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Yoga Therapy - Table of Contents

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1. Pondering Freely

Yogic practices and beliefs were not developed with the intention of treating illness, although they were clearly intended to maximize healthfulness. Indeed, there is not a single mention of therapeutic or curative intentions or practices in the ancient *Patanjali Yoga Darshan* text. Yoga experts are therefore often reticent about adding a remedial perspective to the science of Yoga fearing that the basic aims of Yoga will thus be obscured. That said, for the sake of those suffering from physical and psychological illnesses, the fact that many illnesses can be cured by Yoga ought not and ethically cannot be disregarded. And keeping in mind the basic aims of Yoga, portraying Yoga as the therapeutic instrument it actually is, and learning that Yoga and yogic practices can promote healthful outcomes that are long lasting and without negative side-impacts, can also serve as an effective way to attract newcomers to yogic practices.

Contemporary lifestyle choices and behaviors, as we know, have evoked a steadily increasing number and wide variety of both physical and mental illnesses in human populations. And most individuals currently suffering with one or another illness have become accustomed to obtaining treatment for their maladies without considering the potential risks or long term consequences of the treatment selected, or having any awareness of where or why the illness might have originated. And as we know, in addition to their curative qualities, some modern medical measures have a wide range of potential ill effects associated with their use and are at best short-term measures that do not get to the root of the disease in body or mind. In fact, some "cures" do not provide any relief at all. Both such circumstances suggest they are an ideal time for individual disease sufferers to learn about the healing potential of Yoga. Especially in cases where there appears to be no effective conventional medical measures available, incorporating Yoga practices as a part of one's lifestyle can make the difference between a healthy lifestyle and a debilitating one.

The prevalence of psychosomatic illnesses is also increasing day by day and here again Yoga has proven to be an effective means for promoting healing and if Yogic Therapy is presented in an appropriate manner and with the right perspective, chances are that a significant number of people will turn to Yogic practices to provide relief.

The Yoga educationalist can play a vital role for this purpose and need not fear that expanding the focus of Yoga to that of a therapeutic medium will divert from the foundational aims of Yoga and Yogic practices, indeed they are each and all consistent. If an individual is able to achieve a healthy and happy life through Yoga it is his/her right to get that chance. And for most whose Yoga practice begins with their being drawn to the therapeutic dimension of Yoga, those individuals will inevitably also gain the more commonly recognized benefits of Yoga practice inasmuch as the positive benefits of Yoga are inevitable and unavoidable.

To cite just one example, imagine a person who is getting Yoga "treatments" for diabetes, including modifications in their diet and lifestyle, and how soon other afflictions will also begin to improve, a consequence of the normalizing effects of practicing Yoga, including shifts in temperament, all of which will likely induce the person to continue practicing Yoga even after their blood sugar levels have been controlled. Positive outcomes bind individuals to incorporate Yoga into their lives and there are many examples of people who went on to become long time Yoga practitioners and teachers after they were treated and cured of an ailment through Yoga Therapy.

Yoga therapists are well advised to keep in mind that each patient must be guided

in such a way as to increase the likelihood that they will continue to practice Yoga even after successful treatment, thus perpetuating the ultimate goal of Yoga - 'Yoga Chitta Vritti Nirodhah'

Please note, the beneficial aspects of yogic practices relative to the treatment of disease are not based on "scientific research" at this time, but rather empirical observations and subjective reports of outcomes over the decades. To the extent scientific and medical researchers wish to investigate and study the claims that there are numerous benefits of yogic practices in the remediation of disease such research is eagerly anticipated and welcomed.

Finally, this work is designed mostly as an *introduction* to Yoga Therapy. There is no substitute for experience and practice. Chapters are organized in such a manner that they may be independently consulted vis-à-vis individual diseases and ailments. As such there is a certain overlap in prescribed and proscribed practices associated with each identified disease.

2. Yoga – The Therapeutic Way

The therapeutic employment of Yoga entails the application of Yogic practices for the purpose of curing illnesses, herein defined as disorders or dis-eases arising in any part or system of the human body. It is our contention in this work, and our experience in the field, that specific Yogic practices are instrumental in treating inefficiencies in the functioning of body parts and systems and overcoming the illnesses manifested by them. How to apply the practices and what they may achieve are this book's essence and core.

There are, of course, many different concepts and methods which guide the treatment of diseases including Allopathy, Homeopathy, Ayurveda, Naturopathy, Magnetic Therapies, and so on. The methods and practices by which Yogic processes function for the treatment of diseases are called *Yoga Therapy or* Yogopathy. A fundamental distinction between Yogopathy and all other methods of treatment is that that all the other "pathys" were developed precisely for their remedial purposes, whereas such aspirations was never until quite recently considered as an aim of the science of Yoga.

The ultimate goal of Yoga is the union of the mind, body, and spirit of human beings with the Almighty, the Infinite, or the Divine. Most yogic procedures were designed for these spiritual and energy harnessing and releasing purposes. Over the centuries, however, while observing the consequences of the practice of Yoga, it was frequently noted that in addition to Yoga leading to spiritual "Liberation," many people's ailments appeared to be cured consistent with the practice of Yoga.

There are, of course, many obstacles in the journey towards Liberation and there must, therefore, be ways inherent in Yogic practices that will help overcome such obstacles on the path. Disease is one of the first such obstacles as noted by Maharishi Patanjali in his Yoga Sutra No. 30 five hundred years before the birth of Christ. However, Yogic practices were not used explicitly for overcoming ailments until recently. Even now overcoming ailments is not the ultimate goal or primary purpose of Yoga. Nor is teaching and learning yoga intended as therapy per se, but Yoga is a guide to the normalization and harmonization that allows our minds, bodies, and spirits to be true vehicles to our soul's liberation.

A number of references in the modern Yogic literature can be found where the remedial effects of Yogic processes are cited and 'Yogic practices' for curing a particular disease has been the subject of a number of books in modern times. But treating a disease was not been given any significance in the ancient Yogic literature although in the fifth 'Advice' of Hatha Pradipika some breathing practices for treating the troubles caused due to wrong practice of breathing are mentioned. And in some Hatha Yoga texts, the effects of Postures and Cleansing Processes are explained vaguely as 'Cures to all diseases,' but such exaggerated effects were never proposed to be a therapy, and the remedial effects of Yogic practices were only pointed at.

Credit for bringing forth through scientific experiments the fact that Yogic practices are significant in curing many diseases goes to the founder of Kaivalyadhama, Lonavala – our beloved Swami Kuvalayananda - who carried out a number of experiments and studied Yoga from the remedial point of view. He noted his conclusions in the book he authored with Dr. S.L. Vinekar, <u>Yogic Therapy: Its Basic Principles and Methods</u>, published in 1963, which is in ways the Bhagavad Geeta (or Bible, as we say) for students studying Yoga from the therapeutic perspective and is highly recommended for study. The core aim of that work was to explain the principles on which the various

procedures of yoga therapy are based and to present the scientific rationale of Yogic therapy. The core aim of the current work is not to explain the principles underlying Yogic Therapy, but rather to discuss the practicalities (and limitations) of the application of Yogic Therapy for disease treatment in the modern world.

What is particularly striking to many is how Yoga can be used for remedial purposes, even though there are no diagnostic procedures referenced or developed in the science of Yoga. And as no illnesses these days can be treated without proper diagnosis, such diagnoses have to be made with the help of other therapies/sciences before a disease or illness can be accurately treated through Yoga. For example, blood sugar has to be tested before embarking on Yogic treatment for diabetes and X-rays must be taken before treating spinal spondylitis.

For some illnesses, like spondylitis or certain psychosomatic illnesses, Yoga is often the only and the best treatment alternative available. Treatments for such illnesses with other therapies are short-term, or work superficially by curing only symptoms. The medication in these other treatments is not free of drawbacks and bring with them negative side effects, which may themselves require treatment. Yoga on the other hand not only treats the illness but also gives an overall affirmative experience towards normal health.

In some diseases like Diabetes, Hypertension, and Asthma, Yoga acts in parallel to medical treatment. Although medicines play a prime initial role in treating these diseases, they are often not sufficient and patients can experience a far faster recovery if Yogic practices are started alongside the medicines so that as the disease comes under control and the need for medicine is further reduced by the practice of Yoga. In certain cases, Yoga alone (without any medical treatment) will not be enough in the initial stages, but as the dose of medicine is reduced or ended Yoga plays a vital role in maintaining the reduced need for medicinal treatment. In other illnesses, Yoga acts as a supportive agent to other medical treatments and certain Yogic processes boost the effect of medication. Diseases generated from germs are a good example in this case. The practice of certain Yogic processes will certainly increase resistance and overall health as well as supplement medical treatment and hasten the day that the medicine can be gradually reduced or eliminated.

Yoga is of virtually no use in cases of bone fractures, internal or external physical injuries (more serious than strains and sprains), or illnesses where surgery appears to be the only viable option. In these cases, treatment by other medical therapies is necessary, although Yoga practices clearly augment the overall healing process. Treating the patient while keeping in mind the limitations of Yoga is always the wisest approach. Compelling oneself to submit to Yoga therapy alone may even on occasion prove harmful.

Yoga can be helpful in the initial stages of some cases, but not in the further stages. For instance, a slipped disc is curable by Yoga in the initial stage, but if the disc has moved significantly, traction or surgery is the only way of curing it fully, although again Yoga can help as a complementary therapy.

The unique feature of Yoga in respect to curing illnesses is Yoga's preventative impact, which no other "pathy" can claim. As everyone has heard said, "An ounce of prevention is worth more than a pound of cure" and Yoga is the best way to achieve this preventative protection. So rather than just approaching the practice of Yoga for remedial therapeutic purposes, we advise almost everyone to practice Yoga to keep themselves in maximum health and balance.

3. Natural and Abnormal States

The term '*Prakriti*' when used in relation to the human form indicates a physical and emotional body in a natural, healthy state. When used in other contexts Prakriti refers to nature or to a natural wholesome state of the environment. The opposite of *Prakriti* is *Vikriti*, which signifies abnormality or imbalance. In relation to the body or mind Vikriti means disorder or dis-ease. The word disease (dis + ease) refers to not having a comfortable and sound physical or mental condition, that is, the presence of illness. Analogous to the concepts of Prakriti and Vikriti, Yoga makes use of the words '*Samadhi*' (deep and devout meditation) and '*Vyadhi*' (disease or disorder). And as we noted earlier, Patanjali states that *Vyadhi* is the first major obstacle on the path to *Samadhi* as all illness distracts the mind from concentration.

Before beginning a more detailed study of the therapeutic application of Yoga, we must have a clear understanding of exactly what constitutes the "natural state" of the human body and mind when in a sound and healthy condition.

In Indian philosophy it is believed that human existence is comprised of five levels or sheaths known as the *Koshas* and referred to as *Panchakoshas* (pancha = five in number). The first Kosha is *Annamaya Kosha* (the Food Sheath), the second *Pranamaya Kosha* (the Energy Sheath), third is *Manomaya Kosha* (the Mind Sheath), fourth is *Vidnyanmaya Kosha* (the Extra Sensory Perception Sheath), and fifth the *Anandmaya Kosha* (the Divine Bliss Sheath). The body is considered to be sound and fully healthy only when all five of these sheaths are functioning properly. When there is dysfunction in any of the sheaths the body is considered or diseased. In this light, knowledge of the fundamental functions of the Koshas is mandatory for the study and understanding of Yogic Therapy.

The Annamaya Kosha (energy sheath) of our body is constituted of *the five elements* (*Pancha Mahabhoota*): earth, water, fire, wind, and sky. The body is maintained with food (*Anna* - hence *Annamaya Kosha*,) and is made up of the cells that comprise all bones, muscles, bodily fluids, and organs, the material component of the existence of human life. A disorder in any of the sheaths is inevitably projected on the material level of the body, and the roots of any disorder in the *Annamaya Kosha* may not lie only in the body but also in any of the other sheaths as all sheaths are interrelated in their functioning. Thus to treat the root cause of any disease the functioning of all sheaths needs to be understood.

All body parts require energy to function. In Indian philosophy *Prana* is defined as the inspirational energy that drives body parts to function and this inspirational energy is found in the *Pranamaya Kosha* or energy sheath. The Pranamaya Kosha is not substance based like the *Annamaya Kosha*. Prana is unseen, its existence sensed by the outcome of its functioning. The body cannot live without Prana. By analogy, even if the wiring of a bungalow is complete the electrical instruments do not work unless electricity is passed through the wires. Similarly, the body cannot work unless the inspirational power, the pranic energy, is supplied to it.

The functions of pranic energy (the *Pranamaya Kosha*) are to instigate the movement of the muscles, to prompt the glands to create and secrete hormones, to activate the brain, to control the body organs, and to initiate the senses to perceive. To carry out the functions of the systems in the body pranic energy has its own system of functioning. A disorder that occurs in the functioning of the pranic system will inevitably become evident in the *Annamaya Kosha*.

Another system operating in the existence of human life is the mind, known in India as the *Manomaya Kosha* or mind sheath. This system is also not made of matter that is visible. It functions on a subtle level but its results are evident. The operation of the mind and the mind kosha are reflected in all sheaths and systems of the body including the *Pranamaya Kosha* and the *Annamaya Kosha*. Indeed, mind controls the functioning of the other systems and this control is conclusive. As we say in India, *Mana Evam Manushyanaam Kaaranam Bandhamokshayo* - The force behind liberty or entwinement in the human life is the human mind.

The mind is particularly crucial in perceiving and deriving knowledge from the senses and perception without the mind is simply impossible. Interpreting meaning and storing perceptions, comparing new perceptions with those already stored, concentration, memory, our reactions to situations in daily life, and creativity are some of the key functions of the mind.

The mind is related to the nervous system. The mind holds the reins of the body through the medium of the nervous system. The body will remain calm if the mind is calm and as a result will function normally and properly. Contrarily, if the mind is not calm and stable the body will follow suit. When we feel angry it is because of the mind and this induces an unhealthy, imbalanced, abnormal state of the body.

Disorder in the mind creates a disorder in the body. The mind is the root cause of disorder and hence needs treatment. Treating the body will not suffice. Taking medication to normalize the functions of the body (the *Annamaya Kosha*) without getting to the root cause as to why the body is not properly functioning will not treat the disorder properly. Medication will only suppress the symptoms of the disorder without determining and treating the root cause. It is at these times that mind influencing Yogic processes will be most useful.

The Vidnyanmaya Kosha or Extra Sensory Perception sheath is still more powerful than the Manomaya Kosha. 'Vidnyan' here means 'Vishesh Dnyan' (ESP). This is a very extensive aspect of human life. The common man however is not aware of this aspect as most of the times it is in the dormant mode. It is thus not directly related to the first three sheaths discussed above. When this connection comes into existence the remarkable power of this sheath comes on the perceptional level of the body and the mind. Some processes of the Core Component of Yoga help in making this relationship active. If in some way any mistakes occur with the Vidnyanmaya Kosha in relation to any of the other sheaths, there may be a dysfunction in the system of the other sheaths and the body may experience a disorder. This level of the study is complicated and inevitably needs to be done under perfect guidance. That being said, we will not delve further into this subject for this particular course.

The uppermost sheath is the *Anandmaya Kosha* or the Divine Bliss Sheath. At this stage the human being arrives at a state beyond the earthly joys and sorrows. This stage takes the human being beyond all emotions. It is a state of Blissful Joy, which comes from the entire stability of the human body and mind that can – we believe – only be fully attained by the practice of Yoga. The basic criterion for attaining such bliss is the normal and healthy functioning of all the sheaths.

As can be seen from this brief overview, we will have to focus only on the first three sheaths – the *Annamaya Kosha*, *Pranamaya Kosha* and the *Manomaya Kosha* - for guidance regarding the kinds of disorders we are going to study. The dysfunction or the disorder created in any of these sheaths creates the disease and the outcome of the disease is manifested in the *Annamaya Kosha*. This is synonymous with well played music. The

notes and chords played by the musical instruments must be in tune with that of the singer as the rhythm binds them in harmony. If any of the instruments is not in harmony with the other instruments and the singer the music will be inharmonious and the musical notes will not appear melodious. The harmony between the chords of the instruments, the rhythm, and the words and notes sung by the singer brings about the union that makes the music most harmonious, or by analogy healthy and successful. Life is similar to a musical program. The soul is its singer. Mind, brain, ego and the individual consciousness (*chitta*) are the instrumentalists playing with the organs of the body acting as their instruments. The orchestra of life becomes melodious only if all these are in synchronization, otherwise it starts complaining. Synchronization is the healthy state. Disharmony is the dis-eased or disordered state.

When chords and wrong notes are played it creates disorder and brings about disharmony in the melody of the orchestra. The agitations of these circumstances rouse the mind through the medium of the *Vrittis* (modification of the mind) and reactions to these agitations then take place. These reactions are termed '*Kleshas*' or '*miseries*' or '*sufferings*' in Yoga. The reactions are born in the mind and they spoil the synchronization of all systems. That means they create obstacles in the functioning of the system.

There are nine such *obstacles* described in Yoga and they are stated in the following Sutra: *Vyadhistyan Sanshaya Pramaadalasyaavirati* Bhraantidarshanaalabdhabhoomikatvaa/ Naysthitatatyaani Chittayikshanah Ta Antarayahll (Yoga Sutra 1.30)

Navsthitatatvaani Chittavikshepah Te Antarayah|| (Yoga Sutra 1-30)

The first *obstacle* is disease or disorder. The creation of *suffering* must stop so that *obstacles* may not be created. Disgusting circumstances should not arise for this reason; however, some such circumstances are not within our control. Accordingly there must be control of modification of the mind so that the birth of *pains* does not take place and hence no *obstacles* are created. *Yoga Chitta Vritti Nirodhah* (Yoga Sutra 1-2). (Yoga is the inhibition of the modification of the mind.) (Ref. Taimni).

The benefit of Yoga is that it not only repairs the damages in the body or mind but regains its healthy state. This is why the Yogic processes are being used as a therapy to attain freedom from disease.

4. Ceasing Diseases Through Yoga

The ultimate goal of Yoga may be stated as the union of the Individual Soul with the Supreme Soul. The great sage Patanjali identified the eight folds or limbs of Yoga for attaining this purpose as *Yamas* (self restraints), *Niyamas* (fixed observances), *Asanas* (posture), *Pranayama* (regulation of breath), *Pratyahara* (abstraction), *Dharana* (concentration), *Dhyana* (contemplation) & *Samadhi* (deep and devout meditation). Although the ultimate goal is to attain deep and devout meditation, the first step is always self-restraint in behavior towards oneself and society

As Yoga is a life science that perfectly covers all aspects of human life, it directly associates the human body with the human mind and marks out a designed pathway of progress toward shaping a healthy body and pure mind. The more advanced stages of Yoga cannot be attained without this purification of body and mind. And a healthy body and a pure mind are indispensable requirements for Yoga. Just as all the chords of all the musical instrument need to be adjusted perfectly for a melodious tune to play, so too the body and the mind must be coordinated/attuned with each other for the union of the Individual Soul with the Supreme Soul. The means for attaining union of the body with the mind is another stated goal of Yoga.

Practicing the first four limbs enumerated above - self-restraint, fixed observance, posture, and regulation of breath, which constitute *Kriya Yoga*, can bring about this union between the body and the mind. Practice of *Kriya Yoga* uproots the causes that create imbalance in the body and the mind and maintains the balanced state of both the body and the mind. Kriya Yoga is the process of purifying and maintaining balance of the body and mind. The practice of *Kriya Yoga* intensifies the experience of physical health and mental stability, retains the balance of the natural state of the body and mind, and generates preventive measures so that imbalance will not be produced in future and the unification between body and mind is perfectly maintained.

A natural balance exists between the actions and reactions of the body and mind that reacts to the internal or external arousals or sensations. The internal balance is perturbed at times of reactions. This is called *Vikshepa* (disconcert) in Yoga. The amount and intensity of disconcert created depends on the comparative forces of the arousing event and the reactive and comprehensive force of the body and mind. Thus, Yoga trains the body and mind to maintain the balance even at times of disconcert and in cases of imbalance and helps in quickly regaining of the balance and fast recovery of the natural state.

Diseases are created when there is a disturbance in the balance of the internal system. When the whole system succeeds in regaining balance and uprooting the cause of imbalance the disease ceases while body and mind get rid of disease and resume healthy, natural functioning/condition. The process of bringing body and mind to its natural state and maintaining its balance is sped up by the practice of Yoga.

4.1. Yoga Therapy – an Overview

Determining the elements creating the disease is the first step of the Yogic Therapy. These invading elements may be external or internal. Many diseases may be caused by unnecessary and excess stress. Searching for the cause of this stress and how or why it arises is essential. Determining the root cause of the disease and taking measures to uproot them is the second step of Yogic Therapy.

Suppose the root cause of a disease is over stress, what measures can be taken to release the stress? One is to keep a distance from the stressors. Suppose the patient's stress is due to the participation in complex competitive games like chess or bridge, s/he may stop playing them to avoid the stress, but most of the time it is not possible to get rid of the causes of stress because they are unavoidable in life. At such times, the mind should be trained to regulate the stress levels and prevent them from crossing their limits. This is the second way of maintaining stress levels. And it is possible by practicing certain Yogic processes. After lowering the level of stress, bringing the body to its natural, healthy state is the third step in Yogic Therapy.

To clarify, let us use the following example. A thorn pricks our foot while walking. To prevent any thorn from pricking, the best way is to stop walking completely. But when walking is necessary, there are still two ways that may help us avoid being pricked by thorns. One is to remove the thorns from our path and then start walking and the second is by wearing sturdy boots or shoes to protect the feet. The second option is advocated by Yoga. The Yogic Therapy aims at improving the resistance power of the body.

It is believed that germs or viruses are the cause of many diseases. To treat these diseases the external cause, i.e. the virus, is treated and medicines are given to destroy the virus. No doubt the virus gets destroyed and the disease is cured. But the condition of the body that has helped the development of virus in the body remains the same or even worsens and the body becomes prone to catch the disease again

The conflict between human beings and the viruses producing diseases has not come to an end. Human beings invent new medicines but the viruses do not respond to the medicines after some time and more effective medicines have to be invented to prove supremacy over the viruses. On the contrary, the medication reduces the resistance power of the body to fight the virus naturally whereas the strength of the viruses is increasing day by day. The medicinal force is inadequate to fight the increasing industrialism, pollution, changing rapid lifestyle, power of viruses and on the other hand the natural resistance power is lowering because of non-utilization of pranic energy.

Yogic Therapy is inclined towards increasing the inherent resistance power of the human body and mind. The various Yogic processes help in developing a state of balance of the body and mind in any circumstances. This implies that Yoga focuses on the internal state of body and mind rather than changing the outward circumstances. The Yogic processes that create their impressions on the body have to be practiced in depth while treating the disease. In the initial stage, only those processes that will wash out the effects of the outer circumstances should be practiced. After that, the processes that will improve the internal functioning of the body should be focused on. This does not complete the therapeutic treatment. Creating a physical base that will withstand recurrence of the disease is necessary. The processes that will help this need to be practiced so that even if external circumstances become unfavorable, the improved resistance power will withstand them and the recurrence of the disease will not take

place. This is the reason why Yogic Therapy proves more effective than any other therapy. Yogic Therapy has been formulated keeping in mind all these points discussed above.

4.2. Yoga Therapy and the Koshas

Let us briefly review the koshas.

1. Annamaya Kosha: (The Food Sheath) -

A - Internal Cleansing of the body: Many processes are carried out for the vital functions of the body. Energy produced from these functions is utilized in the functioning of the various other systems of the body. Excreta produced during these processes have to be thrown out of the body by the Excretory System. Various diseases can develop if excreta remain in the body. Sometimes the substances essential for the body are manufactured in a much greater quantity than required. These are stored in the body and interrupt the functioning of the organs and a disease is developed. The Cleansing processes help throw out these additional, unwanted substances from the body. The organs start functioning effectively after throwing unwanted matter from the body with the practice of Cleansing processes.

B - Improving the condition of the various organs: Many causes contribute to the improper functioning of the body. Postures compress organs of the body and create tension or pressure on the endocrine glands thus creating hormones that control and improve the functioning of the organs. Improper functioning of organs is disease and effective functioning is the elimination of the disease.

2. Pranamaya Kosha: (The Inspirational Energy Sheath) -

A. Improving the functions of various organs: A sufficient amount of pranic energy is essential for improving various functions of the organs. An imbalance in the pranic energy gives rise to many diseases. The practice of Breath Regulation is helpful in regaining the balance.

B. Creating Balance in the organs of the body: The organs must operate systematically and in co-ordination to carry out any function of the body as they are intended to work supplementary to each other. A disease may occur if the balance in their co-ordination breaks up. Focus of the mind towards the functioning of these organs is necessary to maintain this balance. With the help of abstraction one can control the mind running behind the materialistic world through the medium of senses and make it introspect to create a balance in the organs of the body.

3. Manomaya Kosha: (The Mind Sheath)

A. Creating stability of the mind: Distress destroys mental stability and as a result destroys the health of the organs of the body. The mind has to be molded at these times and mental stability is essential for the purpose. A study of concentration helps to attain this stability of the mind.

B. Bringing control over the functioning of the body: The mind, which has become stable with concentration, can be molded as desired with the practice of contemplation. Thus a control over the functioning of the body organs can be gained. The damage in the functioning of these organs can thus be repaired through this control. The practice of contemplation thus improves the system where mind is the causal factor of the disease. Hence contemplation has a special significance in Yogic Therapy. 4. *The Emotional Perspective*: Some diseases are a result of external distressing forces not within our control. So instead of trying to gain control over external circumstances, we control our reaction to them. Instead of trying to stop the rain, we make use of an umbrella. Yoga works on similar grounds, advising we maintain our balance by accepting the circumstances coming across us and controlling our reactions to these circumstances instead of fighting them. This can be achieved by following the self-restraints and fixed observances.

Yoga processes are supplementary to each other. Thus, if it is difficult for someone to follow self-restraints and fixed observances, the practice of postures and breath regulation may lead to a mindset in an individual that will then help him/her follow the self-restraints and fixed observances. And follow-up regarding self-restraints and fixed observances will improve the performance of postures and breath regulation.

Practice of the processes discussed above help in improvement in the functions of the *Annamaya Kosha, Pranamaya Kosha and the Manomaya Kosha* resulting in the condition of ease, i.e. a healthy state.

5. Yogic Processes For Therapeutic Purposes

Disease is defined as a dysfunction of the body, mind, or inspirational energy (*prana*). Liberation from disease entails rectifying the cause of dysfunction and making the bodily systems function normally. Yogic therapy is useful in obtaining freedom from disease and repairing the damage caused by disease. The Yogic processes that help in this purpose are (1) Asanas, (2) Cleansing Processes, (3) Breath Regulation, and (4) Contemplation. Unlike medicines, utilization of these processes not only destroy the symptoms but also uproot the cause of the disease itself, thereby helping regain the balance of the body and mind. Each of these processes is very effective if practiced with serious intention. Absent serious intention their impact is greatly diminished.

In this chapter we will study the effects of each of these processes one by one.

1. Asanas.

Asanas (postures) are practiced in many ways. Hence their effects may vary widely. Patanjali described asanas as ideally being manifest or held in a comfortable steady state - or "*Sthira sukham asanam*" - implying long durational stability and comfort in the practice of a posture. The effect of holding an asana is noted to be "*Tato Dwandwaabhighaatah*," i.e., it reconciles conflicts of the mind. That means the effect of the physical asana is reflected on mental wellbeing. But the individual has to climb a few basic steps to reach this stage. The effects achieved in the practice of asanas in these preliminary steps add to the realization of even greater good when one attains the more advanced steps.

There are three different aspects to the practice of asanas. The first part constitutes movement of the body, which attains the position/posture of the asana. The second part is stability, which is the core of the asanas. The third part is that of releasing the asana and returning to a relaxed initial position. Although only the first and third parts of an asana involve movement of the body they are critically linked to the second part - stability -and hence ideally all movements are slow and highly controlled. Such slow and highly controlled movements when carried out without creating tension in the muscles and joints helps improve the strength, flexibility, and general tone of the muscles and joints and are particularly effective in cases of rheumatism, swelling, stiffness and joint or muscularly induced pain when brisk exercises would only add to a sufferer's troubles.

Once the asana position is attained it should be steadily and comfortably held for a certain duration or number of breaths. Maintaining stability in an asana positions may create tension or pressure on particular muscles or joints, of course, but inasmuch as the entire body is in a relaxed state in the position of the asana the tension or pressure created is tolerable. If not the position should be eased. Efficiency of muscles and joints improves with steady comfortable tension or pressures, which also improves blood circulation in muscles and joints thus improving their functioning.

The position of the asana has to be maintained for some substantial period to be of maximum benefit and the body should be relaxed during this period. While some muscles may be tensed when taking a particular position relaxation is to be simultaneously carried out in the same position. If muscles are relaxed the tension and the pressures created on those muscles can transfer the energy exerted and initiated onto internal organs in a manner that will improve the supply of blood to these organs and thereby improve their efficiency. Certain asanas create tensions and pressures that

specifically energize the endocrine glands resulting in increasing their efficiency and functioning. Other asanas have parallel effects on and improve the efficiency of the pancreas. While still other asanas reach and aid the functioning of other bodily systems, i.e., digestive and eliminative.

Once stability and comfort are attained in an asana and the body is completely relaxed, focusing the mind on the breath, an organ, or a higher power is the next step. The mind's power is so strong that, if the mind is focused on an organ, defects in that organ can be overcome and/or the efficiency of the organ improves even if there is no defect. These four stages in the practice of asana - Stability, Comfort, Deliberate Relaxation and Focusing/Dissolving the Mind - create an overall effect on the nervous system that also effect some of the centers of the brain, thereby overcoming weaknesses in the functioning of these brain centers. Different asanas exhibit their effects on different brain centers and more research on this topic is needed as it is not very clear which brain centers are impacted by which asanas, although all asanas appear to have a positive impact in the easing of psychosomatic distress.

2. Cleansing Processes

Cleansing Processes are a special feature of Hatha Yoga, which has developed many processes for internal cleansing of the body. And while some of these processes may appear "unnatural," experience shows that their results are very effective if performed as part of one's yoga practice.

Waste products are constantly produced in our bodies and there are magnificent systems in our bodies designed to dispose of this waste. If a waste disposal system is inefficient all the waste will not be eliminated but will be stored in our body. Stored waste in our bodies creates disease. Effectively disposing of bodily waste is the only way to maintain maximum health. The various yogic cleansing processes developed and perfected over the centuries helps carry out this work. A number of diseases arise from non-disposal of waste products by the body. Particular cleansing processes help in the disposal of the particular waste from the body thus obtaining liberation from the disease.

Our bodies constantly transport food, fluid, blood, oxygen, urine, hormonal secretions, and solid waste (stool) from one part to the other. Messages from the organs to the brain and orders from the brain to the organs regarding material transportation take place consistently. The passageways for the transportation of the various material, messages, and orders are called '*Naadis*' in Yoga. Ancient texts state that there are seventy-two thousands of such *Naadis* in our body. The functions of the body are carried out properly because of the transportation carried out by these *Naadis*. Yet sometimes obstructions are created in these vehicles and the transportation slows down or even stops. This automatically affects the body's functioning and may result in the origin of various diseases. Such blockages in the Naadis need to be removed to cure or prevent these diseases. The process of removing these blockages from the Naadis is carried out with the help of cleansing processes. The cleansing processes that remove these blockages make use of air or water.

The processes that use water for clarification and cleansing include *Jalneti*, *Shankha Prakshalan*, and *Vaman* among others. Processes like *Kapalbhati* make use of air for purification. Processes like *Dandaneti*, *Dandadhauti* use a rubber pipe. Processes such as *Sutraneti* and *Vastradhauti* make use of a strip of cloth. Cleansing processes like *Agnisar*, *Nauli* do not make use of any external medium but are effectuated through the controlled movements of the muscles of the stomach and the diaphragm. All these cleansing processes remove the blockages in the various *Naadis* and purify those *Naadis* so that transportation becomes smooth and disease is defeated. Hatha Yoga believes that all of the thousands of *Naadis* are purified by use of these cleansing processes.

Use of the cleansing processes is an attempt to gain control over the autonomic nervous system. The action of vomiting, for example, is conducted by the autonomic nervous system. But in the process of 'Vaman' a person takes complete control over the process of vomiting, which can be definitely achieved by practice. Similarly, control on the diaphragm in *Kapalbhati*, or of the peristaltic movement of the intestine in *Shankha Prakshalan*, is also brought about intentionally not autonomically. These cleansing processes help in bringing some amount of control over the autonomic nervous system and thereby diseases can be cured.

3. Breath Regulation

Although the main goal of breath regulation is to gain control over pranic energy and advance the path to spiritual enlightenment, an individual can benefit even from the initial stages of breath regulation. The first step in the control of breath is deep breathing, which is very easy and very effective. More advanced breath regulation ranges from the practice of deep breathing to that retention of breath with any of the Bandhas. The range of breath regulation in the therapeutic perspective is as follows.

In the practice of deep breathing, the lungs are completely filled and completely evacuated during deep inhalation and deep exhalation. It is an exercise for the organs involved in the breathing process – the diaphragm, chest ribs and stomach muscles, as their movement should be complete while deep breathing. Hence training is given to make these movements scientifically appropriate. Especially in breath-related diseases, the improper movement of the respiratory system takes place and as a result the disease intensifies. The perfect movement of this system helps in curing the disease.

The oxygen taken in while breathing supplies the required energy for each of the cells of the body to function properly. Lack of adequate amounts of oxygen is one of the causes of nearly all disease. Life is impossible after four minutes without oxygen. No cell and ultimately no organ will be able to carry out their functions without oxygen. Inefficiency in the functioning of these organs with the processing of oxygen can generate disease. In many such cases none of the physiological laboratory tests can detect the cause of illness. Increasing intake of oxygen is the only way out and deep breathing is the solution. Only 500-600 cc of air is in taken in normal shallow breathing. This capacity increases to 5000-5500 cc with the practice of deep breathing, which then increases overall intake of air capacity throughout the day. Deep breathing is beneficial for one and all.

Red blood corpuscles and hemoglobin deliver oxygen to all the cells of the body. The hemoglobin absorbs the oxygen that arrives in the air sacs (alveoli) in the lungs. The more effectively the function of absorption is carried out, the more effectively will oxygen reach the various cells of the body. In two-breath regulation processes - *Abhyantar Kumbhaka* and *Rechaka* - high pressure is generated on the lungs that speeds up the process of absorption of oxygen and makes it more effective. In the ideal procedure of *Pranayama*, the proportion of inhalation to breath retention to exhalation is 1:4:2 and absorption of oxygen takes place 6 out of 7 times in each rotation of the breathing period. The cells of the body are thus supplied with ample quantity of oxygen improving their normal functioning.

During the inhalation in Pranayama, a low pressure is created in the lungs as compared to the external pressure. This compels the external air to enter the lungs. This pressure of air is high in the lungs as compared to the external air during the period of breath retention and exhalation. As the process of inhalation, breath retention and exhalation is carried out in a particular proportion these pressures are maintained for a longer duration and create an impact on the organs in the neighborhood of the lungs. Moreover, the trio of *Bandhas (Jalandhar, Uddiyana* and *Moolbandha*) creates similar pressures on the organs in the stomach and the chest. This improves their functioning too. The functioning of the pancreas, which is defective in case of diabetes, improves by the practice of the *Uddiyana Bandha*. A proper practice of breath regulation helps in curing many complicated diseases. But it is necessary to give a warning that improper practice creates adverse effects on the body thus making the disease more complex. Hence the practice of breath regulation must be prescribed very cautiously.

There are in all eight types of breath regulation exercises along with the *Naadishuddhi Pranayama*. Although the method of breath retention with the trio of *Bandhas* is the same in each of them, the ways of inhalation and exhalation are different in each. The different ways of inhalation and exhalation in these breath regulation exercises produce varied effects. Those like *Suryabhedan* and *Bhasrika* produce heat energy in the body whereas the effects of *Sheetali* and *Seetkari* are that of cooling. Selection of the most appropriate kind of breath regulation exercise according to the effectual requirement of the disease will definitely help in curing the disease. A proper linking of the exercise with the disease is essential for the purpose.

The practice of breath regulation exercise is carried out with the control of the power of aspiration. Basically as we know the respiration is a process in control of the autonomic nervous system; i.e. in control of the centers of respiration in our brain. While these centers are performing their function, we control breath through breath regulation exercises with our aspirations thus producing a control over the centers of the brain. The anatomy of the brain is intact (whole). The effects generated on some centers of the brain may extend to some other centers too. We can thus conclude that the effect produced by breath regulation on the brain can help in the curing of disease.

A shloka in Hatha Pradipika states the significance of breath regulation as follows: *Pranayamen Yuktabhyasen Sarvaroga Vinashakah Pranayamen Ayuktabhyasen Sarvaroga Samudbhavah*, which means that appropriate practice of breath regulation ceases all diseases but inappropriate practice of the same develops all kinds of diseases. More study and research should be done for an effective way out from various diseases keeping in mind the fact that breath regulation is capable of curing all diseases.

4. Contemplation

Contemplation is another effective process in curing disease. And although this process as described by the great sage Patanjali is difficult it starts with gentle practice and works over time to progressive stages. Many of us cannot view any association of Contemplation with the curing of disease, as Contemplation is the process of the mind. But those who are aware of the fact that although the disease is physical its cause may lie in the mind may understand the relation between the two. Practice of it may cease defects in the Manomaya Kosha. It has been clear from the research that the mental imbalance plays a role in the development of any disease. Contemplation is thus effective in the treatment of any disease.

The mind starts becoming stable with the practice of Contemplation. Its

fidgetiness decreases. The physical pains in any disease result in added restlessness of the mind. If the mind can be made stable with the practice of Contemplation it will increase its power to withstand and will reduce the sensitivity of the trouble. The mind can then focus on the repairs of the defects of the body and the mind. Hence reducing the trouble and repairing the defects, both are achieved through the stability of the mind.

