

## Spiritual Endocrinology

I have always been intrigued by the observation that animals and birds are healthy effortlessly but humans have to toil hard for that. They have to worry about their health and spend big money and time on doctors, medicines and hospital treatment. I have never been convinced that human life is meant for sufferings, pain and disease. In my own understanding, life is a grand celebration. We have come onto this planet only to experience unbounded bliss. Celebration is however an internal phenomenon. It has got nothing to do with the external situation. One who learns the fine art of internal celebration enjoys hundred years of healthy life effortlessly and joyfully. Enjoying the moment is the secret of effortless health. So, there are two options; either one can enjoy all aspects of life and live for hundred years effortlessly; or else work hard to achieve positions and material and develop serious diseases and die with sufferings and pain somewhere in the process. The method to celebrate life however is 'Action' or 'Karma'. Actions are performed as a means of expressing and manifesting the inner joy, and for nothing else. Every action is complete in itself and the so called relation of action with its perceived result, is a myth; a mirage to distract people from the grand process of life. Although every action is necessarily linked to a result but the result is not to focus on. The sheer joy emanating from the action is all that is important; and life is designed in a way that one can either get entangled in the concept of result or remain strongly rooted in the joy of actions. Both the phenomena occurring together is not possible. The secret of effortless health is to experience the opulent splendor of life while performing actions. I have been practicing Endocrinology for the last twenty-five years and I have realized that contemporary clinical Endocrinology doesn't answer the most fundamental questions related to disease development. For comprehensive treatment of a disease, one has to treat and eradicate the fundamental abnormalities that initiate the disease process. Let us take the example of Diabetes that is the most common problem in Endocrinology. Conventional Endocrinology has provided lot of insight about how Diabetes develops but fails to answer the fundamental questions.

### Diabetes

Diabetes is caused by twin factors of 'Insulin Deficiency' and 'Insulin Resistance'. Insulin deficiency is caused by pancreatic beta cell defect that, to variable extent, is genetically determined. Pancreatic beta cells of a Diabetic patient are weak to begin with and get exhausted over a period of time as a result of over work. Burden of overproduction is caused by the other defect of Insulin Resistance. Insulin resistance means that the molecule of Insulin works less efficiently in a Diabetic subject as compared to a healthy non-diabetic person. As a consequence many times more Insulin is required to achieve the same biological action. The inherently weak beta cells fail (exhaust) in due course of time due to chronic overwork. Insulin resistance in turn is caused by a number of factors like obesity, overeating, bad quality food, lack of exercise, use of certain medicines, deprivation of sleep and mental stress. Lot of Insulin resistance is determined genetically also. In a nutshell, Type 2 Diabetes is caused by genetic factors and bad quality lifestyle. Obviously therefore, when we treat Diabetes, we focus very strongly on correction of lifestyle and use medicines to augment both Insulin action and Insulin secretion. Beyond a point, administration of exogenous Insulin is essentially required. The role of genetic abnormality in most cases of Diabetes is only permissive. In diseases where the genetic role is causative, the disease tends to manifest right from the time of birth. In Diabetes that is not the case. A permissive role means that it will allow (or permit) the disease to develop only if lifestyle and mental condition remain abnormal for significant period of time. Accordingly Diabetes has been shown to be a preventable disease in majority of high-risk individuals. The most effective tool for Diabetes prevention is predictably lifestyle modification. Conventional Endocrinology doesn't go beyond this framework. It never raises the basic issues as to why human being is the only creature in the world that prefers to eat harmful food, that eats more than the actual requirement, that leads a sedentary life and that is prone to mental stress. In all other creatures on this planet the knowledge

about what to eat and how to live a life is inherent in the system. It is just built in, not at the level of thought but rather existentially and intuitively. Neither a cow would eat meat nor would a lion eat grass. Lion's aversion to grass is not because it is low in calories but because lion doesn't feel like eating it. Animals do what they feel like doing and that is always the best option for them. General health of animals and birds is superb when they are allowed to live in their natural habitat. Diseases like diabetes, hypertension and ischemic heart disease are practically unknown in the animal kingdom. Genetically modified mice have to be created for animal research on Diabetes because normally mice don't get Diabetes. Human being is the most evolved creature on this planet and I am not ready to accept this argument that humans are not endowed with this basic trait found universally in all other less evolved creatures. Ideally human beings should also remain effortlessly healthy just like animals and birds. Ideal situation can only be, when health no longer remains a concern for humanity; when a hundred years of life should be guaranteed effortlessly. Moreover conventional Endocrinology doesn't provide any clue whatsoever about how an individual takes birth in a particular family and inherits a set of disease carrying genes. If a person gets genetically determined Diabetes in this life, there is no way he or she can ensure the next life would be in a healthier family or in a different country where general health is better.

## The Human Uniqueness

It is evident that something wrong has happened to mankind that forces them to court illness. The problem appears to be so fundamental that it is not even recognized as a problem. Recognizing these fundamental issues about disease development and suggesting any possible remedial measures is beyond the realm of conventional Endocrinology. My own understanding about the whole situation is that humans are the most evolved creatures on the planet only in terms of thinking and imaginative functions of brain (or mind). Human beings are mental creatures. They will do everything that is logically correct to their mind. Although they are not born like that but they become like that during the process of growth. A small child may run and play for hours together just for the sake of happiness. An adult on the other hand goes for morning walk because it is good for health and it is logically correct. They will then try to figure out how much walk is best, at what time of the day, at what speed and with what precautions. All intuition gets finished and every moment of life is propelled by logically and politically correct decisions of the mind.

Extremely versatile and capable human mind is however a double-edged sword. It is because of the mind that humans have been able to develop sciences, arts, culture, religion and civilizations. Animals even today are the same as they were ten thousand years ago. Humans are creatures driven by mind. They tend to live their lives as dictated by the mind. The same mind on the other hand, also gives them ambition, fear, greed, tension, insecurity, arrogance and frustration. All such emotional disturbances are the seeds of physical disease. People who go through emotional ups and downs finally end up with serious diseases.

