

Prana and Immortality

All forces of the *Universe*, like those of the human mind, from the highest consciousness to the depths of the subconscious, are modifications of *Prana (bio-energy)*, and were subject to investigation by *Acharyas (masters)* and *Munis (sages)*, and yogis (yoga practitioners) and *rishis (saints)* of the ancient India. I did my own discoveries though I do not fall into any of above categories of *Sadhakas (aspirants)*. I shall try to give you a peep into the unplumbed secret caves and treasure-houses of meaning-wealth that lie so beautifully concealed behind vedantic texts.

Well, the word '*Prana (Bio-energy)*' can therefore not be equated with the physical breath, though breathing or respiration *Prana* (in the narrower sense) is one of the many functions in which this universal and primordial force manifests itself. Whenever I practice *prana-nayma (pranayama or breathing techniques)*, my body too, participates in this gigantic dance, my mind supervises the activity, my brain records the vibrations, like storing a data in Window file of my brain, and the real me in me, remain at the level of the programmer. Many a times, either I participate or become a mute observer; I have kept a choice in my hands. Every time, when ever I practice *pranayama (breathing techniques)*, first I open those file of my brain, I read and go through the file first which is based on my previous encounters with *prana (bio-energy)*, and then I edit the file with new experiences and keep a back up in the subconscious mind. Many a times I found that the mind seemed to act independently of the brain in the same way a programmer acts independent of his computer, however much he may depend upon his computer. The 'functionalism' school of thinking considers consciousness as the software or the operator behind hardware of the entire physical brain complex. Consciousness is an actual phenomenon at whose dictate the brain works. It is beyond our body but works through it and controls its voluntary and involuntary functions.

If Life is lived in its totality, the priest is not needed at all, what is the need of a mediator between you and existence. You are directly in contact with existence through *Pranayamic* breathing and related Meditation, then you are living in existence, breathing in existence, existence is pulsating in you. The golden opportunity you are seeking is in yourself. It is not in your environment, it is not in luck or fluke or in any chance, or the help of others, it in yourself alone. The concept of a biological evolution is "outdated". Now the talk is about the "evolution of consciousness". "Awareness" is the raw material in this evolutionary process and the Rishis (saints) and sages of ancient India have already known map lying out the evolutionary journey of man. In this information age we expect an overthrow of the "superstition" of materialism. Quantum physics and the Vedas are bringing to the realization that the material realm is unreal. The senses do not provide an accurate picture of reality. We are in the throes of a discovery that the essential nature of the material world is not "material" after all.

The medical story of evolution is the evolution of increasingly complex cerebral and associated organisms generating even more complex contents of consciousness.

Though, in the highest sense, *akasa* (space) and *prana (bio-energy)* cannot be separated, because they condition each other like 'above' and 'below', or 'right' and 'left', it is possible to observe in deep meditative states and to distinguish the preponderance of the one or the other principle in the realm of practical experience.

All dynamic qualities, all that causes movement (may be sometimes at gross body level), change or transformation (at mind, brain and sense complex level), reveal the nature of *prana (bio-energy)* and also the nature of the individual. If this were not so, the (healthy) interaction of body and mind, of spiritual and material forces, of matter and consciousness, sense-organs and sense-objects etc. would be impossible. It is precisely this interaction of which the *Yogin* or the individual aspirant like me make use, and upon which the technique of meditation is built in the edifice of perishable body in *yogaasana (yoga-postures)*.

“Pure for Sure”, is the slogan we find in India at almost all petrol pumps (gas stations). It means consumers will get the product (petrol or gas) in the purest form. Similarly, those who practice *pranayama (breathing techniques)* regularly they get bio-energy (*prana-shakti*) in its’ purest form and the body and the *yoga-asana* acts as a refinery to convert raw or crude products in pure form as we get diesel, petrol and gas from the refinery. *Pranayama (breathing techniques)* and the *yogasanas*, together, deal with the subtle functioning of the breath and of the filtration of the crimson colored fluid—the Life Force—with unchecked flow through the network of channels (*nadis*) and the subtle centers (*chakaras*). *Asana* and *Pranayama (breathing techniques)* induce cellular quieting, thus inducing a state of hibernation. If the ancient Indian saying is true, that the body is the instrument provided for the fulfillment of the right law of our nature, then any final recoil from the physical life must be turning away from the completeness of Divine Wisdom and a renunciation of its aim in earthly manifestation. It can, therefore no integral Yoga which ignores the body or makes it annulment or its rejection indispensable to a perfect spirituality according to Vedanta.

Time has come to think seriously about our efforts at different diseases’ and disorders’ management, now lest our future generation should not club us with our forefathers who used to brand every conceivable disease with red hot iron. The future generation might not forgive us for this sin. It is somewhere between intensive care and the crematorium.

What is true for the prevention of illness is equally true for the art of healing the sick. We in India, have many such effective methods of cancer and other diseases’ management where the stress is on strengthening the patient’s immune system. The leading claimants are *Ayurveda* and *Siddha* systems where there are many immune boosters that could effectively suppress cancer growth aided and supplemented by the mind tranquility methods of Yoga and *Praanaayaama*.

The attempt of the ‘*Upanishads*’, is to express the inexpressible, to paint the Formless, *prana (bio-energy)* is one such element, and though we cannot see it still we call it an element just because we just feel it. The finite words are no instruments to reach the roaring the silence of the all-full Spiritual Perfection that comes after the practice of such meditation in which the *prana (bio-energy)* permeates the entire body from within and still I could see (feel) it with eyes closed. Here feeling is knowing and in few cases, seeing, in other words. From this it should not be concluded that the experience of the *Infinite (including Prana (Bio-energy))* cannot be conveyed and is not available for the teachers to teach.

Life is from moment to moment; and its perfection depends upon our ability to maintain such a perfect balance of the vital forces, on which we have just no control, those harmonious vibrations, without, shall find their affinity within. When all the motions of the body have become perfectly rhythmic, the body has, as it were, become a gigantic battery of will.

Vision of Vedanta:

Second *Mantra* of section VI of second chapter of *Kathopanishad*, clearly says; that this Universe evolved from the Brahman, moves (vibrates) in the *Prana* (in the highest *Brahman*). The Brahman is the great terror, like an uplifted thunderbolt. Those who know this become immortal. The whole Universe arose from Brahman and moves in *Prana (Bio-energy)*, or as the *prana (bio-energy)* being present (*prana sati*) the whole Universe comes out of Him and vibrates in Him. *Prana (Bio-energy)* here means the Brahman as the master of creation, and this eternal Reality is the one source from which is the world of appearances has emerged out, in which it is existing and into which at the end of time, it shall merge back.

Because vitality in the individual is a sign of that subject’s life, the *Total Prana (Bio-energy)* is called the Total Life. Thus describes the *Vedic Mantras*, all about *the Prana (Bio-energy)* in us and the Infinite Reality. Therefore the Veda says that he who realizes this sacredness of the very

vitality in him comes to economies in his physical expenditures, and thus, by avoiding all foolish dissipations, he comes to live the full span of his life.

