

Essence of  
*Prānāyāma*

**Shirkrishna**

M.B.B.S., Ph.D. (AIIMS)

ISHWARDAS CHUNILAL  
YOGIC HEALTH CENTRE



**KAIVALYADHAMA**

43, Netaji Subhash Road, Mumbai - 400 002,  
Maharashtra, INDIA

Publisher : **ISHWARDAS CHUNILAL  
YOGIC HEALTH CENTRE  
KAIVALYADHAMA,**  
43, NETAJI SUBHASH ROAD,  
MUMBAI - 400 002, INDIA

© All rights reserved

First Print : 1985  
Second Eeolargel Edition : 1996  
Third Edition : 2012

Price : Rs. 150/-

Printed by :  
**ACE Enterprises,**  
Madhu-Raj Nagar, C1/25,  
137/A, Paud Road, Kothrud,  
Pune - 411 038, Maharashtra, India  
E-mil : [info@acetanpure.com](mailto:info@acetanpure.com)

## *Dedication*



This book is dedicated to the sacred memory of Swami Kuvalayananda, the founder of Kaivalyadhama, a great visionary; who could foresee the immense scope for the application of Yoga in all the spheres of life. It was mainly his contribution which led to the renaissance of Yoga and its spread all over the world.



## Author's Note

This book on the Essence of *Prānāyāma* has been prepared keeping in view the needs of all those who would like to undertake the practice of *Prānāyāma* in all its seriousness. It is also addressed to those who are interested in using these practices, not only for the spiritual purpose but also for its application in the field of health and healing.

For the last several years, Kaivalyadhama has been organizing practical workshops for imparting training in *Prānāyāma* called "*Prānāyāma Sādhanā Shibir*", in the city of Mumbai. In these workshops, participants are taught the various types of *Prānāyāma* with all its intricate technical details. But the real emphasis in these workshops is always on the subtle essential aspect of *Prānāyāma* which makes it possible for the participants to have at least a few glimpses of the spiritual experiences at first hand, which would then act as the main motivator for them to progress on this path through further work on their own.

In these workshops, quite often, it has been observed that there is a tendency in many a people to give exclusive or undue importance to the technical features of *Prānāyāma* at the cost of its essential and subtle nature. In the absence of the knowledge of, which is the essential and the relevant aspect of the technique, and which is the superfluous and optional aspect; the student gets waylaid easily into the plethora of techniques and then misses the opportunity of entering into deeper and spiritual experiences.

This situation could easily be averted if one is alert to understand the practical aspect of *Prānāyāma* in its totality and can follow its essential aspect with full vigilance. The aim of this book is to help the student to grasp this essential nature of the *Prānāyāma*.

All the relevant information from this point of view can be found in this book, yet it does not claim to be either the exhaustive treatise on *Prānāyāma* or the work which could replace personal teaching. It is to be

used mainly as the friendly companion while learning *Prānāyāma* under the guidance of some expert teachers.

The practical information presented here is based on the author's own understanding of this subject based on the scriptures and living tradition, as also its application in personal life as well as in the life of myriads of other *Sādhakas*. For more exhaustive treatment of this subject, the reader should refer to the "*Prānāyāma*", an excellent book written by Swami Kuvalayananda, the founder of Kaivalyadhama.

**Kaivalyadhama,  
Mumbai.  
18th April, 1997**

**Shrikrishna**

### **Note on the use of Sanskrit Words**

The Sanskrit words used in this book are explained in the text at appropriate places for easy reading. They are rendered in italic form with diacritical marks viz. ā, ī and ū indicating that these are pronounced twice as long as short vowels a, i and u respectively. In the part of Prayers and *Mantrajapa* this format is modified to make it easy while chanting the *Mantras*. Here ā appears as aa, ī as ee and ū as oo.

## Acknowledgement

It would be more appropriate to say about this book, that it came to be written rather than the author wrote it. All the individuals who offered their critical comments and helpful suggestions are equal participants in bringing out this book.