Humans are born with a primitive or potential mind. After birth this primitive mind develops further according to the environment that it is exposed to. People are attracted towards certain food or lifestyle, because the association of a particular object with happiness goes deep in their subconscious mind. Ninety percent of mind is subconscious, and only ten percent is conscious mind. When one feels like doing something, he or she makes plans to do it at a conscious level. However why one felt like doing it at the very first place came from the subconscious mind. As a famous proverb puts it, 'You can do as you will, but you can't will as you will'. It is the subconscious that gives issues to the conscious mind to decide upon, and also sets the attitude of the individual to approach the issue. Subconscious mind is so big and powerful that normally it decides the whole life of an individual. An average person has no clue about how his life is in a way predetermined by the subconscious mind. It is fortunate however that of all the various species, only humans have the capacity to understand the mechanisms of mind and then do something to be able to transcend the mind.

Experiencing the beyond mind existence of the self is a possibility only for humans. This is the goal of

all spiritual practices. No animal leads a life through mental concepts. They don't decide their actions after considering all the pros and cons of the action. They have no idea of the functions of mind and they can't ever experience the beyond mind existence. Humans can rise above the mind only because they fall in the ambit of mind. Both the parts are equally important. You can go beyond mind only after you fall in web of the mind. Animals don't fall in the chaos of mind, so they have no possibility of even trying to experience the beyond mind situation. They are always in the below mind locus. So, they have no problem. All problems are because of the mind. All sadness, happiness, anxiety, stress, desires, frustration, greed, anger, hatred, arrogance, insecurity and complexes develop in the mind and subsequently give rise to physical diseases. All these mental traits are the real diseases and they unfold and bring visible effects on the physical body in due course of time. Animals don't live in mental stress and don't develop chronic diseases, and they also don't have any possibility of experiencing the beyond mind situation. Humans, the way they are created, essentially fall in the chaos of mind and throughout life go through all the phases of positive and negative emotions. They consequently develop chronic diseases. This is seemingly a normal life for most people. After decades of living life like this, they become unable to conceive the idea that a beyond mind situation is also possible. If they ever happen to conceive this idea, it again remains only a mental concept and doesn't turn into an existential lived experience. They have three options. Either to fall again to below mind situation and become animal like, or secondly to strive hard to rise above that level and experience a new life that is stress free and disease free. Third possibility is of course to carry on with life the way it is moving; to go through alternate phases of excitement and gloom, health and disease, love and hatred, friendship and animosity etc. Spiritual path is to make conscious efforts to experience the real self that is beyond and deeper than mind. In short, all our woes are due to the fact that we lead a superficial life. We do not know who we really are at our deepest core; what is our essential nature or the real form. Our knowledge about ourselves is what our mind knows. Mind is very shallow. Mind knows only what it has learnt from outside. We have no existential, self-experienced knowledge of our real form. Existentially we are cut off from ourselves. We are not what we are, or what we ought to realize ourselves as.

## Perfect Health

From spiritual point of view I see the human mind body system functioning at three different but very strongly interlocked levels. Firstly there is an innermost core, the soul that is the basic cause for existence of an individual. Soul is devoid of dualities. It is an abstract energy or the pure process of life. This is what I am referring to repeatedly as the beyond mind level. At level 2, soul is enveloped by the huge multilayered mind that is the analyzing, understanding, decision taking and feeling part of the system. Level 3 is the external physical body visible to others. We are always concerned about the external physical health. Only that individual can be healthy who has best health at all the three levels. Health at the level of soul is an ability to feel the soul. Health at the level of mind is having full voluntary control over mind. Mind should come into action only when it is required to serve some purpose. When one is dissolved in some action, mind should disappear. Thirdly, health at the level of external body is a feeling of bodylessness; when you feel yourself just as a mass of energy and consciousness. That is the situation when everything happens on its own accord; where you don't have to do anything to achieve good health; in-fact when the very concept of doing, doer, action and the result (fruit) of action all disappear; when you become natural and function spontaneously. In that situation you are not bound by the society and the world and become your own master. As I have understood the situation, perfect health is not possible as long as there is a longing for good health. The longing itself creates stress. Now you have to live an artificial life. You can't remain intuition driven. You will do certain things that are good for health and avoid others that are bad. This knowledge of good and bad is not innate to you. It is an artificial borrowed knowledge. No borrowed knowledge can safeguard your system over prolonged periods of time. Life is changing fast. What is good for you in this moment may become harmful in the next moment. The food and lifestyle that gave you energy during childhood may give you disease at an advanced age. What is good for one person may be damaging to the other person. It is a total chaos. Neither a borrowed knowledge helps nor does a longing for good health. Animals don't long for good health and yet they have perfect health. Ultimately if and when you start longing that your longing mind should disappear, a

new kind of impossible longing starts. As it is, it is impossible for one to go beyond the realm of mind. Even if you decide to leave the world and go to a lonely mountain, this would also be a decision of the mind. Mind would haunt and dominate you even on mountains or jungles. One has to learn the fine art of moving the consciousness to beyond mind level and becoming it's master. If you are the master of your mind, then you can live a simple, natural and intuitive life wherever you may be, in your office, home or a marketplace.

## How Mind Affects Health

Mind and body are tied to each other so strongly that it will be wrong to say that these are two different parts of the system. They are two sides of the same coin. In fact it is one mind-body system. The invisible part of the body is mind while the visible part of mind is body. If something happens to the mind, effects are seen on the body and vice-versa. In a usual human life mind gets affected much more easily than body and so, normally mind guides the body. Body normally follows the mind. There is a time gap between effects of mind to be translated onto the body. Mind is subtle and gets affected fast and the changes are reversible. The gross physical body takes longer time to change and the changes are more irreversible. One thing is certain however, that in due course of time traits of the mind do affect the body accordingly. Mental stress affects number of key mechanisms of body. Human body is equipped with a mechanism to repair itself in the event of any deviation from normal health. Such reparative processes, endowed by nature, to every part of the body, are called homeostasis. Mental stress weakens the homeostatic mechanisms of body. Various organs thus experience faster time related degeneration (aging). Faster aging means early failure of organs. Organ that is genetically weaker will fail earlier than other organs.