Creation and the worlds created are considered by many philosophers as so many “stresses” in the Infinite. Modern science in the west has also come to a similar conclusion that the world of matter is entirely constituted of energy-units moving at a terrific speed in their eternal vibrations. When an atom was split, the physicists could mechanically discover that it was constituted of the electrons and protons, moving at a high velocity around about a central motionless neutron. They also found out that, if by some method they could change the frequency of vibrations of the energy particles in the electronic vibrations in an element, they could change one element into another! If the atoms are nothing but energy particles vibrating, and matter is nothing but a mass of molecules, the Matter is nothing but energy vibrating!!

Now then, it cannot be much of a difficulty for the modern Hindu, to accept the statement of this *Mantra* that “Creation is a motion, a vibration of energy” and that it is possible for the vibration to maintain itself only if there is a motionless and non-vibrating medium, *the Absolute Reality*. Constant change can certainly give us the delusion of a form: only there must be a constant medium, for the changes to play in or at least a constant axis upon which they can play. Thus when a lit up joss-stick (essence-stick) is rotated fast around the same axis, we can detect the joss-stick maintaining itself in the form of a golden circle. The golden circle has no existence except in the consistency of change at the glowing tip. Similarly, constant vibration of energy in a medium of Absolute Energy, and maintaining itself within the field of a constant axis, gives us the ocean of sense-objects made of things and beings.

Now let's see how the Brahman is a great terror. Nothing in the Universe happens haphazardly. Nature moves in rhythm. There is an immutable law that governs the movement of the stars, planets etc. There is constancy in the working of all the laws of nature. Everything is scheduled to happen according to some strict commands, as though there is a very severe law-maker and a strict maintainer of these laws! In this sense, the scripture states here, that the finite world of names and forms seems to exist and function, so diligently and readily as though the Master of the Laws is standing behind it with a raised whip!!

What we know as the manifestations of *Prana (Bio-energy)* are the periodic changes of its center of activity from one vital function to another in unvarying progression, apparently regulated in order of manifestation by the changes in the flow of the *Tattvas (principles) (pancha-tattvas, five principles)*. For these manifestations of *Prana (Bio-energy)* are of course manifestations of various *Tattvic* activities. Concerning this the Upanishad explains: “as the paramount power appoints its servants telling them, ‘Rule such and such villages’, so does the *Prana (Bio-energy)*”. This is a clear indication of the fact that on the terrestrial globe the cosmic vital energy, or *Prana Shakti (bio-energy)*, utilizes oxygen as the main vehicle for its activity. It is possible that biochemistry in the course of its investigations may have to accept at a future date the instrumentality of oxygen in all organic phenomena as the main channel for the play of the intelligent vital force *Prana (Bio-energy)*.

The earth has its own supply of *Prana (Bio-energy)*, pervading every atom and every molecule of all the elements and compounds constituting its flaming core, the fiery molten regions below the crust, the hard surface layer with its mountains and seas, and the atmosphere to its outermost fringe. The Sun, a vast reservoir of vital energy, is constantly pouring an enormous supply of *pranic* radiation on earth as a part of its effulgence. The superstitions connected with eclipses may thus have an element of truth, as on all such occasions the *pranic* emanations from the sun or moon are partially or totally cut off for a time that is the reason why the birds and the animals and the pregnant women do not carry out any activity during this period.

The changes in the weather and in the vapor and dust content of the atmosphere, which have a marked effect on certain sensitive temperaments, might also be found to cause alterations in the flow of *pranic* currents. The moon is another big supply center of *Prana (Bio-energy)* for earth.

Just as *akasha* (space) oscillates between the poles of immaterial space (a purely mental dimension) and material corporeality, in a similar way *prana* (*bio-energy*) reveals itself in the form of two dynamic tendencies, which condition and compensate each other like the positive and the negative poles of a magnetic or electrical field. In accordance with the view that the human body is a replica of the universe (miniature cosmos in itself) or, more correctly, a universe on a small scale, a microcosm—the polar currents of force which flow through the human body are called solar or sun-like (*surya-svarupa*) and lunar or moon-like (*chandra-svarupa*) forces.

So far as *Vedanta* is concerned, it has a different view on above statement, so far as human incarnation is concerned. *Prashnopanishad*, in its' third query, 11th *shloka* (*verse*), say: "the wise man who knows the *prana* (*bio-energy*) thus will not have to suffer—his offspring's do not perish and he becomes immortal". It means, all possible desires of man have been classified fewer than three headings; (a) desire for offspring, (b) desire for wealth and (c) desire for glory. Of them, the desire for offspring includes all relationships that exist in our social and domestic life. Here the *rishi* says that he who meditates upon the truth—that one's own microcosmic form with its activity centers is but a miniature universe with its cosmic forces in the macrocosm—will find relationships in the world to be always intimate and many. This is, to large extent, psychologically true since the method of concentration suggested makes the practitioner expand in his mental and intellectual outlook. He thereby develops a large heart and a very cosmopolitan intellect and these are certainly qualities which attract towards the individual the admiration, love and regard of his fellow beings almost automatically and irresistibly. "He who knows"—in *Vedanta* 'knowing' is not a mere intellectual appreciation or mental grasp of a theme, but means 'realizing'. Through long and consistent meditation, when an individual comes to realize that the *pranic* centers in him have corresponding realities in the cosmic form, he becomes 'immortal'. The immortality is only relative; the individual thereby comes to experience his perfect identity with the Total Mind, the *Hiranya-garbha*, and remains one in identification (*abhiman*) with the Creator until the end of this creation-cycle. Compared with the short and finite nature of the mortal, the state of the Total Mind-hood (*Hiranya-garbha avastha*) is certainly a state of immortality in a relative sense.

The brilliant 'subjective scientists' of the Vedic period alone could discover such a fitting representation of the *udana vayu* in the cosmic chessboard of universal existence, which is explained in the 9th *sholka* (*verse*) of the same third query. The chief *prana* (*bio-energy*), the 'shadow' of the Atman, the ego-center, has himself appointed different *upa-pranas* (*sub-bio-energy*) to execute their respective duties in the different centers of the body. When the ego center with the subtle body is preparing to quit the physical body he gathers all his different assistants before making his exit: when the visitor has gathered his coat, gloves, hat and umbrella it is certain that he will soon be going out through the front door.

There are no trespassers wandering into Truth; never hope to smuggle yourself across the frontiers of the finite into the Infinite. Eternal law is quite foolproof, and *devatas* (Gods or their mighty governors) in charge of its execution are beyond all temptations! Nobody can thus smuggle himself into the greater domains in the evolutionary scheme. Truth has many aspects. Infinite Truth has infinite expressions. Though the sages speak in diverse ways, they express one and the same Truth.

Thus, if we dedicate all our life to earning and procuring, eating and breeding, certainly our parting thoughts on the death bed can never be about any greater spiritual life or about moving towards a higher evolution, but they can only be about food and women, money and deception, murder and loot; and as such we are apt to be guided to a 'field' wherein we can fulfill these demands without even the minimum unavoidable restraints that we have had to accept, as men living in a modern town, at least for fear of the policeman!