The discussions with the participants of the various special Yoga Courses and the *Prānāyāma Sāadhanā Shibir*, conducted by the Kaivalyadhama Mumbai, helped in defining the scope as well as the format of this book.

The basic concepts presented in this book are entirely based on the traditional teachings and its interpretations found in the works of Swami Kuvalayananda and Swami Digambarji. It is with great reverence, author bows down to the perennial wisdom represented by these great souls.

This book was first published in 1985 in the form of small monogram. The feed back received since then from the large number of participants of various Yoga workshops, prompted the author to enlarge and modify certain portion of this monogram in this book form. Dr. P. V. Karambelkarji and Shri O. P. Tiwariji had been very kind to go through the manuscript and give their critical comments. Author is greatly indebted to them.

Author also acknowledges the warm and friendly help received from Mrs. Shilpa Joshi in transcribing the author's dictation and from Miss Kunda Mavlankar and Mr. Vasant Rao in correcting the manuscript.

While writing this book the author could find the necessary time and freedom of the mind mainly due to the very helpful nature of Mr. Parmanand Aggarwal. The author acknowledges his help and thanks him sincerely.

And my special thanks are due to Shri S. R. Iyer, C.G.M., Shri R. K. Srivastava, D.G.M. and Shri S. N. Dharkar, A.G.M. of P.R. and C.S.B. Mumbai L.H.O. of State Bank of India, for their active help in securing generous donation for printing this book.



# Index

* Foreword			
* Author's Note	.....	.....	5
* Acknowledgement	.....	.....	7
* Introduction	.....	.....	11
1. Yogic Concepts of Body Functions in the Context of <i>Prānāyāma</i>	.....	.....	17
<i>Panchakosha</i>			
<i>Prāna</i>			
<i>Nādi</i>			
<i>Prānaspana</i> and <i>Swarayoga</i>			
<i>Chakra, Kundalini</i> and <i>Chakrabhedana</i>			
<i>Effects of Prānāyāma</i> as Described in Traditional Texts			
2. Evolution of <i>Prānāyāma</i>	.....	.....	43
3. General Consideration of the Practical Aspect of <i>Prānāyāma</i>	.....	.....	49
Components of <i>Prānāyāma</i> :			
- <i>Pūraka, Kumbhaka, Rechaka</i>			
<i>Sagarbha</i> and <i>Agarbha Prānāyāma</i>			
<i>Sahita</i> and <i>Kevala Kumbhaka</i>			
Consideration of <i>Mātrā Desna</i> and <i>Kala</i>			
4. Technical Consideration of the Practical Aspect of <i>Prānāyāma</i>	.....	.....	63
Correct Posture for <i>Prānāyāma</i>			
Technique of <i>Pūraka</i>			
Technique of <i>Kumbhaka</i>			
Technique of <i>Rechaka</i>			
Different Varieties of <i>Prānāyāma</i>			
5. Preparation for <i>Prānāyāma Sādhāna</i>	.....	.....	85
Consideration of Season, Physical Activity and Diet Physical Preparation by Elimination of <i>Mala</i>			

6.	Important Practical Hints for the Daily Practice of <i>Prānāyāma</i> .....	.....	91
	Daily Routine During the Course of <i>Prānāyāma Sādhanā</i>		
	Use of some other Yogic Practices as an Adjutant for <i>Prānāyāma Sādhanā</i>		
	The <i>Āsana</i> for the Practice of <i>Prānāyāma</i>		
	The Time, Duration and the Sequence of the Practice of <i>Prānāyāma</i>		
	The Place for <i>Prānāyāma Sādhanā</i>		
	The Seat for <i>Prānāyāma Sadhana</i>		
	The Daily Regimen of <i>Prānāyāmic</i> Practices		
	The Use of <i>Kumbhaka</i> , in the Daily Practice of <i>Prānāyāma Sādhanā</i>		
	Other Difficulties Arising During <i>Prānāyāma Sādhanā</i> and How to Deal with them		
7.	Appraisal of the Scientific Investigations on <i>Prānāyāma</i> .....	.....	111
8.	Prayers and <i>Mantropāsana</i> .....	.....	123
	Significance of Praying <i>Shānti Pātha</i>		
	<i>Mantropasana</i> :		
	- Chittashuddhi and Manolaya		
	- Kriyayoga		
	Om : The <i>Pranava Japa</i>		
	The <i>Savitru-Gāyatri Mantrajapa</i>		
	The <i>Tryambaka Mantrajapa</i>		
	The <i>Ajapājapa-Soham Japa</i>		
	<i>Om Stavana</i>		
	Prayer for the Well-being of all		
9.	References .....	.....	153
*	About Kaivalyadhama .....	.....	159