The practice of stability of the mind increases the concentration of the mind. We can thus concentrate on any element of our choice and make the mind steady on that object. In one case, a patient had a sore anklebone. The cause was not detected and no measures to cure it were succeeding. An experiment was carried out in which he had to concentrate on the anklebone and visualize reducing of the tenderness of the bone, and the result was normalization of the bone. This is nothing but the outcome of concentration of the mind.

The result of practice of Contemplation is the rise of mental serenity. Serenity is the consequent stage of stability and concentration. The mind is not distracted by any other element. If this stage can be achieved the patient will be rid of his disease quickly as otherwise, when he is fed up of the disease, even a small matter can distract him and he develops a tender mind that gets carried away by emotions. This state of mind takes him away from relief from the disease. So it is necessary to gain the stage of mental serenity through Contemplation.

A regular practice of Contemplation enhances the resistance power of the body and the mind, which are reduced by the disease. Contemplation increases the resistance power and improves the power of facing distresses and the patient develops a confidence to fight the disease.

Contemplation gains control over the trading of the mind. It thus removes the defects in the mind creating balance in its trade. The mind can be channelized after gaining control over it. This uproots the basic cause of the psychosomatic diseases, which is not possible for medicines to do. There is no option but Contemplation in these cases.

Research states that the centers of the brain are stimulated by Contemplation. This can bring about control on all processes of the body and the mind thus causing liberation from the disease.

The basic outcome of Contemplation as stated by the sage Patanjali is creating awareness of the existence of spiritual power and energy. Fully accessing this power is not possible where disease is present as disease is characterized by physical and mental imbalance and naadi blockages. Practicing Contemplation is intended to regain the body's balance and then empower it with consciousness of spiritual energy. Individuals can gain remarkable strength and liberation from disease by the practice of Contemplation starting from the most fundamental stages and advancing to the most advanced stages.

We are now equipped with the basic knowledge of the processes supporting liberation from disease and to bringing about health inducing outcomes to prescribe treatment to the patient. The aspects to be taken in mind for appropriate treatment are the nature of the disease, the combination of the different diseases present, the physical and mental state of the patient, and his/her capability of performing the yogic processes. A treatment encompassing all these aspects will have to be prescribed for desired results.

6. Steps In The Process Of Liberation From Disease

The objective of Yogic Therapy is liberation from disease. Helping a patient become free from his/her health challenges through yogic processes is the goal of Yogic Therapy. But Yoga is not a magical wand that will cure disease in a single moment. Liberation from disease through Yoga is a slow process that can be achieved only by consistent practice of Yoga. The journey from a disease stricken stage to the stage of liberation from disease can be a long one. But there are some milestones along the way that depict whether the chosen path is right. The therapist and the patient must look for these milestones from the beginning of the treatment. If these milestones are not observed to be present the path may be wrong and the therapist must consider changing the focus of treatment. Let us identify some of these milestones for our therapeutic purposes.

Most times a patient coming for Yogic Therapy has been going through some other therapeutic treatment, often combined with prescribed medication and a dietary regime. Such prescription should generally be continued along with Yogic treatments, as Yogic Therapy is a long-term slow working process. One should not consider this as the shortcoming of the Yogic Therapy and over time previously prescribed medication and diet regime will have run their course or taken a back seat.

1. Non-intensification of the Trouble/Discomfort -

The first milestone that will be observed suggesting disease is being effectively responded to – whether continuing medicines and diet or not - is that the disease does not intensify its form. In applying yoga therapeutic practices the trouble the patient is experiencing must not increase. If increase in disease manifestation or symptoms occurs the Yogic treatment is going wrong or are beyond the patient's capacity to beneficially respond to. At such times a yogic practitioner is obliged to search for the reasons and immediately make appropriate changes in the Yogic treatment. If not, the trouble will go on increasing. If the milestone of non-intensification is not observed, it is sure the path is wrong and needs a change in order to take the patient to liberation. Ultimately curing disease through Yoga comes over time, but initially both the patient and the therapist are right to expect to see non-intensification of the trouble and that the trouble of the patient does not amplify at any time.

2. Reduction in the Dosage of Medicines -

The therapist can continue with his treatment once he comes across the first milestone. After practicing Yogic processes for a few days, a time comes when the dosage of medicines has to be reduced. This is not an automatic process but it is a planned procedure. The positive effects of Yoga are seen and the symptoms of the disease diminish. The need of medicines is reduced. But the dosage is reduced only after pathological tests and the experience of the patient. Now a stage comes if the dosage is not reduced the trouble increases. For instance, when a patient of hypertension practices Yoga, his blood pressure level starts coming down to normal naturally. If the dosage is not reduced, the blood pressure reduces to levels lower than normal and he will have to suffer from a low blood pressure. Hence constant monitoring of the blood pressure and reducing the dosage as required is the necessity at this stage.

3. Reducing the Intensity or Duration of the Disease -

Sometimes reduction in medicinal dosage is appropriately prescribed. When

Yogic practices are continued after the reduction of medicines, the result is inevitably improvement in the resistance power of the patient. This improves the strength to face the attack of the disease thus reducing the trouble caused by it. The troubles of an Asthmatic patient can surely be reduced if s/he practices Yogis therapy regularly and the intensity of the disease is gradually reduced.

4. Drop in the Frequency of Trouble/Discomfort -

As the intensity of a disease reduces due to improved resistance powered by Yoga, so also the frequency of the occurrence of the experience of discomfort reduces. Suppose a patient suffers a bad headache regularly once a week, he may not suffer headache for a fortnight after commencing Yoga practice. Since Yogic therapy is a comparatively slow process it will not end any disease instantly. The process will involve steps like reducing its intensity and frequency. The appearance of these milestones will assure the therapist and the patient that the ongoing treatment is correct.

5. Discontinuing Medication Completely -

We have seen that reduction in dosages of medicine is a clear manifestation of improvement in a patient's condition. If the patient continues effective therapeutic Yogic treatment, the need for medication will continue reducing and ultimately come to an end. The initial significance of the medications was to control the patient's disease. But as the Yogic processes increase the resistance power of the patient the dependency on medicines reduces until one day coming to an end. Suppose a patient with hypertension is taking four doses of medication per day and is able to reduce a dose or two after a few days of practicing Yoga. Gradually such a patient's hypertension will come to such a natural level that s/he need no longer need to take any medicine to maintain it. Often the initial advice by a medical doctor is, "Don't stop taking your medicines." But when the therapeutic yogic treatment is on the right path the same doctor advises, "Now please discontinue your medicines."

Discontinuing medication, of course, does not mean that a patient is fully cured and does not require therapeutic treatment anymore. Discontinuation of medication is often just a mid- point in the process of liberation from disease and from a yogic perspective there are five more steps to total liberation.

6. Ceasing the Symptoms of the Disease -

Once medicines are stopped it is presumed the symptoms of the disease have also come to an end. Yet this is not the termination point in the treatment of disease, as the end of symptoms does not necessarily signify a disease has been completely uprooted. Symptoms like pains in the neck, numbness, pins and needles, or weakness that occurs in part of the arm or hands may disappear at times but also can commonly reoccur. Although the disease appears to vanish as the symptoms cease, it is not always so. But reducing symptoms of a disease after discontinuing medication is certainly a progressive stage in the journey towards liberation from the disease. But it is not the final stage.

7. Liberty from Following the Dietary Regime -

Although symptoms may disappear, patients often must follow the dietary rules prescribed for the treatment. If the diabetic patient is fine even without medicines, he cannot increase his sugar intake because his sugar levels would rise again. When practice of Yoga has reached a certain level, intake of a meager amount of sugar would not cause any trouble for him. The improvement in the health of the patient will release the dietary rules and regime. Maintaining health without following diet rules is the next step in the process. Good health without following a rigid dietary regime must be the aim.

8. Abandonment of the Disease -

Continuation of the practice of Yogic treatment as the patient achieves healing milestones one by one takes the patient forward on the journey to total liberation from the disease. The key milestones include no medicines, no diet regime, and the trouble does not emerge even if the Yogic practices are not performed. At this stage although the patient may be completely cured, one is advised to keep practicing Yoga to avoid recurrence of the disease.

9 Uprooting the Cause of Disease -

Uprooting the root cause of the disease so that no possibilities of recurrence arise is the ninth milestone of a patient's journey. At this stage, the patient need not continue Yogic practices for remedial purposes. But continuing the practice of Yoga for health is clearly beneficial.

10. Preventative Measures for Non-recurrence of Disease -

The mere absence of disease is not the equivalent of good health defined as an eminent and efficient condition of the body and mind. Body and mind must be prepared to face any attack by a disease and force it to flee. Yoga helps in preparing the body and mind for this purpose and ought be practiced consistently to keep healthy even after obtaining freedom from the disease.

We have identified ten milestones for assessing liberation from disease through Yoga. All these steps are obligatory in the remedial procedure. If any of these milestones is missed, there is a possibility of erroneous treatment. The time to follow this path varies for each patient and each disease. This time depends upon the preparedness of the patient to undergo the treatment and the level or the intensity of the disease.

7. Yogic Therapy Limitations

Yoga is basically a Darshan, not a therapy as such. Although many Yogic processes are used for therapeutic purposes because of their proven remedial effects it would be erroneous to say that Yoga is a comprehensive therapy for all conditions. As lovers of Yoga we must accept that like any of the many other therapies that exist, Yoga also has its limitations. We must realize those limitations and accept them positively so that we can remain realistic and successful in our treatment methods. This will ensure a positive experience for both the patient and the practitioner.

The first limitation is that Yogic Therapy is not all embracing and that not all persons or all diseases are not cured by Yoga. This is a limitation of all other therapies as well. Yoga cannot treat patients with physical ailments like fractures. But the benefits of Yoga as a supportive/complementary instrument have been observed in patients while they being treated for incurable diseases like AIDS and late stage cancer.

Yoga cannot be an option for situations where surgery is the only option, for instance in cases of Appendicitis. However, Yoga is not totally ineffectual in such cases as it can reduce the intensity of the trouble so long as the patient is capable of performing Yoga in that stage. Moreover, Yoga increases the physical and mental strength of the patient and hence they are better equipped to face the disease firmly. As such, Yoga is in some way helpful in these cases.

Amongst some of the more frequently asked questions is whether or not baldness can be reversed with Yoga. Also frequently asked is if Yoga can change grey hair to its original color. The straightforward answer to these questions is "No."

Some conditions, some persons, and some diseases cannot be cured by Yoga yet all patients can benefit in the building of strength and the improvement of attitudes through Yoga. Take the example of Diabetes, which in some instances can be cured by Yoga and in others cannot. The limitation comes into effect with regard to patients whose pancreas is not in working condition or where the Beta cells in the pancreas that generate insulin for the body are completely dead. Juvenile Diabetes, for example, is incurable by Yoga.

The stage to which a disease has progressed in the patient's body is an equally important factor in Yoga's ability to cure. Yogic therapy cannot be a remedy at all the stages of a particular disease. It may be useful in the initial stages but treatment would be impossible in the later more severe stages. Spondylitis is a good example of this statement. Yoga is very beneficial in the initial stages of Spondylitis but not so once the trouble has progresses to where the patient can no longer move their neck or back at all. Attempts to practice physical forms of Yoga may have adverse effects on such a disease, although if the condition has been alleviated with other forms of treatment or therapies such that an individual has regained the ability to move the neck or back with ease, at such a time, the patient can be taught Yoga and can use the practice of Yoga to help return to the normal condition of well being.

This is true for all diseases. A disease that is weak is more easily curable, but as the power of a disease intensifies, the body becomes feeble and it becomes harder and harder to cure the disease.

In spite of consideration of the limitations of the disease, its state and its phase, none can predict the exact period of treatment for the disease. The period differs case by case. Hence no one can assure that a patient's adult onset diabetes will be cured within a certain period of time or that backache will be cured after a particular amount of practice of Yoga for a particular duration of time. The duration for liberation from disease depends upon many factors.

1. The nature of the disease

If the disease is minor it will undoubtedly get cured rapidly. However, if the disease takes a major form it will require a prolonged practice of Yoga. If a patient suffering from Spondylitis has a minor problem of neck pain and suffers from neck pain only if he works for three to four hours in a leaning condition such Spondylitis can be cured merely within four to six days. If the patient suffers from terrible pains in the neck making neck movement impossible it will take several months for relief from the disease.

2. *Life of the Disease*

Once a disease enters the body it does not leave the body quickly. Just as patient ages, so does the disease, which acquires its own age measureable in months and years. The longer the existence of the disease in the body, the longer will be the period for emancipation from the disease. This is so because as time passes the disease enroots itself more strongly in the body. Hence it requires heavier efforts and a longer time to eradicate the disease from the body. We can conclude that the period for suppression of the disease is directly proportionate to the length of time of existence of the disease in the body.

3. Intensity of the Disease

If the intensity of the disease is greater than its life, treatment will take a long time for cure. For instance, if the first heart attack itself is very severe, the patient will need a fairly long time to recover from it. If the attack is not so severe, the period of treatment will be less. While estimating the period for recovery from a disease, the intensity of that disease is one of the prime factors to be taken into consideration.

4. The Constitution of the Patient

Another factor essential in the process of liberation from the disease is the original constitution of the patient. The actual efforts for recovering from the disease are made by the body itself. The therapies are a helping hand to the bodily efforts. Hence if the patient is originally weak, the period of treatment will be greater. Most diseases cannot cling to persons with strong constitutions for long and their bodies are able to rid themselves of disease rather quickly. Acquiring a sound physical condition is immensely useful in all efforts to treat disease. We know that many times a doctor's treatment also includes energy tonics in addition to remedial medication. The purpose is the same.

5. The mindset of the patient

Another factor that is very effective in the process of remedial treatment is the mental state or the outlook of the patient. At times this factor may even preside over all other factors. If a patient is in tender state of mind they will not be able to recover quickly. If a patient believes s/he is not going to recover from this disease, chances are that they will not. The mind's power governs the body. Hence the first step in the process of freedom from the disease is often to change the mindset of the patient. Providing a positive outlook towards their case and a sense of confidence in treating them will improve the odds of success. Without this confidence the patient's body will not respond to treatment. This change in perception may again take a short or long tie according to the patient's predisposition and nature.

With so many variables we can see that it is not possible to confirm that a particular disease can be cured within a particular period of time. One can predict only an approximate duration after taking into consideration all the above factors that contribute to the success of therapeutic treatment. The disposition of each and every patient is different and as such the effects of Yogic therapy will differ patient by patient.

Many a disease can be cured with appropriate practice of Yoga so long as the Yogic processes supporting the treatment have been prescribed. Certain Yogic processes have to be avoided in particular diseases to avoid greater trouble. The regular course of Yoga is also helpful in curing some of these diseases without the need for a specific prescription of Yogic processes and without contraindications. They need not avoid any Yogic processes in their practice and such individuals need not be treated as patients. They can join the regular practice of Yoga along with the other students. Basic courses like Yoga Sopan, Yoga Pravesh, and Yoga Parichay are useful for troubles like indigestion, constipation and diabetes in the primary stage.

Some diseases get cured automatically without any treatment and also without the practice of Yoga. In such instances general yoga courses can be taught so that the patient can acquire sound health. Such students initially approach Yoga for the purpose of treatment and after feeling the positive results they continue to practice and may even go on to teach Yoga in general society.

8. Patient Registration and Examination

Although we have thus far acquired some basic knowledge of the structure and the functioning of the body, and physical disorders and remedial processes in Yoga, the therapeutic Yoga technique has yet to be learnt. Learning the technique will help the therapist to exercise Yogic therapy to cure the patient in a shorter amount of time. The technique starts right from the first patient interview.

The complaints described by the patient are the symptoms of a disease. Symptoms are not identical to the disease; rather, they are the consequences of the disease. When the patient states these consequences, s/he may be unaware of the disease itself and does not know what disorder has taken place in his/her body. And the fact is, that without knowledge of the internal disorder in the body, the patient cannot be treated well. Therefore, the therapist has to diagnose the disorders in the patient's body from the symptoms mentioned by the patient. This diagnosis can be aided with the help of some tests. A wrong diagnosis can never lead a patient to liberation from their disease. Proper diagnosis is fundamental in regard to therapy.

Detailed information from the patient regarding his trouble, and a number of pathological tests are an appropriate way to arrive at the correct diagnosis. We shall discuss both of these points explicitly.

1. *Patient History* - In addition to the patient's name, age, address, educational qualifications, occupation, gender, weight, and height, noting exercises performed by the patient in the past or exercises s/he is performing at present will be useful. Obviously, past history of diseases and surgeries should also be noted.

2. *Present disease history* - Most patients approaching Yogic therapy have tried other therapies before coming to Yoga. Some of these trials may even have prolonged their disease. It is important that the therapist knows the history of the patient's disease. This history will include the origin of the disease and its current life span, any occasion relating to the establishment of the disease in the patient's body, the intensity of the trouble the patient is undergoing, the remedies the patient has tried in the past, the treatment the patient is taking at present, and the opinion of doctors who have treated and are treating the patient. Detailed information regarding all these points should be noted.

3. *The Well-being of the patient* - The daily well-being of the patient gets disturbed when s/he is afflicted with a disease. Diagnosis is aided by knowledge of the amount and intensity of the disturbance in a patient's wellbeing that has taken place. Details about the patient's sleep, hunger and excretory habits, information about his/her dietary habits, addictions, state of mind point towards one relative state of wellbeing.

4. *Other problems of the patient* - The patient may be suffering from other conditions, in addition to the one s/he has approached the therapist for. It is necessary for the therapist to know all of the patient's problems, so that the line of action for the target complaint may not be troublesome to the other problems s/he is suffering from. The patient may not feel the need or comfort to disclose all of his/her current and former medical problems. But, it is obligatory for the therapist to try to gain a full understanding of the patient's historical and current condition.

5. *Nature of patient's occupation* – More than one-third of many patients' days are spent at the workplace, and the nature of their occupation may be affecting their health and overall condition adversely. The patient may feel it unimportant to describe the nature of his occupation, but the roots of his disease may lie in it. The therapist must acquire details about occupation because sometimes a change of occupation may reduce the trouble experienced by the patient.

6. *Patient's Daily Routine* - The daily routine or lifestyle of the patient is as important a factor relative to overall health as is his/her occupation. Dietary patterns and habits must be recorded. Sometimes, something as simple as adjusting mealtimes works as a remedy.

7. *External Environment* - The external environment includes familial, social, occupational, and economic contexts. These surroundings are significant for the patient because they are something s/he generally cannot escape, or may not want to escape, and must respond to. One's surroundings generate impact on all persons. For patients in weak physical and/or emotional health this impact may be adverse. As a part of treatment, the therapist can advise a person to make changes in the surrounding environment, or teach Yogic processes that may help a person face such impacts. In some cases, the environment itself is responsible for the trouble a patient is experiencing. Some patients would be well advised to be secluded from the stress-inducing environment and to seek admission in a residential therapy center.

8. *Other Information* - Any queries or doubts about any of the above information must be settled by directly asking the patient. The information may shed light on the root causes of the patient's disease, which the patient may not be aware of. The therapist can create awareness about it so that the patient can make suitable changes.

Necessary Pathological Tests - When a patient approaches treatment, s/he describes her/his complaints and the therapist acquires advanced relevant information by asking additional questions. However, final diagnosis is not possible unless and until the internal conditions in the patient's body are known. Some changes in the body are recognized through testing the pulse. But learning to assess the pulse is not so easy and not possible for all. Standard pathological tests carried out in laboratories with the help of standard instruments and machines can help with this purpose. Such standardized tests are accepted the world over. There exist a wide range and variety of pathological tests too vast to cover in this book, as they are the matter of prolonged study and experience. Still some awareness of the following will be helpful to all yogic therapists.

1. *Physical Examination of the Patient* - It is necessary that the therapist examine the patient, including taking the heart rate, breathing rate, blood pressure, hearing sounds generated in the stomach and back with the help of stethoscope, examining the stomach and the lower abdomen by hand, examining and observing the part of the body undergoing trouble, and examining the tongue and eyes. This examination can disclose a wide range of information about a patient's condition and a patient's disease. The more knowledge and experience of physiology the examiner has the greater will be the amount of useful information discerned.

2. *Pathological examination* - The bodily matters that can be examined in a laboratory include blood, urine, stools and saliva. It helps immensely to diagnose disease by

examining these matters and also provides a clearer idea of the internal functioning of the body. The therapist should decide according to the symptoms which examinations are necessary. These examinations are also useful as guides to the therapist after Yogic therapy has started and can be used to determine the further line of action according to the changes taking place in response to the therapy he is offering to the patient.

3. X Ray Testing - X-Rays provide photographs of bones. They are also able to show images of kidney stones and gallstones. A Barium Meal X-Ray gives a detailed picture of the stomach and the intestines, which may provide some idea about diseases of the stomach and ulcers. An X-Ray taken after injecting a specific fluid can portray an image of the kidneys and urinary bladder. Another special injection renders an image of the vertebral disc and its position.

4. *Electrocardiogram* - An Electrocardiograph is a machine that produces a graph of the function of the heart, from which one can detect certain heart defects. Often disorders created in other parts of the body result in the malfunctioning of the heart. This can be detected through an Electrocardiogram and treatment in that direction can be started with the help of the ECG.

5. *MRI Scan* - A graph of the functioning of the brain can be achieved through tests like the MRI scan. It gives an idea of the functioning as well as the malfunctioning of the brain.

6. *CT Scan* - CT Scan is a technique that can be used to produce virtual images that show what a surgeon would see during an operation. It gives a clear idea of many minor issues in the body without an invasive procedure

7. *Other Examinations* - Other examinations include biopsies, in which a part of the body is extracted for examination. This is useful in diagnosing diseases like cancer. Even the fluid in the vertebral column can be extracted for examination. These and other new discoveries make examination and detection of human disease easier.

In some cases, of course, disease may be psychosomatic. In such cases, any pathological tests carried out will render normal results, thus compelling the therapist to conclude that the cause of the disease lies in the patient's mind.

Preparation for Yogic Therapy

The therapist is able to reach the root cause of the patient's disease after taking into consideration all the factors discussed earlier in this chapter. The direction can be fixed only after gaining knowledge of the nature of the disease and its causes. The first and foremost issue to be determined is whether Yogic therapy is possible in this kind of disease and whether the patient will benefit from it. If treatment through Yoga is not possible the patient must be given a clear idea about this. In some cases, although Yoga would not suffice as treatment, it would work well as a supportive agent to cure the disease and to improve the patient's resistance power. The patient must be made aware of all the facts regarding treatment and never be kept ignorant.

Once the decision to proceed further with Yogic therapy has been taken, it is necessary to prepare the patient's mind for it. The patient may be carrying misunderstandings regarding Yoga. He may have a fear that he would not be able to perform Yogic processes, or that the processes may be troublesome for him. The therapist must eliminate misunderstanding and fear from the patient's mind, and boost his confidence that he can be cured by Yogic therapy. The therapist should know that thorough mental preparation for Yogic therapy is the first step towards cure. If this step goes wrong, further treatment will be in vain.

After the patient is fully mentally prepared to undergo Yogic treatment, the therapist must discuss what processes he is going to perform as part of treatment, which processes he has to avoid, what rules and regimen he has to follow and lastly, how he needs to prepare himself for the purpose. This generates faith in the patient's mind and he will then respond positively to the treatment. It also prepares the patient mentally for the performance of the Yogic processes he is being prescribed. Otherwise, it is possible that he may leave the treatment halfway through. It is also necessary to give the patient an idea of the possible duration of the treatment and the time he has to spend daily for the purpose, so that he spares enough time from his daily routine. This will also reduce the misapprehension that the therapist will prescribe the Yogic processes on a piece of paper, just as the doctor prescribes medicine, leaving him to perform them alone at home. The therapist must clarify this with the patient.

The patient must be made aware of the consequences of the Yogic processes s/he is going to perform, so that it prepares her/him mentally and physically to accept these consequences. For instance, sometimes the patient may experience loose motions on performing the cleansing process 'Vaman'. These motions have no need of medication, as they stop once the water in the stomach comes to an end. If the patient does not have an idea of this possibility s/he may be unnecessarily concerned and immediately take medicine. Additionally, it must be clarified that Yogic effects are not instantaneous like medicines.

After making the patient thoroughly aware of all the facts, the therapist can proceed further only if the patient is ready to proceed. If the patient is not prepared for the processes, the therapist will not be able to teach them and they will not yield the expected results. This will generate poor faith in the patient's mind, about the therapist as well as Yoga.

9. Heart Disease

The heartbeat of a person stops or skips a beat for a moment upon hearing the word 'Heart Disease.' This disease is so dreadful that mere mention of it may take a person towards death. The word creates fear in every one. Stopping of the heartbeat is simply stated the main cause of death.

The Bhagwad Geeta states, "As man changes his clothes when the old ones get torn, similarly, the soul changes the body when it becomes worn out." Those who have digested this philosophy do not fear death or heart disease. The word 'heart disease' does not stop their heartbeat. But the philosophy of Bhagwad Geeta has to be digested before this can happen. And an in-depth study of Yoga is necessary for the digestion of this philosophy. Many experts from all over the world have come to agree that one of the most outstanding therapeutic as well as preventive measures for the prevention and treatment of heart disease is the practice of Yoga.

Death comes to a person in form of various diseases. But it seems that the Lord of Death loves heart disease most, as amongst the deaths caused due to various diseases, nearly 60-70% are caused due to heart attacks. It is also true that Yoga is an immensely effective measure in fighting this enemy. Gaining proper and adequate information regarding Yogic Therapy as applied to the issues of the heart's healthy functioning is essential and beneficial to everyone.

Heart and the Supply of Blood

The human body is composed of billions of cells. The life and functioning of all these cells depends upon the oxygen and glucose received by them. This glucose and oxygen is supplied through blood to these cells. The supply of blood to each and every part of the body is carried through the medium of the heart and it is the heart that keeps all cells and ultimately the human body alive. The heart operates uninterrupted from before birth to the death of a human being. It pumps the blood that carries the energy required by the body for the body's proper functioning. The proper operational state of heart maintains life; its non-operational state is death. And death can be avoided if treatment is received in time.

The function of the heart is to keep the blood flowing all over the body. The heart is divided into four compartments for this purpose. These compartments are composed of heart muscle. Blood enters and leaves the heart due to the contraction and expansion of these muscles. The expansion and contraction of muscles takes place on the average of 72 times in one minute. The beats can be counted by feeling the pulse. With this approximation in mind, the heart has to contract and expand its muscles for literally more than thirty seven million times a year. And for the average human being this functioning is not confined to one single year but extends to approximately seventy to eighty years. The functioning of the human heart is a gift of the gods.

The functioning of the muscles of the heart or the speed of the heartbeats is controlled by the nervous system. The major factors affecting this control are metabolism and mental tension. The heart rate increases with increased physical activity or mental strain; it decreases with physical rest and mental relief.

The blood purified in the lungs enters the heart and is then pumped out to flow to all the different parts of the body. The impure blood returning from the different parts of the body flows into the lungs and from the lungs - fully purified and oxygenated - flows back into the heart. The heart muscles have to expand and contract to create pressure for the flow of blood. Sufficient pressure is not created if the muscles are not strong enough to contract to the required strength. It is hence necessary to retain the heart's muscular capacity and this can be done when heart muscles receive the proper amount of glucose and oxygen. The required amount of glucose and oxygen can be received only when blood supply to the heart is in appropriate quantity.

Blood Supply to the Heart

Although the heart is always full of blood, the cells of the heart muscles cannot use it for their own purpose. Coronary arteries supply the blood required by the heart muscle for its functioning. These arteries further divide into branches and sub-branches. Blood is supplied to every cell of the heart itself through the smallest blood vessels called capillaries. The amount of blood supplied to the heart's cells must be adequate. Insufficient supply of blood to the heart cells is the beginning of heart disease.

Heart Disease

The heart cells cry out if the supply of blood to them is inadequate. This may result in chest ache (angina). If the heart cells are starved of blood completely, the cells die. An inadequate supply of blood to the heart muscle is what causes a heart attack. An inadequate blood supply to the heart cells is known as Ischemia or Ischemic Heart Disease (IHD). There are many reasons or causes for such inadequate supply of blood.

When the blood/oxygen requirement of heart cells increases, the blood vessels supplying the blood expand to increase the supply of oxygen reaching the heart muscle cells. Cells return to their original resting states when the need for blood is fulfilled. Trouble arises at certain times if the capacity for expansion of the blood vessels is reduced. A person experiences this trouble when the heart has to exert itself more. Otherwise functioning generally remains normal in regard to life's routine chores. At times when the elasticity of the blood vessels is reduced or there is a clot the heart muscle does not receive an adequate amount of blood/oxygen and even modest exertion generates chest pains, known as Angina Pectoris. AP generally stops at rest and restarts with exertion or movement.

When the blood supply to the heart muscle is blocked or reduced by a clot or by the heart remaining in a contracted state the heart muscles do not receive an adequate blood supply and as a result they die. This is called a Myocardial Infarction or Heart Attack. Once dead, individual cells cannot regain life and maximum capability of functioning of the heart thus reduces permanently. If the area of the dead cells is large it may result in completely stopping the functioning of the heart. If the damaged portion is relatively small, the patient can live for many years with appropriate treatment.

A rise in the cholesterol level of the blood results in deposits of cholesterol in the inner periphery of the blood vessels. In such instances blood vessels reduce in diameter thus reducing their capability of carrying blood and there arises a possibility of heart attack. Depending on extent and degree of severity a person may survive such a heart attack, especially if treated immediately, or unfortunately s/he may die.

Although there are many causes for heart trouble, another major cause behind such troubles is Coronary Vasospasm, a sudden contraction of a coronary artery that supplies blood to the heart. We know this to be true because there have been many examples of major heart attacks to those who did not have any blockage or clot present. It is also reasonably inferred that a major cause of such vasospasms is related to mental stress. Mental tensions affect the hypothalamus, which in turn stimulates the pituitary glands, which then raises the amount of hormones being released, which ultimately results in the generation of spasms in the coronary arteries supplying blood to the heart. There is, as far as we are aware, no known equally effective option for the release of mental tension as Yoga.

Study after study of patients suffering from heart disease reveals that a high percentage of such patients are ambitious and aggressive persons. And like many ambitious aggressive stressed persons, they manifest a number of unhealthy addictions such as over-eating, drinking, smoking, and/or being workaholics. Such persons often develop the habit of suppressing their emotions, as a result of which their emotions often explode in the form of anger, violence, and/or rage. These types of persons are referred to as Type A personalities and if not treated often fall victim to heart disease.

Cardiac Neurosis

An intense fear regarding heart disease, almost at a phobic level, and the stress associated thereto, may lead a person to heart disease. In such cases, even when their ECG is normal, the patient does not find comfort in it and the fear in their minds that 'Now I am going to have a heart attack and it will end my life' increases their heart rates to a level that, ironically, may actually lead them to a heart attack. The patient also fears that nobody will come for their help in time and even if they receive treatment in time, it will be of no use. This fear manipulates the minds of the patients. The stress caused due to the fear increases the likelihood of experiencing a heart attack. The fear in these patients' minds can often be uprooted through Yoga.

The Prevalent Treatment for Heart Disease

There are many potential complications in the treatment of a heart disease patient. And although modern methods of treatment have been developed and are developing every day, if treatment is not received in a timely manner death or irreversible heart muscle damage can be the result. Many hospitals have started Intensive Care Units for this purpose and research regarding heart disease is so ultramodern and effective that death can often be avoided if a patient reaches the hospital in time.

Even if a heart stops functioning injections like atropine and adrenalin can restart it. Artificial respiration and oxygen cylinders can also be provided. The Intensive Care Units are well equipped with instruments and machinery to keep the patient under constant observation. The graph of the heart constantly monitors its functioning. Steroids help in reducing the stress pain-relievers in reducing the pains experienced by the patient.

A patient can be treated very well in an intensive care unit if s/he suffers from heart trouble. But ICU cannot provide the patient with preventive measures to avoid admission to the ICU in the first place. Again, yogic practice is absolutely the best way we know of for that purpose.

In case of an actual heart attack, the patient has to be treated medically and Yoga helps very little. Chest pain is often a significant and initial symptom in case of heart attack. The center of pain lies in the heart muscle itself and it spreads in the surrounding part. In addition to this, sweating, tremendous weakness, fast respiration (trouble in breathing), and vomiting are other symptoms one may come across. The foremost step - to be taken immediately - is to admit the patient in the Intensive Care Unit of a good quality hospital. Medication is the only option here. The patient also needs complete rest. Once the patient recovers with the help of medication, Yogic treatment can be started as supplementary treatment.

The beginnings of heart trouble may take a person close to death. At the same time Yogic practices can keep death at a distance. Yoga is beneficial for a healthy heart as well as a malfunctioning heart and can bring the heart from the damaged condition to a more healthy condition. It is always an individual decision as to whether one practices Yoga, before and/or after suffering heart trouble. Of course, practicing Yoga before one has any heart trouble can serve to keep heart disease far away. As we all know, 'Prevention is always better than cure,' which is why we advise the relationship between heart disease and yoga must be more intimate than that between heart disease and death.

Yoga Nidra

What the heart patient needs the most is rest. The most effective way to take rest is through Yoga Nidra. Yoga Nidra is Shavasana performed for a close to an hour with the help of specific instructions to be followed mentally. The process is to be carried out without any actual movements. Thus the patient can perform it lying in bed even if s/he has suffered from a major heart attack and medications are ongoing. The instructions are to be heard by the patient and followed mentally. Yoga Nidra is effective in reducing stress. Breathe rate lowers to significantly, often by close to 50 percent, thus reducing physical and mental tension even more than rest alone.

In the process of Yoga Nidra, various instructions are given constantly for about forty-five minutes. Instructions in recorded form are also permitted. The patient can play his CD player or cassette player and lie on his/her back in the supine position and mentally follow the instructions. The consequence is that the patient may forget his disease for a while. The thought 'I am suffering from heart disease' haunts him more and causes strain on his mind. This strain may even raise the intensity of the disease. As the patient gets released from these haunting thoughts in the process of Yoga Nidra strain is also released. Frequently performed Yoga Nidra gives significant mental relief to the patient.

The patient has to make a resolution in the beginning and at the end of Yoga Nidra- 'I am getting cured of the heart disease and becoming completely fit'. The resolution comes to fulfillment as mental powers are enhanced in the process of Yoga Nidra and the patient benefits thereby in the direction of healing. A patient's reverie that 'I will never get cured' will increase the possibility of recurrence of heart attack. Conversely, the impression that one is getting cured actually helps in achieving a cure. This is why the patient's mental strength must increase and this is possible through Yoga Nidra.

Heart disease is a physical ailment. Medicines help to cure the disease, but the ultimate truth is that the body heals itself and medicines work only as supporting agents. The mind of a heart disease patient is delicate and sensitive. It is necessary for the heart patient to increase mental strength and regain mental balance. Mental participation is the prime factor in healing. Good mental energy aids the body and inspires it to heal. This preparation of the mind for healing the body is increased by the performance of Yoga Nidra. Medicines alone are not capable of doing this. Yoga Nidra can.

It is possible for the patient to perform Yoga Nidra even after seeking treatment in the hospital after a heart attack. Yoga Nidra helps to reduce the patient's restlessness as body and mind start responding to medication. Yoga Nidra helps reduces the quantity and intensity of medicines. It reduces the need for pain-relieving and stress-relieving medicines. It can shorten the length of the healing period for the patient. Yoga Nidra is especially useful after the patient returns to his/her regular work routine, by giving effective rest on the physical level and helping retain/improve physical and emotional balance. This in turn avoids any stress formation and as a result the patient may lead a more comfortable life.

Study of Aum

A process similar to Yoga Nidra in helping a heart patient to recover is the chanting or contemplation of the sacred sound of Aum! Even listening to the chanting of Aum is beneficial whether by another person or on a recording. A patient who has had a heart attack can chant Aum. For those who can't it is suggested they listen to the chanting of Aum much like listening to Yoga Nidra.

The vibrations created in the chanting of Aum positively affect the body of the listener. As one listens to the Aum, the mind is concentrated, the body gets relaxed, and the patient experiences pleasant bodily and mental sensations because of the vibrations of the Aum. The heart also experiences a gentle massage as the body gets more relaxed. If all these sensations last for a longer time, there generates positive communication between the body and the nervous system as the body stays in a serene and comfortable state. The trouble due to the heart disease and the ill effects of medicines can create an imbalance in the body. The body regains this balance in the presence of the sound waves generated by Aum. Aum also helps in regaining the co-ordination in functioning of the brain and in recovering the normal mental state of the patient.

The mind is not stable in the period of illness and many negative thoughts come to it, creating additional stress. Concentration on Aum nullifies these thoughts, reducing the patient's physical and mental tension. This tranquil state of mind cannot be achieved by listening to music as the musical notes and/or the poetic words are stimulating, whereas listening to the chanting of Aum brings stability to the mind and reduces agitation.

As the mind becomes stable and engrossed in Aum a patient forgets their disease and this tension-free state of the body and mind and the engrossment in Aum bring about a very soothing experience to the patient, ultimately boosting his recovery.

The power in the mantra rendered by the mantra Aum is beyond description by scientific language, nor is it measurable by any instrument, but it can be felt by the body and mind. The effects created by the chanting this powerful mantra alone have relieved many patients of their suffering, disorder, and disease.

Other Yogic Processes

We have seen that the processes like Yoga Nidra and chanting of Aum are helpful to the patient as supporting treatments to the medical treatment for a heart attack. These processes improve a patient's physical and mental condition. Some other processes like asanas, pranayama and contemplation are also useful after the patient recovers from the initial attack. But physical capacity needs to have increased enough so as to perform these processes.

Contemplation

Contemplation is the art of concentration. Although sage Patanjali has described this step as an advanced one, we consider the study of concentration as useful as soon as a patient starts recovering from the initial heart attack. Contemplation with Aum as the object of support will be even more effective. After sufficient practice of chanting of Aum, the patient can sit in a stable position with closed eyes and concentrate his mind on Aum and maintain the state of concentration. This is called Contemplation with Aum, which will create sereneness and stability of the mind, and last for a long duration. The impact created due to contemplation on the body and the mind will reduce pains and aches, temperature of the body, rate of metabolism and production of unwanted hormones ultimately decreasing the body stress and in turn the stress on the heart. Contemplation also reduces explosion of emotions and transforms them into peaceful sensations, thus promoting a sounder state of the mind and the heart.