Deep Abdominal diaphragmatic Breathing:

Breathing controls the body's bioelectric balance just as diet controls its biochemical balance. Deep abdominal breathing not only calms and brings emotions under conscious control, but also greatly heightens awareness, thought and memory. But, many people do not understand the role played by the diaphragm—a resilient yet flexible muscular membrane which separates the chest from the abdominal cavity. When lungs expand, they push the diaphragm downward; when lungs contract, they pull it up into the chest cavity.

This is the first step: the simple observation of the process of breathing, without mental interference, without compulsion, without violation of the natural functions of the body. Hereby breathing becomes conscious, and with it the organs through which it flows. If we were concerned here only with an intellectual observation and analysis of the breathing-process, this exercise would more or less come to an end at this stage. The purpose of this exercise, however, is exactly the contrary, namely, the gaining of the synthesis: the experience of the body as a whole.

“Experiencing the whole body I will inhale; experiencing the whole body, I will exhale”, thus he trains himself. Whether ‘the whole body’ is here meant to be the ‘breath-body’, is of secondary importance, since the former penetrates the latter in its entirety and thus does not confine itself to the organs of respiration.

The next step is the stilling of all the functions of the body through the conscious rhythm of the breath. From this state of perfect mental and physical equilibrium and its resulting inner harmony, grows that serenity and happiness which fills the whole body with a feeling of supreme bliss, like the refreshing coolness of a spring that penetrates the entire water of a mountain lake. This is also known as a state of hibernation.

Thus breathing becomes a vehicle of spiritual experience, the mediator between body and mind. It is the first step towards the transformation of the body from the state of a more or less passively and unconsciously functioning physical organ into a vehicle or tool of a perfectly developed and enlightened mind, as demonstrated by the radiance and perfection of a Sage's body. The next steps are devoted to the incorporation of spiritual functions in the process of breathing: “Experiencing mental activities, being conscious of the mind, gladdening the mind, concentrating the mind, freeing the mind, I will inhale and exhale”, thus he trains himself. In other words: whatever may be the subject of meditation, be it the body, the feelings, the mind, or that which moves the mind (phenomena and ideas), is being associated with the functions of breathing, projected into them, experienced in them, supported by them: thus becoming one with the ‘breath-body’. It is a process that cannot be explained, but only experienced, and which therefore can only be understood by those who have a practical knowledge of meditation. Hence the formula-like terseness of the Pali text in which these processes are described.

Scientific studies suggest connections between body and the mind implying that emotional state and thought processes affect brain, endocrine system and also immune system. A new discipline has emerged based on these concepts—called psychoneuroimmunology or mind-body medicine.

Significant increase in beta activity was observed in the left frontal, occipital and midline regions among regular practitioners of abdominal breathing. Neurologists interpreted these findings as indicative of heightened alertness. Increase in alpha activity was demonstrable in both the hemispheres with interspersed persistence of beta activity. This indicated a state of relaxed alertness. Regular practitioners have lower blood cortisol levels at the base line indicating that they are less stressed. Blood lactate is another chemical, which increases during stress, but after the practice of pranayama go down.

Our immune system protects us from diseases. Natural killer (NK) cells are the surveillance cells of immune system and are capable of destroying tumor cells as well as infected cells. These were

enumerated in the Peripheral Board (PB) of practitioners. Nk cells were found to be significantly higher in the practitioners compared to normal individuals.

The body is repeatedly exposed to chemicals and pollutants in the environment due to which free radicals are generated; these react with oxygen and cause oxidant damage leading to several diseases including cancer. To counteract these, our body has a defense system in the form of antioxidant enzymes. It has been found that regular practitioners have an increase in antioxidant enzymes indicating improved antioxidant defense. Studies conducted at the Bangalore Medical College demonstrated a significant fall in serum total cholesterol and LDL cholesterol, as well as an increase in HDL cholesterol. This would make a Pranayama a tool for prevention of coronary heart disease (CHD). NIMHANS Bangalore recorded a 70% cure rate in individuals suffering from depression. Brain wave patterns were found to normalize and serum prolactin increased. Regular practice might prevent many diseases including infections and possibly even cancer.

The technique:

Either sit in a comfortable position, in a chair but never in a sofa; and/or lie down flat on back while the legs and the hands are spread out. If at all you wish to sit then sit in *padmasana*, *siddhasana*, *swastikasana* or *virasana*, or in any convenient and comfortable position. Please always bear in the mind that any physical disturbance will lead to mental distraction. This preparatory stage trains one in the art of being aware of sensations in the lungs; and this leads to even breathing.

Spread a woolen blanket, folded lengthwise, on the floor or hard surface. Over it, at the head and exactly in line with the edge, lay another blanket folded three or four times so that it fits the back of the head and trunk. Mother earth is best conductor of energy, when you do pranayama, positive and negative electric currents are being generated in the body through different power plants and these currents should be passed on to earth, that is why we need a kind of insulation between your body and the earth. Remember, that an electric field is the condition in the space around a charged body which will produce a force on any other charge in that space. Electric fields are thus created by charged bodies and their effects can only be felt by charged bodies. And therefore our sages and saints, rishis and monies use to sit on either on wooden structures or on the skin of the deer or lion to create good insulation.

Lie flat on the back on the folded blanket, keeping the body in a straight line. Do not unnecessary cave in the rib-cage. Close the eyes and lie quietly for a minute or two. Closing the eyes, we keep the windows close, through which mind just runs away. If possible cover the eyes with a soft cloth or crepe bandage for quick relaxation of the facial muscles. When the facial muscles relax, they loosen their grip over the organs of perception, namely, the eyes, the ears, nose, tongue and skin, thereby lessening the tension in the brain. When tension there is lessened, the Sadhaka (the practitioner) attains concentration, equanimity and serenity.

Breathe normally. Consciously observe and feel the flow of breath throughout. Here feeling is knowing, thus one could travel from communication to communion. Feel the flow of breath at the tip of your nose. Note the change in temperatures. When you inhale, you may feel that cold air entering your body and when you exhale, hot air passing out the body.

As you breathe in, make sure that both lungs fill evenly or uniformly. Feel the chest expand upwards and outwards. Synchronize the two movements for the rhythmic breath.

Breathe out quietly, emptying the lungs evenly on both sides. Correct it if the lungs move unevenly. When you empty the lungs, see how you empty the mind also.

Continue in this way for ten minutes, keeping the eyes closed throughout.

Now, take a slow, deep, steady-in breath through the nose.

Listen to the sibilant sound of the breath. Control, adjust and synchronize its flow, tone and rhythm. The flow is controlled by the resonance of the sound, and tone by the flow. This is the key to success in pranayama.

Fill the lungs from the bottom to the top, right up to the collar-bones. Consciously try to channel the breath to the remotest parts of the lungs.

Be continuously aware of the inflow of breath.

As you breathe in, your body, lungs, brain and consciousness should be receptive rather than active. Breath is received as a divine gift and should not be drawn in forcefully.