# Introduction

Ordinarily when people talk about *Prānāyāma* they generally mean those Yogic practices which involve some kind of manipulation of the breathing activity. But when one looks at the tradition of Yoga, one finds that the concept of *Prānāyāma* has a much greater depth and the greater width and its techniques include vast array of very subtle elements apart from the simple manipulation of breathing activity.

The word *Prānāyāma* has been formed by the combination of two Sanskrit terms *Prāna* and *Āyāma*. Both these terms have very many different meanings and depending upon which of these meanings is chosen, the whole connotation of the word *Prānāyāma* would change.

When we deal with the concept of *Prānāyāma* in its most obvious and technical form, the term *Prāna* means breathing activity and *Āyāma* means restrain, control or the conscious manipulation. The word *Prānāyāma* which occurs in the *Yoga Sūtra* of Patanjali has been used exactly to express this format. According to Patanjali, the conscious manipulation of the breathing pattern makes it *Dīrgha* i.e. deep and prolonged, and also *Sūkshma* i.e. extremely gentle and effortless, ultimately the whole process culminating into complete silencing of the breathing activity itself.

But, when we wish to study *Prānāyāma* in its more essential and deeper aspect, the term *Prāna* indicates the energy responsible for all the life-activities in the human being ranging from the life-sustaining vegetative functions of the respiratory, circulatory, digestive and excretory systems to the very subtle psycho-spiritual activities of the nerve-brain system. The term *Āyāma* here means the expanse or the field or the whole range of these *Prānic* activities. Thus the word *Prānāyāma*, in this context, acquires a more wider and deeper meaning indicating the process through which one can get acquainted with the whole field of the *Prānic* activity with a view to gain a complete control over it.

Ordinarily, one never becomes aware of all the life-activities going on inside what is known as, the *Ghatākāsha*, the body space. These activities enter the field of awareness only occasionally when they give rise to the feeling of pain or pleasure while at other times they remain well below the level of awareness. Only through the heightened and refined sensitivity as well as the intensified attention developed through Yogic practices, one can bring the whole range of the *Prānic* activity in the field of awareness and come to know how to regulate them in a desired manner. For this purpose very many methods came to be used by the Yogic tradition and *Prānāyāma* is the foremost amongst them all.

Though we find the references to *Prānāyāma* from even the early *Upanishadic* time, it was in the *Hatha Yoga* tradition especially from the third century onward the importance of *Prānāyāma* rose significantly, so much so that it was treated as the most central and core practice of the *Hatha Yoga*.

The term *Hatha Yoga* itself is linked with the *Prānāyāma*. Amongst the life activities going on within the body, some are catabolic in nature where energy source is broken down releasing energy and heat. They are more associated with heightened level of activities which consume a lot of energy. According to Yogic understanding, these are regulated by the *Pīngalā Nādi*, which is situated along the right side of the spine and its symbol is sun and indicated by the word 'Ha'. On the other hand, the other life-activities which are anabolic in nature which synthesize and store up the energy-resources and due to conservation of the energy instead of releasing the heat, produce coolness within the body. They are considered as regulated by the *Idā Nādi*, situated along left side of the spine. This *Idā Nādi* is represented by the Moon and is denoted by the word 'Tha'. When there is a harmonious balance between the biological activities controlled by these two *Nadis*, it is said that 'Ha' and 'Tha' are functioning in a balanced state, which is one of the principal aim of *Hatha Yoga*. When this happens then alone, the central *Nādi* or the channel which is situated along the spinal cord in-