What is mental stress? It is generally defined as a situation when one is not in perfect sync with the situation or when mind is not in perfect agreement with external environment. It is strange however that in identical situations one person may be stressed and the other may feel ecstatic. Ultimately stress is an internal matter. Outside environment is not the primary cause of stress. It is just a reason to expose that inside a seemingly normal person, there is a turbulent mind. Apart from general impairment of all homeostatic processes, mental stress predominantly affects three key mechanisms of body, namely the hypothalamic functions of brain affecting the hormones, immune system and the autonomic nervous system. These are the three most important systems through which the whole body is integrated. Through these three key regulatory systems the whole body gets affected in due course of time. Stress can lead to diseases like Diabetes, High Blood Pressure, Heart Attack, Brain Hemorrhage, Back aches, Hyperacidity, Peptic ulcers, Indigestion and Diarrhea etc. Now it is considered that every human disease has a strong psychosomatic component that is involved either in causation of the disease or in complicating it. Effect of mind on physical health is slow but certain. It is so penetrating that the body ultimately gets altered according to the condition of the mind no matter what one wants, thinks or does.

## How Diseases Develop

As a rule all human diseases develop due to four basic causes, namely 1. Genetic predisposition; 2. Faulty lifestyle; 3. Psychosomatic factors; and 4. Environmental pollution. There is no fifth basic cause for any disease. I don't agree with those who put major emphasis on the role of micro-organisms. Bacteria and viruses are always there around human beings but they cause diseases only when the human host welcomes them and responds in a way that a disease creating chain of events is initiated. As discussed earlier, in most chronic diseases, role of genes is only permissive. If other variables are maintained in an ideal situation, diseases hidden in the genes don't come onto the surface. That is what is called primary prevention of chronic diseases. The other three factors are all because of one reason that human being has been cut off from his innate nature. He is so terribly under the influence of mind that he has totally forgotten that he was on one day born as a baby who was unaware of the arithmetic of the world and who was the master of his mind; whose happiness

was within himself; and who did not know what a negative emotion was. Mind is what cuts off an individual from his innermost core, from his roots. A person who is cut off from his roots develops problems in every sphere of life including health. A person who has a false self awareness does not inherently and intuitively know what to eat, how to live and how to react to a particular situation. Such a person would necessarily respond to the mental urges which may be arising at the level of conscious or most of the time, subconscious mind. Likings and dislikings are created in the mind during early life because of external environment. The whole mind is actually the result of external society related factors. Mind is not a natural internal human organelle. Although the possibility of a mind, the potential to develop a mind is a natural human trait but what type of mind it will eventually develop into, is determined by the society. Mind is an external society related phenomenon. Society also includes the immediate family. For this reason minds of people are so variable. Mind of an American is vastly different from that of poor villager in India. Anybody living solely through mind can never lead an Ideal lifestyle or have an ideal psyche. Mind can never remain peaceful. A peaceful mind is a myth. Real peace is only at the beyond mind locus of the real self. Faulty lifestyle and mental stress are the consequences of living life through mind. Finally, the root cause of environmental pollution is an eternally hungry and greedy mind. Hunger of the mind is insatiable. It is only in the beyond mind situation that the individual is happy within himself; when the whole outside world is irrelevant. Only in that situation can a clean and healthy environment be envisaged.

### Internal Factors of Illness

In development of diseases there are always some inherent internal factors that play the causal role. These internal factors cause diseases either by themselves or by interacting with external environmental factors. Modern Medicine mostly targets the external factors or sometimes the superficial internal factors but not the real internal factors operating at the deepest levels. If we take the example of Common Cold, it is caused by external factors like virus, in situations of change of climate, exposure to cold or sometimes stress. If hundred people are exposed to the same environmental situations, all of them will not develop infection. Around twenty will develop a full blown disease, twenty may experience some temporary discomfort and the remaining sixty will not face any problem. The real culprit is therefore not the external factor. There is some immune deficiency which attracts infection during special situations. Some protein or chemical messenger in the body that is not secreted in appropriate amount makes the body weak and unable to deal with a particular temporary change in the external environment. Because of such internal deficiencies such people attract diseases. I am not saying that these people have to essentially fall sick or that the external factors are not important or that they should not be controlled. I am simply suggesting that the internal factors which are more important should not be ignored.

As a rule all human beings are imperfect. Every body has some or the other internal disease attracting deficiencies but they don't fall sick because in changing external situations, they are able to make suitable changes in their lifestyle and prevent diseases. This ability to perceive the subtle signals of an oncoming disease and to make appropriate changes in lifestyle should ideally be intuitive. A person who has good vision can clearly see an oncoming problem and change his actions accordingly. Most people do not do so. They require a professional advice about how to live in order to prevent problems. And even if the advice is available, they are not able to follow that because of their own weaknesses. This is because of some very deep seated internal factors towards which I am trying to indicate.

Ancient Indian scriptures tell us that there are five basic internal human defects or diseases that lead to all problems of life. They are 'Kaam', 'Kroadh', 'Loabh', 'Moah' and 'Ahankaar'. Kaam is the desire for sensual pleasures; Kroadh is the mental reaction towards unacceptable external situations. Whether a situation is acceptable or not has nothing to do with inherent qualities of the situation. It is rather decided by mind on the basis of how the mind has been conditioned. Loabh or greed is an insatiable mental desire to possess more and more of worldly riches and honors. Moah is the attachment towards things or people who temporarily appear to be associated with, and in possession of an individual. Ahankaar or ego is the seed of all problems which means a false

identification of the self as an entity separate from rest of the existence. It leads to the development of the connotation of 'I'. These five basic internal defects lead to all the chaos of mind and force people to take to harmful paths.

Mind-body system is an ever changing flux where there is no stable reality. A mind-body system cannot be defined in absolute terms. The moment you describe it's characteristics, they are already changed. It is like a flowing river that changes in every moment. Body is continually evolving and changing. After few years, changes in the body become dramatic. Mind changes even faster. Thoughts and points of view that are very dear to a person may take a U turn in a small time. All this great change occurs however around an unchanging reality which is the real form and identity of a person. Human life is the story of a mistaken identity. We perceive ourselves what we are not. This problem of mistaken identity occurs due to an unavoidable and essential dependence on mind. Right from early childhood, every individual is taught and trained into leading the life on logically correct and materially gainful decision of mind. By adulthood this mind orientation becomes very heavy, leaving no chance for an intuitive life. The five basic internal defects are ingrained in the human mind in variable proportions. They get altered in proportion with experiences of life and ultimately after death they are carried, in a seed form, to next life. Development of mind depends as much on the external environmental factors as it does on the pre-existing arrangement of internal defects. Two children of the same parents living in the same environment have vastly different minds. There are several aspects of mind viz. the analytical and understanding part, the retentive part full with thoughts and concepts, and the overall attitude or temperament that decides the priorities, likes and dislikes, behavior and actions of the person. The five basic inherent defects affect each aspect of mind. Mental attributes keep on changing with the passage of time and so does the arrangement of the inherent defects. It is however impossible to totally get rid of the inner defects through a usual life.