Do not inflate the abdomen the abdomen as you inhale. Keep the diaphragm below the ribs throughout. Observe this in all types of pranayama in future. If the diaphragm is lifted above the floating ribs, the abdomen gets inflated instead of the chest.

The movements are made by drawing the entire abdominal area from the pubis to the breastbone towards the spine, and then up towards the head. This automatically massage the internal organs.

In deep inhalation, the inner intercostal muscles at the front are lifted up. Just before exhalation, there is further lift of these muscles, which prepares one before breathing out.

Now begins the process of deep exhalation, in which the trunk and diaphragm play an active role.

Maintain the lift of the intercostal muscles along with that of the diaphragm, and start exhalation. Allow the breath to go out slowly, deeply and steadily.

After a few seconds the grip of the trunk relaxes by itself gradually, until the lungs have been passively emptied. Maintain a continuous awareness during the out-flow of breath.

This completes one cycle. Repeat for ten to fifteen minutes keeping the eyes closed and the limbs relaxed. Inhale and then lie down and rest in Shavasana (yoga-nidra).

Effects: The above practice makes one attentive, invigorates the nerves, loosens any hardness in the lungs and prepares them for deep breathing. This pranayama aerates the lungs, soothes and tones the nervous system. As a result of the deep respiratory action, the blood carries the supply of life-giving energy to the minutest parts of the tissues. It reduces phlegm, relieves pain in the chest, and the voice becomes melodious.

Pranayama linked Meditation and connectivity to higher authorities:

The most important result of the practice of abdominal and or thoracic breathing, according to Buddhist scriptural text-book, *Dhammapada*, i.e. “*anapana-sati*”; or ‘mind-fullness with regards to breathing’, is the realization that the process of breathing is the connecting link between conscious and subconscious, gross-material and fine-material, volitional and non-volitional functions, and therefore the most perfect expression of the nature of all life. Those exercises that lead to the deeper states of meditation (*Dhyana and Samadhi*) begin therefore with the observation and regulation of breath, which in this way is converted from an automatic or non-volitional function into a conscious one and, finally, into a medium of spiritual forces: of *prana* in its deepest sense.

In Tibetan Buddhism, which never lost its connection with the original tradition of the Indian mother-soil, the technique of pranayama, the control of pranic forces, remained alive until the

present day. In order to understand the whole depth and width of this term, we must however not confuse prana with 'breath' in the ordinary, strictly physiological sense of the word.

Though pranayama starts with the simple function of breathing and makes it the basis of its practice, it is far more than a mere technique for the control of breath. It is a means for the control of vital psychic energies in all their phenomenal forms, of which the function of breathing is the most obvious. Among all the physical activities and effects of prana, breath is the most accessible, the easiest to influence, and therefore the most suitable starting-point of meditation. Breath is the key to the mystery of life, to that of the body as well as to that of the spirit.

When all sense-functions, and even consciousness, have been eliminated, just like in deep sleep or in a state of swoon, breathing nevertheless continues. As long as there is breath, there is life. We can do without all conscious functions of the mind and the senses for a comparatively long time, but not without breath. Breath therefore is the symbol of all the forces of life and stands first among the bodily functions of prana.

Those bodily functions which represent the 'negative', i.e. gross-material side of the subtle (or 'fine-material') vital energy, the invisible psychic prana-are united under the collective term 'vayu'.

'Vayu', just like the corresponding Tibetan word 'Lung' (rlun) means ordinarily 'air' or 'wind' and has been rendered as such in most translations into European languages, even where these words seemed to contradict all physiological facts, as for example, when it was said that the 'air' (of the breath) penetrates into the toes and finger-tips, or rises through the hollow of the spinal column up to the brain. Just as the word 'inspiration' can be used in the sense of 'inhalation' as well as in that of direct spiritual awareness and experience, or as the Greek word 'pneuma' can signify 'spirit' as well as 'air', so 'vayu' can be applied to the elementary state of aggression (or the gaseous state) as to the vitalizing and dynamic forces of the human organism. Its nature is in both cases that of movement (the root 'va' express motion: 'wind'). Herein consists, its inner relationship with the more general and wider term 'prana'.

Pranayama: Medicine of health & not of sickness

We have forgotten the *Rushi's* advice as the age-old art of dying is no longer practiced in our culture and the fact that it is possible to die in good health seems to have been forgotten by all of us. It teaches us in the line with the ancient Indian philosophy that life is not only dust to dust, but air to air, that, as with the process of fire, matter is transformed into heat, light and radiation from which we may gather strength. But strength is more than the transformation of matter into other forms of matter; it is the transformation of the whole cycle of air and light into matter and back again. In fact, it completes Einstein's equation of matter and energy and translates it into the human, the living incarnation.

The best anti-stress medicine we have may be right under our own nose. "Slow, deep breathing is probably the single best anti-stress medicine we have," says Gordon, also a clinical professor of psychiatry and author of *Comprehensive Cancer Care: Integrating Alternative, Complementary and Conventional Therapies*.

"When you bring air down into the lower portion of the lungs, where oxygen exchange is most efficient, everything changes. Heart rate slows, blood pressure decreases, muscles relax, anxiety ceases and the mind calms."

Breathe Like a Baby. Obviously, everyone alive knows how to breathe. But Gordon and other experts in the emerging field of mind-body medicine say that few people in Western industrialized society know how to breathe correctly. We were taught to suck in our guts and puff out our chests. At the same time, we're bombarded with constant stress, which causes muscles to tense and our respiration rate to increase. As a result, we have become a world full of shallow "chest

breathers," using primarily the middle and upper portions of the lungs. Few people other than musicians, singers and some athletes - are even aware that the abdomen should expand during inhalation.

Watch a baby breathe and you'll see the belly go up and down, deep and slow. With age, most people shift from this healthy abdominal breathing to shallow chest breathing. This strains the lungs, which must move faster to ensure adequate oxygen flow, and taxes the heart, which is forced to speed up to provide enough blood for oxygen transport. The result is a vicious cycle, where stress prompts shallow breathing, which in turn generates additional stress.

I teach breath work to all my students and I have seen breath control alone achieve remarkable results: lowering blood pressure, improving longstanding patterns of poor digestion, decreasing anxiety and allowing people to get off addictive anti-anxiety drugs, and improving sleep and energy cycles.

Unlike any other bodily function, breathing is the only one you can do either completely consciously or unconsciously. It's controlled by two different sets of nerves and muscles, voluntary and involuntary. And it's the only function through which the conscious mind can influence the involuntary, or autonomic, nervous system, which is responsible for revving-up the body in times of crisis. Its' Super Stress-Buster.

In our stressed-out world, the fight-or-flight response that kept our ancestors alive has turned into a "stew and chew". If no physical response occurs after stress revs the body up, chronically elevated levels of stress hormones can stimulate appetite and encourage fat cells deep inside the abdomen to store what we call "toxic weight."