between the *Idā* and *Pīngalā Nādi* called *Sushumnā*, starts functioning. The activation of *Sushumnā Nādi* is known as the awakening of *Kundalini*. It brings a complete transformation in the individual's consciousness, wherein one can experience one's inner state as nothing but the Pure, Unconditioned Consciousness, unsullied by the concept of time and space. This being the ultimate goal of *Hatha Yoga, Prānāyāma* which helps in bringing this harmony between 'Ha' and 'Tha', became the most important technique in the *Hatha Yoga* tradition.

When we study the description of *Prānāyāma* in the literature on Yoga, it becomes quite clear that along the passage of time, the concepts as well as the techniques of *Prānāyāma* have undergone a change indicating a definite stage of evolution and expansion. Over the centuries, generations of Yoga teachers contributed to the science of *Prānāyāma* using their own experience for this purpose. Their experimentation within themselves and with their disciples led to the addition of numerous techniques that would increase the effectiveness of *Sādhanā* and bring quick results.

They have also left record of their personal experiences arising out of the practice of *Prānāyāma*, in the vast literature of Yoga. It contains the rationale and the explanations of these subjective experiences according to their own vision and interpretation. The various terms and metaphors used by them for describing these can be easily misunderstood if one does not have a background of living tradition. Also, occasionally one may come across the mutually contradictory statements or apparently some unclear or ambiguous passages in these descriptions as would be expected when subjective experiences are described or interpreted by the people distant in time space as well as in their linguistic and cultural backgrounds. As if the confusion brought by this was not sufficient, one comes across a plethora of technical details in these descriptions which introduces an element of bewildering complexity in the practice of *Prānāyāma*. Thus in the absence of the personal guidance from the experienced teacher, the study of the

literature alone can pose a great difficulty and can form a shaky base for a student to benefit from the Practice of *Prānāyāma*.

This book has been written mainly as a friendly companion, an adjuvant to a training in *Prānāyāma* under personal supervision of a teacher. It has been written with a view to give the student correct and comprehensive information on all the different aspects of the *Prānāyāma*. It would help in making the actual practice of *Prānāyāma* more effective as the student will be able to discern between the essential and the optional parts of the different techniques of *Prānāyāma*, it would also help the student to keep the spiritual perspective in the forefront while undertaking the practice of *Prānāyāma*.

The first and second chapter of this book discusses the Yogic concept of body functions as well as step by step evolution of the concept of *Prānāyāma* as seen in Yogic literature. This will help the student in getting a clear idea, regarding the genesis of *Prānāyāma*, how it developed and why so many techniques came into existence.

In the third and fourth chapter, there is a discussion on the general and technical features of *Prānāyāma*. It is followed by the recommendations for preparing oneself for *Prānāyāma Sādhanā* in the fifth and sixth chapter. From the point of view of daily practice of *Prānāyāma*, this is the most important part of the book.

In the seventh chapter, there is a brief review of the scientific research work carried out over the last seven decades, to study the effects of *Prānāyāma* on the human body.

Lastly, there is an information about prayers and *Mantropāsana* which includes the description of *Mantra* Chanting and its significance. It forms a very useful adjuvant to the spiritual practice of *Prānāyāma*.

At various places in this book, the original source from where the particular point under discussion is picked up, is indicated by a reference

number and at the end of the book the list of all references is given according to the numbers. It is strongly suggested that whenever possible, the student should make some efforts to refer to this original material, which would definitely broaden the vision and add further depth to the essential understanding of *Prānāyāma*.

During the discussion on various topics, an attempt has been made to present many concepts in as much a precise and clear-cut manner as is possible. But as many of these concepts are subjective in nature and verifiable only at the experiential level, it is extremely difficult to convey the real purport of these concepts in concrete words and whenever such an attempt is made it is but a poor consolation to what can be done through personal discussion.