Diseases always develop basically because of the five inner defects. Anger is well known to cause high blood pressure, diabetes and heart diseases. Insecurity, fear, anxiety, jealousy, hatred, arrogance and excitement are emotions strongly linked to diseases. They are all caused at the very first place due to the five basic defects. If a man overeats and gets Diabetes, the overeating is because of Kaam, a lust for the sensual pleasure of taste sensation. A person eats because he enjoys eating. The pleasure derived from eating is the basic defect, inherent in the system. A person closes his shop late at night and so is not able to find time for exercise. He is suffering from the greed (Loabh) for wealth. In-fact apathy towards exercise in itself is due to the fact that the person is cut off from his basic character. He is living a life too much by the mind. A child is inherently interested in running, playing and physical activity. That is it's innate nature. By adulthood he gets cut off from this and starts living a life on mental concepts. Education is more important than sports, is a concept. Earning wealth, name, fame, positions, power and decorations is more important than physical activity, peace of mind and good health is again a mental concept and an attitude related issue. Exercise thus goes very low in the priority list and the resulting sedentary life leads to Diabetes in due course of time. If we want to seriously tackle the problems of health at the very root level, we will have to, first of all, treat the five basic internal defects.

### How Meditation Helps

Meditation is a technique to experience the beyond mind existence where there is no internal defect. Meditation starts at physical level in the form of performing certain exercises. Every physical movement, activity and posture has a mental correlate. After morning walk or playing a game, one feels fresh. This feeling of freshness is a mental experience made possible by secretion of certain chemicals in the brain. Every physical exercise likewise has mental effects. Methods of meditation have profound effect on mind. By meditation the disturbing and longing mind gets dissolved. One doesn't lose the mind altogether, but it stops disturbing all the time. It can still be used as and when required. One can then use the mind the way one uses the limbs. When the disturbing mind and the five basic internal defects disappear, the individual becomes natural. Then he can eat and live the way he wishes. In that situation there is no desire or internal weakness to distract. The intuitive

feeling then leads one to the right direction the way it leads all other creatures in the right direction. Then for the first time one becomes his own master, because one can do whatever he feels like doing without any fear, pressure or insecurity. The association of action and its result gets broken. Every action is complete in itself; because then there is no past or future. It is only the unending present everywhere. And there is no greater happiness and bliss than to be able to do whatever you feel like doing.

One does what one feels like doing doesn't mean that one becomes a self serving brute. You may still think about others. Chances are high that then you may think about others much more than what you do now. That however becomes your way of life. Then it is not the other person who is important and forces you to decide your action. In that situation you yourself become the ultimate decider in every situation. If you serve others, it is your sweet will and your own decision. Then there is no question of doing anything for anybody else. Then you do everything for your own happiness. Then in fact all your actions are the manifestations of your internal bliss. Then you don't expect anything in return from others and you don't blame others for your problems. Then your happiness remains intact in every situation. In-fact then you cannot differentiate between a good and a bad situation. In different situations if your mind can remain the same then virtually the situation also remains the same. Then all dualities fall down and disappear. Then you have the same feeling towards everyone. Then there is no enemy and no friend.

What is the health benefit of meditation? When you become natural you automatically get health that is due to you. Then you don't create your diseases. One must understand that each one of us is born with certain level of health and longevity. One cannot get anything more than what one is endowed with. The only possibility is that one can reduce it by creating diseases through a faulty lifestyle and mental disturbances. Most people do it unknowingly, almost unconsciously without ever understanding how the mind-body system works. As and when a person gets the taste of meditation, it becomes his permanent state of being. Then the same mental condition can be retained in all different situations. When mental equanimity is attained, correct lifestyle is spontaneously and effortlessly achieved. Mental disturbances also disappear. Stress gets replaced by relaxation. Ultimately health benefits accrue from healthy lifestyle coupled to a balanced and positive mind. All this gets achieved although, spontaneously, effortlessly and lovingly. Somebody once asked a Zen monk about the secret of his glowing face and impeccable health. The monk replied 'the secret is very simple. I eat what I feel like eating, I do what I feel like doing, I walk when I feel like walking and I sleep when I feel like sleeping.' Life is so simple that no knowledge is required to live it. For a meditative person health is not a concern at all. It is guaranteed the way it is guaranteed to the rest of creation.

## Functions of Cortical Neurons

For any individual, the world is what his sensory organs feel it to be. There are five sense organs in human body namely eyes (vision), ears (audition), nose (smell), tongue (taste) and skin (touch). These sense organs provide inputs to the cells (neurons) situated in cerebral cortex. Through sense organs the cortical cells get stimulated. Each sense organ stimulates different sets of neurons in a different way producing a different result. The ultimate result is an experience or a feeling. The experience may be a sight, sound, smell, taste or touch. One knows the world only through these sense organs. Imagine a baby who is born without any sense organ. For such a baby there is no sight, no sound, no smell, no taste and no feeling from the body. Even if it touches its own limbs, it will not feel them because even for feeling one's own body, touch sensation should work. For such a child there will be no world, no society and no environment. It is not important whether there is a world around you or not. The important issue is that there are sense organs that make you feel a world. If sense organs are destroyed the existence of the world will immediately finish. Secondly, neuronal stimulation is not limited just to the sense organs. It is equally affected by the mind (and the basic inner defects). When you are depressed or excited, you can miss certain inputs or perceive them differently. In a state of rage you can miss the facial expression and body language of others which is otherwise very clear to a calm and quiet person. Thirdly, neuronal functions are dependent

on purity of the body. A person who is heavily drunk or drugged can easily miss lot of sensory inputs.