Pranayama

Practicing pranayama – breath control – is limited to only gentle inhalation and exhalation exercises for heart patients, absent the use of Bandhas and breath retention because Bandhas and breath retention boost blood pressure thereby exerting the heart. For heart patients only deep breathing is suggested. This process does not involve much physical effort, and is similar to that used in contemplation, the difference being that in contemplation there was virtually no movement outside of normal breathing, whereas deep breathing obviously involves the movement of the respiratory organs, as well as the chest and the abdomen. A patient may practice deep breathing only when s/he has regained enough strength for the required movements and can practice in a way such that no physical stress is created. There is no need of sitting in any specific asanas for this purpose. The patient can perform pranayama while lying down, with folded knees, resting feet near hips, and with hands folded above the head in a position called Tadagasana. Relax the body in this position, concentrate on breathing and then gradually start deep breathing at a very slow rate. The inhalation and exhalation must be possible without difficulty. The duration of inhalation can be increased up to 4 seconds and that of exhalation to 8 seconds. After sufficient practice of this type of deep breathing, the patient can practice inhaling by left nostril for 4 seconds and exhaling by right nostril for 8 seconds. This is half a round. To complete the round, inhale by right nostril (4 seconds) and exhale by left nostril (8 seconds). It is not recommended to increase the proportion of inhalation to exhalation above 1:2. When a patient recovers enough, and after sufficient practice of deep breathing, s/he can practice deep breathing while seated either in Swastikasana or Vairasana.

Inhalation and exhalation using Ujjaayi Pranayama is also recommended. In this type of Pranayama, a frictional noise is to be created during inhalation and exhalation. The proportion of inhalation to exhalation will still be 1:2 and the process must be carried out with both the nostrils opened together.

Besides Ujjaayi, Sheetali Pranyama is also recommended where inhalation is done through the open sides of the mouth and channel of the tongue while exhalation continues to be carried out through the nostrils with mouth closed. Study of all deep breathing gives needful rest to the heart while normalizing its function and rate.

Noise of a buzzing bee breathing - Bhramaari - is produced while exhaling through the mouth with the lips vibration. Inhalation with Sheetali and exhalation with Bhramari is also effective and a patient can be taught these techniques as their capacity to perform allows. If the patient practices Pranayama according to his fullest capacity, he will soon regain the balance of prana and quickly return to sound health. But remember that breath retention with the trio of Bandhas must be completely avoided.

Yogasanas

When a patient is ready to return to his/her daily routine s/he can add some asanas

to the above-prescribed treatment practices of Yoga Nidra, study and chanting of Aum, contemplation, and Pranayama. These asanas must be very easy and non-stressful for the patient will have to move various body parts and hence must perform asanas only when strong enough to do so. Details about easy asanas are given at the end of this book.

Cleansing Processes

The cleansing processes are generally stressful processes. Hence only the very passive process of Jalneti is suggested and useful to the patient, which may be practiced regularly. Other cleansing processes are to be avoided.

Karma (Deed) Yoga

One philosophical tenet offered in the Bhagwad Geeta is "karmanyevaadhikaaraste maa phaleshu kadaachana" ("perform your deeds with whole and sole sincerity but do not expect fruits for those deeds"). This attitude and approach to life can be very beneficial for the recovery of patients suffering from heart disease and ought be prominently reinforced in all daily chores a recovering patient performs. The philosophy suggests absolute concentration in the deed but entire indifference to outcome after completing it. The person will gain enjoyment by completing a task but without creating any tensions in the mind related to outcome or reward. If the mind is not stable after completing a task it will arouse stress in the doer.

Bhakti (Devotion) Yoga

Human beings are nothing but tiny sand particles in the vast and infinite beach of the universe. But we find it hard to accept this fact, perceiving ourselves as central, important, and potentially powerful beings. We have already seen that those individuals whose power perception is very intense are more prone to fall victim to heart disease. Absolute surrender to the Supreme Power of the universe is the true devotion, or Bhakti Yoga. Singing musical notes in appreciation of the Lord (Bhajan), worshiping Him (Poojan) and religious narration (Keertan) are some of the ways of expressing devotion. And although it cannot be proved scientifically, we strongly believe devotion is an effective way to overcome and avoid heart disease. After all, a heart attack is a supreme experience of one's relative minuteness and helplessness in face of the infinite. But if Bhakti Yoga is brought into practice from the beginning it will help avoid or contextualize a heart attack.

9.1. Preventive Tips to Avoid Heart Disease

While medicinal treatment as well as Yogic treatment are going on the patient has to strictly avoid certain things. These are preventive measures for avoiding heart disease as well. Some of them are as follows:

Addictions - All addictions are harmful to health and hence to the heart. Smoking and drinking are first on the list and intake of either is harmful because poisonous substances like nicotine, carbon monoxide and alcohol mix with blood through the lungs, the blood, and the digestive system and harm the functioning of the body. The more powerful the addiction, the more potent are its adverse effects. Getting addicted to tobacco and alcohol is a bit like buying diseases. Smoking is particularly harmful and directly increases the frequency and intensity of the heart disease.

Working for too long in a sitting position - The proportion of heart disease can be seen more in the persons working in the sitting position the whole day long rather than in those whose work involves movements and roaming. Hence those who have to sit in one place for work must exercise by walking and performing Yoga.

Obesity - The body needs more energy to function if the person is overweight. The body and the heart have to exert more to produce this energy thus increasing the possibility of a heart disease. Hence everyone must take efforts to keep the body weight within the practical limit.

Hypertension - In cases of patients suffering from hypertension, it becomes the duty of the heart to produce high blood pressures thus giving rise to persistent stress on the heart, the consequence of which is to increase the likelihood of heart disease or a heart attack. High pressure in blood vessels harm the internal portion of the vessels increasing the likelihood of producing deposits of cholesterol there. Rise in blood pressure generates a rise in heart disease. Blood pressure can be controlled by intake of medicines but this not the permanent remedy. Yogis Therapy is truly the best way to control hypertension.

Diabetes - The amount of blood glucose is high in case of diabetes. This increases the density of blood resulting in requirement of more energy by the heart to pump the blood. The consequence is that the heart muscles get fatigued earlier giving rise to heart disease. Moreover, the heart muscles do not receive enough glucose due to lack of insulin and as a result they are not able to function efficiently. Hence diabetic patients must control their blood sugar and get rid of diabetes or its impacts as early and fully as possible. This too can be achieved with the practice of Yoga.

Household Therapy

- Decoction of root of the herb Anant kept in thermal container- twice a day.

- Drinking of water boiled with gold ring or chip.

- Mrigashringabhasma (ash of horns of deer) - (little ash in quantity of a gram/ (Dal) + Milk + sugar candy) once or twice a day.

- Eat cardamom and root of peepal tree in the same quantity every morning.

- Juice of ginger and water in the same proportion- every morning and evening.

Naturopathic Treatment

- Hot water tub bath
- Hot water bath on the feet only twice a day.
- Walking in open air twice a day-in the morning and evening.

Beneficial Diet Tips

Vegetarian food without fatty and spicy substances is beneficial to the patient. Fruits and vegetables in the natural form are a boon to the patient. A natural, fresh diet will help the patient in his recovery.

- Natural fruit and juices

- Cucumber, carrot, guava, papaya, ginger, coconut water, gourd, tomatoes, garlic and onion are the substances prescribed in the diet.

- Dinner before 7 pm is very useful

Prohibited Diet

Non-vegetarian diet, hot and spicy food, oils, ghee, bakery products, milk products, chocolates, banana are the substances to be avoided.

9.2. Yoga Practices for Heart Disease

Yogic practices can only be started after the consultation with medical consultant of the patient

Preparatory Practices: Shavasana, Yoga Nidra & Om Chanting

Useful Practices: Basic movements (Yoga Sopan book) with very slow speed. All Asanas are to be practiced on Level -1

Asanas;Tadagasana, Vajrasana series from Yoga Sopan book, Pavanmuktasana, Ardha Chakrasana, Anantasana, Bhujangasana, Dhunurasana, Katichakrasana, Tadasana – Tiryak Tadasana -Shavasana

Pranayama: Anulom Vilom Deep Breathing 15 minutes. Sheetali Purak followed by Bhramari Rechak (21 rounds), Ujjayi Pranayama without kumbhak for 10 minutes.

Meditation on Anahat Chakra with mental recitation of mantra "Yam" Walking for 60 minutes, once a day.

Yoga Nidra : Specially designed for Heart Disease or for Stress Relief. Om chanting. Karma Yoga

Optional Practices:

These Asanas are to be practiced after one month practice of above Asanas. These Asanas can be practiced on Level -2. The Asana position should be maintained as long as it is comfortable for the patient.

Asanas: Vakrasana, Uttanpadasana, Sulabh Ushtrasana. Ushtrasana, Marjarasana, Sankatasana, Ardhamatsyendrasana

Pranayama: Left nostril breathing, Bhramari Pranayama without kumbhak Cleansing Practices: Jal Neti – Agnisar 100 strokes total in 3 to 4 rounds

Contraindications:

Surya Namaskar, Sarvangasana, Halasana, Shirshasana (Head stand) & its variations. Fast breathing, Right nostril breathing.Bhastrika Pranayama, Any Pranayama with Kumbhak.

Vaman dhouti, Shankha Prakshalana (Laghoo / Purna.)

Food Habits:

Suitable :Normal food with less fats & carbohydrates but with high fibers.

Best food is fruits & vegetables

Avoid: Nonveg food, Milk & milk products (Skimmed milk can be taken), Rice, Oily & Spicy food, refined foods, Fast Food, Preserved Food. Salts.

Daily Practice - after completing the prescribed program.

No. Asana / Yoga technique

Duration in minutes

1	Shavasana (Corpse pose)	3		
2	Basic Movements all Types	15		
3	Shavasana	3		
4	Vajrasana Series from Yoga Sopan Book	10		
5	Shavasana	3		
6	Bhujangasana	1		
7	Dhanurasana (Bow pose)	1		
8	Makarasana	2 2		
9	Pavanmuktasana	2		
10	Ardhachakrasana	1		
11	Anantasana	1		
12	Ardhamatsyendrasana	2		
13	Shavasana	2 3 2		
14	Tadasana, Tiryak Tadasana	2		
15	Katichakrasana	2		
16	Shavasana	2		
17	Anulom Vilom, Deep Breathing	10		
18	Sheetali Purek & Bhramari Rechak	10		
19	Ujjayi breathing without Kumbhak	10		
20	Prayer	7		
Total Ti	Total Time 90			
Omkar (Omkar Chanting 30 min			
Jala Neti (once a week)				
Yoga Nidra for Stress relief 30 min				
(Once a day)				
Listen Omkar chanting throughout the night				
Meditation on Anahat Chakra with mantra "Yam"				

10. Hypertension

Do not confuse the term 'blood pressure' with the disease of high blood pressure. Blood pressure is merely a standard measurement reflecting the pressure of the heart's beat pushing blood to flow all through the blood vessels of the body. It is only where there is an elevated level of this pressure that we call it "high blood pressure" or hypertension, a potentially dangerous disease.

The flow of blood throughout the body requires sufficient force or pressure to be adequately distributed. The initial contraction of the heart muscles is what creates the flow that can be measured by the pressure the blood exerts. When the body is exerted, the requirement for oxygen is increased and as a result the metabolic rate increases, thus increasing the heart rate and blood pressure.

Increased blood pressure may be the result of physical exertion or negative emotions like fear and anger, or mental tensions like anxiety or stress. The heart has to exert itself to provide more blood for all these reasons. The heart also subdues the rate and intensity of its beating and the pressure this evokes after the cause that called forth the exertion vanishes. A temporary rise in the pressure of blood is a natural response to the body's needs and is not a disease. A permanent elevation in the level of blood pressure is a disease, although increased blood pressure is not the disease but rather the consequence of the disease (which is the root cause of increased levels of blood pressure).

Blood is forced out of the heart because of the contraction of the heart muscles. Pressure is generated on the walls of the blood vessels by this flow of blood. The pressure increases in proportion to the amount of blood being pumped out of the heart. In some instances a rise in blood pressure is not due solely to the amount of blood being pumped but due to the reduced circumference of the blood vessels through which the blood flows, either because of vessel narrowing or loss of vessel elasticity. As a result the blood vessels are not able to expand to the required extent hence increasing blood pressure.

Another reason for a rise in blood pressure is an increase in the quantity of blood in the body. The total amount of blood in the Circulatory System of our body is approximately five liters, which circulates all over the body again and again. If the amount of blood increases for any reason, there is a resultant rise in blood pressure. An increase in the level of salts or glucose in the body increases the density of blood, which also raises blood pressure.

The functioning of the heart and that of the blood vessels is moderated by the body's nervous system. The hypothalamus in the brain is the base for this control. If the hypothalamus gets stimulated due to mental stress it affects the function of the heart and the blood vessels. If the signals from the hypothalamus become intense, the blood vessels remain in a contracted state and may go into spasm. This keeps the blood pressure in the higher state. Organs of the body do not receive sufficient blood supply if the blood vessels remain in contraction, which means the cells of the body do not receive adequate oxygen and waste formed in the cells is not carried away by the blood. As a consequence the body gets fatigued and cannot work efficiently.

Blood pressure is never even all over the body. The pressure is at its maximum at the point where it is pumped out from the heart and is at a low point as it re- enters the heart. It is measured near the blood vessel of the arm for the sake of creating a standard location for comparison. A belt is tied to the arm before measuring the blood pressure. The blood pressure is of two types- the 'upper pressure' (Systolic) and the 'lower pressure' (diastolic). The pressure that is created when the heart is in a contracted state is the upper pressure and that when the heart is in expanded state is the lower pressure. That means the lower pressure is the constant pressure in the body. It starts increasing with the contraction of the heart and then falls down to the limit of the lower pressure.

Generally, in a normal healthy adult, this pressure is approximately 120/80. The normal levels of blood pressure of an individual may be different in some cases but such cases are exceptional and rare. The lower diastolic level tends to be the same in all ages whereas the higher levels tends to increase with age. A permanent rise of blood pressure levels indicates the presence of disease. If the systolic pressure measures 90 mm and above constantly or if the diastolic pressure measures 15-20 units higher than the person's regular level, it is not thought of as natural and can be termed as disease.

If the kidneys do not properly dispose of body waste the waste mixes with the blood increasing its density. The result of this increased density of blood is rise in the blood pressure. Such increased blood pressure can return to normal level if the kidneys start functioning normally. Blood pressure can rise with increase in blood glucose in case of a diabetic patient. The blood pressure can be controlled with control of blood sugar. It also rises in case of heart disease and decreases when the heart is treated.

The disease of hypertension is a hidden enemy, as it is not discovered unless measured. No symptoms are seen in the initial stages but it keeps on creating adverse effects on the important organs. It keeps on ruining the body, ultimately proving hazardous to life.

Although the cause of this disease is not found on the physical level, it lies in the mental level and can be found there. The name itself directs to the cause - 'hypertension' – excess tension or stress. The disease is thus heavy stress and the consequence is rise in blood pressure. This directs us to the treatment of the disease - releasing the excessive stress. But even now, medical sciences detect the high blood pressure as a disease and give medicines to decrease the increased blood pressure.

This is a temporary treatment as the blood pressure increases again after the effect of medicine is over. It is of course better to control the blood pressure using medicines instead of making the body organs inefficient due to the higher blood pressure. But it should be kept in mind that this is not the permanent treatment.

The permanent treatment is to release the excessive tension and Yoga is very useful for the purpose. Let us first discuss what this tension is and what its consequences are.

Tension is an unnatural state. Tension is created in case of performing some work. If the work is physical, the tension is physical, whereas if the work is mental the tension is at the mental level. That means the body or the mind has to work excessively due to this tension. The body needs extra oxygen and digestive fluids to perform this work. These are supplied through the medium of blood and hence the blood supply has to be increased. This increases the work of the heart as blood supplier. The heart has to exert itself each and every time tension increases. Frequent or constant tension implies enhanced work for the heart without rest. As a result the blood vessels contract, sufficient blood is not supplied, and the impurities from the cells are not carried away. This results in slowing down the functioning of the cells and ordinary rest or sleep is not sufficient to release this tension.

The amount of secretion of adrenaline hormone in the adrenal glands increases through the medium of hypothalamus as a result of increased mental stress. An increase in the amount of this hormone stimulates many physical activities. Constant stimulation of these activities creates adverse effects on the body's functioning. Rise in blood pressure is one such adverse effect.

Increased mental tension also stems from our mental reaction to external circumstances. Managing this reaction is the way to avoiding mental tension. Proper training to regulate our own reactions will help in this case. Processes like asanas, Pranayama, Yoga nidra and contemplation are the features for the treatment of these tensions. The significance of Yoga stated by the great sage Patanjali- "Yogah Chittavritti Nirodhah" is the only comprehensive way of treatment.

Yogasanas

The definition of Yogasana as stated by Patanjali is 'The stable and comfortable state of the body and the mind." The way to attain this state is deliberate relaxation at the physical as well as mental level. Asanas are not brisk movements like those in exercise. Muscular tension increases in exercise whereas it reduces in the asanas. This automatically reduces the need for oxygen, thus reducing the stress on the heart. Patanjali has also stated '*Anant Samapatti*', i.e., direct the mind towards the higher powers to attain stability of mind and peace of mind in the conflicts of daily life. As the outer muscles relaxed in Yogasanas, the blood supply to and the functional balance of the inner muscles, pituitary glands and internal organs is improved. These effects are produced by asanas performed in the proper way.

Pranayama

Pranayama starts with control of respiration. There is a close relationship between respiration and circulation of blood by the heart. The rate of respiration and that of the heart are interdependent and both of rates are impacted by mental stress. In Pranayama the rate of respiration is decreased thus reducing the heart rate and in effect, establishing mental stability. The mental stability attained reduces existing stress and avoids the onset of new stress.

Disorders are created when an imbalance is created in the '*prana*' that controls the body. It is the Pranayama that can regain this imbalance. This helps in reducing the trouble of hypertension. Since Pranayama affects the nervous system and creates relaxation there it directly reduces blood pressure.

Pranayama reduces the requirement for oxygen, reducing the generation of carbon dioxide, thus further reducing the rate of respiration. This establishes stability of the mind. This means that the study of Pranayama eliminates tensions of the body and the mind by relaxing them. As a result they function optimally. Amongst all types of Pranayama, Ujjayi Pranayama particularly carries the '*prana*' peacefully. It is regulated through Naadishuddhi Pranayama. Ujjayi Pranayama also affects the Carotid Sinus, which in turn stimulates reduction in the levels of hypertension. Of course, only inhalation and exhalation is to be performed in this Pranayama, excluding breath retention.

Contemplation

Contemplation is the study of concentration, i.e., study of focusing the mind at one place. This has positive effects on both body and mind. The effects described below can be seen in this context.

- Creating balance in the function of the nervous system.

- Relaxation facilitates making repairs of the damaged cells.

- Mental efficiency, understanding, and memory increase.

- The function of the nervous system improves and as a consequence reactions become quicker and more appropriate with little to no stress created.

- Mental strength to face conflicting situations increases.
- Physical efficiency increases as a result of increased mental efficiency.
- A balance is maintained in the physical as well as mental activity.
- Balance in the activity of the brain is also attained.

The easiest and primary form of contemplation is chanting Aum in a voice that can be heard by our own ears. If hypertension patients chant Aum for half an hour daily, their hypertension will surely be reduced.

Yoga Nidra

Yoga Nidra is a kind of contemplation in an easy form. Yoga Nidra brings about relaxation on physical, emotional and mental levels. This is what the hypertension patient needs. Hence regular performance of just Yoga Nidra will also cure the patient. The instructions of Yoga Nidra can be listened to in recorded form. There is no need of an instructor for this purpose.

Yoga Course for Treatment

Deep breathing, Pranayama, and Yoga Nidra are the processes that regulate hypertension. The following course is useful to overcome the disease rapidly.

10.1. A Prescribed Course of Yogic Treatment for Hypertension

First Week -

Monday- Prayers, Supine position, Shavasana, hand movements exercise-1, leg movements exercise-1, Tadagasana, deep breathing in Tadagasana, Sitting position, relaxed state in sitting position, Swastikasana, Bhramari, Prayers.

Tuesday- Prayers, Shavasana, hand movements exercise-1 & 2, leg movements exercise-1, chin movements exercise-1, single legged Pavanmuktasana, Shavasana, Vajrasana, shoulder movements exercise-1, Bhramari, chanting of Aum, Prayers.

Wednesday- Prayers, Shavasana, hand movements exercise-1, 2, 3, leg movements exercise-1, 2, chin movements exercise-2, Pavanmuktasana single legged & both legged, Shavasana, Vajrasana, shoulder movements exercise-1, neck movements exercise-1, Bhramari, chanting of Aum, deep breathing & Prayers in Swastikasana.

Thursday- Prayers, Shavasana, hand movements exercise-1, 2, 3, leg movements exercise-1, 2, 3, chin movements exercise-1, 2, 3, Pavanmuktasana single legged & both legged, Shavasana, Vajrasana, shoulder movements exercise-1, 2, neck movements exercise-1, 2, Standing position, Katichakrasana, Shavasana, Padmasana, Parvatasana, Bhramari, chanting of Aum, deep breathing & Prayers.

Friday- Prayers, Shavasana, hand movements exercise-1, 2, 3, leg movements exercise-1, 2, 3, chin movements exercise-1, 2, 3, Pavanmuktasana, Shavasana, Vajrasana, shoulder movements exercise-1, 2, neck movements exercise-1, 2, stomach movements exercise-1, Standing position Katichakrasana, Shavasana, Bhramari, chanting of Aum, deep breathing (4: 4 ratio), Prayers.

Saturday- Prayers, Shavasana, hand movements exercise-1, 2, 3, leg movements exercise-1, 2, 3, chin movements exercise-1, 2, 3, Pavanmuktasana single legged & both legged, Shavasana, Prone position, Sahajahasta Bhujangasana, Vajrasana, shoulder movements exercise-1, 2, neck movements exercise-1, 2, stomach movements exercise-1, 2, Standing position Katichakrasana, Tadasana, Teeryak Tadasana, Shavasana, Bhramari, chanting of Aum, deep breathing (4: 4 ratio), Prayers.

Sunday- Prayers, chanting of Aum- 51 times, deep breathing, Prayers.

Second Week -

Take revision of the processes taught in the last week and add the following to those in the following manner:

Monday- Revision, + Preparatory Movements exercise-1, 2, 3, Janu Hastasana in the position of Vajrasana, chanting of Surya mantra (Aum rhaam, rheem, rhoom, rhaim, rhoum, rhah)

Tuesday- Revision, + Preparatory Movements exercise-4, 5, Hasta Shirasana, deep breathing (ratio 4:6)

Wednesday- Revision, + Preparatory Movements exercise-6, single legged Sahaja Hasta Bhujangasana, inhalation with Sheetali Pranayama

Thursday- Revision, + two legged Sahaja Hasta Bhujangasana, inhalation with Seetkari Pranayama.

Friday - Revision, + inhalation with Sheetali Pranayama + exhalation with Bhramari Pranayama- 11 times, inhalation with Seetkari Pranayama + exhalation with Bhramari Pranayama- 11 times.

Saturday- Revision, + deep breathing (ratio 4:8)

Sunday- Prayers, chanting of Aum- 51 times, deep breathing, Prayers.

Third and the Fourth Week -

The practice of all the above processes is necessary in these weeks. It is necessary to perform Yoga Nidra once daily. It is suggested to perform the necessary processes regularly with the advice of the therapist. Medication must be continued initially and then it can be reduced with the doctor's advice later. Regular practice of Yoga is capable of stopping the need for all medication.

Naturopathic Treatment

- \Box Hot water bath for legs (15 minutes twice a day).
- \Box Cold water waist bath for 15 minutes, twice a day.
- □ Wrapping of cover to the whole body

Beneficial Diet Tips

- \Box Boil ground garlic in water and drink the water.
- □ Garlic, apple, orange, soybean, carrot, tomato, cucumber
- □ Buttermilk without butter
- \Box Fruits, leafy vegetables, sprouted beans.

Prohibited diet

- * Non-vegetarian diet, hot and spicy food, salt.
- * Oily food, bakery products.
- * Oils, ghee, butter, substances made from coagulated milk.

10.2. Yoga Practices for Hypertension

Preparatory Practices:

Start the training with Shavasana Practice for 3 minutes. Basic movements (Yoga Sopan book) Preparatory movements (Yoga Pravesh book)

Useful Practices: Asanas are to be practiced on Level 3

Asaas;Tadagasana, Vajrasana series from Yoga Sopan book, Pavanmuktasana, Ardha Chakrasana, Anantasana, Bhujangasana– Shalabhasana– Dhunurasana, Ardhamatsyendrasana (1 minute each side) Tadasana – Tiryak Tadasana - Katichakrasana Trikonasana– Veerasana, Shavasana

Cleansing Practices:

Uddiyana Bandha 3 rounds (each round 30 seconds) Jalaneti (Once a week)

Pranayama: Anulom Vilom Deep Breathing 15 minutes Ujjayi Pranayama without kumbhak for 10 minutes Sheetali Purak followed by Bhramari Rechak (21 rounds)

Meditation on Anahat Chakra with mantra "Yam" Yoga Nidra for stress relief Walking for 60 minutes, once a day.

Optional Practices:

Asanas: Vakrasana, Uttanpadasana, Sulabh, Ushtrasana, Marjarasana – Sankatasana,

Pranayama: Left nostrill breathing, Bhramari Pranayama without kumbhak

Cleansing Practices: Neti – Agnisar 100 strokes total in 3 to 4 rounds

Contraindications: Sarvangasana, Halasana, Shirshasana (Head stand) & its variations. Fast breathing, Right nostril breathing. Bhastrika. Any Pranayama with Kumbhak. Vaman dhouti, Shankha Prakshalana (Laghoo / Poorna.)

Food Habits:

Suitable :Normal food with less fats & carbohydrates but with high fibers. use minimum salts. Best food is fruits & vegetables.

Avoid: Nonveg food, Milk & milk products (Skimmed milk can be taken), Rice, Oily & Spicy food, refined foods, Fast Food, Preserved Food. Salts.

11. Diabetes

Diabetes can be described as the bitter story of sweet sugar. Efforts to limit the excessive use of sugar as a sweeter are being made all over the world but have not significantly succeeded. It is now becoming evident that Yoga, which is capable of bringing an overall improvement in human life, is also capable of overcoming a disease like diabetes, provided all pancreatic cells have not already been destroyed. There are many different levels of diabetic disease.

We often hear patients whose diabetes is newly detected saying, "My blood sugar was checked recently and a high level of glucose was detected in the report diagnosing diabetes. Now this disease will accompany me life long. The doctor has prescribed medicines which I will need to take for the rest of my life, and warned to strictly avoid sugar." Of course some level of glucose in the blood is perfectly healthy and glucose detected in blood need not necessarily be diabetes.

Our bodies are comprised of billions (!) of minute cells. Each cell is a living organism. Each cell carries out its own function consistently and requires energy for doing so. A combination of glucose and oxygen produce the energy required for the functioning of these cells. The cell extracts both these elements from the blood itself. When the cell is required to increase its activity, it extracts more glucose and oxygen from the blood. All the cells require these elements and in a healthy body a balance of both these elements is maintained. Amongst these oxygen is taken from the air by breathing and absorbed into the blood. This process is carried out in the lungs.

Digested starch and sugar is transformed in the body into glucose, which is again absorbed into the blood. T amount of glucose in the blood can be tested in a laboratory. Levels of glucose vary during the day. It is greater two hours after intake of food. It is lowest when the stomach is empty.

A standard level of blood glucose has been determined after testing the levels of lakhs of glucose found in healthy people. The standard levels are: Fasting - 80 mg/100cc, and that measured two hours of after lunch (Post Prandial Blood Glucose) - 140mg/100cc. These are considered the natural levels of blood glucose. Of course the levels may vary with the kind of diet taken. That means if the lunch was loaded with sweets, glucose levels will naturally shoot up. If on the other hand, lunch consisted of less starch and sugar, glucose levels may fall down to 100. Hence lunch taken before testing blood glucose levels must be one's regular and balanced lunch.

The amount of glucose in the blood increases when there is higher sugar or sweet intake. This increases the density of blood, thereby decreasing the speed of circulation of blood and creating stress on the heart. The excess amount of glucose is stored in the liver. The excess amount of glucose is utilized when the body requires extra amount of glucose for increased activity. When the storage of glucose in the liver exceeds its limits, the excess glucose is excreted through urine with the help of kidneys, thus maintaining the glucose level in the blood. The metabolism of glucose is carried out by the nervous system in coordination with the endocrine glands. The glucose level can remain elevated permanently if any damage is caused to this system. This is the state of diabetes. Generally, a person having fasting sugar above 100 and PP sugar above 160 can be said to be suffering from diabetes.

Another major factor that contributes to the metabolism of glucose is Insulin. The beta cells in the pancreas produce a stimulator named insulin, which is absorbed by blood. The function of insulin is to transport glucose from blood to each cell. Cells

cannot absorb glucose directly from blood without the aid of insulin.

An increased requirement of glucose by the cells is satisfied by the production of extra amounts of insulin.

In a steam engine a fireman is necessary to add coal into the boiler of the steam engine. The operation of the steam engine would not possible without him. Similarly, insulin transports the glucose from the blood into the cells. If enough insulin is not produced for any reason, the cells will not receive glucose and the glucose will stay in the blood, increasing the level of blood glucose. This is the main manifestation of diabetes.

In the body of a diabetic patient the cells demand glucose when they need to perform activity. But they cannot perform these activities if they do not receive glucose due to insufficient insulin. As a result, diabetic patients cannot exert themselves physically. They get fatigued very fast and their activity slows down. The cells keep demanding blood glucose and in an attempt to satisfy this demand, the patient gets hungry frequently. He eats more food to satisfy his hunger. As a result the level of blood glucose increases. The glucose is not received by the cells and remains in the blood due to insufficient insulin. This increases the density of blood, reducing the rate of circulation. It thus becomes necessary to throw away this excess glucose through the kidneys. Patients with this condition have to pass urine frequently and in much larger quantities. This reduces the water level in the blood thus increasing thirst.

The primary symptoms of diabetes are weakness, excess hunger, excess thirst, and passing large quantities of urine frequently. It is thus essential to limit the levels of blood glucose. Otherwise, adverse consequences of increased blood glucose can be experienced. Diabetes affects the skin, the anus, the urinary tract or the vagina. It can even be a cause of death. The walls of blood vessels become thick and stiff. This adversely affects the blood supply especially to the feet. It also affects the function of the eyes leading to blindness. There may be a swelling on the feet due to increased load on the kidneys. At times, the kidneys may stop functioning totally. In fact, the elevated levels of blood glucose affect the functioning of practically all the organs. It is hence very essential to maintain levels of blood glucose in the normal range.

There are many medicines which function to maintain normal glucose levels. Insulin is injected into some patients. These medicines or injections have to be taken life long as they only maintain glucose levels in the normal range rather than cure the patient's diabetes. It is well known that this treatment is not enough to start regeneration of insulin in the body. However, there is evidence that some Yogic processes are capable of regenerating production of insulin in the patient's body.

One must be aware of the limitations of Yoga when one states that Yoga is beneficial in curing diabetes. As we know diabetes is 'a reduced quantity of production of insulin by the beta cells in the pancreas.' In some patients, the beta cells may be absent or the beta cells are incapable of producing insulin right from birth. This is called Juvenile Diabetes. These patients need to be injected insulin everyday. Yoga will not work in case of those patients whose beta cells are dead or are incapable of producing insulin. The percentage of such patients is only about 4-5%. Yoga is helpful to the other 95% of diabetic patients.

These other patients do have beta cells present in their bodies but the amount of insulin produced by them is not sufficient. As a result the cells do not receive glucose, decelerating their rate of functioning and increasing the amount of blood glucose in the body. The cells starve, while the density of blood increases, causing hypertension and heart trouble. Yoga enhances the efficiency of beta cells of the pancreas in such patients

and they start producing sufficient insulin in the body. This effect is not known to be possible with any kind of medication.

The root cause of depleted production of insulin by the cells also varies. Reduction in efficiency of the beta cells is one of the reasons as discussed above. Other causes include raw material to produce insulin is not received by the beta cells, the beta cells do not receive sufficient signals to produce enough insulin, there is damage in the glands transmitting these signals, the hypothalamus that sends signals to the pituitary glands gets damaged, or the nervous system that notes the requirement of insulin is damaged. Diabetes may occur due to any of these causes. Yoga treats diabetes in such a way that it helps to overcome all these shortcomings that are responsible for the emergence of the disease.

A patient may also suffer from diabetes despite being in a physically sound condition. The cause lies in the psychology of that patient rather than his physiology. One of the many consequences of mental stress is the emergence of diabetes. A disorder in the Manomaya Kosha creates diabetes in the Annamaya Kosha. Medicines are not capable of reaching the Manomaya Kosha and hence it is not possible for medicines to cure diabetes. Some processes in Yoga are, however, capable of curing disorders in the Manomaya Kosha, and yoga can help such diabetic patients.

Diabetes can be caused by any of the factors discussed above, and it is often difficult to trace the exact cause. It is only possible to know that the level of blood glucose is too high, or that the production of insulin is too low. But this is detected only after the onset of diabetes. Hence when it comes to Yogic treatment, the practices need to treat whatever may be the cause of diabetes. There is no treatment other than Yoga capable of treating all the causes from reduced efficiency of beta cells to nervous system disorders. This is because Yoga affects not only the body, but also all the five Koshas. The various Yogic processes to be practiced for the cure of diabetes are Yogasanas, Pranayama, cleansing processes and contemplation.

Yogasanas

Yogasanas, as we've seen, are different postures of the body. If performed briskly, they can be regarded as exercise. Sun Salutation can be performed in an energetic way, making it into an exercise. This kind of exercise increases the requirement of oxygen and glucose by the cells. Increase in the production of insulin takes place to meet this requirement, and signals to do so are generated in the brain with greater intensity. The rate of production of insulin may increase with the increased intensity of these signals. Sun salutations are hence included in the treatment process for diabetes. But the patient must be capable of performing the Sun Salutations briskly.

The main component of Yogasanas is that they be performed with stability and in comfort. Deliberate relaxation can help attain this state. If the voluntary muscles are relaxed deliberately while a posture is being maintained the tensions on these muscles are transferred to the internal organs and glands, thus improving their functioning. In the case of diabetes, where the pancreas is unable to produce sufficient insulin, deliberate relaxation of muscles attained in particular asanas creates positive tension on the pancreas, thus improving the production of insulin. These asanas include- Shalabhasana, Dhanurasana, Ardha Matsyendrasana, Yoga Mudra type-2, Pavanmuktasana, Sarvangasana, Halasana, and Matsyasana. Attaining stability in these asanas for a period of time and deliberately relaxing in the position can give good results.

Cleansing Processes:

Cleansing Processes play a significant role in the remedy of Diabetes. Experience shows that processes such as Jalaneti, Vaman, Kapalbhati and Shankha Prakshalana help in increasing the production of insulin in the body thus reducing the glucose level in the blood. Regular practice brings about internal cleansing of the body thus enhancing the functional efficiency of the organs. This results in an improvement in digestion of food, which in turn helps improvement in digestion of sugar in the food.

Vaman helps in bringing about some additional control of the autonomous nervous system. This results in improving the function of this nervous system with respect to the production of insulin.

The abdominal pressure created during exhalation in Kapalbhati helps in improving the efficiency of beta cells in the pancreas.

The process of Shankha Prakshalana is excellent for a diabetic patient if s/he is capable of performing it. To get the full benefit of the procedure the patient must practice the asanas in Shanka Prakshalana for eight days before performing the complete Shanka Prakshalana. S/he must then perform Laghu Shanka Prakshalan for a further 40 days to complete the procedure. The level of blood glucose falls significantly with the practice of Shankha Prakshalana. The diabetic patient should not take any insulin injections before the practice. In fact, the patient may even have to take sugar externally. It has been observed that the practice of Laghu Shankha Prakshalana ends some patient's requirement of medication. This practice increases the generation of insulin and the patient can then get rid of the disease with regular practice of certain asanas and Pranayama. The process of Shankha Prakshalana can be carried out once every six months, and diabetic patients are recommended to perform it regularly.

Pranayama

Naadishodhan Pranayama is helpful in this case. But it has been observed that Bhramari and Bhastrika are also beneficial. All kinds of Pranayamas must of course include the trio of Bandhas along with breath retention. Hence before practicing Pranayama, scientific practice of deep breathing, rapid breathing, Jalandhar Bandha, Uddiyana Bandha and Moolha Bandha is very essential. Hence consistent and prolonged practice of these processes under expert guidance is necessary. Not much research is found on the effects of these processes and hence it is difficult to state what and how do they affect. But experimentation and observation leads to the inference that these kinds of Pranayama are helpful as they create pressure on the pancreas, improving their functioning.

Contemplation

The meaning of contemplation here is the practice of concentration. The stability attained through the practice of concentration can be useful to cure diabetes. And as we know, defects at the mental level are the root cause of many diseases and mental condition is noteworthy in cases of diabetes too. Hence the mental stability attained through the practice of concentration is definitely helpful. This practice starts from concentrating on Aum initially and later concentrating on the pancreas as the object of support.

It is quite easy to concentrate on Aum. The power of concentration developed by concentrating on Aum has to then be utilized to concentrate on the pancreas. The patient has to be provided with complete knowledge of this gland - its perfect position, its size,

and its shape - for concentrating on the pancreas. A regular practice of concentration for 10-15 minutes daily will be useful. The patient will have to be well instructed and guided for the practice. The therapist must do this skillfully. If the therapist is unable to guide properly, the patient will not be able to concentrate acutely and the process will ultimately not help the patient.