In hospitals, breathing techniques were once taught only to women to use during childbirth. Today, some institutions are teaching breathing to patients being treated for many conditions. At Duke University Medical Centre in Durham, North Carolina, nurse-clinician Jon Seskevich has taught abdominal breathing to most of the 18,000 patients he's worked with since 1990. About half the people he sees have cancer; the others have differing ailments, including heart disease, cystic fibrosis and various lung disorders.

One of the few scientific studies to examine "belly breathing" found that menopausal women who learned the technique were able to reduce the frequency of hot flushes by about 50 percent. With training, women can slow their breathing down to seven or eight cycles per minute. Deep diaphragmatic breathing and other mind-body techniques can significantly reduce symptoms of severe PMS as well as depression. In addition, practices can also combat infertility. After completing a mind-body program for women with infertility - in which 132 participants learned a variety of techniques including deep breathing, stress management and lifestyle changes--a surprising 42 percent of the women conceived within six months. Not only do these strategies work, breathing is pretty cheap intervention. Deep abdominal breathing, or belly breathing, helps establish a state of physiological calm and can neutralize the negative effects of stress.

Pranayama, the Yogic art of breathing, leads to a control of the emotions; which in turn brings stability, concentration and mental poise—qualities sadly lacking in our lives today. It deals with subtle functioning of the breath, various techniques of inhalation, retention, and exhalation and of the filtration of the crimson coloured fluid—the Life Force—with unchecked flow through the network of channels (*nadis*) and the subtle centers (*chakras*). *Pranayama* is something far more, involving exercises, which affect not only the physical, physiological and neural energies but also the psychological and cerebral activities, such as memory training and creativity. Health giving and invigorating effects of *Pranayama* called voluntary respiration are beyond words. The multiple effects of it, not merely on the lungs but on the whole metabolism of the human body are detailed into various textbooks of *Pranayama*.

With respect and reverence to *Patanjali* and the *Yogis* of ancient India who discovered *Pranayama*, I share with fellow men and women the nectar of its simplicity, clarity, subtleness, fineness and perfection. *Pranayama* helps to keep the involuntary or autonomous controlling system of the human body in a balanced state of health and perfection. It prevents atmospheric damage to the cardiac system, as it washes away accumulated toxins in the blood. The most important effect is washing away free radicals, which can damage the heart. *Asanas* and *Pranayama* induce cellular quietening, thus inducing a state of hibernation. Breathing in through the nose & making the stomach expand & breathing out through the nose, thereby flattening the stomach is the right way to go about it. This process makes our heart operate like an inflatable balloon, constantly expanding & contracting. A pounding heart is not especially good for circulation of blood through the body.

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We tend to forget that peace is the norm. Peace is the exclusive domain of the mind and peace is a product of *Pranayama*. Psychiatrists and sociologists take it as a given that modern man is deeply divided in his psyche. The rise of stress related disorders, depression, anxiety, chronic fatigue, and "the disease of being in a hurry" is a sign of the times. The hectic pace of work and life in general, has accustomed us to turmoil. By now, people are thoroughly indoctrinated by the idea that a certain degree of internal conflict is normal. The war, it seems, was started by us, and could be ended by devotional practice of *pranayama*; but it is taking its toll in a frighteningly ordinary way.

The effect of *Pranayama* is precisely accurate in feeding the nerves with plenty of oxidized energy, than in so called deep breathing. Hence, *pranayama* is a very refined art, which makes the respiratory organs to move and expand deliberately, intentionally with perfect rhythm and balance. The unseen world is the real world and when we are willing to explore the unseen levels of our bodies, we can tap into the immense creative power that lies at our source.

There is no more beautiful experience than when the world expands beyond its accustomed limits. These are the moments when reality takes on splendor. The Veda calls such an experience *Ananda*, or bliss; it is said to be another quality inherent in the human mind but covered over by layers of dulled awareness. The reality, where time really is timeless. What stands out unmistakably in this experience is its sense of revelation.

Effects of pranayama:

Yoga and Meditation achieve the most important change in our living and that is to change the way we breathe daily. Normally when we breathe, more so when we are excited or angry, we use less than 25% of our lung capacity, by breathing through the help of chest muscles (chest breathing) which is modulated through the sympathetic part of our most vital system, the autonomic nervous system.

This sympathetic system is our friend in emergencies like flight, fright and fight. The healthy breathing, brought on by Yoga and Meditation, on the other hand, is the deep and slow breathing using diaphragm and abdominal muscles (belly button breathing). This is modulated through the parasympathetic system. Meditation, therefore, in essence converts us from the flight, fright and fight mode to the tranquil, peaceful and loving mode.

Saint Kabir has rightly said: there is GOD in between two breaths, so for me breath is GOD. See he has beautifully compared, both God and breath.

"It is both inside and outside every living thing, constantly moving but looks to be stationery and solid, so subtle that no science can unravel its mystery. It is very far and unknown to those who

try to know-that. The word “that” was interpreted as God and the whole concept lost its importance with rationalists.”

Now that quantum physics has opened up the “Nature’s Pandora’s Box” and the mystery of the lepto-quark-“that” gains scientific currency. This is the science of ancient Indian wisdom, threatening to be wiped out because of our obsession with the western thoughts of materialism and physical sciences. The epistemological root of the words physics, physiology and physician are one and the same: bheu=to grow.

As a deep inhalation is done, enhanced venous return occurs along with better lymphatic drainage. The rhythmic up and down movement of the diaphragm massages the abdominal organs, increasing their circulation and efficiency.

Changes in coronary flow occur during pranayama, allowing more blood to flow into the coronary vessels. The input of healthy blood into the lungs increases, allowing better uptake of oxygen and build up of adenosine triphosphate (ATP) molecules at the cellular level, which is the source of energy to the cell.

Quieting of the mind during pranayama is very beneficial to a cardiac patient, reducing stress on the sympathetic nerves. This can go a long way in preventing a sudden attack in times of emotional stress. The system being stronger, sudden spasm does not occur in the coronary blood vessels. Relaxation of the nervous system allows excellent perfusion of blood with the coronaries relieving oxygen starvation of tissues. Angina vanishes rapidly after pranayamic practice.

It is the only science that delivers oxygen directly without strain and facilitates storage at the cellular level. As mentioned, washing away of free radicals *by pranayama* at the cellular level is very important. Asana improve blood flow, pranayama the oxygen content. After a few months of pranayamic practice, drug dosage can be tapered off rapidly.

Pranayama is useful to alter chamber size and is done with pillows to support the dorsal spine.

Shrinkage of chamber size may require several months. Pranayama constantly changes the shape of the heart. As a deep inhalation occurs, the right ventricle (RV) enlarges and pumps out more blood while the left ventricle (LV) shrinks and its output fall. During exhalation the changes are reversed. Such constant, systematic in LV and RV size are very useful for patients with a dilated or shrunken heart. In my experience, practice of pranayama removes the rhythm disturbances at once (prana also being nervous energy). Regularizing this energy corrects all nervous disorders in the body. This correction of rhythm can be easily observed by ECG recordings.