Whole body including cortical neurons is made up of matter that is a converted form of soil. It is inert and as such cannot experience anything. You see through eyes, but eyes are not the ultimate seers. If eyes are cut and taken out, they can't see anything. Eyes are only instruments through which the seer sees. Through all the sense organs, it is ultimately the experiencer, deep inside our system, that experiences everything. Experiencer is the real self that is different from sense organs and rest of the physical body. Sense organs bring external stimuli to cortical neurons and then it is up to the cortical neurons, mind and the experiencer. When cortical neurons are stimulated, one feels the world. This can happen even if sense organs are not stimulated. That is the mechanism of dreams. In dreams no sense organ is stimulated but still, because mind keeps on stimulating the cortical neurons, the experiencer experiences worldly images. During sleep no one can distinguish whether it is a dream or reality. When cortical neurons are affected, the experiencer experiences the same situation no matter whether it is real or unreal. Same effect can be produced by certain hallucinogenic drugs (narcotics). These drugs stimulate the cortical neurons in a way that realistic images or sounds can be experienced. Ultimately it is unimportant whether the world really exists or not. To sum up, there is an experiencer inside every human being who has taken birth just to experience the world and go through alternate phases of happiness and sadness during the process. During life, this is achieved through neuronal activity which is affected by stimulation of sense organs and by activity of the mind. The process of experiencing is also modulated by purity of the body.

### How Thoughts and Concepts Affect Cortical Neurons

Every individual is living in a different world. Not that the world is different for everybody, but because every individual is different at the level of perception, the same world appears different to different people. There are as many worlds as there are people living in it. An experience is the product of interaction between the observer and the object of observation. Experience becomes different if either the object changes or the experiencer (observer) changes. Life is such that all observers are different. Every mind is different and therefore every individual experiences the world in a different way. That is the reason why different people have different reactions to similar situations. Their minds perceive the situation sometimes in diametrically opposite ways. When perception is very abnormal, the person is considered mad.

Differences in perception relate to differing personalities and attitudes. Personality and attitude are non material attributes. Although these are abstract and intangible aspects, yet I am not ready to accept it as a causeless phenomenon. For me every non-material and seemingly intangible phenomenon in the mind-body system must have a material correlate. In my own hypothesis, perception of a situation is the product of neuronal metabolism and its reactivity to stimuli. Neuronal function is of supreme importance. It determines perception of a situation and subsequent reaction to it. In my understanding mind, psyche, attitude or personality are all tangible and material variables. Various factors, like which neurons are active, in what sequence and arrangement and to what extent, determine the attitude. All sadness and happiness can be bio-chemically defined. Different types of experiences result from differing neuronal activity. It is because of alteration in neuronal activity that a person may sometimes develop split personality or major psychosis. A foolish person never understands the reasons of his foolishness. He goes on committing the same mistakes throughout his life. Why can't he change himself? Simply because he perceives the situation differently and this happens because his neurons function differently. Is neuronal behavior genetically determined is a moot question. I believe that lot of this is carried from previous life to a new life in a seed form. Seed form is the subtle body comprising of the residual five basic internal defects.

Neuronal function is a very delicate matter. Just a slight shift in neuronal activity changes the perception tremendously. Neuronal health depends upon many factors. To variable extent it depends upon general health of the person. Lifestyle affects neuronal functions in a big way. That is why I put so much emphasis on my lifestyle programme, the magic of ten. Use of medication, alcohol and

tobacco etc. all affect neuronal function. Certain psychoactive drugs affect them much more profoundly than others. Abstinence from alcohol and drugs may also alter the neuronal responsiveness to external and internal stimuli. It may also get affected by the altered biochemical milieu of body during systemic diseases. They also seem to get affected by climate, environment, quality of water and soil, time of the day and year, and even by constellation of stars. Subtle changes in neuronal functions may go unnoticed because all understanding is through them only. That is the reason people are often unaware of their personality defects. They don't know about themselves what often the whole society knows. Neuronal function is the very instrument through which all perception is made. Through the same instrument they perceive themselves too. If the instrument is defective, it shows in various spheres.

Most importantly, neuronal activity can be severely affected by thoughts and concepts. This is the real malady of mankind. The deeper a thought goes into someone's mind, the more it affects the neuronal functions. When you have strong pre-conceived notions, you start seeing things accordingly. If you trust someone totally and he is exploiting you, you cannot understand it for ages. Absolute trust blocks vision. You may even feel bad if someone tries to point this out to you. It is as if your eyes have been blindfolded and you just cannot see the truth. However this blindfolding is selective. You may see everything else clearly except one special object about which you have a strong prejudice or emotion. In my understanding, this is what is maaya, the veil, or the illusion of life. It is because of maaya that one cannot see the truth. Because of maaya, one cannot see a situation the way it is. It is because of maaya that people have wrong judgments and make mistakes. Because of maaya one cannot distinguish between what is good and bad. The way I have understood the subject, the enlightened ones are those who get rid of maaya and are able to see everything clearly without any distortion. My construct of thought therapy is based on this hypothesis. When thoughts create the veil, new thoughts can alter it and thoughtlessness can destroy the veil and provide clear vision. A clear vision undistorted by maaya, can be achieved by detoxifying the mind-body system. Body needs to be detoxified of toxins and mind of pre-conceived notions. Pre-conceived notions are most difficult to remove because when one notion is removed, it is immediately replaced by the other. If however this construct is understood well, it is definitely not impossible to be free of maaya. And the best part is that one can do it through his or her own efforts without wasting any time and money.

### Spiritual construct of life

My understanding about the phenomenon of life is that human being is made up of two very distinctly different components; the inner self (the invisible soul) and the outer covering (the visible mind-body system). The inner core (the soul) is the real identity of an individual while the outer covering (the mind-body system) is a temporary illusion. It appears to be, but it is not there in absolute terms. One essential basic characteristic of soul is to attract a physical body around it. Methodology for that is through conception, pregnancy and delivery. Physical body as a rule ages, degenerates, decays and dies in due course of time. After death, soul gets released from physical body but not from the subtle body. Subtle body is the condensed or seed form of the five inner defects. Soul carries the subtle body to new life. In-fact soul gets new life because of the subtle body. Subtle body thus decides the parentage and constituent genes in new life. It thus decides the type of physical body with all its built-in diseases. Life after life, a person gets repeated opportunities to understand this arrangement and identify oneself with the real self, the soul. Soul is free from all defects and emotions. A person who gets more and more rooted in the real self becomes free from the inner defects and disturbing emotions (happiness and sadness). Yoga, meditation and other spiritual practices are meant to provide that beyond mind feeling of the self, a new self identity; a feeling of being separate and different from the mind-body system. This new identity provides a new character that is not affected by fear or greed, and that is immune to mental disturbances.