Yoga Nidra

The mental tensions created due to various reasons affect the pancreas through the medium of hypothalamus and pituitary glands thus reducing its efficiency. This is the significant cause of diabetes. An easy and effective way to release these mental tensions is Yoga Nidra. The resolution made during Yoga Nidra that, 'I am definitely getting cured of diabetes' brings the patient nearer to liberation from the disease.

11.1. A Prescribed Course of Yogic Treatment for Diabetes

The list of yogic processes that are beneficial for the treatment diabetes is very long. These processes have to be practiced for a long duration and many more processes have to be practiced as a basic preparation for practicing the main course of treatment. It must be noted that it is not possible for the patient to perform these processes on his own referring to books. Expert guidance is a must. A complete course for Liberation from Diabetes is illustrated below for therapists guiding the patients. This is a ten week course and the list of new processes to be taught daily is given in reference to each week. Regular revision of the previously taught processes is mandatory and practice for one hour daily is also necessary.

Course Contents (10 Weeks) First Week

Monday- Prayers, Standing Position, Preparatory Movements Types 1-3, Supine Position, Shavasana, Tadagasana, hand movements exercise-1, Sitting Position: Relaxed state, Swastikasana, gentle breathing, deep breathing, Sharanagat Mudra, Prayers.

Tuesday- Prayers, Preparatory Movements exercise-4 & 5, leg movements exercise-1, Tadagasana, deep breathing, chanting of Aum.

Wednesday- Prayers, neck movements exercise 1 & 2, hand movements exercise-2, leg movements exercise-2, Tadasana- Teeryak Tadasana, Bhramari (with exhalation), Parvatasana.

Thursday- Prayers, Preparatory Movements Types 10, chin movements exercise-1, leg movements exercise-3, hand movements exercise-3, Vajrasana, shoulder movements exercise-1, Sulabha Pavanmuktasana- both legged, Katichakrasana (Standing Position). Friday- Prayers, chin movements exercise- 2, Prone Position, Sahajahasta Bhunjagasana, Sulabha Pavanmuktasana- single legged, shoulder movements exercise- 2, stomach movements exercise-1-2, Vrikshasana.

Saturday- Revision.

Sunday- Chanting of Aum for 30 minutes.

Second Week

Monday- Preparatory Movements exercise-6, 9, 10, Asanas of Shankha Prakshalana, Tadasana- Teeryak Tadasana.

Tuesday- Preparatory Movements exercise-11, 12, Asanas of Shankha Prakshalana-Katichakrasana, Teeryak Bhujangasana.

Wednesday- Asanas of Shankha Prakshalana- Udarakarshana, Kaakpada.

Thursday- Makarasana, Padmasana, Revision of Asanas of Shankha Prakshalana. Friday- Parvatasana, Sharanagat Mudra, Revision of Asanas of Shankha Prakshalana. Saturday- Positions of Sun Salutation, Vrikshasana, Revision of Asanas of Shankha Prakshalana.

Sunday- Prayers, Ganapati Atharvasheersha, Pranayama- Jalaneti. *Third Week*

Revision of Asanas of Shankha Prakshalana must be taken daily in this week.

Monday- Positions of Sun Salutation with breathing rules and chanting of Surya mantras.

Tuesday-Sun Salutation, Saralhasta (straight-armed) Bhujangasana, Ardha (partial) Shalabhasana.

Wednesday- Sun Salutation (12+2), Uttanpadasana (Complete and partial).

Thursday- Vakrahasta (Crooked armed) Bhujangasana, Shalabhasana (Complete). Friday- Vakrasana type-1, Ardha (Partial) Pashchimottanasana. Saturday- Dhanurasana, Vakrasana type-2, Deep breathing- 1: 0: 1.5 Ratio. Sunday- Prayers, chanting of Aum 108 times, Contemplation- 5 minutes, Vaman, Shankha Prakshalana (Complete process).

Fourth Week

Monday- Vipareet Karani, Padmasana Yogamudra type-1, Samaasana. Tuesday-Naukasana types 1 & 2, Padmasana Yogamudra type-2, Vajrasana. Wednesday- Laghu Shankha Prakshalana, Vajrasana Yogamudra types 1 & 2, Baddhapadmasana, Ardha Matsyendrasana.

Thursday- Laghu Shankha Prakshalana, Sarvangasana- Matsyasana, Vajrasana Yogamudra types 2.

Friday- Laghu Shankha Prakshalana, Utthit Padmasana, Halasana, Pashchimottanasana Saturday- Laghu Shankha Prakshalana, Trikonasana, Ashwini Mudra, Deep breathing- 1: 0: 2 Ratio.

Sunday- Prayers (As previous), Contemplation- 10 minutes, Vaman, Laghu Shankha Prakshalana. (Start with Laghu Shankha Prakshalana from Wednesday in this week and continue to take practice of it up to the 10th week).

Fifth Week

Monday- Aakarna Dhanurasana type-1, Fast breathing types 1-3. Tuesday- Aakarna Dhanurasana type-2, Veerasana, Fast breathing types 4-5. Wednesday- Pavanmuktasana, Fast breathing typ-6. Thursday- Revision. Friday- Revision Saturday- Revision. Sunday- Prayers, Contemplation (With pancreas as object of support). Perform Laghu Shankha Prakshalana daily and Vaman thrice in this week.

Sixth Week

Monday - Preparatory Movements, Advanced Study- Vajrasana Yogamudra- 5 minutes, Deep breathing 1:0:1 ratio – 10 minutes.

Tuesday - Sun Salutation, All types of Bhujangasana, Padmasana Yogamudra type-1 (5 minutes) Advanced Study- Shalabhasana, Dhanurasana.

Wednesday - Padmasana Yogamudra type-2 (5 minutes), Advanced Study-

Uttanpadasana, Vipareet Karani, Halasana, Deep breathing- 10 minutes.

Thursday - Ardha Matsyendrasana 5 minutes, Advanced Study- Pashchimottanasana

(Complete and Partial), Sarvangasana, Deep breathing- 10 minutes.

Friday - Sun Salutation- 25, Shavasana- 15 minutes.

Saturday - Trikonasana- 2 minutes, Veerasana- 2 minutes.

Sunday - Prayers- Ganapati Atharvasheersha, Chanting of Aum- 15 minutes,

Contemplation (With pancreas as object of support).

Perform Laghu Shankha Prakshalana daily and Vaman thrice in this week.

Seventh Week

Monday- Niralamba Bhujangasana, Parivarta Trikonasana, Agnisar, Deep breathing 1:0:2 ratio (with single nostril at a time).

Tuesday- Ardhachakrasana, Jalandhar Bandha with Padmasana as the initial position.

Wednesday- Ardhapadmasana, Kukkutasana, Moola Bandha.

Thursday- Sheershasana, Uddiyana Bandha.

Friday- Asanas involved in Sun Salutation.

Saturday- Revision, Deep breathing 1:0:2 ratios (Circulatory breathing).

Sunday- Prayers, Cleansing Process- Jalaneti, Contemplation (With pancreas as object of support).

Perform Laghu Shankha Prakshalana daily and Vaman thrice in this week.

Eighth Week

Monday- Niralamba Shalabhasana, Karnapeedanasana, Bhraamari (exhalation only). Tuesday- Dhanurasana, Vistrit Pada Halasana, Kapalbhati.

Wednesday- Sankatasana, Uddiyana Bandha with Padmasana as initial position. Thursday- Ekpadahastasana (Standing Position), Nasagra Drishti with Padmasana as

initial position.

Friday- Garbhasana, Chakrasana (Supine Position).

Saturday- Naadishuddhi Pranayama (With trio of Bandhas) 1:1:2 ratio.

Sunday- Prayers, Cleansing Process- Vaman Dhauti, Contemplation (With pancreas as object of support).

Perform Laghu Shankha Prakshalana daily and Vaman twice in this week.

Ninth Week

Monday- Ekpada Hastasana (Sitting Position), Merudandasana.

Tuesday- Bhraamari (while inhalation).

Wednesday- Siddhasana, Utkatasana.

Thursday- Tolaangulaasana, Paadaangushthasana, Sinhasana.

Friday- Ugrasana (Standing Position), Bhramari- Bhraamari (in association).

Saturday- Bhraamari (with trio of Bandhas)

Sunday- Concentration of Aum, Cleansing Process- Jalaneti & Vaman Dhauti.

Perform Laghu Shankha Prakshalana daily and Vaman twice in this week.

Tenth Week

(Stop performing Laghu Shankha Prakshalana in this week).
Monday- Ugrasana (Sitting Position).
Tuesday- Garudasana, Bhraamari Pranayama.
Wednesday- Mridanga Bandha.
Thursday- Hansaasana, Bhasrika Pranayama.
Friday- Ekpada Shirasana.
Saturday- Ujjayi Pranayama
Sunday- Concentration of Aum, Vaman- once.
Perform Yoga Nidra personally using cassette or CD.

Special Instructions

The patient must be checked once in a fortnight and get the doses adjusted. The doses have to be reduced and if not done so the patient may get into trouble. After completing this course the patient can make use of the following Revision lessons for his practice.

Prayers, Sun Salutation- 12, Shavasana.

Yogasanas- Bhujangasana, Shalabhasana, Dhanurasana, Sarvangasana, Ashwini Mudra, Halasana, Matsyasana, Pashchimottanasana, Ardha Matsyendrasana, Hansaasana, Parivarta Trikonasana.

Breath Regulation- Naadishodhan, Bhraamari and Bhasrika

Cleansing Processes- Laghu Shankha Prakshalana- once in a week, Vaman and Jalanetionce in a week.

Yoga Nidra- Once daily.

Chanting of Aum- 15 minutes daily in the morning and 15 minutes daily every night.

Household Therapy

 \Box Drink with water powder of jamun seeds (1 teaspoon) every morning.

□ Eating leaf (trio) of 'bael' tree (Aegle Marmetos) every morning.

 \Box Decoction made 1/8th proportion of the descending shoot or the bark of the banyan tree + 1 teaspoon honey every morning.

□ Make decoction of one teaspoon of fenugreek grains mixed in one cup of water and boil until half its proportion. Drink this decoction every day.

Naturopathy

□ One glass full of Luke warm water + half lemon juice daily in the morning.

- □ Chewing and swallowing hot water as possible throughout the day.
- \Box Hot and cold fomentation on the place of pancreas -10 minutes twice a day.
- □ Mud cover on the place of pancreas before sleeping.
- \Box Shushka (Dry) massage all over the body daily before bathing.

Beneficial Diet Tips

□ Juice of Bananas, carrot, bitter gourd, spinach, Coconut water, butter milk exclusive of butter, fresh leafy vegetables.

 \Box Bitter gourd, garlic, tomatoes, radish, aalu (a leafy vegetable tasting similar to spinach), coriander, fenugreek, cucumber, brinjals, sprouted beans, fruits of the lime group.

Prohibited Diet

- □ Sweets (Including sugar and jaggery).
- \Box Sugar or starch inclusive of fruits, potatoes, sweet potatoes.
- \Box Rice, milk products.

11.2. Yoga for Diabetes

Preparatory Practices: Start the training with Shavasana Practice for 3 Minutes. Basic movements (Yoga Sopan book) Preparatory movements (Yoga Pravesh book) Sun Salutatons with slow speed (Yoga Pravesh book) Useful Practices: Preparatory Movements type 1 to 10 with fast speed. Sun Salutations 32 rounds in 8 minutes All Asanas are to be practiced on Level 3 & 4 with concentration on pancreas. Asanas; Uttanpad Chakrasana 3 rounds – Dhanurasana 3 rounds, one minute each Ashwini Mudra in Sarwangasana (3 minutes) – Halasana (1min.) – Matsyasana (30 secs) Ardhamatsyendrasana (1 minute on wach side) - Paschimottasana (1 minute) Akarna Dhanurasana 3 rounds each.- Privart Trikonasana (1 minute on each side) Veerasana (1 minute on each side) - Shavasana (when needed)

Cleansing Practices:

Agnisar 100 strokes total in 3 to 4 rounds Uddiyan Bandh 5 rounds (each round 30 seconds) Kapalbhati 5 rounds (120 strokes per round) Nouli (all types) Vaman Dhouti (Once a week) Full shankhaprakshalana (Once a Year) followed by Laghoo Shankhaprakashlana

for 40 days.

Pranayama: Suryabhedan Pranayama with kumbhak for 10 minutes, Bhastrika Pranayama with kumbhak for 10 minutes.

Yoga Nidra: Specially designed for Diabetes or for Stress Relief. Meditation: on Manipoor chakra with the mantra "Ram"

Optional Practices:

Asanas: Bhujangasana, Noukasana, Vipareetkarni, Vakrasana, Uttanpadasana, Pawavanmuktasana, Ardhpaschimottanasana, Ushtrasana. Garudasana, Trikonasana, Patangasana. Shirshasana (Head stand) & its variations. Pransyama: Anulom Viloma with or without kumbhak, Right nostril breathing

Cleansing Practices: Jal Neti – Dand Dhouti – Vastra Dhouti

Walking for 60 minutes

Contraindications: None

Food Habits: Suitable :Normal food with less fats & carbohydrates but with high fibres. Best food is fruits (except banana, mango & grapes) & vegetables Avoid: Sugar, Sugar cane, Nonveg food, Milk & milk products, Rice, Oily & Spicy food, refined foods, Fast Food, Preserved Food.

Special Food Program FANEER

This is a specially designed food program for reduction of weight. This includes the diet for three days as follows;

First day – Only Fruits and raw vegetables (No other food to be taken) Second day – Only Fruits and raw vegetables (No other food to be taken) Third day – Only Juices & soups (liquid diet to be repeated once in 15 days) Monitor the sugar level and adjust the treatment ted accordingly

Daily Practice Program: To be practiced after completing the prescribed program.)

No.	Asana / Yoga technique	Duration
110.	/ loana / Toga looninquo	minutes
1	Omkar Chanting	5
2	Sun salutation 32 rounds	8
3	Shavasana (Corpse pose)	2
4	Uttan Chakrasana 3 rounds	3
5	Dhanurasana (Bow pose) 3 rounds	3
6	Makarasana	2
7	Ashwini Mudra in Sarwangasana (Horse gesture)	3
8	Halasana	2
9	Matsyasana	1
10	Shavasana	2
11	Ardha Matsyendrasana (spinal twist) both sides	5
12	Paschimottanasana	2
13	Akarna Dhanurasana	3
14	Udar Sanchalana 3 rounds	2
15	Shavasana	2
16	Hansasana (Swan Pose)/ Mayurasana (Picock)	3
17	Parivarta Trikonasana (Twisted Triangle) from	3
	both sides	
18	Veerasana from both sides	3
19	Shavasana	2
20	Agnisar (Stimulating Fire technique) 100 strokes	5
21	Uddiyan Bandha (Abdominal lock) 5 rounds	5
22	Shavasana (Corpse pose)	2
23	Kapalbhati (Forceful exhalations) 5 rounds	5
20	Bhasrika (Bellow's breath)	10
21	Prayer	7
	Total Time	90
	Meditation on Pancreas during the practice of all	
ļ	Asanas	
ļ		
ļ	Yoga Nidra once a day	
	Laghu Shankha Prakshalana Once a week.	
	Shankha prakshalana (complete) + 40 Days of	Once in
	Laghu shankha prakshalana	Year
	Meditation : on Manipur Chakra with mantra "Ram"	30 min

12. Asthma

Asthma is a life-threatening disease. But it never kills a person in one blown and no one dies of one Asthma attack. Asthma kills a person by wearing him out. The asthma attack drains away the patient's energy leading toward death. This is a disease that harasses the patient openly, that creates intimacy with the patient, and that attacks him frequently, but does not kill the patient. So terrible can this disease be that the harassed patient often thinks s/he would prefer death as it becomes more and more difficult for the asthmatic patient to inhale or exhale during an attack, and death seems the only respite from his/her trouble.

The process of breathing outside air into the lungs and breathing out impure air is a natural and vital process of life. It starts from the moment of birth and ends only after the last breath. The process of breathing is a distinguishing symptom of life. To test whether a person on his deathbed is alive, a thread is held near his nose. The thread moves if the patient is breathing. Breath is life and breathlessness is death. Generally no person can survive after four minutes of breathlessness.

This breathing process is the key supplier of oxygen to the body. Oxygen is necessary for the activity of each and every cell in the body. Cells cannot carry out their activity without oxygen and a cell denied oxygen is none other than death. Oxygen lies in the air surrounding us. The external air enters the body through the nose. The oxygen also enters along with this air. This air then enters the lungs where some oxygen gets absorbed in the blood and is carried to all the cells in the body simultaneous with the carbon dioxide formed in the cells being expelled on exhalation. The breathing process is in control of the nervous system. If the requirement for oxygen by the body increases, increased amounts of air are inhaled by increasing the rate of respiration. The rate decreases as the requirement is fulfilled. We all know that the rate of respiration increases while running and decreases during sleep.

Asthma is nothing but a disorder developed in the process of respiration. The asthmatic patient cannot breathe in and breathe out enough air. Hence the body does not receive the required amount of oxygen. This reduces the rate of activity of the patient and at times he may become unconscious. The hindrance in the process of respiration is the attack of asthma. The intensity and frequency of the attack depends upon the nature of the disease. Some patients suffer from the attack only in a cold or humid environment; i.e., in winter or rainy season, but do not suffer from asthma in hot and dry climate. There is no rule as such for the suffering from this disease. But the nature of the suffering is one and the same in all cases.

Let us understand the process of respiration to know how obstruction in the process of respiration takes place during an asthma attack. Inhaling is the pulling of external air by the chest into the lungs. The chest cavity is expanded for the purpose, the diaphragm moves down and the muscles of the stomach are pushed outward. This creates a low pressure in the lungs and the result is the external air entering the alveoli through the nose, pharynx, trachea, the bronchi and the bronchial tree. A network of tiny blood vessels surrounds the alveoli. Oxygen passes through the alveoli into the tiny blood vessels (capillaries) and carbon dioxide from the capillaries passes into the alveoli. The diaphragm then expands and moves up, stomach muscles move inward, ribs move downward and the air from the lungs is forced out. Each inhalation constitutes nearly 500-600 cc (one-half liter) air and the same amount is expelled during exhalation. Efforts of deep breathing may increase this quantity up to 4500 cc and a scientific practice of

Yoga may increase this quantity even as high as 5500 cc.

In case of the asthma patient, the quantity of air inhaled is 300-350 cc instead of 600 cc. It may reduce to even 40-50 cc at the time the patient suffers from an asthma attack. The cause is the contraction of the bronchioles. There are circular muscles in the bronchioles. These muscles receive messages from the nervous system resulting in their contraction. When the action of the bronchioles is compromised enough air can be neither inhaled nor exhaled. Mental stress stimulates the nervous system for the contraction of these muscles. Reactions to the daily events in the form of emotions like anger, hatred, jealousy, love, fright, anxiety about the future, and so on arouse mental stress stimulating the nervous system and contracting the bronchial muscles. The intensity of the messages is directly proportionate to the intensity of mental stress, thus amplifying the intensity of the asthma attack. Many unfavorable incidents may result in this. Once the patient suffers from the attack, the fear of recurrence of the attack may increase the possibility of the recurrence of the attack.

As the bronchial tubes contract when the patient suffers from an attack very little air goes into the lungs. Cells from all parts of the body note the requirement of oxygen to the brain. Cells start complaining and once sensing the seriousness of the problem the brain makes vigorous efforts to breathe in excess air. As a result the expansion and contraction of the chest cavity and the neck muscles increases and the diaphragm moves down with such force the muscles get fatigued while simultaneously not receiving sufficient oxygen to function optimally. As their capacity to function comes to an end it increases the severity of the attack. Frequent attacks may make these muscles weak forever and it may not be possible for them to help even in normal breathing. This develops a vicious cycle - asthma attack- weakening of respiratory muscles - leading to asthma attack - leading to frailty in the patient - thus increasing the frequency of attack and severity of the disease.

Phlegm developed in the lungs is another element responsible for an asthma attack. There are many glands creating phlegm in the lungs. The respiratory movements force this phlegm in the upward direction through the airways and it is ultimately thrown out through the throat. Impurities like dust particles, smoke particles, poisonous particles, or any other foreign particles adhere to the phlegm due to its sticky characteristic and it is thrown out along with all these impurities. This means that the phlegm is a useful element in the respiratory system. But if its production increases due to some reason and the quantity thrown out does not increase, it gets stored in the lungs and the airways thus blocking them. This too results in an asthma attack. The main reason for stimulation of the glands producing phlegm is the stimulation of the nervous system. Sometimes infection is the cause behind increase in production of phlegm.

As mental stress is responsible for asthma it also obstructs other functions in the body. A tendency to give in to addictions believed by the patient to reduce stress like smoking, tobacco chewing, and drinking also actually increases stress, which is suppressed only temporarily with addictions but increases the intensity of disease forever. Watching movies and over-eating are other ways imagined to release stress. And although these ways appear to release stress, they too actually enhance stress. The fear of experiencing an asthma attack is also responsible for increasing mental stress.

Eating food that is hazardous or infectious to health also causes a person to suffer from asthma. This is termed as 'allergy.' A person's body reacts in extreme negation to certain substances. It creates its impression over the body. This impression may be in the form of an asthma attack. In this case finding out the substance causing allergy and avoiding it is the only way out. Medication works temporarily. It does not cure the disease. The reason behind this allergy cannot be detected although it is believed that mental stress may be one of the reasons behind it.

Asthma can also be hereditary, but it cannot be predicted that the child of an asthmatic parent will definitely suffer from asthma. Yet where there exists such a possibility it can be avoided if appropriate precautions are taken. If a person carries the attitude that, "I will surely suffer from asthma since my parents had to," s/he will definitely suffer from it even if s/he has not had any trouble until then.

Whatever the cause of asthma, allopathic treatment is accepted the world over and the medicines are very effective during a serious attack, but they do not cure asthma completely and the patient has to take the medicines permanently. This prolonged medication generates dependency in the patient. It creates a strong belief in his mind that it is not possible for him to stay alive without medication. Many a times, s/he suffers from an attack only due to the thought that the stock of medicines is over.

Various chemicals enter the body through the medicines taken by the patient. These chemicals may be toxic. Although medicine is helpful for asthma it may create adverse effects on functions of the other systems of the body and may cause other trouble for the patient. These other troubles might be so bothersome that the patient might prefer asthma. The chemicals in the medicines may disturb the physical and mental balance of the patient and this in turn may invite an asthmatic attack. The medicine is either taken into the stomach or is in the form of injections. Recently it is being taken through respiration. This reduces the quantity of intake and gives results within minutes.

There is no option other than medicine at the time of an attack. The amount of medicine is less in the modern method (through respiration), but it must be noted that it will only reduce the asthma trouble and not cure asthma. As time passes, the effect of medicine deteriorates and side effects appear. Frequency of trouble increases and resistance power diminishes. As the medicines will not cure asthma, the patient must see to it that the need for medication reduces, even though they are effective. He must uproot the main cause of asthma. Yoga is very useful in uprooting different causes of asthma. Although the Yogic processes do not produce instantaneous results and have to be performed for long periods of time, their effect stays for a long time, the causes of asthma slowly vanish, and the frequency of attack reduces as a result of increased resistance power.

12.1. Yoga in the Treatment of Asthma

Cleansing

Cleansing processes are the best for treating asthma. Amongst these Vaman, Jalaneti, Dandaneti, Shankha Prakshalana and Kapalbhati have been proven to be the most effective. We have seen that an increased amount of phlegm in the lungs contracts the airways resulting in asthmatic attack. The phlegm constantly moves in the upward direction through the trachea into the pharynx and is thrown out through the nose or the mouth or enters the stomach through the food pipe. The phlegm stored in the stomach can be thrown out in the process of Vaman. The internal movements held in the process of Vaman help the phlegm in the chest to move more in the upward direction and be thrown out. It is suggested in the book of *Hatha Pradipika* that Vaman be performed immediately after meals. The food taken is all thrown out during this Vaman. This does not increase hunger but gives a feeling of lightness. This kind of Vaman can be performed once in eight days.

A process even more effective than Vaman is Vastradhauti. *Vastra* is cloth. This cloth cleans the food pipe and stomach from inside by rubbing them. Although this process is somewhat difficult to perform it is very effective. The patient feels relaxed immediately after performing this process. The patient must perform this process every morning on an empty stomach during the period when he is undergoing asthma trouble.

Jalaneti and Dandaneti are the cleansing processes of the nose. These clean the nasal tract and reduce the allergy caused by dust, smoke, fragrance, humidity, pollen, etc. These also improve the strength of the nasal skin to sustain these impurities.

Shankha Prakshalana is an amazing and effective process that cleans the entire food path from the mouth to the anus. The process involves ingesting lukewarm water with lemon juice and salt and the practice of certain asanas for a period of one and a half to two hours. This speeds up peristalsis and cleans the entire food path in only one and a half to two hours. Many flaws in the process of digestion disappear by this process. The internal cleansing attained by this process gives rest to the asthmatic patient. This means that it must be affecting the respiratory system and the nervous system as well, but more research must be done to study its effect on these systems. It can be firmly stated that Shankha Prakshalana helps the asthmatic patient. But it cannot be performed frequently. Hence it is suggested once in six months.

Another effective cleansing process is Kapalbhati. Some perceive it as a kind of Pranayama as it is related to the respiratory system, but Kapalbhati is technically a cleansing process of the lungs. The procedure of Kapalbhati is to inhale in the normal way, but to exhale sharply and vigorously as if blowing a bug out of the nose, which causes a sharp upward impulse in the diaphragm. The increased strength and efficiency of the diaphragm derived from this process helps during an asthmatic attack and breathing can become comparatively easier for the patient. Smooth inhalation and sharp exhalation also lifts the phlegm in an upward direction and releases it, making the respiratory tract freer of phlegm. Regular practice of Kapalbhati can uproot the main cause of asthma, but must be practiced daily for 10-15 minutes to get good results.

Asanas

Asanas are also useful for an asthmatic patient as various muscles are pressed or stretched when practicing asana. Just as the fluid in a sponge is released when it is stretched or pressed, similarly, the stretches and presses experienced in the asanas help draw out toxins from the body. Asanas also improve the blood supply to the muscles thus improving muscle functioning and efficiency. In the case of patients suffering with asthma asanas can also help improve the efficiency of the chest muscles. And relaxation in the asanas also helps in improving respiratory efficiency. An asthma patient is permitted to perform all asanas as it cannot be said with certainty what asanas are useful and what ones are not and none are harmful to asthma sufferers. Moreover, benefits may vary according to each patient's constitution and need. So one must decide based on trial and error to confirm which asanas are most beneficial and then perform them regularly. While practicing asanas stability and length of hold of the asanas ought be gradually increased for enhanced effect. Do not start with difficult asanas, although Sun Salutation performed at a slow speed will be quite supportive. Practice simple asanas initially and then turn to the difficult ones.

Breathing - Pranayama

Pranayama is the control of *prana* and as a result the practice of pranayama reduces asthmatic trouble. Remember, the process of Pranayama is directly related to respiration. Hence Pranayama is directly beneficial to the asthma patient. Deep breathing and rapid breathing improves the efficiency of the chest muscles as well as the entire respiratory system and the intensity and frequency of asthma attacks reduce as a result of reduced stress on the respiratory and the nervous systems.

Control of breath also results in improved mental control, drains tensions piled up in the mind, and hinders development of new stress. As a consequence, asthma attacks can be reduced with the practice of Naadishodhan Pranayama, Bhasrika, Ujjayi and Bhraamari. But sufficient practice of deep breathing must be carried out before practicing these.

Contemplation

Contemplation as we know is the practice of concentration. This practice drains out mental tensions, as the mind does not concentrate on unwanted baggage. As we have seen that mental tension is one of the main causes of asthma, the reduced tension due to contemplation avoids contraction of the airways. Contemplation is very difficult although very effective. Hence initially, chanting of Aum is helpful. It carries out deep breathing indirectly and reduces stress, purifying the mind. The vibrations produced due to Aum affect the nervous system and help reduce stress. This results in systematizing the function of the nervous system. After sufficient practice of chanting of Aum, concentration of Aum and contemplation with Aum as the object of support are the further steps to be achieved. These processes have to be practiced only with proper guidance and these processes help in reducing asthmatic trouble.

Yoga Nidra

Another boon to the asthma patient is the process of Yoga Nidra, easy to perform and yielding the positive effect of relaxation. Yoga Nidra can be performed by all patients on their own with use of a recorded tape or CD. It can be performed twice or three times a day as per requirement. This process brings about relaxation on physical, emotional and mental levels. The practice of relaxation carried out daily will help reduction in muscular contraction at the time of attack. The mental pressure of an attack is reduced and the patient gets physically and mentally prepared to face the attack.

12.2. Yogic Practices for Treatment of Asthma – A practical program

Yogic processes, from cleansing processes to Yoga Nidra, purify the body and mind of the patient and alter the perception of the patient towards life. He develops a positive attitude to life. The allure for sensual enjoyment decreases and a positive detachment towards life develops in the patient. This detachment impedes any rise in tensions and it takes the person beyond the state of joy and woe. Consequently, the root of the disease disappears. All this change is not spontaneous. It is the fruit of consistent practice of especially advanced processes.

The treatment of asthmatic patient has to be considered on three levels. A patient new to Yoga will have to be taught some preparatory practices and then he may be taught the processes useful for treatment. The self-study processes are different and those to be performed at the time of attack are different. All the three periods have to be taken into consideration.

Contents for a new patient

First Week- Yoga Sopan syllabus

Second, third and fourth Week- Yoga Pravesh syllabus

Fifth to tenth Week- Yoga Parichay syllabus Yoga Sopan, Yoga Pravesh and Yoga Parichay are the primary courses of our institution-Yoga Vidya Dham.

It takes ten weeks to complete all these three courses in continuation. The processes of these courses may vary a little according to the patient's capacity. Here follows the additional processes to be taught to the asthma patient during these weeks.

Second Week- Process of Vaman (Perform it regularly after learning it).

Third Week- Shankha Prakshalana (On the last day of the week).

Fourth to Tenth Week- Perform Laghu Shankha Prakshalana and Vaman once daily and Vastradhauti thrice a week.

The asthma patient must perform Yoga Nidra regularly once in a day. Chanting of Aum for half an hour is also beneficial. When the patient completes the above course in ten weeks' duration, he must perform the following practices daily for his self-study.

Self-Study Contents

Prayers, Sun Salutation- 12 in no., Shavasana, Sarvangasana, Matsyasana, Shavasana, Bhujangasana, Dhanurasana, Makarasana, Ardha Matsyendrasana, Pashchimottanasana, Ushtrasana, Shashankasana, Marjarasana, Shavasana, Trikonasana, Veerasana, Chakrasana, Agnisar, Uddiyan Bandha, Shavasana, Laghu Shankha Prakshalana, Vaman, Shavasana, Kapalbhati, Naadishodhan Pranayama (21 cycles), Bhasrika Pranayama (11 cycles), Bhraamari Pranayama (11 cycles), chanting of Aum (51 times), Prayers. It requires approximately two hours for self-study. Asanas may be more or less according to the patient's necessity. In addition to this, Yoga Nidra once daily and chanting of Aum for fifteen minutes before sleeping is beneficial.

Household Therapy

 \Box Eat some cinnamon daily.

 \Box Take lavang pepper powder + jaggery twice a day.

 \Box Take garlic and camphor in the same quantity and grind them. Mix essence of sweet fennel into it and sniff it with the nose as well as the mouth.

□ Make decoction of dry ginger, cinnamon and sugar candy and drink half a cup of it daily.

 \Box Heat dry fig in milk and drink it

Naturopathy

 \Box Hot water bath for legs. This process is useful even at the time of asthma attack.

 \Box Take a steam bath in the morning daily. Take enema of sesame oil in the evening in between 5.30 - 6.30.

 \Box Grated cabbage steam twice a day.

 \Box Have a glass of cabbage juice on an empty stomach.

Beneficial Diet Tips

 \Box Drink hot water when it is very hot.

 \Box Eat light food that is easy to digest

 \Box Have dinner before 7.00 pm.

Prohibited Diet

□ Non-vegetarian food, hot, spicy, fried substances, bakery products, milk products and cold substances.

□ Banana, guava, custard-apple, cucumber, pineapple.

No.	Asana / Yoga technique	Duration in minutes
1	Sun salutation 12	10
-		
2	Shavasana (Corpse pose)	2
3	Sarvangasana (shoulder stand)	5
4	Matsyasana (Fish pose)	1
5	Shavasana (Corpse pose)	2
6	Bhujangasana (Cobra pose – Straight hand)	2
7	Dhanurasana (Bow pose)	1
8	Shalabhasana (Locust pose)	1
9	Makarasana	2
10	Ardha Matsyendrasana (Half spinal twist) both	5
	sides	
11	Chakrasana 2 rounds	1
12	Ushtrasana (camel pose)	2
13	Shavasana (Corpse pose)	2
14	Trikonasana	3
15	Veerasana (warrioe pose)	2

16	Shavasana	2
17	Agnisar 100 strokes in 3 to 4 rrounds	4
18	Uddiyan Bandha (Abdominal lock) 5 rounds	4
19	Shavasana (Corpse pose)	2
20	Kapalbhati (Forceful exhalations) 5 rounds	5
21	Ujjayi Pranayama with Kumbhak OR Nadi	10
	Shodhan Pranayama	
22	Right nostrill purak with Bhramari rechak	10
23	Bhasrika (Bellow's breath)	5
24	Prayer	7
	Total Time	90 Minutes
	Jalaneti once a week	
	Laghoo Shankh Prakshalana once in week	
	Purna Shankh Prakshalana once in 6 months	
	Meditation on Anahata Chakra, mantra "YAM"	15 minutes
	Yoga Nidra & Omkar Chanting once a day	
	Bhramant Pranayama	60 Minutes

13. Diseases of the Vertebral Column

The backbone/spine is a unique and immensely significant organ of the human body. The backbone is made up of thirty-three separate vertebrae and supports the weight of the entire body. There is a disc like cushion in between each vertebra. These discs are softer than the bones and maintain a specific distance between the vertebrae. There is a hole in the center of each vertebra and each disc that forms a hollow pipe. The spinal column that comes from the brain is safe in this hollow pipe. The nervous fibers in the spinal cord arrive from in between each two vertebrae and sets out to its specific organ. The distance maintained by the discs in between each two vertebrae is for this purpose. This structure of the backbone enables its movement in all directions- leaning forward, backward, bending sideways, twisting sideways- are all possible due to this characteristic structure of the backbone. Furthermore, physical shocks to the body are absorbed by the backbone and stopped from reaching the brain. The discs are filled with thin fluid and this fluid is covered with a strong and tenacious coat. This too helps in absorption of shocks.

There can be many diseases or deformities in these vertebrae and discs.

Deformities by Birth

These include bent vertebrae, difference in size of the vertebrae, misaligned joints in some vertebrae, etc. Surgery can overcome these deformities in many cases. Minor deformities may be reduced by Yoga or by using back braces.

Accidents

Accidents can damage the vertebrae and injury to the disc may cause severe trouble. Any harm to the spinal column may stop the function of certain organs. Surgery may be the answer in case of accidents. The nature of treatment depends upon the nature of injury.

Spinal Tuberculosis

Prolonged medication can treat this disease. Rest and use of plaster or braces is needed and in some cases surgery is necessary

Erosion of Vertebrae or discs

The wearing out of the vertebrae or shifting of discs can be severe over a period of time. These conditions are well known by the names spondylitis, sciatica, and slipped disc. The number of problems of the backbone is increasing and Yoga is the only natural remedy for these problems.

Spondylitis

Not only ladies but men also posses an attraction towards necklaces and waist belts as ornaments. When these braces transform into surgical braces, it is painful to carry them physically as well as mentally. Using it is an encumbrance and not using it is an impediment. The reason behind being prescribed a brace is Spondylitis. This disease has affected the human population to such a large extent that even doctors state that there would be few exceptions to who is not suffering from some vertebral diseases.

Modern medical science has not succeeded in producing effective medicines for this disease. Pain relieving pills, injections, tractions creating artificial tensions and pressures and at last surgery are the ways to overcome the disease. These do not always bring the disease under control and the patient encounters many side effects. When the patient turns to Yoga in a frustrated condition, Yoga gives him a helping, sympathetic hand. Yoga teaches the patient the technique of fighting with the disease and leading as well as maintaining a healthy life.

This does not mean that Yoga can cure Spondylitis completely. But it is also true that there is no option other than Yoga for treatment of spondylitis. It gives complete relief to the patient from the point of view of the patient, but medically, it does not get cured. The damage caused to the discs is not repaired by Yoga and hence the doctors are of the opinion that the disease is not cured. But the patient can perform his routine chores without any hindrance and trouble and hence for him the disease is cured.

The erosion between two vertebrae puts a load on the vertebrae, pressing the nerve fibers passing through them and causing the patient a lot of trouble. Specific yogic processes carry out exercise to the various muscles of the vertebrae enhancing their efficiency where the load on the vertebrae is inefficiently sustained by these muscles. The nerve fibers aren't pressed and pain is relieved. The symptoms of this disease start from pain in the waist or neck. The consequent symptoms are pins and needles in the hands and feet, giddiness etc. An X-ray is the way to diagnose this disease. Once spondylitis is diagnosed the patient has to follow certain rules whatever treatment - allopathic or yogic – s/he may be undergoing. Following these rules prevents the severity of the disease and it is the first step towards healing.

The first and the foremost rule is, do not lean in a forward direction. Bending forward brings the vertebrae nearer to each other further compressing the nerve fibers resulting in pain. Many of our movements include bending forward and hence the use of neck or back brace becomes mandatory. Avoiding this movement can achieve a lot. Furthermore, sleeping on a hard bed instead of spongy or thick cotton mattresses will prevent increasing severity of the disease. Sleeping on the plain floor or a plain board with some soft blanket or thin mattress will provide the required comfort. Taking support beneath the head when in supine position will be harmful but while sleeping on one side having support of a pillow will be beneficial. Hurried movements are prohibited.

