoughts form the scene. Your intellect is the shutter. With your intellect, absorb only those impressions into your heart, which are spiritual. If your thinking is bad, it gets imprinted on your heart. So, do not entertain bad thoughts.

SM, Oct. 2000

-Sathya Sai Baba



Chariot Drive

From the address of Rabindranath Tagore delivered in China in the early twenties-

“We have for over a century been dragged by the prosperous West behind its chariot, choked by the dust, deafened by the noise, humbled by our own helplessness, and overwhelmed by the speed. We agreed to acknowledge that this chariot-drive was progress, and that progress was civilization. If we even ventured to ask, ‘Progress towards what, and progress for whom’ it was considered to be peculiarly and ridiculously oriental to entertain such doubts about the absoluteness of progress. Of late, a voice has come to us bidding us to take count not only of the scientific perfection of the chariot but of the depth of the ditches lying across its path.”

This talk is still relevant to-day when the so called Progress is widening the gap between haves and have nots. Based on its traditional wisdom, can India raise to occasion to build its own Model of Development in which every one shares the fruits of the progress and disparity between rich and poor becomes narrower?

SM, Jul. & Apr. 2000