The world is like a dream where nothing is real. All physical bodies including my own are just transitory shadows. Through this three dimensional shadow, the self experiences all types of positive and negative emotions (sukh - dukh) over lifetime. These experiences (karma phal) are the very

reason for which the soul takes a new form. Emotional experiences (sukh - dukh) cleanse the subtle body and help in freeing the soul. People, not understanding this arrangement, store more emotional charge through every experience of life. The mechanism for karma bhog is the provision of five sense organs, and the mind essentially infested by the five inner defects. An individual will not feel any happiness or sadness if all the five sense organs are absent or all the five inner defects get finished. A person free from Kaam, Krodh, Loabh, Moah and Ahankaar does not feel any fear, anxiety, tension, insecurity, greed, arrogance or excitement. At the time of death, soul of such a person departs in it's pristine purity unattached to any subtle body. The subtle body of such a person gets finished through the experiences of life whose consciousness remains steadfastly focused on the real self. As the causal subtle body is not there, new birth does not take place. This is what is called freedom or moksha. Spiritual path is about understanding this construct, realizing the importance of self identity and then following the discipline and practices that are designed to provide the experience. Some people at some stage of life get genuinely interested in the question – 'who am I ?' They want to have their real identity. That is the starting point of the journey to self.

Many people will get confused as to why I, being a doctor, am advocating all this. Let me clarify this. I had said in the beginning that modern Medicine does not answer the most basic and important questions about causation of diseases. Those answers are available in spiritualism. According to the spiritual construct of life, the basic reason for all diseases and miseries of life is only one that human beings do not know who they are. They do not have a true self identity. They have started recognizing themselves as something diagonally opposite to what they really are. Instead of the real omnipresent existence, they consider their existence as the transitory shadow like mind-body phenomenon. As a result of this false identity, two problems develop. One, that instead of the beyond mind intuition, they have to essentially live a life on the decisions of mind; and secondly that they continue to remain affected by the five basic internal defects. The defects may get altered in configuration but they don't get exhausted and finished altogether. Decisions of mind cannot be correct in all situations throughout life causing faulty lifestyle and the five inner defects eventually attract mental and emotional disturbances and physical diseases. Thus the fundamental disease is lack of self identity, and naturally the basic treatment should be an effort for self actualization. As and when this is achieved, it gives natural and effortless health coupled with immense bliss.

### What is Spiritual Endocrinology

Endocrinology is the science of hormones. Hormones are highly reactive chemical substances secreted by Endocrine or Ductless Glands directly into blood. Hormones affect key functions of various systems of body including their own secretion. In Endocrinology we study, diagnose and treat diseases caused by abnormalities of hormone secretion. Commonest endocrine disease is Diabetes caused by deficient secretion and reduced action of Insulin. Insulin is a hormone secreted by beta cells of Pancreas. Spiritual Endocrinology is not a standard term. I use this term for my own understanding of the changes that occur in the body as a result of spiritual development. As consciousness of a person shifts from superficial mental plane to deeper existential planes, mental and emotional chaos disappears. The individual experiences a tranquil state of mind. That state of the mind is characterized by five essential qualities namely, peace, happiness, satisfaction, love and positive attitude. All these features emanate from inside rather than achieved from outside. Whatever the external situation may be, these features always remain. You may then be in the company of a friend, family member or enemy but you retain the same five qualities of mind. You may possess the ultimate riches of the world or lose all that you ever had, but your internal situation remains the same. It just cannot change because you are rooted firmly in your real self which is made up of these elements. In that state there are no mood swings and the internal defects tend to disappear.

In that state of being many hormonal secretions and functions change. Cortisol and Adrenaline levels tend to come down. These are stress hormones which have anti-insulin actions. In order to provide immediate energy for any emergency situation or during unavailability of food, they draw nutrients from body stores and thus make the body weak. When their levels come down, Insulin action automatically improves. Blood sugar level comes down and body is turned to anabolic mode that is a

tissue building and strengthening mode. All the body functions improve and the organs become strong. Hypothalamus is a very mood sensitive part of brain. With spiritual development, hypothalamic functions improve and optimize according to the real needs of the person. Hypothalamus in turn optimizes the release of all the important hormones of the body from Pituitary gland. Pituitary gland situated in the middle of brain is called the Master Gland because it regulates the functions of most other hormones of body. Spiritual practices and especially 'Om' chanting improves functions of Pituitary and Pineal gland. Pineal gland is a mysterious gland whose functions have not been well understood. It however regulates the important rhythms of body including the sleep wake cycles. Strong rhythms of body improve functions of many organs.

In spiritual context, I always like to use the expression, 'optimization of secretions'. Different hormones are secreted to variable concentrations in different people. For every hormone, there is a range. All values within that range are considered normal. This cannot always be true. For example, the range for TSH, a pituitary hormone is 0.5 to 5.5 MIU. A person who keeps a TSH value of 0.5 in normal health develops a disease and his value goes up to 5.0. It is still within the normal range but for that particular person there is a thousand percent rise. We cannot know as to within the so called normal range, what is the actual normal value of a particular hormone for a particular person at a particular time. At what level of a particular hormone the system of an individual works best, can not be easily understood. Moreover hormones work in a complex interplay with other hormones and hormonal ratios are equally important as absolute levels of individual hormones. Neither the individual hormonal level nor the proportions of different hormones can be standardized in different people at different times. If however the mind-body system is fully relaxed, as in the state of meditation, all different hormones automatically come to the preset ideal values and proportions. The process of meditation can be compared to resetting a television to 'normal', and the color, contrast and brightness all come back to a preset ideal level. Human body, as an organic whole works best at this ideal preset or optimized level of hormonal secretions. This gives improved quality of life and significant longevity. And all this is achieved effortlessly. One has to just experience the beatitude and joy of life. The situation can be likened to feeding and watering the roots of a plant and the whole plant becomes healthy. Nothing else needs to be done. I don't say that such a person never falls ill. He may fall ill once in a while, but the illness will be trivial and will respond dramatically to small doses of medicines.