Patients are inclined to seek allopathic treatment for spondylitis. Traction may benefit them to a certain extent. But if the intensity of the disease is not much, yoga can treat well without traction. Use of collar or back braces is suggested in consultation with the doctor. Use of such braces does not cure the disease but prevents increasing its severity. It prevents the patient from leaning forward and this reduces his discomfort. Taking medicines or injections to reduce discomfort is not recommended. Avoid their use as far as possible.

Yogic Treatment

Certain Yoga asanas are useful in treating this disease. The disease is caused in the vertebrae of the neck or back.

Vajrasana

1. With Vajrasana as the initial position, keep both forehands besides the knees; press the waist below and hold the neck backward. Let the hands sustain all the body weight.

2. With Vajrasana as the initial position, touch the elbows on the floor near the knees and place the face in between both hands with joined wrists and relax your weight.

3. In the above position (2nd), straighten the left leg behind.

4. In the above position (3rd), straighten the right leg and seek position of Sahajahasta Bhujangasana.

All these steps are to be performed in the opposite sequence leading up to the initial position of Vajrasana. It forms a chain of eight asanas - the above four and the four reverse steps. Try to attain stability in each step to the extent the patient is comfortable. The movement from one step to another must be very gentle and controlled. Stop at the position where the patient experiences trouble. Besides the above chain of nine asanas, asanas like Marjarasana, Samakayasana, Matsyasana and Veerasana in which backward bending is included are helpful. Trikonasana and Pavanmuktasana (without lifting the neck upward) are helpful in spondylitis of the back. These are well-known asanas and hence their description is not provided in this chapter. Moreover they cannot be performed without a Yoga coach. Mere description will not add to the patient's knowledge.

After learning the asanas necessary for the treatment the patient must practice them twice a day initially. The effect of the asanas lasts for about four to six hours. Later the neck/back starts aching. Hence if they are performed in the morning as well as in the evening, the patient will not experience discomfort. After such practice for a month or two he can cut down his practice to one time daily as muscle strength increases.

Medication should not be stopped even if yogic treatment is going on. As yoga practice increases, medication can be reduced gradually and then stopped completely on consultation with the doctor. Practice must be continued even later. Once the patient gets rid of his trouble he can follow his regular regimen. The practice of asanas ought never be stopped but it is not within the reach of asanas to cure this disease entirely. The trouble may recur once the practice of asanas is stopped. Practicing asanas is preferred to taking medicines forever. Besides, the side effects of asanas are positive. The disease can be overcome with proper guidance and practice, immediately after the diagnosis of the disease. Some patients try other ways out. When other options fail to help them, they ultimately have to turn to Yoga. But it is always better to pursue the yogic path before the disease gets worse.

The asanas mentioned above are not the only one's that are beneficial for spinal cord diseases. A specific course has been developed for the purpose (Yoga Sanjeevan). The course contains body movement exercises, simple Yogasanas, respiratory practices, and other yogic processes that are useful. Besides these, some specific asanas according to the condition of the patient are also included.

Household Therapy

 \Box Decoction of fenugreek seeds half a cup 1-2 times.

 \Box Eat garlic buds (5-10) during meals.

 \Box Take 100 gm. leaves of coral tree. Boil them in one liter water until one-third remains. Strain it and have it empty stomach in the morning and one hour before dinner.

Naturopathy

□ Warm the painful part of the body and apply Sanjeevan oil to it twice a day.

 \Box Have lemon juice with water in the morning when stomach is empty.

Beneficial Diet Tips

- \Box Light meals, natural diet.
- \Box Sprouted fenugreek seeds.
- □ Apple, guava, orange, chickoo, watermelon, banana, mango.

Prohibited Diet

- □ Non-vegetarian food, hot, spicy, fried substances,.
- □ Pulses- pigeon peas, Bengal gram, black gram.
- □ Bakery products and cold substances.
- \Box Potato, sweet potato, sago.

Slip Disc

Initially this appears to be trivial but it may take a serious form later. The disc between the two vertebrae shifts due to wear and tear of the vertebrae or due to some other reason. This compresses the spinal cord and harms the nerve fibers. The result is heaviness or pins and needles in the feet, numbress in the calf of the leg or a finger. It is only surgery that works in case of numbress in the feet. In other cases, the way out is pain- relieving medicines, waist brace or traction. It gives relief to some extent but yoga and naturopathy render wonderful outcome in this kind of diseases.

In case the patient is experiencing severe trouble, it is not possible for the patient to perform yoga. The patient is treated with naturopathy in that case to reduce his trouble and pains. In case of extreme condition, the patient has to be given traction and medical treatment as well. As his condition improves gradually, he can be treated with naturopathy and yoga. If the numbness of feet increases then there is no option other than surgery.

Actual Treatment

The treatment of spondylitis can be followed for slip disc patients too. In addition, the following treatment will help.

 \Box Take enema of 50 cc sesame oil in the evening between 5.30-6.30 (This must be done under guidance of an expert).

 \Box Have a glass of water and dill seeds on an empty stomach in the morning.

□ Perform Shavasana for fifteen minutes with a pillow underneath the waist.

□ Sleep on a hard floor or bed instead of foam or thick cotton mattresses.

13.1. Yoga for Spine Problems

(Lower backache, Cervical/Lumber Spondylitis)

Preparatory Practices: Start the training with Shavasana Practice for 3 Minutes. Basic movements (Yoga Sopan book)

Useful Practices: All asanas are to be practiced on Level 3

Asanas;Tadagasana, Vajrasana series from Yoga Sopan book, Pavanmuktasana, Ardha Chakrasana, Anantasana, for about 10 days, *then* Bhujangasana– Shalabhasana– Dhunurasana Ardhamatsyendrasana, Tadasana – Tiryak Tadasana - Katichakrasana Trikonasana– Veerasana, Shavasana (when needed)

Cleansing Practices: Uddiyana Bandha 3 rounds (each round 30 seconds) Jalaneti (Once a week)

Pranayama:

Anulom Vilom Deep Breathing 15 minutes Sheetali Purak followed by Bhramari Rechak (21 rounds)

Meditation on Vishudhdhi Chakra with mantra "Ham" Swadhisthan Chakra with mantra "Ham"

Optional Practices:

Asanas: Vakrasana, Uttanpadasana, Sulabh Ushtrasana. Ushtrasana, Marjarasana Sankatasana,

Pranayama: Right nostril breathing, Bhramaari Pranayama without kumbhak Cleansing Practices: Neti

Contraindications:

All forward bending Asanas Sarvangasana, Halasana, Shirshasana (Head stand) & its variations. Fast breathing, Left nostril breathing. Bhastrika Pranayama, Any Pranayama with Kumbhak. Vaman dhouti, Shankha Prakshalana (Laghoo /Purna.)

Food Habits:

Suitable :Normal food with less fats & carbohydrates but with high fibres.

Best food is fruits & vegetables, less protin diet.

Avoid: Nonveg food, Milk & milk products (Skimmed milk can be taken), Rice, Oily & Spicy food, refined foods, Fast Food, Preserved Food. Salts.

14. Arthritis

Our joints are responsible for body motion. Pain in various joints of our body is termed as arthritis. It is minor in the beginning but gradually becomes severe and extremely painful. The movement of joints is gradually constrained and ultimately it becomes impossible to move even a little bit. Arthritis thus hinders not only the patient's walk but also sitting and standing becomes difficult. So it is better to get treated in the initial stage. The initial stage is pain in the knees or waist; slowly all joints of the legs start experiencing pain and swelling. Sometimes these areas become reddish. In the later stages the finger joints also get swollen and start aching. Pain- relievers give temporary relief but do not improve the condition of the joints.

Yoga can cure this disease completely in the initial stage. In the latter stages yoga can help in reducing medical requirement thus reducing the side effects. It may also improve the movements of joints and prevent an increase in intensity of the disease. In the last stage of this disease the movement of joints is completely obstructed and there is a permanent change in the shape of joints. Not only yoga but other therapies too are incapable of treating the patient in this stage.

We shall look into the structure of joints before studying their disorders. The bones are designed to support our body. These bones are joined to each other and they move except for the skull bones. These are termed as 'movable joints'. There is some movement constantly in these joints. They constitute a specific structure to enable easy movements. There is a cartilage at the end of the bones that are joined to each other and it is joined to both bones with a network of tendons. There is a thin coating covering these cartilages and an oily fluid is secreted from the cover. This fluid acts as lubricant and enables frictionless movements of joints. The cells in this part must be provided with sufficient blood supply for optimum production of this fluid. Sufficient oxygen is also required with sufficient blood supply. If this supply is not enough there is a drop off in the production of this fluid creating friction in the joints resulting in pain. Moreover, the toxins and uric acid produced are not carried away due to lack of blood supply. The rate of production of the lubricating fluid slows down even more due the toxins stored in the cells. The movement of joints is restricted as time passes and is ultimately completely stopped. It is not possible to treat this condition.

The causes of joint aches are the same in all cases. Yet some kinds can be differentiated on the basis of the causes. Here are some:

Restraint in joints - Sometimes there are temporary reasons for joint pains like cold, fever, and diarrhea. The toxins in the blood increase during these diseases. These toxins are stored in the fluid of joints or cells producing fluid and consequently the production of fluid reduces resulting in joint pain. The amount of pain is directly proportionate to the amount of toxins present. Treatment of the original disease reduces this joint pain automatically.

Gout - This joint pain occurs due to incorrect diet. Non- vegetarian or protein-rich diet increases the amount of protein in the blood. This in turn increases the amount of uric acid. It is not eliminated completely through urine. The extra uric acid is then stored in the cells of the joints decreasing the amount of lubricating fluid thus developing arthritis.

Arthritis - This is very troublesome disease. The pains are similar as in the above case but definite cause of the disease is not known. Many a time it may be hereditary and may occur in young age too. It has been observed that it may rise due to emotional factors. It is also developed due to high medicinal doses. The consequence is reduced production of fluid and amplified pains in the joints.

Osteoarthritis - This kind of arthritis is developed mostly in obese people or in those persons whose joints have been injured long before. Later on, there occur some permanent changes and a defect may be formed due to insufficient blood supply and insufficient oxygen and joints start paining. Trouble arises despite increasing the amount of calcium in the body; i.e., again due to inappropriate diet.

Causes of the disease

It is evident from the above description that inappropriate diet is one of the principal causes of this disease. Over-eating, non-vegetarian food, oily, refined substances, use of excess amount of milk, ghee, sugar and salt are the substances contributing to this disease. Frequent indigestion too is the cause of rise in arthritis. Lack of exercise is also a major cause responsible for the growth of this disease along with inappropriate diet. Emotional imbalance and mental condition too contribute in the rise of this disease. A blast of suppressed emotions may be a cause of emergence of this disease.

Prevalent Method of Treatment

The most common method of treatment is pain-relieving medicines like aspirin. These damage the digestion, and also the function of liver and of the kidneys of the patient. The original disease is not cured but keeps on growing and higher doses of medicines have to be taken. These give rise to more side effects. At last, corticosteroids have to be given. These give rise to severe troubles. There is a decrease in the amount of calcium in the bones making the bones brittle. The original disease has not been cured. Hence sometimes joints are replaced with artificial joints by surgery. But this is not the way to cure disease. On the contrary, yogic therapy works on improving the condition of the original disease and is hence significant.

Yogic Therapy

It is important for the arthritis patient to carry out movements of his joints as these movements improve the blood circulation in the joints and as a result the toxins stored there are carried away. But the problem with the arthritis patient is that his pains increase with increased movements. Hence he doesn't move and this further increases the pain. Rapid movements are not possible here but movements that are bearable, sustainable and won't increase the trouble must be carried out and those are possible only in yoga.

Beneficial Yogic Therapy

- □ Yoga Sanjeevan + Yoga Sopan
- □ Inhalation with right nostril and exhalation with Bhramaari (21 times).
- \Box Rapid breathing types 1-6 (3 cycles)

 \Box As joint pain goes on decreasing the patient can perform the processes included in the courses of Yoga Pravesh and Yoga Parichay.

Warming and massage

Aching joints can be made warm and then massaged lightly and correctly with specific herbal oil (Sanjeevan Oil). This improves the condition of the patient and makes movements comfortable for him. He can then perform yoga without difficulty.

Lifestyle Suitable to Yoga

It is necessary to lead a healthy life following the self-restraints and fixed observances stated in Yoga. Leading a life with a detached point of view and controlling the modifications of the mind are the ways of life stated by yoga. They can be achieved with proper practice and will definitely reduce illnesses in the body.

Household Therapy

 \Box Drink water boiled with dry ginger throughout the day.

□ Eat 2-3 teaspoons of raw coconut oil during meals.

□ Massage painful joints with castor oil before bathing

 \Box Have a combination of 2 teaspoons castor oil + 1 teaspoon honey + a cup hot water every night.

Naturopathy

Steam bath- 15 -30 minutes daily.

□ Warming the painful joints and massaging them with Sanjeevan oil twice a day.

 \Box Enema of sesame oil every evening in between 5.30- 6.30 pm.

□ Have lemon juice with lukewarm water on an empty stomach every morning.

 \Box Have a glass of juice made from wheat sapling (grown in a small earthen pot for a week) on an empty stomach.

 \Box Sun bath daily for 10-15 minutes.

Beneficial Diet Tips

□ Fresh, hot and light diet. Milk boiled with dry ginger.

 \Box Khichadi of split green gram, chapati with vegetables, boiled vegetables, leafy vegetables.

□ Fenugreek, garlic, spinach, dates.

 \Box Fruits except banana.

 \Box Meals before 12 noon and 7 pm.

□ Fasting once a week, excluding substances like sago, peanuts, potatoes, sweet potatoes.

Prohibited Diet

□ Non-vegetarian food, high protein diet, hot, spicy, fried substances, bakery products.

□ Pulses- pigeon peas, Bengal gram, black gram.

 \Box Cold drinks and foods.

 \Box Over-eating and fast food.

14.1. Yoga for Arthritis

Preparatory Practices:

□ Start the training with Shavasana Practice for 3 Minutes.

□ Basic Movements with very slow speed, from Yoga Sopan Book

Useful Practices:

Asanas - All asanas are to be practiced on Level 1 Tadagasana, Shavasana and slow practice of all basic movements, Vajrasana series from Yoga Sopan book, Pavanmuktasana, Ardha Chakrasana, Anantasana, Shavasana (when needed)

Cleansing Practices:

Agnisar 100 strokes total in 3 to 4 rounds Uddiyana Bandha 5 rounds (each round 30 seconds) Kapalbhati 5 rounds (120 strokes per round) Vaman Dhouti (Once a week) Laghoo Shankhaprakashlana (once a week)

Pranayama:

Anulom Vilom Deep Breathing 15 minutes Purak with right nostrill followed by Bhramari Rechak (21rounds) Suryabhedan Pranayama with kumbhak for 10 minutes Bhastrika Pranayama with kumbhak for 10 minutes.

Meditation on Adnya Chakra with mantra " OM "

Yoga Nidra for stress relief

Optional Practices:

Asanas: Vakrasana, Uttanpadasana, Sulabh Ushtrasana. Ushtrasana, Marjarasana Sankatasana

Pranayama: Right nostril breathing, Bhramaari Pranayama without kumbhak

Cleansing Practices: Neti

Contraindications:

All movements & asanas which overstrain the joints Suryanamaskar, Sarvangasana, Halasana, Shirshasana & its variations.

Left nostril breathing. Sheetali & Sitakari Pranayama

Food Habits:

Suitable :Normal food with less fats, protines & carbohydrates but with high fibres. Best food is fruits & vegetables,

Avoid: Nonveg food, Spicy food, refined foods, Fast Food, Preserved Food.

15. Indigestion

The question - "Do we live to eat or eat to live?" is one of debate. But, the relation between eating and living is reciprocal; that of give-and-take. Though we all know that food is a basic need of human beings; it can also prove hazardous to human life. A humorous thought in this context is: 'we live on half the amount of food we eat and our doctors live on the other half!' This implies that food ruins man as well as helping him survive. Food is the savior if digested properly and it is the destroyer if not digested properly. Indigestion is not a severe disease, but it may be responsible for the emergence of other, more severe diseases. As the source of many diseases, it must be given serious thought. We shall start by going through the structure of the digestive system.

The Digestive System

The food we eat is not utilized in the same form as we take it in. Carbohydrates, proteins, fats, vitamins, minerals and water are absorbed from the food we take and utilized in the metabolic process. The substances obtained from food undergo a chemical reaction, with the help of oxygen, in order for the body to take energy from food. The process in which chemical analysis of the food and absorption of nutrients takes place is called digestion. This process is carried out in the digestive tract. The digestive tract is nothing but a thirty foot long unbroken pipe that starts from the mouth and ends at the anus. Various functions take place at various points of this tract. Ingestion of food from the mouth, digestion in the stomach, absorption and assimilation in the small intestine, and excretion in the large intestine are the functions carried out in the various organs.

The outer cover of this food tract is whitish in color and a jelly-like fluid is secreted from it. This prevents any disturbance of other organs in the passage of food. The small intestine is made up of many folds, but these do not obstruct each other because of this cover. There is a central layer made up of muscles below the cover. It helps to push the food forward with a muscular movement. The innermost layer is very soft like velvet. A jelly-like secretion in this layer helps food to travel forward. Digestive juices are secreted at some sites. The blood vessels that absorb the nutrients in the food also reside here.

The mouth is the entrance of the digestive system. The teeth grind the different food items taken in by the mouth. Saliva is mixed at this place and the digestion of starch starts at this point due to the element tylin in saliva. The food then travels to the stomach via the throat.

The stomach is a muscular bag. Various digestive juices get mixed with the food while it is in the stomach and start the process of digestion, that is, food is transformed into a state that can be absorbed into the blood. It then enters the small intestine, after three to four hours. The length of the small intestine is about 21 feet and the process of digestion is continued in the initial part of this intestine. Its area measures around 10 square meters. The nutrients in the food are absorbed due to the folds in the intestine, and the waste is pushed forward into the large intestine. Then, the liquid form of food is absorbed and residual solid waste in the form of excreta is pushed ahead into the rectum and thrown out through the anus.

The other organs that contribute in the function of digestion are the salivary glands, liver, spleen, and pancreas. The journey of food from the throat to the anus takes place due to the expansion and contraction of muscles of the digestive system. The rate changes according to requirement, and is controlled by the automatic nervous system.

The healthy functioning of these organs means a healthy state of the body. The malfunctioning of these organs, however, is a disorder. The main reason for their malfunctioning is nothing but an inappropriate diet. There is no chance of indigestion if the diet is appropriate. Hence, following dietary rules is the primary requirement when treating indigestion. It cannot be cured without dietary control. Often, fasting works wonderfully to cure indigestion. Fasting gives the digestive system the rest it needs. A proper diet after fasting is the subsequently important part of treatment.

Indigestion

If the food eaten is not digested, the result will be indigestion. This can happen when food is of low quality, or the person eats beyond the capacity of their digestive system. The undigested food rots in the stomach or in the intestine, resulting in symptoms like sour belches, vomiting sensations, heaviness in the stomach or uneasiness. If this happens frequently, it creates adverse effects on the secretion of the digestive juices, resulting in permanent indigestion. Many toxins are produced as a result of rotting food. These toxins are absorbed into the blood affecting other organs of the body. The consequence is headaches, weakness, and reduction in weight.

The main reason behind indigestion is an inappropriate diet; a diet that is void of mineral salts, the use of refined substances, substances made from maida (fine wheaten flour), sugar, alcohol, indefinite timing of meals, late dinners, frozen food, cold drinks, spicy and hot food. Additionally, indigestion can result from mental and emotional stress, which can inhibit the proper production of digestive juices.

Yogic Therapy

Acidity, ulcers, constipation, and gastric disorders are the byproduct of frequent indigestion. Yogic therapy for these disorders is independent of this chapter, which shall discuss the treatment of indigestion only.

Preparatory Movements- The twelve preparatory movements in the course of Yoga Pravesh exercise all muscles and joints. These movements are performed very slowly and therefore benefit the digestive system as well.

Sun Salutations- Sun salutations contribute a chain of Yogasanas inclusive of Pranayama. The Sun is the Lord of the Manipura Chakra, which is the chakra in control of digestion. Sun salutations, worshipping the sun, act on this chakra. Furthermore, asanas in the Sun salutation are performed with a regular speed, which regulates blood circulation to all muscles, throwing away the toxins in the blood, and altogether improving the metabolic system.

Yogasanas- Any Yogasana performed in the right way affect the digestive system favorably. An effective, yet simple list of asanas include the names of- Bhujangasana, Shalabhasana, Dhanurasana, Sarvangasana, Halasana, Pashchimottanasana, Ardha Matsyendrasana, Trikonasana and Veerasana.

Bandhas and Kriyas - Agnisar Kriya improves the digestion process and kindles the digestive fire. Uddiyana Bandha and Kapalbhati are also beneficial in improving digestion. In addition, the cleansing process of Vaman cleans the stomach and improves the quality and quantity of production of digestive juices.

Shankha Prakshalana - Complete Shankha Prakshalana is the process of cleaning the entire digestive tract. This not only cleans the impurities in the tract but also helps digest food properly by providing digestive juices in the appropriate amount in the stomach, and allowing proper absorption to take place. After performing complete Shankha Prakshalana once, the patient can perform Laghu Shankha Prakshalana as per his requirement. With this practice he can get rid of all his digestive problems.

Pranayama- Deep breathing and rapid breathing such as Naadishodhan Pranayama and Bhasrika Pranayama are useful in improving digestion.

Household Therapy

 \Box Store water in a copper vessel and drink in the morning before brushing teeth.

 \Box A half teaspoon of myrobalan (Hirda) powder + one glass of hot water twice a day.

 \Box Triphala powder (three myrobalans - Hirda, Behda and Aavalkathi) 1 teaspoon + 1 glass of lukewarm water.

Soak 50 gm dried black grapes in 1 glass of water. Crush the black grapes with your hand in the morning, eat them, and drink the water in which they were soaked.
 Eat 4-5 garlic buds with betel leaf.

Naturopathy

□ Fasting and juice diet (only) as per the requirement.

- \Box Keep a cold plate on the stomach for 15 minutes before meals twice a day.
- □ Sunbathe every morning and evening.
- \Box Have meals before 12 noon and 7 pm everyday.
- □ Water enema as per requirement.

Diet

The prime factor to improve or destroy the digestive system is diet. Indigestion is the product of an improper diet. The first and foremost way to improve disorder of the digestive system is fasting- complete restriction of food intake. This gives rest and purifies the body.

When food is taken again, some dietary rules should be observed. Non-vegetarian food must be totally banned. Vegetarian food must be fresh; having been subject to minimum reactions. Refrigerated or tinned food is not suitable for proper digestion. The diet must include leafy vegetables, fruit vegetables, fruits, etc. It must contain all six flavors- sweet, sour, salt, pungent, bitter and astringent.

Food should be taken twice a day and the timings must be fixed. The quantity should be half the stomach solid food, one-fourth liquid food. Dinner should be light to digest and taken at the time of sunset. Late dinners should be avoided. The atmosphere and the mind should be calm and peaceful before consuming food. If the mind or body is stressed, perform Shavasana for 5-10 minutes before having meals.

Beneficial Diet Tips

 \Box Fresh and light diet.

- \Box Sweet (not sour) buttermilk after meals.
- \Box Leafy vegetables and half cooked fruit vegetables.
- □ Ripe papaya, coconut water, carrot, orange, pomegranate, gourd.

□ Natural diet, sprouted beans.

Prohibited Diet

□ Non-vegetarian food, hot, spicy, fried substances, bakery products.

- \Box Curd, stale food, frozen food.
- \Box Tinned food and fast foods.
- \Box Over-eating.

Yoga and Diet

Regular practice of Yoga definitely improves digestion, and also brings about mental control. The patient can thus avoid spoiling his digestion.

15.1. Yoga for Digestive Disorders

(Indigestion & Constipation)

Preparatory Practices: Start the training with Shavasana Practice for 3 Minutes. Basic movements (ref Yoga Sopan book) Preparatory movements (ref Yoga Pravesh book)

Useful Practices: Sun Salutations 32 rounds in 8 minutes Asaas; Bhujangasana (1 min.) – Shalabhasana (3 Rounds) – Dhanurasana (30 sec.) Makarasana (2 Min.) – Pavanmuktasana (2 min.) - Uttanpad Chakrasana 3 rounds – Sarwangasana (3 minutes) – Halasana (1min.) Matsyasana ! minute) Ardhamatsyendrasana (2 minutes on each side) Paschimottasana (1 minute) – Akarna Dhanurasana (1 minute on wach side) Ushtrasana (2 minutes) – Udarsanchalan (3 rounds) – Trikonasana (1 minute on each side) – Veerasana (1 minute on each side) - Shavasana (when needed) Cleansing Practices: Agnisar 100 strokes total in 3 to 4 rounds Uddiyan Bandh 5 rounds (each round 30 seconds) Kapalbhati 5 rounds (120 strokes per round) Vaman Dhouti (Once a week) – Laghoo Shankhaprakashlana (once a week) – Full shankhaprakshalana (Once a Year) Pranayama: Suryabhedan Pranayama with kumbhak for 10 minuits Bhastrika Pranayama with kumbhak for 10 minuits.

Optional Practices:

Asanas: Vipareetkarni, Vakrasana, Uttanpadasana, Pawavanmuktasana, Ardhpaschimottanasana, Sulabh Ushtrasana. Garudasana, Parivart Trikonasana, Patangasana. Pranayama: Anulom Viloma with or without kumbhak, Right nostrill breathing

Cleansing Practices: Neti – Dand Dhouti – Vastra Dhouti – Nauli (all types)

Walking for 60 minutes

Contraindications: None

Food Habits:

Suitable: Normal food with less fats & carbohydrates but with high fiber. Best food is fruits (except banana, mango & grapes) & vegetables Avoid: Nonveg food, Milk & milk products (Skimmed milk can be taken), Rice, Oily & Spicy food, refined foods, Fast Food, Preserved Food.

16. Constipation

Constipation is a trouble experienced from childhood to old age. However, not many are aware that it is an intimation of an impaired body system. Hence, there is a tendency not to get treated and even if the person undergoes treatment, relief is only temporary as the source of the disease is not taken into consideration. The vexation recurs once the treatment is stopped, which can then transform into an incurable disease. For many, Yoga is the best therapy.

The prevalent treatment is to take medicines to loosen the bowels. There are individuals taking these medicines regularly who are convinced that they have triumphed over constipation. However, theirs is not the best way as the tension of the intestinal muscles is altered by the intake of medicine. They have to perform rapid artificial movements and hence they lose control in performing their function independently. Gradually, the person becomes dependent on such medication to evacuate their bowels. Yoga is the only option to stop this vicious cycle.

Nutrients from the food we take get absorbed in the small intestine, and the excreta enters the large intestine in order to be disposed of. This process is carried out in the digestive system. The liquid is absorbed here and the solid waste is excreted through the anal path. This journey of excreta takes place due to peristaltic movement created by the expansion and contraction of the intestinal muscles. If the strength of expansion and contraction of the large intestine reduces, it affects the peristaltic movement, which inhibits the discharge of feces. This is the state of constipation. Sometimes, the remnants of food do not respond well to the muscular commands to move ahead. This hindrance can be overcome by appropriate changes in the diet. For example, if there is a low amount of liquid in food, the excreta become thick and hard, making their movement difficult. The solution is to include sufficient liquid form in the diet; such as leafy vegetables and other food containing a lot of cellulose. With this change, the patient may get rid of one of the major causes of constipation. This is the only solution if the muscular movement becomes sluggish.

Mental stress, the root cause of so many diseases, is also one of the causes of constipation. A high level of mental stress can prevent the right control of the muscles of the large intestine. Medication does not alter the condition in this case. The cause of mental stress must be discovered so that it can be overcome; then the constipation trouble will automatically be beaten. It must be noted that alcohol or medicines creating vertigo are not acceptable ways of treating mental stress. The practice of yogic processes that do not exhibit any side effects is the appropriate method in every respect.

Four kinds of yogic processes are useful in the case of constipation - asanas, Pranayama, cleansing processes and relaxation. Of course it may not be necessary for everyone to perform all these processes. The cause of constipation plays an important role in deciding treatment.

Asanas

Sun Salutation- This is a chain of six asanas in continuation. Among many methods of performing Sun Salutations, the 'Aundhkar Method' is the most beneficial for this condition. 10-12 Sun Salutations should be performed regularly. This creates apt pressure and tension on the inner as well as outer muscles, thus improving their efficiency as well as overall bodily functions. It also affects the digestive tract in a positive way.

Sarvangasana- The inversion means that the intestinal muscles will be relaxed. Moreover, as the Jalandhar Bandha exerts pressure on the thyroid and parathyroid glands, they secrete juices supportive to digestion.

Bhujangasana, Shalabhasana, Dhanurasana- These three asanas have a positive effect on the digestive process. They act on the Manipur Chakra, which is related to digestion. If deliberate relaxation in these asanas is practiced, the intestinal muscles will get strained to some extent, thus improving the peristaltic movement. If constipation is the outcome of improper movement of food through the digestive tract, it will immediately disappear with the practice of these asanas.

Ardha Matsyendrasana, Pashchimottanasana- In these asanas the intestinal muscles are pressed and twisted. They also affect positively the glands secreting digestive juices, improving their efficiency. Indigestion and constipation will vanish totally if the secretion of digestive juices is appropriate.

Cleansing Processes

Agnisar - As the name suggests, Agnisar is the process that kindles the digestive fire. It is a rapid inward-outward movement of the stomach with breath held out of the lungs. The intestines and the glands secreting digestive juices are tensed and pressed rapidly. Consequently, the efficiency of the digestive system as well as the peristaltic movement improves.

The process of Nauli - Although this process is difficult to perform it is very effective. It creates a negative pressure on the stomach, small intestine, large intestine and rectum. This helps in the movement of food as well as the excreta.

Basti - Anyone with an in-depth practice of yoga will be able to perform Basti. Ideally, he must have a good practice of Uddiyan Bandha and Nauli beforehand. To perform Basti; create negative pressure by performing Nauli, draw water in through the anus and large intestine into the rectum before releasing it along with the excreta. The difference between Basti and the modern method of enema, is that in enema water is drawn inside by the force of gravity. Basti is a more natural process, relying solely on muscular action. The practice of Basti under proper guidance will rid the patient of constipation.

Moolshodhan - An easy but effective process, which can reduce the tendency to constipation. The middle finger of the left hand is to be used. Cut the nail short and apply castor oil to the finger, then pass it into the anus and massage all the surrounding muscles. This will help the muscles to become efficient, influencing the sensation of motion and resulting in proper discharge of feces. The process is much better than taking laxatives.

Shankha Prakshalana- This too is an effective cleansing process. Lukewarm salt water with lemon juice is taken before repeating a set of dynamic asanas. The water starts to move through the system. The water and lemon juice is taken again, and the asanas repeated. The process is repeated until water is passed through the digestive tract. The process should be ceased only when the water runs clear, indicating that the digestive tract has been thoroughly cleaned with salt water. This ends many diseases regarding the digestive tract. However, this process requires proper guidance, and should not be performed independently.

Pranayama

Perform rapid inhalation and exhalation with both nostrils in the Bhastrika

Pranayama. When exhausted, perform deep exhalation and unhurried inhalation with the right nostril. After that, perform breath retention according to individual capacity and exhale slowly with left nostril. This will complete one cycle of Bhastrika Pranayama. Perform as many cycles as possible on a regular basis to end constipation. Appropriate guidance and practice before carrying out individual practice of this Pranayama is necessary.

Household Therapy

 \Box Triphala powder (three myrobalans - Hirda, Behda and Aavalkathi) 1 teaspoon + 1 glass of lukewarm water every night.

 \Box Soak 40-50 gm dried black grapes in 1 glass of cold water. Eat them in the morning and drink the water in which they were soaked.

 \Box Half teaspoon of myrobalan (Hirda) powder + one glass lukewarm water twice a day.

 \Box Amla powder (25 gm) + 15 gm ginger juice + 2 teaspoons of honey every night.

Naturopathy

□ Sufficient intake of water (liquid diet). (1-1.5 liters).

 \Box Drink lemon juice (of half a lemon) mixed with lukewarm water on an empty stomach every morning.

 \Box Have meals before 12 noon and 7 pm everyday.

 \Box Do not eat until full. Keep the stomach empty to some extent.

- \Box Water enema as per requirement.
- \Box Warm the stomach for 5 minutes every morning and then keep a mud plait over it.
- \Box Steam bath once or twice a week.
- \Box Keep a mud plait on the stomach at night.

Beneficial Diet Tips

 \Box 1 bowl of leafy vegetable soup before both meals.

□ Leafy vegetables, fibrous substances, fruits, fenugreek, bitter gourd, coriander, coriander seeds.

□ Carrot, gourd, lemon, orange, sweet lime, soybeans.

□ Sprouted beans, soup of green gram, rice husked manually.

 \Box A glass of sweet (not sour) buttermilk after meals.

Prohibited Diet

 \Box Non-vegetarian, hot, spicy food.

- □ Bakery products, substances made from wheaten flour (maida), oil, ghee, and curd.
- □ Over-eating, frequent snacking.

 \Box Tea, coffee, cocoa, chocolates, other addictions.

Conclusion

As we know, yoga is not a therapeutic science; hence, it is not possible to quote exact processes for certain diseases. Yet, we have made an effort to suggest yogic processes that may prove useful in eradicating the tendency to constipation. It cannot be firmly stated that every individual will benefit from these; it is obligatory to seek expert guidance before treating oneself. It is a fact that the regular practice of yoga will hinder the emergence of such disorders. It is therefore advisable to start practicing yoga when the individual is in good health and can reap the benefits of Yoga's preventative action.

17. Colitis

Colitis is a disease of the large intestine. The disease occurs due to a specific amoeba that swells the large intestine, impairing its function and causing frequent diarrhea. The disease is also called 'Amoebic Dysentery'. Ulcers also affect this disease, in which case it is termed 'Ulcerative Colitis'.

Significant Symptoms

Frequent purging is the most significant symptom of this disease. Often, white mucus will be discharged along with the feces, which will smell strongly. Stiffness and pain in the stomach are the general complaints of the patient. Colitis comes as an attack or dwells in the large intestine for months. The consequence is reduced hunger, impairment in the process of digestion and loss of weight. There is a chance of anemia if bowels continue to bleed for a long period.

Causes of the Disease

Although it is true that colitis is caused by certain amoeba, the root cause of colitis is mental stress. Sometimes these stress-initiated symptoms occur without any physiological defects. For instance, students often suffer from this trouble at the time of their exams; known as 'Examination Diarrhea'. This temporary condition can be ended by stress medication or the end of the cause of stress. Similarly, mental stress is the main cause in prolonged colitis. Though colitis is caused by amoeba as well as stress, it has been seen that the disease is overcome by reduced mental stress regardless of the cause. Hence, stress reduction is the best solution for this disease, in the absence of an effective medical cure. Medicines are only able to decrease intestinal movement or destroy the amoeba, both of which produce no more than an interim relief. The disease is kept under control when on such medication, but recurs on stopping it. If high intensity medicines like steroids are used, the ill effects will be more than the positive ones.

Sometimes the damaged part of the intestine is surgically removed and in such cases, the rectum also has to be cut. The patient then has to carry around a bag for excrement for the rest of his life. Such a devastating permanent change can of course be avoided by the practice of yoga.

Yogic Therapy

Though certain amoebas are responsible for the growth of this disease, it is the favorable internal physical environment that is truly responsible for it. The perfect remedy therefore is to alter the condition of the internal environment that allows the growth of amoeba, thus completely uprooting it. Destroying the amoeba with the help of medicines is not the way out because while the internal environment favors their growth new ones will continue to grow, constantly re-igniting the condition. Improving the environment entails improving digestion. Undigested food rots in the intestine generating circumstances favorable for the growth of amoeba. The digestive and excretory systems must be efficient to avoid this situation. This efficiency can be brought about by the practice of yoga, hence yoga is capable of curing the disease by correcting internal environment. Furthermore, the main cause behind 'Ulcerative Colitis' is mental stress, for which yoga is the only option. Pranayama, Shavasana, Aum chanting and Yoga Nidra are suitable remedies for this trigger factor. Prolonged practice of these will uproot the disease completely. Appropriate diet control is another of the chief measures as the

disease is related to the digestive system. Yoga will also prove helpful in realizing dietary change.

Course Contents

As the disease is related to digestive system as well as to mental stress, the course is designed to support both of these elements.

Yogasanas- Nearly all asanas are useful in improving the digestive system. But a patient suffering from this disease is not capable of performing them all at once. He has to proceed step by step. The fundamental course (of 10 practical hours) 'Yoga Sanjeevan' is helpful for the patient. Body movement exercises performed in a slow motion and simple asanas are useful and effective for a newcomer to yoga.

Pranayama- Colitis is related to increased body heat and so cooling pranayama like Sheetali and Seetkari are beneficial. Initially the patient must perform them without breath retention. Then, further practice can be carried out with proper guidance. To start with, deep breathing and Anulom-Vilom are suitable processes to prepare for the advanced steps. Later, practice of Naadishuddhi Pranayama is also permitted. But actual guidance must be sought for the practice of the three Bandhas.

Cleansing Processes - The patient cannot be advised to perform cleansing processes if he has become feeble. When his health improves with the above treatment he may be taught Vaman, Agnisar and Kapalbhati. Complete Shankha Prakshalana or Laghu Shankha Prakshalana is useful if the patient is capable of performing them. But, before performing them, the patient should be checked thoroughly, for which expert advice is necessary.

Contemplation- Chanting or listening to Aum is an effective measure, as Aum is related to mental stability. A regular 15 minutes of Aum chanting will achieve substantial results. It will reduce mental stress and strain, improve mental stability and concentration, and generate circumstances favorable for curing this disease.

Yoga Nidra- This is a very easy but effective procedure for the establishment of mental and physical tranquility. Even Shavasana alone generates similar results. The patient may perform Yoga Nidra 3-4 times a day during the period of trouble. A recorded tape or CD is recommended for ease of use.