Pranayama is superior to all involuntary processes in our body. The heart rate is considered an involuntary function, but a practitioner of pranayama can reduce or increase it at will. Hence the so-called involuntary mechanisms can be made semi-voluntary. The overdrive of the sympathetic nervous system is most amenable to reduction by the practice of pranayama. The elasticity of the aorta and major blood vessels is well maintained. After a 30- minute session the blood pressure reduces and remains so for several hours, just as in the use of the drug. Constant conditioning over several years helps regulate pressure. There are special types of pranayama for high blood pressure. The steady rhythmic breathing helps control the autonomic system. As the breathing rate reduces, the stress on the body is reduced. The hibernative state removes the accumulated stress. All this happens over the period of time.

Viloma pranayama type 2 is very suitable for high pressure. This is practiced in a lying down position to prevent pressure fluctuations. A bandage is always used. In this method, inhalation is a continuous process and exhalation is interrupted in gaps of two seconds. About six breaks of exhalation are performed. The use of the bandage is essential and the patient must be in savasana with the spine supported by a pillow and the neck supported, thus relaxing the accessory muscles of respiration. In the carotid arteries, the walls of which have baroreceptors that adjust reflex changes in blood pressure, the practice of raising the dorsal spine and lowering the

head into the chest with prolonged breathing patterns massages these receptors and lowers blood pressure. If the dorsal spine is not supported, the rib cage never relaxes and breathing remains tense. As the mind and senses are withdrawn, pressure drops.

Deep breathing in Pranayama makes many changes in the body. It helps to use of all the 100% lung capacity, raising the tissue oxygen levels from 40% to 90%. Whole body feels well fed with the life giving oxygen vitality called bio-energy. Lowered diaphragm stretches itself to widely open the two holes through which the two great blood vessels (*aorta & inferior vena cava*) taking blood to & from the heart, to dilate & relax, bringing in less load & also simultaneously relieving the load for the heart to pump blood out (*preload & after load*) to be significantly reduced, thereby helping the heart to function a lot better. Deep breathing also slows breathing, per force.

Slow breathing changes many parameters in the heart, makes the mind tranquil & peaceful converting man from fighting mode to the loving mode. These were shown in many studies, two of which have been published in the prestigious medical journal, *The Lancet*. A London hospital based, properly controlled study, and showed the same results.

Studies done at our yoga institute showed that slow deep breathing increased tissue perfusion, reduced breathlessness & unstable angina, made patients get out of bed, reduced the aortic pressure, the pulmonary artery pressure, the end diastolic pressure in the left ventricle & also significantly increased the ejection fraction in patients who were otherwise dying of terminal heart failure.

Another study in California showed that in a group of patients in terminal heart failure waiting for heart transplant, death rate was prohibitively high as no donor was available. One of the cardiologists studied the effect of Yogic slow breathing on those patients with remarkable results. There are many cardiologists now applying these methods in routine patient care in the West. Many more are doing in India. Nearly half of them did not have any more indication for heart transplant after the exercises and were discharged home!

The whole bio-plasma this universe is made of has 20 miles depth for the sky to the bottom of the seas and 4000 miles in radius. From carbon, hydrogen, oxygen, nitrogen and some trace metals everything is created using energy from the sun, and at the end, all of us get back there as carbon, hydrogen, oxygen, nitrogen and trace metals! Why not live and let live?

Recent evidence points to the role of life-style modifications with a special stress on tranquility of mind as the best insurance against precocious coronary disease. Excellent collateral circulation (natural by-pass) is possible by the devoted practice of yoga-asana & pranayama, and it works as pneumatic tool. The key words are deep & slow breathing. And these techniques have been shown by independent, clinical trials to be effective in increasing lung capacity, reducing the blood plasma levels of cortisol, (the "stress hormone") and alleviating depression, to name a few of the tremendous benefits demonstrated by these studies. Pranayama releases layers of stress without effort, removing blocks to the increased energy and joy that are our birthright.

Breathe For Your Heart

Breathing may seem to be the most natural physical movement we do on a daily basis. Some may not be aware of how shallow or deep their breathing is, or even conscious of their breathing. Some may question how breathing could possibly affect the condition of the heart. It takes a certain level of consciousness to monitor how we breathe. Breathing for the betterment of health may sound simple and easy, but there is more to breathing than just inhalation of oxygen and exhalation of carbon dioxide. This technique, when incorporated in our daily lives, will help us maintain a functional and a healthy heart.

We all know that the **human heart** is a very powerful organ of our body. The heart is responsible for the circulation of the blood all over our anatomy. The heart is also believed to trigger the human emotions. Pain, sorrow, excitement, and happiness are felt in the heart. The human heart

is always associated with love. With all these reasons, we may conclude that the heart is the most incredible organ in the human body.

Studies show that the human heart, as well as our entire body, needs our utmost and primary care. Given the kind of foods we eat and the improper use of our muscles and bones, the body serves us very well in one way or another. Only when diseases or illnesses step in that we realize that we have not given enough attention to our bodies.

By breathing correctly and regularly, we can improve the quality of our lives and add more vitality and energy to our heart. By having a commitment to a healthy heart, we are promoting wellness and physical rejuvenation. Not to mention that one can do this almost anywhere and it does not cost a single penny. Think about being healthy with no money involved! Plus a hundred percent guarantee!

So, how well do we take care of this amazing organ? A consistent inhalation and exhalation process suffices the requirements for primary care that leads to maintaining our hearts as healthy as possible. Combined with a well balanced and [nutritious food intake](#), daily exercise, and a positive outlook, the heart can pump more years to our lives.

The practice of breathing consciously, that is, breathing in through the nose and making the stomach expand and breathing out through the nose and flattening the stomach, is the right way to breathe. This process turns our respiratory system into an inflatable balloon that constantly expands and contracts. This process must be done in a relaxed manner and with no pressure applied on the stomach. The best way to try this is to lie down. Notice that a person tends to breathe naturally and the stomach inflates and deflates normally. The body and the mind become more relaxed after just a few rounds of complete breathing. Breathing the proper way helps one release stress, calm down, and think more clearly.

In emergencies, we usually 'forget' about the proper breathing exercise. Thus, some of us experience cardiac arrest that leads to coma and even death. When our air passages become constricted due to panic, our body reacts in a different way, usually the reverse of the natural process.

The way to create balance is to be aware that we can control our breathing movements.

Reminding the body to breathe in and breathe out can do more help. Such technique is taught and encouraged by people who are experiencing difficulties in breathing and even pregnant women (who are encouraged to attend Lamaze classes so that when they give birth, they will be able to handle the birth delivery equipped with proper breathing.)

Researches have stated that meditation decreases the level of blood pressure to normal and is one of the methods used in the holistic approach to cure cardiac diseases and cancer patients. According to the studies, the basic lesson in meditation techniques is learning how to breathe properly.

Taking care of the heart and keeping it healthy starts from within. In the exercise program, Breathe Thin, the way to reduce weight is by breathing properly. More studies prove that the health of mind and body is mainly linked with how we maintain regular breathing exercises. It takes but a solid commitment to maintain our health. A constant reminder of breathing regularly will enhance the growth of a healthy heart. It is never too late to take care of our heart. So, breathe for your heart's sake!