### What to Do (The Practice)

First of all it must be understood that my recipe will not help everybody. It is therapeutic just like a medicine and no medicine helps everybody. Just like any other medicine, my recipe may also be ineffective for some and may even have adverse effects to few. My recipe for effortless health through spiritual endocrinology will help only those who agree with me totally; who agree with all the foregoing description. This is so because spiritual experience is very subtle and delicate. If there is slightest of pressure, longing, greed, urgency for results or discomfiture at ideological level, the point may be missed. For this recipe to be effective, not only agreement but also devotion needs to be the starting point. Devotion doesn't mean a blind faith but actually a thorough understanding. If you are convinced at intellectual level that what I have written makes sense, then a sincere effort can be made. Whether your effort will bring results or not, depends on many factors. One thing is certain that without effort there would be no result. With effort, there may or may not be a result. The result will depend upon your level of conviction, urge, devotion and your patience (ability to wait for a result). If you are ready to wait till eternity with consistent effort, the result may come immediately. One more thing is certain that sincere efforts never go wasted. If you don't succeed in this life, you may continue from the same point in the next life. This is so because any alteration in the configuration of the five inner defects will be carried to the next life. So, wait for a little more time, read some more scriptures, talk to more evolved people and think within yourself till you are fully convinced with the idea. This initial work-up is necessary because the biggest hurdle in the path of any meaningful achievement is lack of conviction, understanding and devotion. If and when you get enough conviction and motivation, you can follow my below mentioned recipe for effortless health.

- **Take your own responsibility:** understand fully well that you are responsible for your life. You can't hold me responsible for your success or failure in this programme. Whether you follow me or not is your own decision. Your taking charge of your life starts the process. Then it becomes your own programme. If you succeed, it is your success and if you fail, it is your own failure. When you take charge and become the decider, you can in-fact decide your own course of action. You can either follow my programme, or anybody else's programme; or make a new programme altogether on your own. Ultimately whatever you decide to follow or not follow, feel fully responsible for your decision. Stop holding others responsible for your destiny.

- **Follow the instructions lovingly and playfully:** People in general adopt a specially serious and different attitude towards matters related to divinity and spiritualism. By doing so they block all possibilities of change. In spiritual pursuit, changes occur at a very delicate level. If you become conscious about the process, changes may be blocked. Always remember that spiritualism is great fun. The practices should be followed lovingly and joyfully just like playing a game. It should be followed in as much measure as possible. If you are not able to follow something, don't feel much about it. Changes are gradual but certain; and they occur in everyone who goes through the process. You can start the process as and when you are ready to play the game.

- **Follow the Magic of Ten:** The magic of ten is a healthy and balanced lifestyle to keep your body healthy and mind relaxed. It is a powerful and comprehensive ten-point programme that takes care of all your needs. Every point is equally important. It will cleanse the mind-body system and provide the much needed energy, agility and mental relaxation for things to happen. Points no. 1 to 6 in Diabetes education should be considered for a better understanding. It is possible that for a variety of reasons, your discipline may get broken once in a while. This should not be taken as a problem. The way the mind-body system works, it cannot be kept under a strong imposed discipline for prolonged periods of time. If you happen to take alcohol or non-vegetarian food or miss on aerobics or yoga once in a while, don't feel bad about it. It always happens like this. Concentrate nevertheless on positive aspects of the programme and gradually as your neuronal functions change, everything will change. Even your will power will change. Much improvement may happen to you if you simply concentrate on what you gave to do rather than on what went wrong. And always remember what could not happen till yesterday may happen today. Effortless health is within hundred percent reach of everybody because it is inherent part of your system. It is not to be developed. It is already there fully developed. It is just to be realized. This entire programme is just for that.



- **Thought therapy:** Whatever I have said in this write-up is a set of thoughts. Thoughts as a rule don't have any substance. They are completely hollow. They cannot provide you the experience. No thought, howsoever noble or extra-ordinary it may appear, is powerful enough to give you the real experience. Yet thoughts are important to alter the neuronal functions. They provide a new understanding on the subject and tend to change the attitude. With change of attitude, tiny secretions of neuropeptides change, and ultimately the neuronal functions change. With the change of neuronal functions, choices and priorities change, emotional state changes, and in due course of time the whole world changes. With a radically new perspective of life, one can take new resolutions. One may be able to change lifestyle and resolve to include aerobics and yoga in daily schedule. The change in lifestyle and mental state brings real lasting changes in the mind-body system. In that sense thoughts are very penetrating. One should always be receptive to new thoughts. For this reason, wise people have always eulogized the importance of good company (satsang). I do my bit

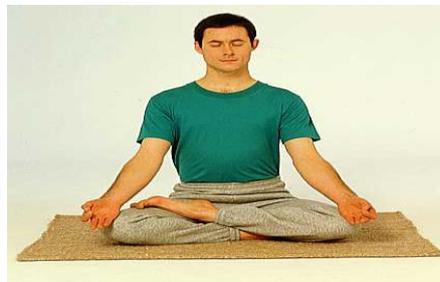
by providing logical and scientific basis for initiating spiritual pursuit. I hold meetings for interested audience and I am always willing to go whenever invited to talk to a group of curious people. Try to get new thoughts from wherever possible, but remember always that you are not free to select which thought will enter your mind. You cannot entertain every thought with the same level of interest. You have special thought receptors in your mind, which will catch only some special thoughts, not all. If my thoughts appeal to you, then I may be useful to you. Thought therapy works just like medicine. It changes your system in a programmed manner and in due course of time brings about significant improvements. All this happens however if you interact with new thoughts with an open and receptive mind. If you have a feeling that you know everything and indulge in new thoughts just to prove them wrong, then as a person you will remain the same. Nothing will happen to you. Your attitude decides the outcome.