Household Therapy

 \Box Drink water boiled with a copper piece in it.

 \Box Grind a mixture of opium seeds 25 gm + cardamom powder 8 gm + sugar candy 50 gm. Eat this mixture every three hours.

□ Mix 1 teaspoon of ginger juice in half a cup of boiling water and take it every two hours.

Paramhansa Satyanand Saraswati from Mungher suggested a remedy for Amoebic Dysentery as follows-

Mix 250 gm of curd in three glasses of water. Add two teaspoons of sugar and churn it thoroughly. Strain using a clean cloth and add a further three glasses of water. Churn again, then strain. Consume this mixture constantly and do not eat or drink

anything else but plain water. A regular diet may be begun at the end of the trouble.

Naturopathy

- \Box Keep a cold plait on the stomach for 15 minutes before meals twice a day.
- \Box Keep a mud plait on the stomach every night before sleeping.
- \Box Bathe with water boiled with neem leaves.
- \Box Have meals before 12 noon and 7 pm everyday.
- \Box Take a glass of sweet (not sour) buttermilk.

Diet - Diet control is the most important part of the treatment of colitis. It will not be cured unless the diet is controlled.

Beneficial Diet Tips

- □ Raw food, fruits, fruit or vegetable juice.
- \Box Simple and light meals.
- □ Thin (semisolid form) khichadi made of split green gram.

Prohibited Diet

- □ Non-vegetarian, hot, spicy food, bakery products.
- □ Pulses- pigeon peas, Bengal gram, black gram.
- \Box Stale food, fast food.
- \Box Tea, coffee, cocoa, chocolate.

18. Acidity

Various digestive juices are secreted for the digestion of the food we consume. As a result of this the food is digested due to the chemical reaction of these juices with the food. Acid is the major element in the list of these juices. The juices are secreted from glands in the walls of the stomach as well as spread throughout the stomach and have several functions. In a healthy body, these acids are produced after meals and in the required quantity. This is the natural state occurring for the digestion of food and the acids are therefore not proving troublesome to the body. They maintain the natural balance and it is only when the balance is spoiled that issues arise.

These acids can be produced even when there is no need and also they can be produced in excess. At such times they remain in the stomach and in turn will begin to ruin the delicate layers of the stomach. Consequently, the inner layer of the stomach becomes weak and fragile and the acids touch the ends of the inner nerve fibers. The acids also affect the inner cells resulting in burning sensation in the stomach. This can further result in symptoms such as a burning sensation in the throat, vomiting, headache, and excess and frequent hunger, as well as mental stress. Other glands in the stomach secrete a mucus-like fluid responsible for diluting stomach acids. A lesser amount of production of this fluid will increase the acidity demonstrating the above symptoms.

The disease of acidity is a result of an increase in the quantity of acids released into the stomach. Today's lifestyle of is again one of the major causes for this rise in acidity production. Mental stress creates an imbalance in the function of endocrine glands thus producing excess acids. The other reason is a diet rich in proteins, peanuts, excess salt, extreme cold substances and non-vegetarian food. Acidity can increase due to the diet void of minerals.

Production of acids is the beginning of the digestion process. The process is related to the taste buds and salivary glands. Digestion begins when these glands are stimulated and the greater the amount of stimulation, the greater the production of acids. The elements in the diet are incapable of utilizing all of this acid. The taste buds and salivary glands get very excited at the sight, smell and taste of very sweet, spicy or chilly made substances. If these substances are weak points for the person, the glands will get excited even at the thought of them. This increases acidity but without consumption it cannot be utilized. Smoking and alcohol also contribute to a rise in acidity.

Frustrations caused by a sense of hopelessness, lack of self worth, inadequacy, unrealized expectations or unfulfilled dreams can often lead to an increase in consumption of delicious food, alcohol or smoking. These may provide a temporary feeling of relief from stress however the stomach gets over stimulated, increasing the acids and contributing to acidic trouble. The psychologists' quote that "If in babyhood the feeding by mother has been insufficient, the person gets frustrated because of a feeling of insecurity developed in the latter age habituating him into addictions like over-eating, smoking, drinking, intake of tobacco which satisfy the mouth fostering acidity." This opinion is deserving of considerable thought.

The temporary trouble of acidity is exactly that and generally comes to an end after a brief period of time. When frequency of this trouble increases, the patient will suffer continuously and the disease of acidity arises. At this stage, treatment becomes necessary and common medicines such as aluminum hydroxide, calcium carbonate, etc. are given to make the acids in the stomach inactive. The reactions of these chemicals with the stomach cause the acid to be inactive thus temporary alleviating the trouble for the patient. The disease of acidity is a continuous one and the tablets as such provide only temporary relief. In turn, the trouble will persist and the patient will continue to suffer.

Additionally, the need for the tablets will increase and the patient will have to suffer from their adverse effects. Moreover with all of these efforts to subside the acidity, the disease will remain as it was. The patient suffering from this acidity problem is advised to eat more frequently so the acid can then be utilized for digestion of that food thus reducing his discomfort. This will assist in temporary relief but once again does not cure the problem. There is still an over production of acids and the patient runs the risk of over indulging by eating more. That means eating frequently is a temporary remedial measure.

Intake of alkaline substances is another means used to settle down acidity, and often an increased regular intake of milk is suggested. The effect like those previously mentioned is short term. The pattern indicates that the above three measures do have their value but they do not cure the disease. The ideal remedy would be for the body to be able to produce an appropriate quantity of acid, thus bringing the disease under control. Once more, using yogic therapy to help reduce mental tensions would be a meaningful way to relieve the disease.

Yogic Therapy

It is evident from the above discussion that even though production of acidity is a physiological process the causes of this imbalance lie in the mental disposition of the individual. Regulation of mental constitution is the ideal remedy and it can be achieved through Yoga. Patanjali defines Yoga as the inhibition of modification of mind (Yogah Chitta Vritti Nirodhah).

There are certain yogic processes that would be more effective.

First Week - Yoga Sopan (Complete Course) and Yoga Nidra.

Second Week - (Continue revision of the course contents stated above). Vaman (every other day), practice of asanas of Laghu Shankha Prakshalana and at the end of the week perform Laghu Shankha Prakshalana. After completing the preceding, continue with a habitual practice.

Regular Self-study

Asanas as in Yoga Sopan course and Pranayama practice for one hour daily. Cleansing processes: Vaman and Laghu Shankha Prakshalana every alternate day. Perform Yoga Nidra once a day in the afternoon or evening. Sit in Vajrasana for ten minutes after each meal. Chant Aum for 15-20 minutes before sleeping.

Household Therapy

 \Box Amla jam/ rub the Sootshekhar tablet in milk to transform to powder.

□ Make one-eighth decoction of the mixture of dry ginger, Gulvel powder (Tinospora Cordifolia) and Nagarmotha (Cyperus Rotundus).

 \Box Sleep on the left side for 10-15 minutes after meals.

 \Box Do not drink water during meals. Instead drink water one and a half hours after meals.

Naturopathy

 \Box Have a mixture of one glass lukewarm water and half lemon juice on an empty stomach.

- \Box Keep cold compress on the stomach for 15 minutes twice a day.
- \Box Have juice of gourd.
- \Box Have a glass of milk every night.

Have meals twice a day but on fixed timings, preferably before 12 noon and 7 pm. During meals be mindful of what you are eating and take your time as hurried meals will aggravate the condition. Enjoy the food you eat and do not have negative feelings towards it. The food must be satisfying to your senses. While having meals breathing must take place through the right nostril. Make every effort to keep negative emotions like anger, fear, worry and anxiety out of the mind and instead focus on keeping the mind serene. To facilitate this, perform Shavasana for fifteen minutes and pacify the mind before eating.

Fasting (Niraahar) - The production of acids increases due to the food we take. Fasting will affect the production of acids and will bring it to the natural condition. Five to ten days of fasting is suggested as per the condition of the disease in the patient. Only lukewarm water may be taken during fasting. It is very necessary to experiment this with expert guidance. It will definitely create a permanent effect on the production of the acids.

Juice Diet (Rasaahar) - Juice diet is also beneficial for this disease. A juice diet can work as another option keeping in mind that it would increase the duration from the prescribed length for fasting. Juices of vegetables like carrot, cabbage, cucumber, and gourd prove useful. Even coconut water is helpful. Soup made of gourd and rice-gruel of unhusked rice can be taken as supportive food. While experimenting on a juice diet the above juices must be taken at different times and they must be freshly made. Any other diet is not permissible. Fifteen to twenty days on juice diet will be necessary. Afterwards a more regular diet may be followed progressively.

Beneficial Diet Tips

- \Box Milk diet and milk products.
- □ Gourd, carrot, snake gourd, bitter gourd, green gram, red lentils.
- □ Leafy vegetables and other natural diet.

Prohibited Diet

- □ Non-vegetarian food, hot, spicy, fried substances, bakery products, canned food.
- □ Stale food, over-eating, pulses- pigeon peas, black gram.
- \Box Tea, coffee, cocoa, alcohol.
- \Box Cold drinks and fast food.

Alterations to be made in Lifestyle

Acidity arises due to traveling and wakefulness, hence both these must be controlled especially during the course of treatment. Rest is useful in case of higher intensity of the disease. Sleep before midnight is more helpful rather than after midnight. Acidity increases because of exposure to the sun so it would be best to avoid it whenever possible. Otherwise, take precautions to protect yourself from the sun's intense heat.

19. Ulcers

Prolonged trouble of acidity will eventually cause injury to the intestine, which is progressive in nature. As the wound goes deeper and deeper it may produce a hole into the intestine which if left untreated could lead be fatal. This is known as an ulcer and it can be detected by X-ray or by endoscopy. The symptoms are that of acidity however with an ulcer they are intensified. Additional symptoms may include stomachache and chest pain.

If the injury is on the walls of the stomach, it is known as a 'Gastric Ulcer' and if it is at the beginning of the small intestine, it is termed as a 'Duodenal Ulcer'. The troubles and the consequences are the same in either case. Again, all the symptoms of acidity are seen in this disease with the symptoms gradually becoming more severe.

Gastric Ulcers -

If the ulcer is in the walls of the stomach, the pain occurs in the chest ribs and there will be stiffness in the stomach after meals. Sometimes the patient vomits and at times he vomits blood. If the ulcer has caused bleeding in the stomach it will come out in the form of vomiting. This trouble increases with consumption of oily, spicy & sour substances, as well as drinking and smoking. Drinking milk will temporarily reduce the symptoms.

Mental stress is a one of the major causes of this disease as well. Constantly feeling like one has to achieve more in life contributes to the overload on the system. That combined with insufficient mental and physical rest is a recipe for illness. Overeating, smoking and/or drinking are the ways adopted to reduce these daily stresses and again further contribute to the problem. These substances increase the acid production thus exacerbating the original wound. Anxiety provoking thoughts and worries will only intensify this disease causing persons in emotional turnoil to be especially are prone to this disease.

Duodenal Ulcers

There is a curve in the small intestine at the base of the stomach. If ulcers are formed in this area they are called 'Duodenal Ulcers'. With this type of ulcer, the pain resides at the center of the stomach on the inside. The pains lessen with food and milk causing these patients to constantly feel the need to eat in an effort to manage their pain. This again aggravates the situation by adding weight gain to the problem.

Mental stress and threat of the consequences

There is an intimate relation between the emotions generated in the mind and the internal layer of the membrane of the stomach or the intestine. Stress stimulates the nerve cells resulting in a greater production of acid from the walls of the stomach. This acid is then let into the stomach. It is used for digestion if there is food in the stomach but when there is not, it will be stored in the stomach yielding inflammation of the stomach membrane. As the membrane is delicate it will burn on contact with the acid that will then come into contact with the inner nerve tissues. These nerve tissues will then become inflamed causing a wound that will continue to spread and cause increasing pain. It will start to penetrate the walls of the membrane and if not properly treated may create holes in the stomach or duodenum. As a result the food comes out of the stomach, which is a very serious condition with no alternative to surgery. Blood vessels of the walls of the

stomach or the intestine may burst causing bleeding. The blood will come out with vomiting but if this bleeding continues, the patient has to undergo surgery. The ultimate outcome is death if proper treatment is not taken in time.

Medical Treatment

There are medications for ulcers given primarily to dissolve excess acids. Additionally, medicines for curing the illness as well as medication for reducing mental stress can also be recommended. All these medicines will provide temporary relief for the patient however reoccurrence of the cured wound may occur. At that time the patient has to be operated on whereby the wounded part of the stomach or the duodenum is cut out. Without getting to the root cause of origination and regeneration of the wound, surgery can only have a limited effect as the injury may be generated in some other area.

Appropriate Treatment

First, take the recommended medication for reducing the severity of the problem and to provide interim relief. Then adopting yogic therapy for a more permanent cure is the right course of treatment. Medication can be stopped after sufficient yogic practice, therefore minimizing their adverse effects. Keep in mind that while yoga will help, the patient will have to make changes and follow stricter rules and regimen for diet and lifestyle.

Yogic Therapy

The mental stress produced from our daily lives is the main cause of this disease. Creating an atmosphere that will not minimize these stresses is the first measure for treatment. Taking rest for a month at a place other than our home is necessary for the required change of atmosphere. A residential Yogic therapy course is best for this purpose. The patient must take complete rest at this place and stay detached from worries and anxieties.

The following course is recommended:

First Week- Complete Yoga Sopan course and Yoga Nidra.

Second Week- (Continue revision of the course contents stated above). Vaman on alternate days, practice of asanas from Laghu Shankha Prakshalana and at the end of the week perform Laghu Shankha Prakshalana.

Regular Self-study

Asanas from Yoga Sopan course and Pranayama practice for one hour daily. Cleansing processes; Vaman and Laghu Shankha Prakshalana every alternate day. Perform Yoga Nidra once a day. Yoga Nidra may be performed in the afternoon or evening. Sit in Vajrasana for ten minutes after each meal. Chant Aum for 15-20 minutes before sleeping.

Household Therapy

Amla jam/ rub the Sootshekhar tablet in milk to transform to powder.
 Make one-eighth decoction of mixture of dry ginger, Gulvel powder (Tinospora Cordifolia) and Nagarmotha (Cyperus Rotundus).

 \Box Sleep on the left side for 10-15 minutes after meals.

 \Box Do not drink water during meals but rather wait one and a half hours after meals.

Naturopathy

 \Box Have a mixture of one glass lukewarm water and half lemon juice on an empty stomach.

 \Box Keep cold plait on the stomach for 15 minutes twice a day.

- \Box Have juice of gourd.
- \Box Have a glass of milk every night.

Have meals twice a day but on fixed timings and of course before 12 noon and 7 pm. And while eating concentrate on what you are putting into your body. Hurried meals will not be helpful. Enjoy the food you eat without negative feelings towards it. Ensure the food is satisfying and try to breathe through right nostril. The mind must be serene while taking food. If the mind is preoccupied with negative emotions like anger, fear, excitement, anxiety, perform Shavasana for fifteen minutes to and calm down the mind before eating.

Dugdha Kalpa (Milk Diet)

Before starting this treatment the disease must be controlled through the other naturopathic treatments. Additionally, before actually starting the therapy the patient must follow a diet of mainly alkaline substances like non-citrus fruits, vegetables, and juices. After that the patient has to fast for three to four days and then begin with the treatment of Dugdha Kalpa.

The milk diet must be followed in a specific way. Instead of drinking a larger quantity of milk once or twice daily, the patient must drink smaller amounts more frequently. For instance, having 25 ml milk at 7 o'clock in the morning, and continuing to drink 25 ml of milk every two hours until 7 o'clock in the evening. The same pattern is to be followed the second day but with an increased quantity of milk. The doses on day 2 would be of 50 ml instead of 25 ml again very two hours from 7 am- 7 pm. The quantity of milk is to be increased by 25 ml each day following the same pattern of drinking for a total of six days. On the seventh day drink 150 ml of milk every one and a half hours. Follow this (150 ml every one and a half hours) for the next four days. Drink 200 ml milk every hour from the eleventh day. On the thirteenth day, 300 ml milk each hour for a total of twelve times per day measuring 3600 ml of milk in total. Next, drink 300 ml every 45 minutes until day forty. After forty days are finished, reduce the quantity of milk gradually over ten days.

The milk should be from a cow and initially it is to be boiled. After that it is to be consumed at a lukewarm and this can be done by immersing the glass of milk into hot water. Do not drink fast but rather sip it and feel its taste. Let it mix well with the saliva and then swallow. Eating milk is advised rather than just gulping it.

The milk diet will help to regain the lost weight. It also works very well on pale eyes, wrinkled skin, weak disposition, and formless stomach. It improves blood circulation in the body and hence a feeling of vivacity resides in the mind and body of the person. This experiment works in many diseases such as tuberculosis, anemia, muscle diseases and weak tissues.

Fasting (Niraahar) - The production of acids increase due to the food we take. Fasting will affect the production of acids and will bring it to the natural condition. Five to ten days of fasting is suggested as per the condition of the disease in the patient. Only

lukewarm water may be taken during fasting. This must be followed only with expert guidance on an experimental basis. It will definitely create a permanent effect on the production of the acids.

Juice Diet (Rasaahar) Following a juice diet is also beneficial for this disease. At times it can work as an option to fasting, keeping in mind that the duration will be more than fasting. Juices of vegetables like carrot, cabbage, cucumber, and gourd prove useful. Even coconut water is helpful. Soup made of gourd and rice-gruel (rice that is not husked) can be taken as supportive food. While experimenting on a juice diet the above juices must be taken at different times and they must be freshly made. Any other diet is not permissible. Fifteen to twenty days on a juice diet will be necessary. Later, a gradual return to a regular diet may be followed.

Beneficial Diet Tips

- \Box Milk and milk products.
- □ Gourd, carrot, snake gourd, bitter gourd, green gram, red lentils.
- □ Leafy vegetables and other natural diet.

Prohibited Diet

 \Box Non-vegetarian food, hot and spicy seasonings, fried substances, bakery products, canned foods.

- □ Stale food, over-eating, pulses- pigeon peas, black gram.
- \Box Tea, coffee, cocoa, alcohol.
- \Box Cold drinks and fast food.

Alterations to be made in Lifestyle

Acidity rises due to traveling and not getting enough proper rest hence both of these must be controlled specifically during the course of treatment. Rest is useful when the disease has become more serious and getting to sleep before midnight is even more beneficial. Acidity increases because of taking too much sun so take measures to avoid it or at the least use preventative measures to limit exposure.

20. Hernia

The skin covers the entire human body and beneath it lays layers of muscle. Under this layer are the bone tissues. In the abdominal cavity there are many organs namely the stomach, small and large intestines, liver, spleen, pancreas, kidneys, rectum, uterus and ovaries. Behind this cavity is the vertebral column and the along side are strong muscles. All of these organs are able to function efficiently because they are safely situated in the abdominal cavity. If for some reasons these muscles lose their elasticity, a part of the small intestine may bulge out from a gap formed between muscles and which will cause a swelling to be formed under the skin. This is called a hernia.

The small intestine is a flexible pipe of about 1-1.5 inches thick. A swelling is seen beneath the skin when a small part of this intestine peeps out. There is no trouble experienced and passage of food continues through the digestive tract. There are times when a larger part of the intestine bulges out and is pushed due to the muscles obstructing the food from passing. In these cases surgery has to be performed as soon as possible and the intestine has to be replaced in its proper position attached to the outer muscle.

There are several possible areas from where a part of the intestine may possibly bulge. The first one is in males where it may bulge from the scrotum and increase the size of testicles. In this case it must be properly diagnosed before treating to ensure that it is in fact hernia and not simply a swelling of the testicles due to water retention in that area. Another type is an inguinal hernia, which is common in and found in the inguinal region; where the vessels supplying blood to the feet enters the thigh. A hernia may also take place in the umbilical region where the muscles are comparatively weak.

This bulging of the intestine can be cured through the practice of yoga when it is in the primary stage. The problem here is that the patient often does not experience any trouble and tends to ignore it. Later when it has progressed to where part of the intestine is pressed, there is no other alternative to surgery. Yoga must be practiced immediately after hernia is diagnosed. There are certain asanas that can be helpful but also some that can be dangerous for hernia. Hence yoga has to be practiced under the guidance of an expert.

Causes of Hernia

What we can deduct from hernia is that when a part of the intestine bulges from the muscles, it is because the muscles have become weak. The loss of elasticity in the abdominal area is the leading cause of hernia. The unnecessary and improper movement of the body; especially lifting heavy objects with jerky or twisted actions, can harm the muscles and cause them to be damaged. This is one of the leading causes of hernia in persons of a young age.

The abdomen is pressed in some patients and the intestine comes out of the muscles. A hernia may develop from a prolonged cough or be the result of using unnecessary force while passing urine. In cases of indigestion and/or constipation, straining while trying to defecate may cause an inner pressure emerging hernia. Other contributing factors could be the abdominal pressures that increase due to obesity, overeating, and in females pregnancy and delivery. All of these could weaken the abdominal muscles resulting in hernia. Also, constantly being in the sitting position and lack of exercise are also causes of hernia.

Medical Treatment

It is evident from the nature of the disease that medicines are of no use. In the primary stage of hernia, special braces that support the muscles may be used. This may press the bulged intestinal part back inward. Prolonged support from braces may actually repair the abdominal muscles and cure the hernia. However, in cases where the hernia progress, surgery becomes the only measure and the bulging part is pushed inside and the muscles are stitched. This reduces the possibility of recurrence of the disease.

Yogic Therapy

The selection of the asanas should be done carefully as hernia is the weakness of the abdominal muscles. Asanas in the prone position should be strictly avoided. Bhujangasana, Shalabhasana, Dhanurasana, Naukasana may cause trouble to the hernia patient.

To begin, the body movement exercises in the Yoga Sanjeevan course are very useful. Further, Uttanpadasana, Vipareet Karani, Sarvangasana, Halasana, Matsyasana, Pavanmuktasana, Vajrasana, Supta Vajrasana and Ushtrasana are beneficial.

Cleansing processes like Agnisar, Uddiyan Bandha and Kapalbhati prove helpful. Mudras like Ashwini Mudra and Traatak are beneficial to some extent. These are fairly difficult for a newcomer and must be taught in steps.

Yoga Nidra acts like a supporting agent in this disease.

Rules and Regiment to be Followed

A patient with hernia should avoid lifting weights, jumping, running and any hasty movements. Also, being careful to not strain while urinating or defecating is imperative. One should avoid eating non- vegetarian food or a heavy diet. When eating it is best to not eat until completely full to prevent the sensation of heaviness from being created in the stomach. Have light meals in an optimum quantity. Fasting once in a week is also beneficial.

21. Obesity

Obesity is an unnatural state cause basically by inactiveness, high caloric intake, and metabolic factors. The tendency to not perform any physical exercise is the main cause of increased weight. It is difficult to specify beyond what weight a person is considered obese. A chart of the ratios of age, height and weight is prepared and efforts to define obesity using this chart have been made. (Such a chart is given at the end of this chapter). While no one can firmly state such charts are 100% accurate there is no difference of opinion regarding the consequences of obesity.

Actually, obesity is not a disease but the source of many diseases. The body has its own existence and hence its own weight. This weight affects all the functioning systems in the body. It starts affecting the functioning systems unfavorably when it starts exceeding its optimal limit. If the body weight puts stress on the organs, the organs that are weak are unable to function appropriately and a disease is developed in that organ. Hence it is said that obesity is the mother of many diseases.

The increasing body weight is nothing but the weight of excess fats stored in the body. A person feels exhausted even while walking with this increased weight. Climbing a staircase or running becomes difficult for him. His rate of breathing becomes rapid with even a little exhaustion. He sweats more and all this puts a strain on the heart. Consequently, diseases like heart disease, hypertension, asthma, arthritis or anemia start emerging. The person is advised to reduce his weight at such times but reducing weight becomes difficult once he becomes victim of the disease. Trapped in this vicious circle, the obese person not only becomes a patient but also begins his rapid journey towards death. Hence, even if obesity is not a disease, it must be got rid of as quickly as possible.

Let's go through some of the major causes of obesity. Obesity will not be overcome unless it is destroyed at its root.

1. *Lack of exercise* - Physical activities and demands have been reduced as a result of modern day conveniences and amenities. As calories are not utilized they are stored in the body in the form of fats, thus increasing obesity. If this is the cause of obesity, reduction in weight can be achieved with proper exercise.

2. *Inappropriate Diet* – As noted, today's lifestyle and modern day conveniences reduce physical activity yet diet/food intake increases. As a consequence, excess food is stored in the form of fats in the body, thus increasing one's weight. If the regular diet constitutes of fats storage of fats will obviously increase.

3. *Impairment in the Digestive System* - The food we take is digested and then absorbed in the blood, from where it is supplied to the various cells in the body. The food that is not digested or not absorbed in the blood is disposed in the form of excreta. This is called metabolism. If there is any disorder in this process, the food is transformed into fats and is stored in the body and increases body weight. Digestion process improves with practice of yoga thus reducing the weight.

4. *Imbalance in the function of Endocrine Glands* - An imbalance in the master glands - the pituitary gland, thyroid and adrenal – may increase the amount of fat stored in the body, again increasing weight. When this happens, intake of hormone supplements in the form of tablets or injections produces a temporary effect. But certain Yogasanas and

Pranayama are even more helpful in that they improve the functioning of these glands permanently.

5. *Mental Stress* - Stimulation of various emotions, mental stress, and anxiety have a direct impact on the mind and body and affects the function of endocrine glands. The disorder in these glands increases fat storage thus increasing the weight. There is no solution to reduce weight cause by stress other than to reduce the stress and to regulate emotions. There is no remedy for it in any other therapy. The main goal of yoga is to bring about control on the mind. The increased obesity due to the mental reasons can be controlled only with the help of yogic processes. The process of Yoga Nidra relaxation soothes the mind and helps in reduction of weight.

Generally, the way people release mental tension is by overeating which increases obesity. If the tensions are released, the diet will automatically come under control.

6. *Imbalance in the centers of the brain* - The various brain centers control the various functions in the body. A disorder in their functioning may result in excess of hunger. And overeating obviously increases weight. Some disorders of the brain may increase storage of fats. Proper functioning of the brain is hence necessary. Yogasanas, Pranayama and contemplation are useful for this purpose.

Obesity - Limitations

It is difficult to state the exact definition of obesity but a fairly accurate definition is used by most. The weight (measured in pounds) double the count of the person's height in measured in inches is termed appropriate. To measure weight in kilograms, subtract 4 for males from their height in inches and subtract 6 for females for the same. The answer of this subtraction is the appropriate weight of the person in kilograms. Some more research regarding this calculation has been made and a generalized chart of age, height and weight is prepared. But it is relative to the geographic conditions and hence there are differences in it. A 10% difference on both positive and negative sides in the weight count acquired from all this calculation is understood as normal. Greater than 10% excess weight can be termed as obesity.

Some persons are obese by birth. Their weight exceeds the chart limits. But they do not have any trouble and their weight doesn't reduce. Hence it can be termed as their natural weight.

Therapy

The causes behind obesity have to be found out once obesity is confirmed. There may be more than one cause amongst the six described. There may be three to four causes in different proportions clubbed together. The treatment has to be comprehensive. Fasting or eating less is the general treatment that is adopted. But under eating can also be dangerous and one cannot rely only on control of diet but has to select therapy that will consider all the causes of obesity in the particular individual.

A Research Experiment

The details of an experiment on obesity are presented here to give a clear idea about it. The aim of the research was to explore whether obesity as an unnatural state could be overcome by practice of yoga. The causes of obesity were identified and certain yogic processes intended to overcome these causes were practiced by a group of women of different ages. Observations were carried out regarding the effects on individual body weight, various measurements of the body and the feeling of the individuals regarding the course and their opinion in respect to their routine and efficiency.

(Hypothesis) Direction of Research

There are in all six root causes for increase in obesity.

- 1 Lack of exercise.
- 2 Inappropriate diet.
- 3 Impairment in the digestive system.
- 4 Imbalance in the function of the endocrine glands.
- 5 Mental stress.
- 6 Imbalance in the centers of the brain.

Obesity in the women participating in this research must have been due to one or more of the above causes. It was not possible to find out the individual causes and suggest personal treatment accordingly as the same course was to be adopted by all. Hence a common course that would uproot most of these causes was designed.

Sun salutations were emphasized to increase body movements. Daily nearly twenty-four to thirty Sun Salutation were performed. The fundamental laws of diet control were disclosed to the group. It was observed that the group took initiative in diet control. Furthermore, practice of various asanas automatically brought about control on hunger. Moreover, practice of different asanas, rapid breathing, Agnisar, Uddiyan Bandha brought about a balance in the functioning of the digestive system and the endocrine glands.

Deep breathing and contemplation were included in the course contents to control the mental stress. Kapalbhati and chanting of Aum were taught to help in bringing about balance in the various centers of the brain. As all these processes had to be performed by the group, practice of each process had been limited. But it was observed that each one benefited by the practice of all these processes.

Outline of the Research Project

The duration of this course was two months. Regular practice of one hour daily without any holiday was taken. One batch practiced in the morning from 6.30-7.30 A.M. and the other batch practiced in the evening from 4.00-5.00 pm. The total number of females in both batches was 29. They were classified according to their ages as follows.

Age Group- 13-25 yrs. 26-35 yrs. 36-45 yrs. 46-60 yrs. Total Number- 6 11 8 4 29

The weights of all females were measured before beginning the course. Furthermore, the measurements of chest, waist, and hips were taken to get an idea of the fat quantity in their body. The same observations were carried out after the course was completed and they exhibited sound differences. Along with the practical, the group was delivered lectures regarding obesity, yoga and diet to prepare them mentally and to convince them of the causes of obesity. These addresses proved useful in the sense that the students made the required alterations in their daily routine. As they were convinced with it bringing it into practice became easy for them.

Height		Weight	
Ft-Inch	Cm	Kg	Pound

5-00	152	47.5	105
5-1	155	50.0	110
5-2	158	52.0	115
5-3	160	54.0	120
5-4	163	56.5	125
5-5	165	59.0	130
5-6	168	61.0	135
5-7	170	63.5	140
5-8	172	65.5	145
5-9	175	68.0	150
5-10	178	70.0	155
5-11	180	73.0	160

Yogic Therapy for Treatment

Sun Salutation played a major role in the one hour classes. About 24-30 Sun Salutation were practiced daily. If it was difficult for some of them to do all the sun salutations, they were made to do Shavasana in between. All asanas in the Yoga Pravesh book were taught. But instead of focusing on stability in an asana they were performed in the form of repetition. Uttanpada Katichakrasana was one of the effective asana taught to them. Cleansing processes like Agnisar, Uddiyan Bandha, Kapalbhati and Vamandhauti were taught. The process of Shankha Prakshalana was also carried out one Sunday. Exercises of rapid breathing were also conducted daily. The daily prayers included chanting of Aum for 11 times. But chanting of Aum for 108 times was carried out once in a week. They were not taught any kind of Pranayama. Two months' duration was too short for practice of breath retention. The measurements of weight, chest, waist and hips were taken before and after the course.

Conclusion

If this project is considered as a legitimate one, it can be said that we have reached many positive conclusions. All doubts regarding the role of yoga in reduction of obesity were cleared with this experiment. The regular routine of the whole group was the same except for the daily practice of yoga. In two months, the first month passed by in just teaching the various yogic processes. The actual practice was carried out in the second month. Considering this, the loss of one and a half to three kilograms of weight can be called a significant reduction. The maximum reduction was five kg. Moreover it must be noted that there wasn't anyone who had had increase in her weight within these two months.

The measurements of chest, waist and hips also significantly reduced. The average reduction in the measurement of the chest was 0.7 cm - 3.6 cm. Reduction in the measurement of the waist was more notable. It was in the range of 3 cm - 6.6 cm. The reduction in the measurement of hips was 2.7 cm - 6 cm. It can be noted that the reduction in the measurements of hips and waist was more significant than that of the chest.

Some more conclusions may be drawn by analyzing the data according to the ages. Average loss of weight of the age groups 13-25 and 46-60 was 1.4- 1.6; whereas, that in the age groups of 26-35 and 36-45 was 2.6- 2.9 kg. Reduction in the measurements of chest, waist and hips was more again in these lastly described two groups. The group of ages 13-25 exhibited more reduction in the measurement of the

waist (average 6.6 cm). Finally, it can be concluded that obesity of the age group 26-45 was reduced significantly due to the yogic processes. Reduction was medium in case of the group 13-25 and was least in the age group 46-60.

Household Therapy

□ Mix catechu (an extract of acacia catechu, a type of tree native to India and Myanmar) powder with water and drink it once in a day.

- □ Rub the catechu juice to the entire body before bathing.
- \Box Eat a piece of jaggery after meals.

Naturopathy

 \Box Have a mixture of one glass lukewarm water + 2 teaspoons of honey + half lemon juice empty stomach.

- □ Keep hot-cold plate on the stomach for 10 minutes and then mud plate for 30 minutes.
- □ Have frequent water enemas
- □ Steam bath daily 10-30 minutes.
- \Box Chew each bite for 32 times during meals.
- \Box Have ample raw diet (fruits and vegetables) before meals.
- \Box Have meals before 12 noon and 7 pm..

Beneficial Diet Tips

- □ Buttermilk without butter, phulkas, boiled vegetables.
- □ Fibrous substances, unhusked rice, sprouted beans.
- □ Fruit diet, juice diet.
- □ Vegetable made form bitter gourd.
- \Box Liquid diet and water should not exceed one to 1.25-1.5 liters.

Prohibited Diet

- □ Non-vegetarian food, hot, spicy, fried substances, bakery products, over-eating.
- □ Milk products, oil, ghee, chocolates.
- \Box Tea, coffee, cocoa, honey.
- □ Banana, mangoes, potato, sweet potato.

21.1. Yoga for Obesity (S.S.S. – Slim and Smart Sadhana)

Preparatory Practices: Start the training with Shavasana Practice for 3 Minutes. Basic movements (ref Yoga Sopan book)

Preparatory movements (ref Yoga Pravesh book) Sun Salutatons with slow speed (ref Yoga Pravesh book)

Useful Practices: Preparatory Movements type 1 to 10 with fast speed. Sun Salutations 32 rounds in 8 minutes Asanas; Uttanpad Chakrasana 3 rounds – Sarwangasana (3 minutes) – Halasana (1min.) Matsyasana - 1 minute) - Ardhamatsyendrasana (2 minutes on each side) Paschimottasana (1 minute) – Akarna Dhanurasana (1 minute on each side) Ushtrasana (2 minutes) – Udarsanchalan (3 rounds) – Trikonasana (1 minute on each side) – Veerasana (1 minute on each side) - Shavasana (when needed)

Cleansing Practices: Agnisar 100 strokes total in 3 to 4 rounds Uddiyan Bandh 5 rounds (each round 30 seconds) Kapalbhati 5 rounds (120 strokes per round) Vaman Dhouti (Once a week) – Laghoo Shankhaprakashlana (once a week) – Full shankhaprakshalana (Once a Year)

Pranayama: Suryabhedan Pranayama with kumbhak for 10 minutes Bhastrika Pranayama with kumbhak for 10 minutes.

Yoga Nidra specially designed for Obesity.

Meditation on Manipoor Chakra with mantra "Ram"

Optional Practices:

Asanas: Bhujangasana, Dhanurasana, Vipareetkarni, Vakrasana, Uttanpadasana, Pawavanmuktasana, Ardhpaschimottanasana, Sulabh Ushtrasana. Garudasana, Parivart Trikonasana, Patangasana. Pransyama: Anulom Viloma with or without kumbhak, Right nostrill breathing

Cleansing Practices: Neti – Dand Dhouti – Vastra Dhouti – Nauli (all types)

Walking for 60 minutes

Contraindicatons: Shirshasana (Head stand) & its variations.

Food Habits

Suitable :Normal food with less fats & carbohydrates but with high fibres. Best food is fruits (except banana, mango & grapes) & vegetables Avoid: Nonveg food, Milk & milk products (Skimmed milk can be taken), Rice, Oily & Spicy food, refined foods, Fast Food, Preserved Food. Special Food Program FANEER This is a specially designed food program for reduction of weight. This includes the following diet for three days: First day – Only Fruits and raw vegetables (No other food to be taken) Second day – Only water with lemon juice & salt

Third day – Only Juices & soups (liquid diet only)

(This is to be repeated once in 15 days)

21.2. Yoga for Obesity (for Cholesterol)

Preparatory Practices: Start the training with Shavasana Practice for 3 Minutes.

Basic movements (Yoga Sopan book) Preparatory movements (Yoga Pravesh book) Sun Salutations with slow speed (Yoga Pravesh book)

Useful Practices: Preparatory Movements type 1 to 10 with fast speed. Sun Salutations 32 rounds in 8 minutes

Asanas:

Uttanpad Chakrasana 3 rounds Sarwangasana (3 minutes) Halasana (1min.) Matsyasana (minute) Ardhamatsyendrasana (2 minutes each side) Paschimottasana (1 minute) Akarna Dhanurasana (1 minute each side) Ushtrasana (2 minutes) Udarsanchalan (3 rounds) Trikonasana (1 minute each side) – Veerasana (1 minute on each side) Shavasana (when needed)

Cleansing Practices:

Agnisar 100 strokes total in 3 to 4 rounds Uddiyana Bandha 5 rounds (each round 30 seconds) Kapalbhati 5 rounds (120 strokes per round) Vaman Dhouti (Once a week) – Laghoo Shankhaprakashlana (once a week) Full shankhaprakshalana (Once a Year)

Pranayama:

Suryabhedan Pranayama with kumbhak for 10 minutes Bhastrika Pranayama with kumbhak for 10 minutes.

Optional Practices:

Asanas: Bhujangasana, Dhanurasana, Vipareetkarni, Vakrasana, Uttanpadasana, Pawavanmuktasana, Ardhpaschimottanasana, Sulabh Ushtrasana. Garudasana, Parivart Trikonasana, Patangasana. Pransyama: Anulom Viloma with or without kumbhak, Right nostril breathing

Cleansing Practices: Neti – Dand Dhouti – Vastra Dhouti – Nauli (all types)

Walking for 60 minutes

Contraindications: Shirshasana (Head stand) & its variations.