Research in *Pranayama* & Power of Mantra:

Pranayama together with chanting of a Mantra creates protecting shield around us. It purifies mind, body, brain and sense complex also. It dissolves every ounce of bitterness and malice from the mind. The mantra received from an enlightened Guru or teacher or Master is charged with the power of Guru's own fully enlightened state and then it could annihilate the effects of even the most stubborn faults of a human being. Our body is made of vibrating energy and though it appears dense, every cell has its own frequency, like tuning our radio with the radio station any where.

Feel the rhythm of breath and become aware of your whole environment. Just participate in your breath and see how pure it is and how it takes you to new heights in Life, how it takes you to totally new world, virgin world, where you never been there. It offers a free trip to heaven. Like

Holiday-Inn, it is Holiday-out. While practicing pranayama, the rhythmic pulses participate in the cosmic dance of energy, but unfortunately we are not available to ourself to experience these subtle energies, and how they help us day-in and day-out. Feel its' rhythm, hear its' sound and go to the highest level of existence; the choice which is available only to human beings and not to animals and even Gods.

Recent evidence at our Yoga Institute points to the role of life style modifications with a special stress on tranquility of mind as the best insurance against precocious coronary disease. And for the tranquility of mind *pranayama* is best suited. Excellent collaterals (natural by-pass) are also possible by the practice of *pranayama* so far coronary artery disease is concerned.

Normally when we breathe, more so when we are excited or angry, we use less than 25% of our lung capacity, by breathing through the help of chest muscles (chest breathing or thoracic breathing) which is modulated through the sympathetic part of our most vital system, the autonomic nervous system. This sympathetic system is our friend in emergencies like flight, freight, and fight. The healthy breathing, brought on by meditation and yoga, on the other hand, is the deep and slow breathing using the diaphragm and abdominal muscles (belly button breathing). This is modulated through the parasympathetic system. Meditation, therefore, in essence converts us from the flight, fight and freight mode to tranquil, peaceful and loving deep breathing mode.

The key words are deep, slow and rhythmic breathing. Deep breathing makes the following changes in the body.

Use of all the 100% lung capacity.

Raising the tissue oxygen levels from 40% to 90%.

Whole body feels well fed with the life giving oxygen-vitality called bio-energy or *Prana-Shakti*
Lowered diaphragm stretches itself to widely open the two holes through which the two great blood vessels (aorta and inferior vena cava) taking blood to and from the heart, to dilate and relax, bringing in less load also simultaneously relieving the load for the heart to pump blood out (preload and after load) to be significantly reduced, thereby helping the heart to function a lot better.

Deep breathing also slows breathing, per force. Slow breathing changes many parameters in the heart.

Makes the mind tranquil and peaceful converting the practitioner from fighting mode to loving mode.

Studies done at our Yoga Institute showed that slow deep breathing increases tissue perfusion and reduces breathlessness, helps patients to get out of bed, reduces aortic pressure as well the pulmonary artery pressure and the end diastolic pressure in the left ventricle and also significantly increases the ejection fraction in patients who were otherwise dying of terminal heart failure.

Another study showed that in a group of patients in terminal heart failure waiting for heart transplant, death rate was prohibitively high as no donor was available. Nearly half of them did not have any more indication for heart transplant after the exercises and pranayama and were discharged home.

We have clinical data with us that at Poona Hospital and Research Center, the patients who were on medication for hypertension, have stopped their medication after practicing *pranayama*.

There are many cardiologists now applying these methods in routine patient care in the West. Many more doing in India.

Following stanza that speaks of the lepto-quarks of the subatomic world (modern physics). They could move in and out of all us, showing how the intercessory prayer mentioned earlier works. The new explanation in physics is teleportation (tele-transportation), i.e.: transfer of a known or knowable thought from one place to another without any conventional communication methods and without loss of time.

“Bahiranthasycha bhootaanaam, charam-acharamevacha, Sookshamaavahet avijneyam, doorastham cha anikethacha, tat.”

(It is both inside and outside every living being and thing, constantly moving but looks to be stationary and solid, so subtle that no science can unravel its mystery. It is very far and unknown to those that do not know but is very close to those who try to know—that. The word “that” was interpreted as God and the whole concept lost its importance with rationalists).

Now that quantum physics has opened up the mystery of the lapto-quark—“that” gains scientific currency. This is the science of ancient Indian wisdom. The epistemological root of the words physics, physiology and physician are one and the same: bheu=to grow.

The whole bio-plasma this universe is made up of has 20 miles depth from the sky to the bottom of the seas and 4000 miles in radius. From carbon, hydrogen, oxygen, nitrogen and some trace metals, everything is created, using energy from the sun and, at the end, all of us get back there as carbon, hydrogen, oxygen and trace metals! Why not live and let live?

The discovery of the True and Eternal in the nature of human being, who is basically the spiritual being, is not an accidental gift-parcel from any God or Gods to a chosen Rishi of that blessed era. It is the birthright of man to know his True Nature and in any century, where there is common happiness, social security and individual prosperity; generations can be guided to live, seeking the nobler aims of Life. They too shall come to discover for themselves the inner world—as readily and as easily as the scientific world of today opens up Nature’s Pandora’s Box, to let loose more and more painful and treacherous outrageous and soulless weapons to annihilate itself. This is a beauty of pranayama. *Pranayama* and meditation together removes see-saw of sorrow and happiness and gives freedom from mental paralysis. Meditation is appointment with oneself.

The Breath of Life & Magic in breathing:

During the past 30 years I am consulted by more than a thousand sufferers from respiratory and heart complaints, in many parts of the world I have a theory that famous work songs, ranging from those of the Volga boatmen to the cadent melodies of the Negro, offered more than just a rhythmic beat to help in hauling that barge, or toting that bale. It’s my belief that the songs encourage men to *breathe out* while they worked, to release air for the lungs in a moderate and orderly manner. You can’t sing without exhaling gradually, and when you exhale you expel impurities and empty the lungs for a fresh and involuntary intake of air.

Real breath control means learning to control the way we exhale, not the way we inhale. Energy is best renewed by the orderly release of breath, not by strenuously pumping the lungs full of air. Thus in sustained physical exertion—carrying a heavy bag, walking rapidly, wielding a garden shovel—your power is enhanced when you concentrate on the slow expulsion of air from the lungs. Speakers, opera singers, swimmers and runners know this. The rest of us can find it out by simple tests. When you step into a cold shower, for example, the tendency is to gasp and tense the muscles. This only increases the torture. If, instead, you try breathing out in a steady purring breath, you will be amazed at how slightly the temperature of the water affects you. Exhaling helps the body accommodate, itself to change.

The next time you have something heavy to lift—whether it be a large pot of soup, a typewriter or a suitcase—try taking a full deep breath and holding the breath while you lift. Much of the weight oddly disappears. The effect is like picking up a box expecting it to be full, only to find it empty. Those who have played the game of levitation have found that a person or a table can be hoisted by the mere finger action of a group if all present breathe deeply and simultaneously as they lift. This illustrates the mysterious aid that comes from conscious and calculated use of breathing.