- **Yoga:**

Yoga is pure magic. It is probably the most powerful method for transforming a person. It is important not just for good health but for shifting the consciousness to deeper planes of existence and make one realize the real self. I am not in favor of comparing Yoga to Allopathy or any other form of therapy. Yoga is a way of life and those who follow it religiously don't generally fall ill. They develop a strong mind-body system that prevents diseases. It is a holistic science. One or two hours should be devoted to Yoga preferably in early morning each day. Yoga is an eight fold discipline, namely – Yam, Niyam, pranayam, Asana, Pratyahara, Dharna, Dhyana, and Samadhi. All these aspects are important for a holistic development. They are complimentary to each other. The daily Yoga practice should include asanas to be followed by pranayam. It should be followed by 'Om' chanting for five times and in the end sitting in meditative posture for about fifteen minutes. Meditative posture is sitting in Siddhasana with back and neck erect, eyes closed gently and fingers in Gyaan Mudra (Tip of the thumbs touching tips of index fingers with hands placed flat and open on the knees). All attention should be directed towards respiration. Respiration should be normal, relaxed and somewhat shallow. Different aspects of respiration should be deeply felt. If one follows this discipline regularly, effects will be visible on the body and behavior in six months time. The transformation is slow, steady and certain.



**Gyanmudra**



**Meditation Pose**

- **Other forms of meditation:** There are many other methods of meditation. Any method may be followed according to personal preference. They all lead to shifting of consciousness to deeper planes of existence. Most meditation techniques are based on respiration, vision, hearing, touch and imagination. There are very powerful methods of meditation developed by Osho, which are based on vigorous physical activity (Dynamic Meditation), dance and various other types of activities. Any method that one may like is good for him. Don't ever go into the analysis of how meditation works. The analysis is useless. One doesn't know how medicines work but they still work. One doesn't know how jogging brings down sugar and improves heart function, but it still does. Just choose your activity and practice it for at least three months coupled with all other precautions (the magic of ten) before discarding it. Any method takes about three months to bring about results. Meditation shifts your consciousness to a different level of perception. Everything appears different and as a result your behavior, your reactions, and your attitude, everything changes. It is well known that alcohol changes the level of consciousness and after a few drinks the attitude and behavior changes. Alcohol at the same time brings about many other damaging side effects. After heavy intake of alcohol, a person may become totally unconscious. He may fall into a drain without knowing that. On the

contrary meditation shifts the level of consciousness permanently but without any side effects and with enhanced consciousness. Just like diminished consciousness is possible, enhanced consciousness or super consciousness is also possible.

- **Mental Exercises:**All mental exercises relate to only one basic method i.e. remembrance. Normally a person lives in a state of semi consciousness. Things happen through him and he doesn't know how they happen. One becomes tense, angry, sad, excited or depressed without realizing how it happened. Various types of emotions affect the mind without the person's knowledge or control over them. This is all happening as if one is a programmed puppet. You can change all this by assuming control on your systems. All that you have to do is to remember all the time that 'you' are the master of your being and not the mind. Following specific mental exercises may be helpful-

### **Get shocked:**

- Whenever an emotion affects you like fear, anxiety, tension, anger, sadness, excitement or depression; just at the start of the emotion get shocked that you are getting entrapped in the mental web. Just remember to realize that you are automatically going towards negativity. Just be aware of it.

### **Say 'so what?':**

- Whenever something good or bad happens, say with all your heart and soul 'so what'. This has not happened to you for the first time in this world and whatever has happened is unnoticeable for the entire world. There is no need to feel much about it. You are giving it much value only because of your basic internal defects. Don't just speak the words 'so what' and complete a ritual. Rather feel it deep inside with all your heart and soul at every important happening. Even if something extra ordinary happens in life just remember to silently say 'so what'.

### **Become a witness:**

- Practice watching yourself. This is a three step exercise. In the first step watch (be aware of) your body. Feel every movement of the body with full awareness. In the second step watch your mind. With closed eyes, let the thoughts come and go. Just look at the changing thoughts as if they are not passing through your own mind; as if they have no relationship with you. Don't comment, don't criticize; just watch. In the third step watch your emotions. For example when anger or frustration affects you, close your eyes, with back erect, feel and experience the full extent of the emotion. Feel how and from where it is getting generated and how it is affecting your body and mind. Once again, don't comment, don't criticize; just watch. In different situations of life, while you may be doing variety of things never forget to be a witness to yourself.

### **Essentially remain an actor:**

- whatever you may be doing, feel as if you are doing an act on the stage. While you are performing always keep on analyzing whether your performance is upto the mark or not. Put more emotions into the act but always remember that you are just putting up an act. No body should ever find out that you were acting. If people find that out, then you fail. In different situations know very well as to what role you are playing and then play it to perfection. Only you should know that you were acting. If you are angry with somebody, show your anger properly.

### **Remain focused:**

- Always remember what your interests are; what benefits you. Don't get swayed away by situations. Always remain clear about your aims and goals. Even if you are acting, never forget your limits and demands of the situation. I am advising you to act but not act blindly. You should always act only to your benefit. Keep on assessing the situation moment by moment and as per the demands of the changing situation, keep on changing your act. No one else should know that you are acting and you should never forget that you are acting. Life is indeed a game. Whether you win or lose is unimportant, but every game is played for winning. Being focused on your goal gives you material success also, yet it is a very effective mental exercise.

### **Remain silent:**

- Speech is mostly unnecessary and harmful. One speaks mostly because one wants to speak. Speaking is a weakness. Try to speak as less as possible. Learn the fine art of becoming a listener. Listen, understand, decide your action and do it silently.

### **Keep secrets:**

- Whatever you know, keep it to yourself. Never try to transfer to others what may be a special knowledge to you unless it is very important to share it with some special person for some very special and noble reason. This increases your depth. You tend to become more calm and quiet and also a more reliable and sincere person.

### **Become action oriented:**

- Thoughtfully focus on what is to be done and not what happened, what should have happened, what will happen, and what went wrong etc. For your growth and evolution only one thing is important, that is what you have to do at a particular time. Everything else is there only to distract you and throw you in your mental web. Beware of this design of the mind. Never criticize or crib. Just decide your action according to the demands of the situation and perform it to perfection. Your action is sufficient to fill you with bliss.

If you could remember all this, revolutionary improvement may occur in your mind-body system.