Food Habits:

Suitable :Normal food with less fats & carbohydrates but with high fibres. Best food is fruits (except banana, mango & grapes) & vegetables Avoid: Nonveg food, Milk & milk products (Skimmed milk can be taken), Rice, Oily & Spicy food, refined foods, Fast Food, Preserved Food.

22. Cold-Catarrh

Cold-catarrh is not considered a major disease. Everyone has suffered from it at some time. Although it is not a very serious disease it is no doubt troublesome. Patients get used to it and never complain about it. A person suffering from a cold is never considered as a patient. But if it gets too bad, the patient tries to seek treatment.

Suffering from cold-catarrh is not recognized as an unhealthy condition. People boast about their health stating - "I've not suffered from cold-catarrh since twenty years." Of course, a person not suffering from cold-catarrh can be said to be of sound health. Besides, frequent occurrence of cold-catarrh cannot be stated as destruction of sound health as it is the cleansing by the body to dispose off the impurities in it, not a sickness. But such frequent cleansing may be considered a defect. It is an indication of a rise in impurities in the body. The person having improper diet, constant indigestion, lack of exercise, weak immune system befalls is a victim of this disease.

A "runny" nose is the first symptom of this problem. Sometimes nostrils are choked and the person has to breathe through his mouth. Sneezing, throat irritation, heaviness in the head, headache are other symptoms seen gradually. The tip of the nose becomes extremely sensitive from frequent blowing. There is no sensation of smell and taste and at times there is a temporary change in voice, pain in throat, and temporary deafness. Prolonged cough may result in fever. Besides, a feeling of leanness, reduced hunger, reduced enthusiasm, watering eyes, trouble in breathing, chest pain are experienced in further stages. If the disease is growing it has to be controlled with proper treatment. Otherwise it may increase complications.

Germs take advantage of the sickness and the person may suffer from influenza. Increase in cold may develop a swelling in the muscles of sinus due to infection and the patient may have to suffer from sinusitis (heaviness in the head, headache, choked throat, pain in the eyes, etc.). If the infection reaches the Eustachian tube, the patient may suffer from temporary deafness along with fever. This infection gradually reaches the internal passage of lungs resulting in asthmatic troubles like chest pain, panting, etc.

Modern medical sciences do not have effective medicines for this disease. The medicines given at the time of trouble are those that give only temporary relief reducing only the symptoms. As the saying goes, with medicines it takes a week to return to normal whereas, it takes seven days' to feel good without medicines. One can of course seek satisfaction by taking medicines. But only yoga and naturopathy are capable of giving complete liberation from this disease.

Once you are the victim of cold, you must avoid things that will increase the trouble. Over-eating increases trouble of cold while a little fasting reduces it. Sour, spicy and fried substance must be avoided. Controlled diet should be taken on time. Raw diet and fruits (excepting banana, guava) must be taken. Drinking hot water will be helpful. Taking rest and observing silence with less exertion during this period will prove

effective.

The therapeutic processes in yoga for colds and excess phlegm are Jalaneti, Vaman and Kapalbhati.

Jalaneti

This is the process of cleaning the nasal passages with the help of water. Add one teaspoon salt in a mug full of lukewarm water and pour it in the container specially made for performing Jalaneti. The container has a spout. Place the opening of the container in one of the nostrils, breathe with the mouth, move the neck a little back and tilt it in the opposite direction. Now tilt the container and let the water from it enter the nose through its spout. The water will enter the throat because of its specific angle. Do not gulp it but change the direction of the neck a bit so that it comes out from the other nostril. Continue the flow of water until water in the container is finished. Perform the same action with the other nostril. After completing the process with both nostrils stand with some distance in the feet placing the hands on the waist. Inhale, bend and move the waist and head from left to right and while moving so exhale with a jerk. Further, inhale again and bend and move head and waist from right to left exhaling with a jerk. Perform 5-10 repetitions so that water from the nostril will be thrown out. If the water remains in the nostrils, it will result in cold. One may perform Kapalbhati if he can.

Jalaneti cannot be performed when the nostrils are choked. But if it performed frequently at other times, the person will never suffer from cold. If the person has a tendency of suffering from frequent cold, performing Jalaneti once in a week will be useful for him.

Vaman

The process of vomiting after drinking plenty of water is very effective. The excess of acids, phlegm and toxins are disposed in this process, which helps in reducing the cold of the person. A mixture of lukewarm water and salt is used in this process too. Add two teaspoons of salt in a jug of water and drink 8-10 glasses. This gives a feeling of heaviness in the stomach as well as a vomiting sensation. The person may still drink a glass full again. This will intensify the vomiting sensation. One may vomit by bending and inserting fingers in the throat. Performing this act four to six times will remove all the water from the stomach, thus cleaning it. A feeling of lightness and contentment is experienced as all the toxins are disposed off. Lastly, Shavasana for 10 minutes will pacify the vomiting sensation. Do not eat anything for an hour after performing Vaman. Regular diet can be taken later. If all water is not thrown out during the process of Vaman, the water passes further and is eliminated in the form of purges that stop automatically. It is not the case to worry. The impurities that are thrown out in the process of Vaman may appear reddish. But it is not blood. The reddish color may be due to acids.

The process of Vaman immediately reduces the cold or acidic trouble. Performance of Vaman constantly for 8-10 days with empty stomach removes the phlegm in the stomach. Later, it may be performed once in a week. Those suffering from hypertension, heart disease or brain diseases must not perform Vaman. To reduce the phlegm in the stomach, eating soda may be added in the water.

Kapalbhati

Kapalbhati is a cleansing process similar to Jalaneti or Vaman, but performed with air instead of water. This process consists of gentle inhalation and forced exhalation as if blowing a bug out of the nose. Some term this process as Pranayama but it is not. Exhalation is significant in this process as the diaphragm is lifted up during exhalation and moved down during inhalation. Hence the air in the chest is thrown out vigorously. When the diaphragm is relaxed, the air automatically and gently enters the lungs. Again throw out the air with a jerk and again breathe in gently, thoroughly. Performing these cycles rapidly is Kapalbhati. The rate should be generally120 cycles per minute. This is of course an ideal condition. Initially a person gets exhausted on performing only 30-40 cycles and the practice has to be stopped. It can be performed up to three to four minutes consistently with constant practice.

The process carries out purification of the alveoli as well. Furthermore, the impurities or phlegm, entangled in the respiratory tract are pushed further and are gradually thrown out. There is no possibility of their return as inhalation is gentle. This process also affects the sinus positively. The vigorous exhalation pulls out the impurities in the sinus. The toxins in the cells of the nasal tract are thrown out as the air goes out of this tract rapidly. This purifies the nasal tract thus reducing the cold troubles of the patient. It also reduces swelling of the nasal tract and choked nostrils.

In addition to these three cleansing process, the three pranayamas- Naadishuddhi, Suryabhedan, and Bhasrika too prove useful. But it is not possible to discuss their techniques in this chapter. They have to be learnt from an expert. But a person can easily practice deep breathing and rapid breathing. Besides, certain asanas help in improving the physical resistance power. Regular practice of yoga may keep the individual away from cold.

Household Therapy

 \Box Drink decoction (made 1/8) of lemon grass twice a day.

 \Box Mix jaggery + turmeric powder + dry ginger powder to form a pill. Take it thrice a day.

□ Take handful of gram soaked and parched. Warm it and take it every night.

 \Box Medicated smoking (fumigation) of turmeric powder.

Naturopathy - Cabbage Steam

Boil half a vessel of water. When water comes to boil, mix half a bowl of grated cabbage into it and cover it tightly. Let the water boil more for two-three minutes. Then take the vessel off the fire along with the lid over it. Cover the face as well as the vessel with a cloth. Slide the lid and inhale the steam with the nose as well as the mouth. Close the lid immediately. Open the lid and inhale steam again. Do this activity for 10 minutes. Dry the face and take rest for sometime. Take this steam for two to three times a day during the trouble of cold. It will reduce the trouble and free the choked nostrils.

Cabbage Juice

Extract cabbage juice from the juicer. On absence of juicer, cut the cabbage into smaller pieces and grind it in a grinder and strain it with a clean cloth. Take a glass full of juice empty stomach in the morning. Juice of sweet lime, orange or apple may be added to it to taste. Take this juice fresh immediately after preparation. Take the juice every morning until suffering from cold. (The cabbages used for steam and for juice must be

different).

- \Box Drink hot water.
- \Box Have meals before 12 noon and 7 pm.
- \Box Warm the chest with cabbage steam for ten minutes.

Beneficial Diet Tips

- \Box Complete fasting for one or two days.
- □ Natural diet (uncooked vegetables and fruits).

Prohibited Diet

- □ Non-vegetarian food, hot, spicy, fried substances, bakery products.
- □ Milk products, cold substances, sour substances.
- □ Banana, guava, custard apple, cucumber, pineapple.

A combination of yoga, naturopathy and diet control can definitely give liberation from this complex disease of cold.

23. Sinusitis

Sinusitis is a disease related to cold-catarrh (thick mucus) that affects the facial cavities located within the bones of the face that are known as 'sinuses'. On the interior of these cavities mucosal membranes are connected to the nasal tract. The mucus produced in the nasal tract gets stored in these cavities and can block their openings. This chokes up the voice. Symptoms associated with these blockages are heaviness in the head, swelling around the bones of the face, inflammation in the eyes and headache. In this case, rest is the best cure and can with the help of fasting; this disease can be controlled instantly.

If not treated in its early stages, sinus trouble can last for several days and will often have frequent reoccurrences. Repeated episodes of the disease reduce the immunity of the person and they can become more prone to infection and other troubles with recurrent nasal congestion. As with so many common diseases, mental and emotional distress can further contribute to the cause and intensity of this disease.

Medical Treatment

Medical treatment provided for sinusitis works primarily by alleviating the symptoms of the disease, but is incapable of curing it. Medications such as pain-relievers, anlagen and antihistamines are commonly used. Antihistamines will temporarily reduce the runny nose but lasting effects are not achieved. In case of severe trouble there is a surgical procedure that is performed. This will provide relief but once again, without getting to the root of the disease is not destroyed at its roots, there is a possibility of recurrence. The standard medical treatment is hence not enough. Yoga uproots the disease and gives permanent relief from it.

Yogic Therapy

There are many yogic processes helpful in curing this disease but their selection must be made according to the individual capacity of the patient. The damaged physical condition is the cause of the disease and yoga can improve it.

Sun Salutation- Sun Salutations are comprised of asanas, Pranayama, concentration and meditation. This will help in bringing the condition to normal and will also improve the immune system.

Yogasanas- The patient can perform all the asanas he is capable of performing. To start with, the Yoga Sopan course will be beneficial. Later, significant asanas from the Yoga Pravesh course will be more effective. Asanas like Sheershasana and Sarvangasana would be unsafe as they will increase the trouble.

Pranayama- Types of rapid breathing help to free the sinuses. After sufficient practice of this, Suryabhedan Pranayama and Bhasrika Pranayama can be taught. Cleansing Processes- Vaman is very useful. It clears the phlegm in the stomach and the respiratory tract. As a result the sinuses will also be freed. Laghu Shankha Prakshalana and full Shankha Prakshalana are capable of uprooting the disease. Jalaneti and Sootraneti are also useful. These will reduce the delicacy of the inner membrane of the nose. Kapalbhati has a tremendous effect on sinusitis due to the vigorous flow of air generated with this process.

Relaxation- The disease increases with an increase of mental stress as well as emotional outbursts. Efforts to reduce mental stress must be made and Yoga is a great way to do this. Yoga itself is a form of relaxation and certain techniques; especially Yoga Nidra has proven to be very effective in relaxing the mind. Performing Yoga Nidra once or twice daily will be a boon to the patient of sinusitis.

Household Therapy

 \Box Drink decoction of lemon grass (made 1/8) twice a day.

 \Box Mix jaggery + turmeric powder + dry ginger powder to form a pill. Take it three times daily.

□ Take handful of gram soaked and parched. Warm it and ingest every night.

□ Medicated smoking (fumigation) of turmeric powder.

Naturopathy

□ For immediate relief from cold, cabbage steam and cabbage juice are very useful.

 \Box Warm the chest with cabbage steam for ten minutes

Cabbage Steam

Boil half a large pot of water. When water comes to boil, mix half a bowl of grated cabbage into it and cover tightly. Let the water boil more for two to three minutes, then remove from heat. Take the lid off and place face down over container with a towel around head and mixture allowing the steam produced to be inhaled by both the nose as well as the mouth. Close the lid immediately. Open the lid and inhale steam again continuing on and off for 10 minutes. Dry the face and take some rest. Take this steam two to three times a day during the illness and I will reduce the trouble and free the clogged nostrils.

Cabbage Juice

Extract cabbage juice either with a juicer or by cutting the cabbage into smaller pieces, grating it and then straining it with a clean cloth. Take a glass full of juice on an empty stomach in the morning. Juice of sweet lime, orange or apple may be added for taste. This juice is best taken when fresh when prepared. Continue to take the juice every morning while suffering from cold. Please note that the cabbages used for steam and for juice must be different.

Beneficial Diet Tips

- \Box Complete fasting for one or two days.
- \Box Natural diet (uncooked vegetables and fruits).
- \Box Drink hot water.
- \Box Have meals before 12 noon and 7 pm.

Prohibited Diet

- □ Non-vegetarian food, hot, spicy and/or fried substances, bakery products.
- □ Milk products, cold substances, sour substances.
- □ Banana, guava, custard apple, cucumber, pineapple.

24. Tonsillitis

Tonsils are the glands located in the throat at the opening of the food pipe. They are situated at both the sides of the pipe like guards and there function is as such. They destroy the germs entering the body through respiration or through food by creating antibodies.

The white blood cells and certain proteins fight the external infections to the body. Production of these proteins and white blood cells is made by glands like tonsils, adenoids, thymus, etc. This security system must be intact. At times when the germs are strong, they are not completely destroyed. They then reside in the tonsils and start growing there. This will cause swelling to these glands as well as the formation of puss, slowing down their functioning. These germs can enter the body and cause some disorder. Thus, these glands contribute to of the disorder in the body. In such cases the tonsils are surgically removed as they are deemed to be sick, therefore these 'security guards' are taken away. The ideal solution would be to treat them and improve their functioning. The majority of the times the surgical option is taken and these glands are partially or completely eliminated, leaving the body to fight a variety of infections by other means due to the absence of its 'security guards'. Hence maintaining good health of these glands is a better option to surgery.

The growth of tonsils and adenoid glands continues up to the age of ten to twelve years at which point their size become reduced. The adenoids disappear after the age of sixteen. The outcome of an infection- weakened immune system-infection is the vicious circle for the victims of tonsillitis. The infection to the tonsils allows for the entry of germs into the body which can develop into further troubles such as swelling in the tonsils, throat pain, trouble swallowing and breathing, a nasal voice and quite often a fever. Sometimes there are accompanied pain in the neck bones. All these consequences result in feeling low, trouble concentrating and if not treated in time, may develop possibilities of arthritis, heart disease, or kidney disorders. Sometimes, there is infection in the ears through the Eustachian tubes developing disorders in the ears.

Infection of the tonsils and increased or swollen tonsils are two different things. If someone is suffering from infection it does not necessarily mean that the size will increase or vice versa. If however there is swelling without infection, it can create an obstruction to both the respiratory tract and the digestive tract. This reaction could be temporary and therefore not a serious problem. Being symptomatic once or twice in a year will not require as there may be other treatments that may reduce the trouble.

On the other hand, frequent occurrence of the trouble may lead to long-term negative effects, especially in young persons who suffer from this ailment, as they tend to breathe through the mouth. This habit creates adverse effects on their physical as well as mental growth. It alters the facial appearance and size of chest and also affects mental skills lowering concentration and memory. In these cases with frequent outbreaks, surgery is suggested as a measure. In earlier times, the number of such surgeries was more but more recently an inclination to avoid surgery has been developed.

Prevalent Treatment

Doctors are now aware of the hazards of removing tonsils. The body becomes permanently weak by eliminating one of the organs responsible for protecting the immune system. Antibiotics to fight the infection in the tonsils are a temporary measure. The way to get rid of the disease permanently is of course Yoga.

Yogic Therapy

We know that yoga does not work at the time of attack. Medication may be used to reduce the trouble and then regular practice of yoga may prevent future trouble. When the trouble is less severe, measures like warming the throat, gurgling with salt water and Jalaneti, if possible may be adopted. These help in bringing the patient to normal. Increase in the resistance power of the body and especially the tonsils through Sun Salutations, Yogasanas, Cleansing processes, and Pranayama will be helpful. A four week course has been developed for this purpose. The list includes both revisions of processes taught initially as well as some new ones to be taught. Revisions should be practiced daily within the one hour expected daily practice.

Eradication of Tonsils Trouble: Course Contents Week one

Monday- Standing Position, Preparatory Movements Preposition, Preparatory Movements Exercises-1-6, Sitting Position, Supine Position, Shavasana, Halasana, Gentle Breathing, Deep Breathing, Prayers and Shantipaath.

Tuesday- Preparatory Movements Exercises-7-12, Swastikasana, Padmasana, Dhyan Mudra, Sharanagat Mudra, Deep Breathing 1:0:1 ratio (Same proportion).

Wednesday- Prone Position, Makarasana, Parvatasana, Sun Salutation (Positions), Vrikshasana.

Thursday- Sun Salutation (Positions including rules of respiration and chanting of mantras), Sun Salutation-9, Saral Hasta (straight armed) Bhujangasana, Ardha (partial) Shalabhasana.

Friday- Sun Salutation 12 + 2, Uttanpadasana (complete and partial), Vakrahasta (bent arm) Bhujangasana, Complete Shalabhasana.

Saturday- Vakrasana Types-1 & 2, Dhanurasana, Ardha (partial) Pashchimottanasana, and Deep Breathing (1: 0: 1.5 ratios)

Sunday Prayers - Ganapati Atharvasheersha, chanting of Aum- 108 times, contemplation 5 minutes, Prayers.

Week Two

Monday- Vipareet Karani, Naukasana types-1 & 2, Padmasana Yogamudra types 1 & 2, Samaasana, Vajrasana.

Tuesday- Vajrasana Yogamudra types-1 & 2, Baddhapadmasana, Ardha Matsyendrasana, Yogamudra type-2, Sarvangasana, Matsyasana.

Wednesday- Utthit Padmasana, Halasana, Pashchimottanasana, Trikonasana, Ashwini Mudra, and Deep Breathing (1: 0: 2 ratios).

Thursday- Aakarna Dhanurasana types 1 & 2, Veerasana, Rapid Breathing types- 1-5. Friday- Pavanmuktasana, Rapid Breathing type-6, Revision.

Saturday- Revision.

Sunday- Prayers, (as previous), contemplation 10 minutes.

Week Three

Take revision one hour daily of the processes taught in the previous two weeks. Important points to be noted for revision are:

□ Stop practice of Preparatory Movements.

□ Perform 12 Sun Salutation regularly.

 $\hfill\square$ Focused practice of Sarvangasana, Halasana, Hala-ugrasana, and Matsyasana

 \Box Continue chanting of Aum for 10 minutes regularly.

New Processes to be taught-

Monday- taking Vajrasana as initial position perform Shoulder Movement exercise-1 & 2, Leg Movement exercise- 1 & 2, Jalandhar Bandha, Bhraamari (while exhalation). Tuesday- Ardha (partial) Chakrasana (supine position), single-legged Hastasana (sitting and standing positions), Kapalbhati.

Wednesday- Complete Chakrasana (supine position), Sinha Mudra- Bhramari (while inhalation).

Thursday- Chakrasana (standing position) - Ushtrasana- Parighasana- Ujjayi. Friday- Ugrasana (sitting and standing position).

Saturday- Hala-ugrasana- Karnapeedanasana.

Week Four

The following revision should be taken in sixty minutes time in this week. *Daily Revision-* Prayers, Sun Salutation-12,

Sarvangasana, Halasana, Hala-ugrasana, Karnapeedanasana, Matsyasana- 2 repetitions,

Shavasana- Chakrasana, Bhujangasana (complete and partial), Shalabhasana,

Dhanurasana, Naukasana, Matsyasana, Ardha Matsyendrasana, complete

Pashchimottanasana, Aakarna Dhanurasana types-1 & 2, Shavasana, Trikonasana,

Veerasana, Chakrasana, single legged Hastasana, Ugrasana, Shavasana,

With Vajrasana as initial position - Shoulder Movement exercise-1 & 2, neck movement exercise - 1 & 2,

With Padmasana as initial position- Bhramari, Bhraamari, Kapalbhati, Ujjayi, Deep Breathing, Prayers, Chanting of Aum.

Household Therapy

 \Box Gurgling of the mixture of 1 glass of hot water + half teaspoon salt + half teaspoon of Alum granules 2-3 times daily.

 \Box Gurgling of mixture of Bark of myrobalan (Hirda) + turmeric powder 2-3 times a day.

 $\hfill\square$ Soak orange, sweet lime or dry grapes in water, crush it with hand and drink that water.

 \Box Cover the throat with warm muffler.

Naturopathy

 \Box Warm cover to the throat for 30 minutes thrice a day.

 \Box Warm the throat and apply Sanjeevan oil to it twice a day.

 \Box Hot and cold plait on the stomach for ten minutes twice a day.

 \Box Water enema for 7-8 days of the mixture of neem leaves boiled in water.

Beneficial Diet Tips

□ Drink hot water with a mixture of lemon juice 2-3 times daily.

- □ Soup or juice of tomato, spinach, carrot, gourd.
- \Box Drink hot water.

Prohibited Diet

 \Box Non-vegetarian food, hot, spicy, fried substances.

- □ Cold substances, refrigerated substances, Bengal gram.
 □ Tea, coffee, cocoa, tobacco, bakery products, fast food.

25. Thyroid Disorders

Thyroid Glands

The thyroid glands in the endocrine systems participate considerably in the functioning of the body. Hence any impairment in the functioning of these glands affects the functioning of the body extensively. Let us start with the knowledge of functioning of these glands before studying the damages in them and their ill-effects on the body. Thyroid glands are a type of endocrine glands, i.e. the secretion by these glands is mixed with the blood. These secretions are termed as hormones. These hormones affect certain organs and their functions, and an increase or decrease in the hormonal level directly affects the function of those organs. This implies that a control on the functioning of various organs can be achieved with the help of these hormones. The hormones that control the most important function of metabolism are secreted in the thyroid glands.

The thyroid glands are located at the base of the throat. It is divided into two similar parts and they are situated on each side of the respiratory tract. Both these parts are connected to each other from behind to the center. Each part measures approximately 5 X 2 X 2 cm. and it weighs 20-25 gm. Its weight is affected by factors such as age, physical state and sexual state. These glands get a high blood supply - 3.5-6.0 ml/gm. The two main hormones secreted by these glands are Thyroxin (T4) and Triiodothyronine (T3). Iodine is used in the production of these hormones. Our diet normally consists of 100-150 micrograms of iodine. The iodine is absorbed in the blood from the intestine at the time of digestion where it is transformed into iodide. The thyroid glands absorb this iodide from the blood and produce T3 and T4 hormones. But the process of absorption of iodide takes place in proportion to the TSH hormone secreted by the following:

1. They help in increasing the energy levels in the body.

2. They speed up the process of metabolism by increasing the absorption of glucose.

3. Increase in the metabolic rate increases production of urine thus increasing the amount of passage of urine.

4. These hormones support the growth of the body.

5. These hormones are responsible for the increase of amount of milk and fats constituent in the milk after delivery in a female.

6. The rate of expansion and contraction of the heart increases due to this hormone.

7. These hormones help in bringing about the required physical changes in accordance with the mental stresses in our daily life.

These glands function extensively during puberty, and in the state of pregnancy. Furthermore, they function more if the external temperature decreases and vice versa. This helps in maintaining the body temperature in all kinds of environment. It has been found out by research that these glands are responsible for some other secretions as well.

Metabolism - The process of production of energy in the body from the food and oxygen taken from the external environment is called metabolism. There are two processes involved - anabolism and catabolism.

Anabolism - The process by which chemical reactions of the various digestive juices on

the food we eat takes place and absorbed glucose is transformed into glycogen and stored in the liver.

Catabolism - The process by which the glycogen stored in the liver is transformed into glucose and carried to the cells where burning of glucose with the help of oxygen takes place thus producing energy.

Any activity by the body requires energy provided by the process of metabolism. Hence any damage in the process of metabolism affects adversely the functioning of the body. In fact, a system controlling this metabolic process is situated in the body itself. It increases or decreases the rate of metabolism as required. That is, the metabolic rate increases with physical exertion and decreases during rest. This control is carried out by hormones in the thyroid glands. Sometimes there is imbalance between the physical requirement and the metabolic rate. This state will be termed as disorder. There are two types of disorders due to the malfunctioning of the thyroid glands.

1. Hyperthyroidism - In this type, the hormone level in the thyroid glands exceeds the normal, thus increasing the rate of metabolism. Consequently, there is an increase in the heart rate, rate of respiration, purges, generation of more heat in the body, more sweating, complaints about menstruation in case of females, swollen eyes, feeling of exhaustion. The person feels like increasing activity but cannot. He becomes short tempered. A temporary measure can be taken by intake of medicines or a permanent measure can be achieved by removing a part of the thyroids through surgery, thus reducing total hormone levels.. However, if later the gland starts functioning normally the operated part cannot be rejoined and hence the hormonal level will stay below normal, leading to other disorders.

2. Hypothyroidism - In this case, the glands secrete a less than normal level of hormones, or hormones are not secreted at all. Thus when the rate of metabolism needs to increase, it cannot. The physical and mental activity thus lowers down. Symptoms like laziness, indigestion, muscular pains, deafness, dryness of the skin, forgetfulness, lack of hunger and still increase in weight are seen. This patient is so depressed physically and mentally that he is not ready even for treatment. The further stages of this disorder are swelling all over the body, thickness in lips, and lack of luster on the skin. These patients are not able to talk properly. If this disorder is not treated appropriately, (eg. by yogic therapy), the heart may even stop functioning.

The main cause of hypothyroidism is the surgery performed in hyperthyroidism to reduce the size of the glands. Once surgery is carried out, the hormones in thyroids are never regenerated. Hence the patient has to inject hormones externally to control this disorder. But frequent injections may reduce the remaining functioning of the thyroid glands. Such treatment has to be followed forever, and its consequences could be hazardous.

3. Goitre - The size of the thyroid glands increases beyond normal in this kind of disorder. It is of course neither an infection nor a tumor. This happens if the amount of iodine in the food is too low. This does not increase the secretions of the glands but its enlarged size creates pressure on the other organs thus affecting their functioning. Goiter may be a consequence of side effects of some other medicines too. The enlarged part of the gland is removed by surgery, but again it ends the secretion of hormones forever

indulging the patient into some other trouble. Medicines constituting of iodine are useful to some extent. But they too may cause adverse effects if used constantly.

It can be stated from the above discussion that yogic therapy is better than the illeffects caused by the prevalent medical treatment. Medical treatment is helpful only in the temporary phase. But yoga is the only way to achieve permanent effects.

Yogic Therapy

Yogic therapy is generally the same for all the three types of disorders discussed above. This can happen because yoga is capable of controlling the function of the thyroid glands to maintain a balance between the need and the actual rate of metabolic process. This treatment constitutes of Yogasanas, Pranayama, cleansing processes and contemplation.

Among the Yogasanas, Sarvangasana is the best for metabolic disorders as it creates the necessary pressure on the thyroid glands, supporting secretion as well as production of hormones in optimum quantity. Sarvangasana also helps in increasing blood supply to these glands thus improving their functioning. The asana is performed in the form of repetitions initially and the duration is increased with increased practice. The duration of stability can be increased from one minute to ten minutes, without repetitions. Movements of legs in Sarvangasana will be possible with increased practice, and then Padmasana can also be performed in Sarvangasana.

After sufficient practice of Sarvangasana, improved effects may be achieved by performing asanas like Halasana, Hala-ugrasana, etc. Additionally, Sun Salutation, Bhujangasana, Dhanurasana, Ardha Matsyendrasana, Pashchimottanasana, Yogamudra, Supta Vajrasana, Sinhasana, Sinha Mudra, etc. are also useful. With progress achieved in this practice, the patient may learn mudras like Mahabandha and Mahamudra which prove very effective in the recovery of these disorders.

Ujjayi is the Pranayama that works on improving the functioning of these glands. It helps in creating a balance in the supply of oxygen to this gland. It also improves functioning of the Vishuddhi Chakra situated in the throat, thus improving function of the thyroid glands. Besides, the Jalandhar Bandha that is performed during breath retention in this Pranayama is very useful in improving function of these glands. The Pranayama must be learnt from an expert and sufficient practice of asanas must be performed before learning it.

Naadishuddhi Pranayama is also useful to some extent in these disorders. Sheetali and Seetkari are useful in case of hyperthyroidism. Likewise, Bhasrika and Suryabhedan prove very beneficial in hypothyroidism.

The complete relaxation technique - Yoga Nidra is helpful in bringing the thyroid glands to normal as one of the root causes of the disorders lie in the mental stress. Yoga Nidra is helpful in reducing mental stress. The root cause of imbalance of hormonal secretion in the thyroid glands is often not detected. In that case too yoga proves useful as yoga can achieve a balance in the functioning of the organs. Hence, regular practice of yoga improves the functioning of the organs, and prevents any future cause of imbalance.

Naturopathy

 \Box Hot and cold cover on the stomach for 30 minutes 2-3 times a day.

- \Box Cabbage steam- 10 minutes twice a day.
- \Box Drink hot water while still hot.

Beneficial Diet Tips

 \Box Light diet.

□ Natural diet (Fruit diet, Juice diet).

Prohibited Diet

- \Box Non-vegetarian food, hot, spicy, fried substances.
- □ Bakery products, Cold substances, fast food.
- \Box Tea, coffee, cocoa, chocolate.
- □ Cold substances, cold drinks, ice- creams.

25.1. Yoga for Thyroid Disorders

Preparatory Practices: Start the training with Shavasana Practice for 3 Minutes. Basic movements (ref Yoga Sopan book) Preparatory movements (ref Yoga Pravesh book) Sun Salutations with slow speed (ref Yoga Pravesh book)

Useful Practices: All Asanas are to be practiced on Level -4 with concentration on the Thyroid glands. The Asana is to be maintained as long as it is comfortable to the patient. Asanas: Neck Movements 5 Rounda Jalandhar Bandh 5 rounds (30 secs each.) Bhujangasana (1 Minute) – Dhanurasana (3 Rounds) Sarvangasana (3 minutes) Halasana (1min.) Hala Ugrasana (1 minute) Matsyasana (1 minute) Shirshasana (1 minute) Paschimottasana (1 minute) Ardhamatsyendrasana (2 minutes on each side) Ushtrasana (2 minutes) Supta Vajrasana (1 Minute) Sinhasana (1 minute) Sinhamudra (1 minute) Trikonasana (1 minute on each side) Veerasana (1 minute on each side) -Shavasana (when needed) Omkar Chanting (30 minutes)

Cleansing Practices:

Agnisar 100 strokes total in 3 to 4 rounds Uddiyan Bandha 5 rounds (each round 30 seconds) Kapalbhati 5 rounds (120 strokes per round) Vaman Dhouti (once a week) Laghoo Shankhaprakashlana (once a week) Full shankhaprakshalana (once a Year)

Pranayama: Ujjayi Pranayama with kumbhak for 10 minutes for both types.

For Hypothyroidism:
Suryabhedan Pranayama with kumbhak for 10 minutes
Bhastrika Pranayama with kumbhak for 10 minutes.
For Hyper Thyroidism:
Sheetali Pranayama with Kumbhak for 10 minutes
Shitakari Pranayama with kumbhak for 10 minutes.
Yoga Nidra : Specially designed for Thyroidism or for Stress Relief.
Meditation: on Vishuddhi Chakra with mental recitation of mantra "Ham"

Optional Practices:

Asanas: Vipareetkarni, Vakrasana, Uttanpadasana, Pawavanmuktasana, Ardhpaschimottanasana, Sulabh Ushtrasana. Garudasana, Parivart Trikonasana, Patangasana.

Pranayama: Anulom Viloma with kumbhak Cleansing Practices: Neti – Dand Dhouti – Vastra Dhouti – Nouli (all types)

Walking for 60 minutes

Contraindications: None

Food Habits:

Suitable :Normal food with less fats & carbohydrates but with high fibres. Best food is fruits (except banana, mango & grapes) & vegetables Avoid: Nonveg food, Milk & milk products (Skimmed milk can be taken), Oily & Spicy food, refined foods, Fast Food, Preserved Food.

Daily Practice Program

No.	Asana / Yoga technique	Duration
		in minutes
1	Omkar chanting	5
2	Bhujangasana	2
3	Dhanurasana	1
4	Sarvangasana (shoulder stand)	4
5	Halasana (plough pose)	1
6	Halaugrasana	1
7	Matsyasana (fish pose)	2
8	Shavasana	2
9	Paschimottasana (forward bend)	1
10	Supta Vajrasana	1
11	Ushtrasana	2
12	Ardhmatsyendrasana	5
13	Sinhasana & Sinhamudra	3
14	Kantha sanchalana type 1, 2 (neck movements)	4
15	Shavasana (Corpse pose)	2
16	Trikonasana	3
17	Veerasana	3
18	Agnisara	5
19	Uddiyana Bandh	5
20	Kapalbhati (Forceful exhalations) 120 X 5	5
21	Ujjayi Pranayama with kumbhak	10
22	Sheetali (Inhalation) + Bhramari (exhalation)	8
	OR Bhastrika Pranayama with kumbhak	
23	Shitakari (Inhalation) + Bhramari (Exhalation)	8
	OR Suryabhedan Pranayama with kumbhak	
24	Prayer	7
	Total Time	90
		Minutes
	Omkar Chanting	30
	Yoga Nidra	30
	Vaman Dhouti once a week	
	Laghoo Shankhaprakashalana once a week	
	Purna Shankhaprakashalana once a year	
	Meditation on Vishudhdhi Chakra with mantra	

26. Headache

It goes without saying that the human head is a critical component part of the body as the brain - most significant organ of the nervous system – and all the senses are situated in the head. Any harm in the functioning of this significant organ can cause pain and dysfunction elsewhere in the body.

There are numerous causes of headache. Any damage to the brain in the skull, its different parts, and their blood supply may lead to headache. The disorder in the functioning of eyes, ears, nose, mouth, and throat may also result in headache. Headache may also be a reaction to a disorder in any other organs in the body. We all know that one can suffer from headache in case of indigestion or gases, also in case of hypertension, or diabetes. It is difficult to find out the underlying cause of headache and then treat it, as there are a number of causes of headache. Hence stopping the patient's headache is a headache to the doctor.

There are many pain-relieving medicines available in the market. These only work on the pain and relieving the headache. But as the original cause is not treated, there is recurrence of headache, and the tendency to take pain-relieving medicines for headache keeps increasing. Later the body repairs the disorder internally and the person thinks that the medicine has done its job. But actually it is an illusion. To get rid of headache completely and forever, the underlying cause must be found and treated. In this chapter we shall go through some of the causes of headache.

Brain disease

The patient suffers from headache in any of the brain diseases. Increased pressure of fluid in the brain, a tumor in the brain, internal bleeding in the brain are some of the severe causes requiring surgery as treatment. These diseases also cause other symptoms too (along with headache). In such cases, the root cause may be diagnosed from these symptoms, and some other diagnostic tests and treatment may be carried out.

Diseases of other organs

Any disorder in the organs like eyes, ears, nose may also lead to headache. Weak vision, where spectacles are needed but not used, may lead to headache. There is headache in case of cold-catarrh. The head hurts even if there is infection in the throat or any disorder in the ears. The patient has to be treated for those diseases to stop the headache.

Headaches can be caused by increased or decreased pressure of blood or increased or decreased amount of blood glucose in the body. These causes must be treated to avoid headache. These remedies are not discussed in this chapter.

Impairment in the blood vessels of the brain

There are billions of cells in the brain and they function relentlessly. These require plenty of supply of blood. The vessels supplying blood to them lose their elasticity due to some reasons. This creates a hammering sensation in the brain.

Muscular Spasm

A spasm in the muscles of the skull, face and especially neck affects the blood supply to the brain and the result is headache. The cause of spasm is physical or mental stress. These muscles become stiff due to spasm. Massaging them lightly may reduce these tensions. Relaxation works wonderfully on it.

The causes of headache discussed until now were related to other organs and their disorders. The treatment was suggested in their respective chapters. The most significant and common causes of headache are migraine and mental stress. Yoga has a positive effect on these, and hence we shall discuss them now.

Migraine

Sometimes part of the head pains and the pain is intense and sometimes unbearable. This headache recurs periodically. In some patients it starts in the morning, intensifies by noon and stops in the evening. Sometimes it affects the functioning of the eyes; there is also vomiting at times. A swelling in the blood vessels supplying blood to the brain may cause this headache. It may result from emotional stress on the nervous system. The symptoms comprise of bright spots or zigzag lines before the eyes, feeling of loss of energy in the hands and feet and even in the mouth. Later there is an intense headache followed by vomiting. Intense light is unbearable. There is sweating. This trouble lasts for hours. It lasts for days in the case of some patients. These attacks reappear frequently and the patient gradually becomes weak. The trouble may vary in various individuals. It is a trouble that does not respond to any therapy. Only yogic therapy works on it wonderfully.

Household Therapy

□ Make pure ghee lukewarm and put 5-5 drops in each nostril.

 \Box Eat garlic petals with salt during meals.

□ Put 2-2 drops of mustard oil in both nostrils.

 \Box Eat 1 teaspoon Triphala powder + pure ghee + sugar in the morning.

 \Box For migraine- eat coconut piece (not dry) + jaggery and Bhimseni camphor (natural or Borneo camphor) before sunrise. Take Gulvel (Tinospora Cordifolia) powder 1 gm +hot milk thrice a day.

Naturopathy

□ Keep mud plait/mud application on the head for 30 minutes.

 \Box Cabbage steam 10 minutes twice a day.