Careful breath control, with emphasis on exhaling, helps us to relax under any kind of tension or stress. Most of us are only half-breathers: we breathe in because we can't help it but we fail to breathe out completely. The result is that we sigh a lot—a sign of our need to exhale. The sigh is nature's way of deflating the lungs when we have neglected the breathing apparatus long enough. The sensible thing is to learn to sigh in a systematic and organized fashion. We know that any interference with breathing causes acute distress. It follows, as common sense and science show, that any improvement in our breathing can bring exhilaration to mind and body.

Normally we do breathe without apparent effort--about 18 times a minute, 1080 times an hour, 25,920 times a day. The more air we exhale, the more we can breathe in. The amount we take in, which can be measured by a watch-size instrument called a spirometer, is known as our vital capacity.

A thoughtful management and husbanding of breath can be of practical daily aid, can tone us up and contribute visibly to our health and vitality. To increase our vital capacity is the object of all breath discipline. Thus consciousness of breathing out becomes the most important factor of all.

But the main thing is to cultivate the habit. Breathe out before you begin any task. Once you grasp the idea of correct breathing you will find rewards in a dozen different ways. Even in a day of escalators and elevators there are still stairs to climb--usually by puffing and panting. But try this: As you climb the first two steps, keeping the shoulder blades in position, breathe in. On the next two, breathe out. With a rhythm of two in and two out, two in and two out, you can glide up flights of stairs and arrive at the top without gasping for breath.

What happens is this: By quickening the breath rhythmically as we climb we expel a greater amount of carbon dioxide and take in a greater supply of oxygen.

The principle can be illustrated and confirmed further if we shorten our rhythm when we walk up a hill or long slope. In this case, breathe in while you take three paces and breathe out as you take the next three--three in, three out, keeping the shoulder blades in position. A hill that otherwise would leave you clutching for breath can be easily accomplished by this simple change in breathing tempo.

If some strenuous exertion without the right alteration in your breathing leaves you "out of breath", there is a simple way to get your breath back. Breathe faster. Pant like a dog for a few seconds. Then take a couple of full, easy breaths. Again pant and follow with a few full breaths. This will quiet your breathing much more rapidly than the forced effort to breathe naturally.

When a runner gets what we call his "second wind" it means that, at a certain point, he has unconsciously assessed his increased needs and countered the faster accumulation of carbon dioxide by a deeper and steadier intake of oxygen.

During World War II, airmen were asked series of exercises for early-morning use by the Royal Air Force. Hangars and mess hall were cold; fuel was short. To warm up the men, were prescribed the following routine: they were to inhale and exhale through the nostrils rapidly at first, then slowly; quick, short breathing for thirty seconds, then slow and full breathing for thirty seconds. Repeated several times, the exercise makes the body glow, with warmth.

What the unfortunate majority of us need these days is a breathing program that can help us at our desks or stoves or machines. Tenseness and even depression may be overcome by the following exercise: Place the shoulder blades as nearly together as you can without strain, then breathe out gently and fully. Pause, then inhale with a deep, slow, gentle breath until the lungs are comfortably filled. Breathe out slowly through the nose with a long sigh and without altering the position of the shoulder blades. Do this a dozen times and your depression should disappear. Why? Because you have stimulated and inspired your brain and eased the nerve tension with a fuller supply of life-giving oxygen.

In what is known as stage fright a person often seems to suffer from a mild form of suffocation. Actors and experienced public speakers know the benefits of breath control. Any of us can profit from the actor's practice of stopping in the wings and fortifying himself with several full breaths before entering a scene.

One of the best exercises to establish the habit of proper exhaling involves reading aloud. From a newspaper, read aloud on one breath as many words as you can without effort. Now count the number of words you covered. Tomorrow try again. See how much you can increase the length of your exhalation.

Practice with some favorite passage of literature or Scripture which you have memorized, such as the First Psalm. You probably won't get beyond "the seat of the scornful" on the first attempt, but after a dozen daily efforts you may get through the whole psalm on one breath.

Another effective way to practice controlled out-breathing is counting. Sit down comfortably in an upright position; breathe in gently and steadily to the count of 4. Pause a second and then breathe out to the count of 12. Next time breathe in to the count of 5 and out to the count of 15. Continue this practice until you see notable progress. By the time you are able to breathe out to the count of 21 you will find that humming helps immensely to limit the amount of air you release. Humming as you breathe out gives you your own form of work song.

Many are the by-products of breathing out consistently, but the greatest of these is awareness. It introduces a sharp change in our regular habits and, in a sense, makes us repossess our bodies. Conscious breathing brings with it a consciousness of posture. You begin to realize that you cannot sit all hunched up and breathe well either in or out.

The average person goes around with his shoulder blades wide apart. By drawing the shoulder blades close together he accomplishes the incidental result of squaring his shoulders. But he also accomplishes far more: he frees the whole abdominal region of unnecessary weight and pressure and sets up arrangements for proper movement of the diaphragm. He is relieved immediately of some of the burden of breathing, for ordinarily we use part of our breath intake to lift the weight of our ribs and chest. Pulling the shoulder blades close together gives us a feeling of lightness in the abdominal region and prompts us to breathe deeply.

By practice we can make our breathing involuntarily good just as it is likely now to be involuntarily bad. The body responds to wise treatment, and a consistent effort to enlarge vital capacity to wise treatment, and a consistent effort to enlarge vital capacity by learning to breathe out will pay off. Good habits will take over and in turn become second nature.

In the strained circumstances of modern life automatic breathing is not sufficient for our needs. Sedentary or monotonous work habits call for new and consciously controlled rhythms. It will pay to test daily some of the suggestions offered here. Experience will demonstrate the constructive use we can make of a power we now overlook.

To live in the present moment with the totality of our being, with all intensity, alertness and receptivity at our command; is the net result of *pranayama*. The act of living becomes its own fulfillment; as we cannot use human relationships as an investment for the future. *Pranayama* achieve the most important change in our living and that is to change the way we breathe daily.

Thus by emptying all the junk from the mind with the help *pranayama* and *kumbhka*; one could start experiencing Divine Presence in oneself. Overcome your emotions and excess emotional attachments to become stress-free via pranayama. When the breath wanders the mind also is unsteady. But when the breath is calmed the mind, too, will be still, and the Yogi achieves long life. Therefore, one must learn to control emotions.

Every breath of life is a precious jewel which can buy eternal treasures. Wasting these breaths or using them for detrimental purposes is such a great loss.

Inhale and God approaches you. Hold the inhalation (antar kumbhaka, inner breathing suspension) and God remains with you. Exhale and you approach God. Hold the exhalation (bhaya kumbhaka, outer breathing suspension), and surrender to God. Breath is the bridge which connects life to consciousness, which unites your body to your thoughts.

Through the ages, men have dreamed of finding a Fountain of Youth; some potion or treatment that would postpone aging and prolong our useful, vigorous years, *Pranayama* is there for you for this.