Beneficial Diet Tips

 \Box Raw food.

 \Box Have meals before 12 noon and 7 pm.

Prohibited Diet

□ Non-vegetarian food, hot, spicy, fried substances.

- □ Bakery products, Pulses- pigeon peas, Bengal gram, black gram.
- $\hfill\square$ Tea, coffee, cocoa, chocolates.

27. Varicose Veins

This disease is generally found in those who stand all day, usually for occupational purposes. The veins appear enlarged and blue in colour and there is pain in the legs. Varicose veins occur due to an adverse effect on the blood supply to the legs caused by constant standing. There is no medication available for this disease. Though surgery is sometimes performed on severe cases, it does not cure the condition completely. However, varicose veins can be prevented with proper precautions and even cured in the initial stages.

Oxygenated blood from the heart is carried to all parts of the body, while impure blood is gathered from the various parts and taken to the heart. Then, it is carried to the lungs where it is purified and supplied again to the parts of the body. When oxygenated blood moves from the heart, the heart muscles enact positive pressure on it so that it can be carried all over the body. Sometimes, this pressure reduces and the blood is not driven forward. The pressure in the right compartment of the heart goes into negation to solve this situation, and the impure blood is drawn towards the heart. Special effort has to be taken to carry impure blood from the legs to the heart. This is because the legs are at the farthest distance from the heart, and the blood has to travel opposite to the gravitational force. Nature has developed a system especially for the purpose.

We know that the blood vessels that carry impure blood to the heart are called veins. There are one-way valves in these veins which open in the direction of the heart. Due to these valves, blood that comes from the legs to the heart cannot flow backwards. The muscles of the legs assist by forcing blood in the upward direction. So, veins get pressed due to the contraction of these muscles and the blood travels upward due to the valve. The thigh and calf muscles have to expand and contract constantly for this purpose, which happens in the movement of the legs while walking.

The veins travel upward in two ways; some are superficially situated underneath the skin, whereas some are deeper in the muscles. Both types of veins are joined to each other at some points. Here, there are one-sided valves so that blood that has passed into the deeper veins does not return to the superficial veins. This system operates very well in people whose routine consists of sufficient movements. However, in those unused to physical exercise, blood does not travel upward to the heart as it should. It remains in the veins and exerts weight on the valves instead, causing varicose veins.

Those who work constantly in a standing position are at risk from this disease. Being in the standing position constantly limits the upward flow of impure blood, meaning that the blood storage in the veins gradually increases. In this situation, there would be insufficient muscular movements in the legs, exerting extra pressure on the valves and making them weak. As a result, the blood would run backward instead of traveling in the direction of the heart. As well as affecting blood circulation, the blood vessels would lose their elasticity. Accordingly, there would be pain in the legs; they would start to feel heavy, and walking would become difficult.

Sometimes, thrombosis occurs in the deeper blood vessels. Thrombosis is the formation of a blood clot in the deeper vessels which blocks the passage of blood from these veins. Therefore, all blood will be carried out by the superficial veins, affecting the elasticity of these veins and that of their valves. This increases the intensity of the disease.

Similar trouble can be caused by the pressing of the veins in the stomach, generally found in pregnant women. The growing size of the fetus in the womb develops

pressure on the blood vessels of the stomach. This prevents blood flow in the upward direction, thus exerting pressure on the veins of the legs and the valves. But the pressure decreases and blood circulation returns to normal after pregnancy.

There are no medicines for this trouble, but if it intensifies, the superficial veins can be operated on and removed, allowing the flow of impure blood through the deeper veins only. This reduces pain in the legs, but the original disease remains and gradually trouble moves to the remaining veins, which then have then to be operated on as well.

This trouble does not occur suddenly and should be sensed and treated in the early stages. There is plenty of time from the emergence of the disease to the time when surgery is the only option for the patient. Possible treatments include certain asanas and massage.

Yogic Therapy

This disease occurs due to the lack of movement of the legs and standing in one position for a long time. Hence, any asana which takes the legs upside down is beneficial in freeing the patient from this trouble. Asanas in which the muscles of the legs and thighs are strained are also useful.

The leg movement exercises and chin movement exercises may be easily performed and are beneficial. Pavanmuktasana and Uttanpadasana are useful for creating strain in the veins of the legs, helping the flow of blood towards the heart. After practicing these, Vipareet Karani, Sarvangasana and Sheershasana, are to be practiced to create flow towards the heart and reduce the pressure on the valves. Dhanurasana, Shalabhasana, Vajrasana, Ardha Matsyendrasana, Aakarna Dhanurasana and Pashchimottanasana are useful in improving the muscular efficiency of the legs. Tadasana, Veerasana and Trikonasana help in improving the elasticity of the leg muscle, which in turn improves the elasticity of the veins. If the patient does not suffer from any other disease, scientific practice of Sun Salutations will aid the patient in curing himself. Regular and persistent practice of these asanas is necessary so that the condition of the patient improves gradually until he is liberated from the disease.

Shavasana with legs placed on a chair

Lie in Shavasana on a mattress on the floor. Put both legs over a chair and use a pillow for comfort. Stay in this position for 10- 15 minutes. Perform action two or three times per day.

Avoid standing in one position for long

Varicose veins occur due to constantly standing in one place. So, this habit must be changed. One must walk after some time of standing. At the very least one can perform marching on the spot. Exercise the thigh and calf muscles frequently to avoid the adverse effects of standing. Practice sitting crossed legged on the floor instead of using a chair.

Naturopathy

Massaging the legs –

Massage both legs using sesame or coconut oil. Start from the bottom of the legs and move up. The blood in the legs must be helped towards the heart, so it is important that massage is done in this direction only. Perform this massage for 10-15 minutes two to three times a day. Varicose veins may take a severe form that there is no way to treat. But this does not happen suddenly; hence, treatment taken in the initial stages may control it before the disease gets underway. If treatment is sought in good time, the disease may be completely eliminated from the body.

28. Urinary Infections

There are many germs in the external environment. They enter the body through air, water or wounds on the body and can multiply rapidly given favorable conditions. White blood cells fight these germs and try to kill them. If the white blood cells win, the body does not suffer. But if they do not succeed in killing the germs, the germs grow rapidly and infect the organs in their vicinity. The infection may cause fever, swelling in the organ, pain in the organ, slowing or even cessation of functioning in that organ. Antibiotics can solve the problem for the time being, but yoga yields long term results.

Certain organs are at higher risk of infection, and kidneys are at the top of this hierarchy. The kidneys, ureter, bladder and urethra are the major urinary organs. The urinary tract gets in contact with the external environment through the urethra; one end of which opens to the outside of the body. Germs can enter the tract from here and may infect any of the above four organs.

Infection in the urinary bladder

Blood circulation helps the cells absorb nutrients and eliminate waste. Impurities in the blood are filtered by the kidneys. Impurities in liquid form (urine) are stored in the urinary bladder and eliminated when a sufficient amount is stored; usually after about four hours.

The possibility of infection in the bladder is very high. Infection results in a burning sensation in the lower abdomen, a frequent need to pass urine, and other symptoms. The urine appears turbid and contains pus when it is infected. Sometimes it contains blood, appearing reddish in color.

Kidney infection

If germs reside in the bladder for a long time, the infection may reach the kidneys through the urethra. This slows the purification of blood in the kidneys and the impure blood spreads all over the body, thus spreading the infection. The kidneys stop functioning if the infection is not brought under control. The patient has to undergo dialysis at such times. Dialysis is the process of extracting the impure blood and inserting pure blood into the body. If an error occurs in this process, the patient is at great risk. Kidney transplants are another solution, but they are very risky and expensive. This kind of infection is found more in females rather than males as their urethra is short (3-4 inches) and its opening is covered with muscles. Hence, it is difficult to clean properly and germs can easily enter and reach the bladder. Women should be aware of this and take suitable precautions.

The possibility of infection increases during the pregnancy period. As the fetus increases in size, it applies increasing pressure on the bladder, which cannot be controlled. The woman has to pass urine frequently, but the bladder is never emptied completely. The continued storage of urine in the bladder increases the possibility of infection. Moreover, as the fetus grows in the woman's womb, her body takes on its functional needs. As a result, the amount of impurities in her blood increases. These should be disposed of properly, but the pressure on the bladder prevents this. Blood circulates spreading impurities and may cause serious trouble. It may even result in the abortion of the fetus. Sometimes control over the bladder muscles is lost. In this case, urine keeps dripping constantly. As a woman goes through further pregnancies, these muscles start losing their elasticity and she gradually loses control over them. In addition,

the urinary organs are strained at the time of delivery, worsening the trouble. Sometimes this control is lost due to squeezing or coughing, resulting in the passage of urine. It is therefore necessary to practice certain yogic processes during the pregnancy period and after delivery. However, it is unsafe to practice certain asanas at these times; yoga practice should be performed under expert guidance only.

Yogic Therapy - Yoga is not specifically useful once there is an infection in the body. But infection may be resisted with the help of regular yoga practice, especially in cases where there is a need to rebuild muscular control, because yoga helps in improving the elasticity of the muscles. Yoga also improves overall body balance.

Sun Salutations - If the person is not suffering from backbone or heart disease, he can perform Sun Salutations, which help in improving the elasticity of all the muscles of the body. Moreover, an improvement in physical and mental immunity keeps an overall balance in the body. The performance of twelve Sun Salutations every morning is a boon to good health.

Yogasanas - A newcomer to yoga may start with the Yoga Sopan course. S/he may learn the body movement exercises, simple asanas and Bhramari (exhalation). If his/her physical condition is otherwise sound, s/he may learn Bhujangasana, Dhanurasana, Naukasana, Sarvangasana, Ashwini Mudra, Halasana, Matsyasana, Pashchimottanasana, Ardha Padmasana, Ardha Matsyendrasana, Ushtrasana, Vyaghrasana, Supta Vajrasana, Veerasana, Vatayanasana, Agnisar, Uddiyan Bandha, Mool Bandha, Kapalbhati, Vaman, Laghu Shankha Prakshalana. Regular practice of Yoga Nidra will release all unnecessary stress, helping the patient to regain muscular elasticity and therefore balance in muscular movements. This will automatically aid physical repair and enhance mental strength.

Household Therapy

□ Drink water boiled with barley and then cooled.

□ Drink one glass of water mixed with Padelium murax (Bada Gokhru) on an empty stomach.

Naturopathy

 \Box (Warm, warm-cold) waist bath once in a day.

 \Box Keep cold plait on the opening of the urethra for fifteen minutes, twice a day.

 \Box Fasting once a week only lemon juice + water. Three to seven days of fasting in six months.

 \Box Have a glass of juice made from wheat sapling (grown in a small earthen pot for a week) on an empty stomach.

Diet - A simple, fresh, vegetarian diet is always beneficial, Non-vegetarian, spicy, and fried substances damage health. There should be enough liquid in the diet. If not, water intake must be increased to clear the urinary system.

Beneficial Diet Tips

- □ Unadulterated natural diet.
- □ Fruits, fruit or vegetable juice.
- \Box Drink plenty of water.

 \Box Have meals before 12 noon and 7 pm.

Prohibited Diet

□ Non-vegetarian, hot, spicy food, pickles, papad (crackers or flat bread).

- □ Pulses- pigeon peas, Bengal gram, black gram.
- □ Sweets, refined substances, hydrogenated vegetable ghee.
- \Box Tea, coffee, cocoa.

Alterations to be made in Lifestyle

Nylon clothes and clothes tight at the waist are harmful for these diseases. Therefore, use clean cotton, loose clothes. Furthermore, make deliberate efforts to clean the urinary organs. It is possible to prevent these diseases if the above precautions are taken and yoga is practiced regularly.

29. Menstrual Disorders

The reproductive system in the human body is a very complicated system. We know that conception takes place when sperm from the male body come in contact with the ovum in the female body. The male part is merely producing sperms and depositing them inside the female body. After the point of conception it is the female that has to protect and nourish the fetus with her own body. To do this excretion of various hormones help her body to performing all the necessary functions. These are all very complex procedures, which can lead to a number of defects. For our purposes we will go through only some of the major and more common defects. Before that we shall study the events occurring in the female body.

The uterus is the chief organ of the female reproductive system and is the location where the fetus is nourished and developed. Once the growth of the fetus is complete it passes through the vagina to enter the external environment. The ovaries that generate ovum are situated on both sides of the uterus. The ovum in the ovaries enters the uterus through the fallopian tubes. If it comes in contact with the sperm during this journey towards the uterus, conception takes place and it is carried to the uterus through these tubes. It starts growing in the uterus.

The Menstrual Cycle

The ovum comes from the ovaries into the uterus through the fallopian tubes. If it does not come in contact with the sperm when in the uterus it does not fertilize. Meanwhile, the uterus makes preparations for pregnancy. When there is no conception this is all in vain as pregnancy is not going to take place. Hence the unfertilized ovum, the fluids produced for the sake of preparation of pregnancy and a certain amount of blood is disposed through the vagina. This disposal takes place for about three to seven days and is termed as menstruation. The menstrual cycle is generally 28 days, beginning on the first day these fluids start discharging. The discharge takes place for roughly three days and stops on the fourth day. The ovum enters the fallopian tubes in mid cycle (approximately on the fourteenth day) and later comes into the uterus. The menstrual flow starts again after 28 days.

Irregular Menstrual Cycle

The onset of this menstruation cycle (menarche) in girls is generally at the age of 14. It continues up roughly to the age of forty-five and then it is concluded (menopause). Two to four years more or less may be counted in this duration of years due to individual differences. Regularity in this cycle is a sign of good health. With pregnancy the cycle is halted during the months of pregnancy and a further three to four months after delivery of the child.

The cycle gets disturbed due to intake of hormones. It may also get disturbed because of significant changes in life or due to physical and/or emotional stress. There may be other temporary causes that can cause the cycle to become irregular for a period of time but it usually returns to normal when the stressor or temporary cause has been eliminated. If the menstrual cycle is irregular despite of any peculiar cause, it is a defect and if it continues it has to be treated. There can be a serious illness or disease (i.e. Cancer), which could cause the cycle to stop and in this case would have to be treated with priority. Although the general period of menstrual cycle constitutes 28 days, individuals may vary from 26-36 days. This deviation of period is not a defect. Furthermore, if the cycle is irregular but no physical defect is detected, and if her state of mind is fine, then there is no need to worry. She can be taught the yoga courses- Yoga Sanjeevan, Yoga Sopan, Yoga Pravesh, Yoga Parichay, Yoga Praveen and her cycle may come to normal with regular practice of Yoga.

Excess bleeding and pains during menstruation

Many women experience trouble with excess bleeding during the first three days of their period. For some bleeding continues up to 10-15 days. This reduces the blood and hemoglobin quantity in the body, resulting in weakness. Some other troubles related to menses are pain in lower abdomen and the waist. These women may find it necessary to take rest to alleviate these symptoms. It has been observed that these troubles are seen mostly in young girls and usually end after the delivery of the first child.

In some females the intensity of pain may be less but they experience an increase in mental stress and other symptoms before menstruation. Example of such are; swelling in the breasts, bloating in the abdomen and water retention usually due to reduced passage of urine. As a result there is temporary increase in their weight. All these troubles start six to seven days before menstrual discharge. Once menstruation begins the symptoms are reduced and will end with the menstrual discharge.

Without being able to identify the exact cause behind these troubles, what is certain is that they occur when there is a decrease in the hormones progesterone and estrogen. These troubles are also related to mental stress and have been seen to lessen when stress levels are reduced. In these cases, hormone tablets or pain-relievers are often prescribed, which will provide temporary relief of the symptoms. Moreover they carry their own side effects, which can be more problematic than the original troubles.

As a substitute to conventional medicine we can treat these troubles permanently with regular practice of Yoga. Yoga helps in maintaining balance in the level of hormones; it reduces the mental stress and also changes the individual attitude towards the menstrual cycle. Menstrual related problems will be resolved if the woman carries the viewpoint that menstrual cycle is a boon for spiritual development and not a curse.

The Menstrual Cycle-A Boon to Females

The bleeding in the menstrual cycle is actually a kind of cleansing process, thus purifying the female body. A number of hormones are produced in the body at this time

and it has also been found that the mental ability of a woman enhances during this period. The period three days before the beginning of menses, four days of menses and five days after the menses is very useful and beneficial for concentration, contemplation and Japa (constant thought). The sense organs of the women are very efficient during this period and it would be wise to take advantage of it.

The idea that an onset of troubles will occur with the beginning of menstruation creates tension in the minds of females essentially inviting the problem. Regular practice of yoga prevents the emergence of these stresses and strains and alters the point of view of the females towards their menstrual cycle. This new perception of menses as a boon to them rather than a curse will be of great benefit.

Prevalent Medical Treatment

The troubles at the time of menses occur due to lack of hormones. These are injected or taken in form of tablets. They yield temporary results and hence have to be taken frequently, which may develop a habit and may also create side effects. Sometimes the uterus is eliminated to avoid complications from excess bleeding. The menstrual troubles will no longer exist however the woman may end up with other troubles like waist pain etc. Hence if yoga is practiced before such a procedure, it is possible that the surgery can be avoided.

Yogic Therapy

The following processes are very useful for the troubles discussed above. However, during while bleeding is going on, it is suggested that the woman should avoid practicing many asanas but rather concentrate on Pranayama, Yoga Nidra and shavasana. Expert advice is necessary if the woman is suffering from some other diseases as well.

Sun Salutation- Sun Salutation is a comprehensive exercise but performing it as a part of treatment, it must be performed like asanas - slowly and with supportive breathing techniques. As Sun Salutations are inclusive of asanas, Pranayama and mantras regarding the Sun, they help in regaining the internal balance of the body. The number of Sun Salutation must be decided as per personal capacity.

Yogasanas- the Yoga Sanjeevan course is useful for the newcomers. Besides, asanas like Bhujangasana, Shalabhasana, Dhanurasana, Sarvangasana, Halasana, Matsyasana, Chakrasana, Ardha Matsyendrasana, Pashchimottanasana, Sheershasana, Ushtrasana, Vajrasana, Supta Vajrasana and Shashankasana are useful.

Mudras and Bandhas- Ashwini Mudra performed in Vipareet Karani or Sarvangasana is extremely useful. The trio of mudras- Mahamudra, Mahabandha and Mahavedha are also useful. The Uddiyan Bandha and Mool Bandha directly affect the defected organs positively.

Pranayama- Naadishuddhi, Ujjayi and Bhraamari Pranayama are most useful for these problems. Initially, Pranayama should be practiced without breath retention. After practice of Bandhas, Pranayama may be practiced along with the trio of Bandhas and breath retention. Some patients may benefit from Bhastrika Pranayama as well.

Cleansing Processes- Vaman and Laghu Shankha Prakshalana may be performed

alternately. Agnisar and Kapalbhati are useful to improve functioning of organs in the abdominal cavity.

Yoga Nidra- It is useful as in all diseases. The resolution, "I am going to get rid of my troubles," will help increasing the patient's mental strength and decrease their troubles. Shavasana will also prove helpful for extra relaxation.

Household Therapy

□ Drink decoction of Anantmool (root of Hemidesmus indicus (Indian Sarsaparilla)) powder made and stored in a thermos flask thrice a day.

□ Drink half cup of Gomutra (cow urine) when empty stomach.

□ Make pills from the paste of tender Rui (cotton) leaves and black pepper and take one pill at a time thrice- morning, noon and evening.

□ Boil pieces of dry fig in milk and eat them and drink the milk every morning.

Naturopathy

□ Keep cold plait on the lower abdomen fifteen minutes, twice a day.

 \Box Warm + cold + warm waist bath 15 +15 +15 minutes once in a day.

 \Box Warm leg bath for 15 minutes once in a day.

 \Box Have a glass of mixture of lemon juice + honey + water in the morning.

 \Box Enema of water boiled and cooled with neem leaves.

Beneficial Diet Tips

- \Box Raw diet, fresh fruits.
- □ Fasting once in a week (only lemon juice and water permitted).
- \Box Have meals before 12 noon and 7 pm.
- □ Juice of Gavankur (sprouted wheat grains).
- \Box Sprouted beans.
- \Box Milk, curd, buttermilk.
- □ Tomato, carrot, orange, sweet lime, chickoo, banana, pineapple, apple.
- \Box Fig, almonds, dried fruits.
- □ Coconut Water.

Prohibited Diet

□ Non-vegetarian food, hot, spicy fried substances, bakery products.

□ Salt.

30. Female Reproductive System Disorders

Vaginal Discharge

The menstrual cycle is the process that brings together all of the female reproductive organs. We have learned about some of the related disorders in the previous chapter. We shall now learn about the disorders of the different organs of this system. The first and the foremost is the vagina for which an excess of discharge is found to be a common disorder in women. It is also termed as 'white discharge'. It is normal for a certain amount of discharge to be found the vagina, just as we have regular secretions in the eyes and nose. It keeps the vagina wet and clean thus protecting the internal sensitive vaginal skin. The discharge carries out the function of preventing dust particles and germs from entering the body through the vagina and disposes it out of the body. This discharge is whitish and sticky and is secreted by the minute glands in the uterus. In a healthy condition it has no odor.

Disorder of White Discharge

When there is excessive discharge of this vaginal fluid it is a disorder. The inners have to be changed frequently in case of this disorder. The troubles are heaviness in lower abdomen, as well as back and waist pain. There are usually no pains or inflammation in the vagina. If this discharge continues for several days together it can lead to lethargy and weakness. If it is not treated in time it may cause infection in the vagina as well as uterus.

One of the most chief causes of increased discharge is an injury at the mouth of the uterus. Such an injury may be a result of a tear caused during childbirth that did not heal properly. Furthermore, excessive physical exertion, lack of sufficient rest, lack of nutritional diet, and mental stress are the other causes of this disorder. Women suffering from diabetes or tuberculosis may also suffer from this disorder.

Excessive intake of milk products and constant intake of refined rice increases the 'kapha' dosha in a part of the body and it is through the vagina that it gets eliminated. An increase in the amount of sugar one consumes can also create an environment conducive to germs, which lead to this trouble.

Vaginal Infection

If the white discharge lasts for an extended period of time, it creates access for germs to enter through the vagina. The vagina is the outermost part of the reproductive system, thus being the gateway to the other reproductive organs. Once the germs enter into the opening of the vagina, they settle there before proceeding to the uterus and may even reach the fallopian tubes making it possible for a variety of other troubles.

The infected portions cause an inflammation to those areas and lead to frequent passage of urine. The infection not only increases the vaginal discharge but also changes it to a yellowish or reddish color. In these cases of infection it will become contagious and therefore any physical intimacy with a partner could lead to the infection being transmitted. If this infection is not controlled in time it may lead to serious problems and hence must be treated immediately. Antibiotics will work well in the initial stages. Once the infection has been treated, a regular practice of yoga will increase the individuals resistance power making it less likely she will suffer from future infections. Rest and avoiding physical intimacy in that period are supportive measures for treatment.

Yogic Therapy

If the patient is not suffering from any other diseases the following yogic processes will help cure this disorder. If there are any other troubles, the patient must seek expert guidance for yogic practice.

Yogasanas - Sun Salutation, Bhujangasana, Shalabhasana, Dhanurasana, Naukasana, Sarvangasana, Ashwini Mudra, Halasana, Ushtrasana, Ardha Matsyendrasana, Marjarasana, Paschimottanasana, Chakrasana, Veerasana.

Pranayama - Deep breathing, Naadishuddhi Pranayama, Bhasrika and Ujjayi Pranayama.

Bandhas - Mool Bandha and Uddiyan Bandha.

Cleansing Processes - Kapalbhati, Bindu Traatak.

Other processes - Yoga Nidra and chanting of Aum.

Special Precautions

Cleaning of the body, especially anal region and reproductive organs is very necessary. Moreover, wearing nylon and/or tight clothing is an invitation to infections. Free passage of air in the vicinity of the organs will keep them healthy. Wear cotton and natural fibers as much as possible.

Another important thing is that treatment should be sought immediately after the trouble starts in an effort to prevent progression and further complications. Treatment becomes more complex as the problems increase.

Household Therapy

 \Box Clean vagina with -

- 1. Water boiled with guava leaves and guava skin and then cooled.
- 2. Water- 1 liter + 1 teaspoon vinegar.
- 3. Descending shoots of banyan tree boiled in water and then cooled.

 \Box Take a mixture of Ashwagandha (Withania somnifera (winter cherry)) powder 3gm + ghee- 3 gm adding sugar to it. Drink milk over this mixture.

□ Prepare powder of cumin seeds and sugar candy taken in same proportion. Take half teaspoon powder with the water in which rice is cleaned before cooking.

Naturopathy

 \Box Have a glass of mixture of lemon juice + lukewarm water in the morning.

- \Box Fasting for three days.
- □ Fasting once in a week (only lemon juice and water permitted).
- \Box Keep mud plait on the lower abdomen.
- \Box Waist bath with cold water- 15 minutes twice in a day.

Beneficial Diet Tips

□ Fruit diet, Juice diet.

□ Carrot, cucumber, spinach, tomato, orange, sweet lime, apple, pineapple, guava, chickoo, jamun.

 \Box Cabbage, cauliflower.

Prohibited Diet

- Non-vegetarian food, hot, spicy fried substances.
 Tea, coffee, cocoa, chocolate, toffees.
- \Box Mock drinks, fast food.

31. Yoga for Gynecological Disorders

Preparatory Practices:

Start the training with Shavasana Practice for 3 Minutes. Basic movements (ref Yoga Sopan book) Preparatory movements (ref Yoga Pravesh book)

Useful Practices:

Sun Salutations 12 rounds in 12 minutes Asanas; Dhanurasana (3 rounds) – Shalabhasana (1 minute) – Ardha Chakrasan (2 minutes) – Purna Chakrasana (1 minute) - Uttanpad Chakrasana 3 rounds – Sarwangasana (3 minutes) – Ashwani Mudra (2 minutes) –Halasana (1 minute) -Matsyasana (1 minute) - Ardhamatsyendrasana (2 minutes on each side), Paschimottasana (1 minute) – Akarna Dhanurasana (1 minute on each side) Marjarasana (2 minutes) – Ushtrasana (1 minute) - Udarsanchalan (3 rounds) – Sankatasana (1 minute) – Garudasana (2 minutes) – Parivart Trikonasana (1 minute on each side) – Veerasana (1 minute on each side) - Shavasana (when needed)

Cleansing Practices:

Agnisar 100 strokes total in 3 to 4 rounds Uddiyan Bandh 5 rounds (each round 30 seconds) Kapalbhati 5 rounds (120 strokes per round) Vaman Dhouti (Once a week) Laghoo Shankhaprakashlana (once a week) Full shankhaprakshalana (Once a Year)

Pranayama:

Nadishodhan Pranayama with kumbhak for 10 minutes Bharamari Pranayama without kumbhak for 10 minutes.

Meditation on Swadhistan Chakra with mantra Yoga Nidra specially designed for Menstrual Problems.

Optional Practices:

Asanas: Bhujangasana, Vipareetkarni, Vakrasana, Uttanpadasana, Pawavanmuktasana, Ardhpaschimottanasana, Sulabh Ushtrasana. Patangasana.

Pranayama: Anulom Viloma without kumbhak, Right nostrill breathing Cleansing Practices: Neti – Dand Dhouti – Vastra Dhouti – Nauli (all types)

Contraindications: None.

Food Habits:

Suitable :Normal food with less fats & carbohydrates but with high fibres. Best food is fruits (except banana) & vegetables Avoid: Nonveg food, Rice, Oily & Spicy food, refined foods, Fast Food, Preserved Food. Special Food Program - FANEER

This is a specially designed food program for better digestion. This includes the diet for three days as follows:

First day – Only Fruits and raw vegetables (No other food to be taken)

Second day – Only water with lemon juice & salt

Third day – Only Juices & soup (liquid diet only)

(This is to be repeated once in 15 days)

Daily Practice	Asana / Yoga technique	Duration
Program		minutes
1	Sun salutation $12 + 2$	10
2	Shavasana (Corpse pose)	2
3	Dhanurasana (Bow pose) 3 rounds	3
4	Shalabhasana (Locust pose)	1
5	Chakrasana (wheel pose) Half + Full	3
6	Shavasana	2
7	Sarvangasana (shoulder stand)	3
8	Ashwini Mudra (Horse gesture)	2
9	Marjarasana (cat pose)	2
10	Ushtrasana (Camel pose)	1
11	Ardha Matsyendrasana (Half spinal twist) both sides	4
12	Udar Sanchalana type I & II (Abdominal movement)	4
13	Shavasana (Corpse pose)	2
14	Sankatasana (Difficult pose)	1
15	Garudasana (Eagle pose)	1
16	Veerasana (Warrior pose) from both sides	2
17	Parivarta Trikonasana (Twisted Triangle) from both	2
	sides	
18	Shavasana (Corpse pose)	2
19	Agnisar (Stimulating Fire technique) 100 strokes	3
20	Uddiyan Bandha (Abdominal lock) 5 rounds	3
21	Shavasana (Corpse pose)	2
22	Kapalbhati (Forceful exhalations) 5 rounds	5
23	Nadi Shodhan Pranayama (alternate nostril)	10
24	Bhramari (Humming bee breath)	10
25	Prayer	7
	Total Time	90 Minutes
	Meditation on Swadhistan Chakra with mantra "	30
	Yoga Nidra specially designed for M. C. problem	30
	Om Chanting for 30 minutes every day.	-

32. Yoga for (HIV) AIDS

Preparatory Practices: Start the training with Shavasana Practice for 3 Minutes. Basic movements (re Yoga Sopan book) Preparatory movements (ref Yoga Pravesh book) Sun Salutatons with slow speed (ref Yoga Pravesh book)

Useful Practices:

Preparatory Movements type 1 to 10, Sun Salutations 12 rounds in 8 minutes Asanas; Uttanpad Chakrasana 3 rounds – Bhujangasana (1 minute) – Dhanurasana (1 Minute) - Sarwangasana (3 minutes) – Halasana (1minute.) - Matsyasana (1 minute) – Supta Vajrasana (1 Minute) - Ardhamatsyendrasana (2 minutes on each side) - Paschimottasana (1 minute) – Akarna Dhanurasana (1 minute on each side) - Ushtrasana (2 minutes) – Udarsanchalan (3 rounds) – Trikonasana (1 minute on each side) – Veerasana (1 min. on each side) – Garudasana (2Min) Shavasana (when needed)

Cleansing Practices: Agnisar 100 strokes total in 3 to 4 rounds Uddiyan Bandh 5 rounds (each round 30 seconds) Kapalbhati 5 rounds (120 strokes per round) Vaman Dhouti (Once a week) – Laghoo Shankhaprakashlana (once a week) – Full shankhaprakshalana (Once a Year) Pranayama: Suryabhedan Pranayama with kumbhak for 10 minutes Bhastrika Pranayama with kumbhak for 10 minutes. Meditation on Adnya Chakra with mantra "Om" Yoga Nidra specially designed for AIDS.

Optional Practices:

Asanas: Vipareetkarni, Vakrasana, Uttanpadasana, Pawavanmuktasana, Ardhpaschimottanasana, Sulabh Ushtrasana. Garudasana, Parivart Trikonasana, Patangasana.

Pranayama: Anulom Viloma with or without kumbhak, Right nostrill breathing

Cleansing Practices: Neti – Dand Dhouti – Vastra Dhouti – Nouli (all types) Walking for 60 minutes

Food Habits:

Suitable High protein Food, All food in hot condition Normal food with less fats & carbohydrates but with high fibers. Best food is fruits (except banana, mango & grapes) & vegetables Avoid: Cold food & cold drinks, Milk & milk products (Skimmed milk can be taken), Rice, Oily & Spicy food, refined foods, Fast Food, Preserved Food

Daily Practice	Asana / Yoga technique	Duration in
Program:		minutes
1	Prepeparatory movements (3 repetitions) OR Sun	10
	salutations – 12 rounds	
2	Shavasana	2
3	Uttanpad Chakrasana 3 rounds	3
4	Bhujangasana	1
5	Dharasana (bow pose in prone position)	1
6	Suptavajrasana	1
7	Shavasana	2
8	Sarvangasana (shoulder stand)	3
9	Halasana (plough pose)	1
10	Matsyasana (fish pose)	1
11	Shavasana (Corpse pose)	2
12	Ushtrasana (camel pose)	1
13	Ardha Matsyendrasana both sides	5
14	Paschimottanasana (forward bend)	2
15	Akarnadhanurasana Type 1, 2	3
16	Udar sanchalana type 2 (abdominal movements)	3
17	Trikonasana (triangle pose) 1 min X 2 sides	2
18	Veerasana (warrior pose) 1 min X 2 sides	2
19	Garudasana 1 min X 2 sides	2
20	Shavasana (Corpse pose)	2
21	Agnisar (100 rounds)	3
22	Uddiyan Bandha (Abdominal lock)	4
23	Shavasana (Corpse pose)	2
24	Kapalbhati (Forceful exhalations) 120 X 5	5
25	Bhasrika Pranayama with kumbhak	10
26	Surya Bhedan Pranayama with kumbhak	10
27	Prayer	7
	Total Time	90 Minutes
	Omkar Chanting	30
	Yoga Nidra for Aids.	30
	Meditation on Adnya Chakra with mantra "Om"	30
	Vaman dhouti once a week	
	Laghoo Shankhprakshalana once a week	
	Purna Shankhprakhalana once a Year	

33. Yoga for Depression & Anxiety

Preparatory Practices: Start the training with Shavasana Practice for 3 Minutes. Basic movements (ref Yoga Sopan book) Preparatory movements (ref Yoga Pravesh book) Sun Salutatons with slow speed (ref Yoga Pravesh book)

Useful Practices: Preparatory Movements type 1 to 10 with slow speed. Sun Salutations 12 rounds in 8 minutes Asanas; Bhujangasana (1 minute) – Shalabhasana (15 Secs) – Dhunurasana (30 sec) Ardhamatsyendrasana (2 minutes on each side) - Paschimottasana (1 minute) Akarna Dhanurasana (1 minute on wach side) - Ushtrasana (2 min) Trikonasana (1 minute on each side) – Veerasana (1 minute on each side) Shavasana (when needed)

Cleansing Practices: Agnisar 100 strokes total in 3 to 4 rounds Uddiyana Bandha 5 rounds (each round 30 seconds) Jalaneti (Once a week) Laghoo Shankhaprakashlana (once a week)

Pranayama: Anulom Vilom Deep Breathing 15 minutes Ujjayi Pranayama without kumbhak for 10 minuits Right Nostrill Purak followed by Bhramari Rechak (21 rounds)

Optional Practices:

Asanas: Vipareetkarni, Vakrasana, Uttanpadasana, Pawavanmuktasana, Ardhpaschimottanasana, Sulabh Ushtrasana. Marjarasana - Garudasana, Patangasana.

Pranayama: Bothnostrill breathing, Bhramari Pranayama without kumbhak, Bhastrika pranayama without Kumbhak

Cleansing Practices: Neti – Dand Dhouti – Vastra Dhouti – Nauli (all types)

Walking for 60 minutes

Contraindications: Shirshasana (Head stand) & its variations. Any Pranayama with Kumbhak.

Food Habits: Suitable - Normal food with less fats & carbohydrates but with high fibers. Best food is fruits & vegetables Avoid: Nonveg food, Oily & Spicy food, refined foods, Fast Food, Preserved Food. Salts.

Daily Practice	Asana / Yoga technique	Duration in			
Program		minutes			
1	Sun salutation 12 + 2	10			
2	Shavasana (Corpse pose)	2			
3	Bhujangasana (Cobrea pose – Straight hand	2			
	+ bent hand)				
4	Shalabhasana (Locust pose)	1			
5	Dhanurasana (Bow pose) 3 rounds	5			
6	Makarasana	2			
7	Sarvangasana (shoulder stand)	3			
8	Halasana (plough pose)	2			
9	Matsyasana	1			
10	Shavasana	2			
11	Ardha Matsyendrasana (Half spinal twist)	5			
12	Paschimottanasana	1			
13	Akarna Dhunurasana	2			
14	Ushtrasana	1			
15	Shavasana	2			
16	Trikonasana (Triangle) from both sides	3			
17	Veerasana	3			
18	Shavasana	2			
19	Agnisar (Stimulating Fire technique)	3			
20	Uddiyan Bandha (Abdominal lock)	3			
21	Kapalabhati 5 rounds of 1 min, each	5			
22	Shavasana (Corpse pose)	2			
23	Anulom Vilom Deep breathing OR	10			
	Right nostrill purak & Bhramari Rechak				
24	Ujjayi Breathing	10			
25	Prayer	7			
	Total Time	90			
	Omkar Chanting 30 minutes	30 min			
	Jala Neti (once a week)				
	Laghoo Shankh Prakashalana (1x/ week)				
	Yoga Nidra for Stress relief (1x/day	30 min			
	Listen Omkar chanting throughout the night				

34. End Notes and Reflections

Obviously no text of this length can be considered a comprehensive guide to all Yogic Therapy practices or the treatment of all diseases. And for those inspired to become Yoga therapists, or to utilize Yoga healing practices, we encourage and invite further study.

What we can say is that some more distinguishing features of Yoga therapy as compared to the other therapies (where an external input of medicines is the prime requirement for treatment), is that Yoga

- (1) Requires no external resources for curing, the only necessities being the presence of the focused body and the mind;
- (2) The effects seen by treating through Yoga are not immediate as the medicinal effects, but the patient can experience a steady, stable and long lasting effect on the illness. The medicinal effects, on the other side are temporary.
- (3) The patient has to perform Yoga his or herself and has to spend substantial amounts of time for the purpose.
- (4) The treating job is not over in a couple of seconds where the patient takes his medicine and is free of his responsibility. This is why people do not tend to approach Yoga where a little medication treats to get well soon. They approach Yoga only when the ill effects of medicines are significant or there is no use of medication for their case. Time does not matter at that time.
- Yoga is helpful in many cases where the other therapies do not work. It is possible only because the science of Yoga has learned over decades and centuries and searched unto the roots of the diseases and the overall healing aspects of human life.

We wish you the best of health. Namaste!