The reader should remember that *Prānāyāma* is one of the most potent and effective techniques, which influences the body and mind in a remarkable way. But it is a sword with a double edge. When performed with proper understanding, it surely paves a way for spiritual development. But it is equally true that any undue enthusiasm and injudicious efforts in the practice of *Prānāyāma* has to be critically avoided as otherwise it is sure to cause great damage. The only way to avoid this pitfall is to learn *Prānāyāma* under the personal guidance of an experienced teacher.



# 1

## Yogic Concepts of Body Functions in the Context of *Prānāyāma*

- ✧ *Panchakosha*
- ✧ *Prāna*
- ✧ *Nādi*
- ✧ *Prānaspanda* and *Swarayoga*
- ✧ *Chakra, Kundalinī* and *Chakrabhedana*
- ✧ Effects of *Prānāyāma* as Described in  
the traditional texts



# Yogic Concept of Body Functions in the Context of *Prānāyāma*

When we try to understand the practical aspect of yoga incorporating *Āsanas*, *Shatkriyās*, *Prānāyāma*, *Mudrās* and *Bandhas* from the psycho-physiological point of view; it becomes quite obvious that they are intended to be used with the aim of influencing the internal functions of the body in a specific way. The evolution of these practices seems to have taken place alongwith the gradual increase in the knowledge regarding how the human body and mind function. Of course, when compared to the knowledge of the psycho-physiological functions in the modern times, the knowledge available to the Yogis in ancient times was of very simple and preliminary nature. But even then, as it was based on the observation and interpretation of the internal experiences; this knowledge is equally valid today and would also be of help to us to make us understand 'why' and 'how' the various practices of Yoga came into existence and 'how' they are intended to be used.

The modern knowledge of the psycho-physiological functions is very objective and definitive, and uses the analytical and reductionist approach to arrive at the final understanding. The Yogic knowledge, on the other hand, is more subjective and less concrete, and uses the approach of analysis-for-synthesis before coming to a final understanding. It is true that alongwith this experiential and introspective knowledge, Yogis also used to refer to the more objective knowledge of the human body as it was available in *Ayurveda*, the Indian system of medicine. *Sushruta Samhita* is one of the most authoritative text of *Ayurveda* which deals with human body and its functions in relation to surgical procedures. There it has been specifically mentioned that the knowledge of anatomy given therein, is

not only for the practitioner of *Ayurveda* but is also meant to be used by the student of Yoga (Vide *Sūtra Sthāna* III-17).

When we study these psycho-physiological concepts of Yoga which are important from the point of understanding the nature of *Prānāyāma*, we have to keep in mind two main points which form the back-drop for these concepts.

The first one is that from the Yogic point of view, the body and mind are never considered as the two separate, though interdependent elements but rather as the one organized whole. They are considered as merely the two different aspects of the same entity.

In the same way, the structure and the function of the human body, too, was treated always together in a mixed way and never separately, in the Yogic tradition.

Obviously for a Yogi, the concept of the form and the organisation of the internal structure of the body arises out of his inner perception of the various sensations generated through the activities of these organs, thereby the function always contributing in the conception of the structure. Various Yogic practices which influence these functions when coupled with the process of heightened inner awareness, became the major contributing factor for generating this conceptualization of the entwining structure-function duet.

In the following section we have briefly reviewed those concepts which are relevant and essential for the *Prānāyāma Sādhanā*.

## ***Panchakosha***

In the concept of *Panchakosha*, we find the consideration of the functioning of the body and mind in a composite, integrated manner. At any given time, the mind-body complex functions at five different levels. Each of these levels is called *Kosha*. *Kosha* means the cocoon or the sheath; and just as the silk-worm with its cocoon around it, the human being too is considered as having the five layers or grades to its functioning ranging from the most gross to the most subtle one.

The most gross and the material aspect of the mind-body complex is the physical body which is made up of and is sustained by the *Anna*, the food, which we eat and therefore, it is known as *Annamaya Kosha* (Anna=food, *maya*=made up of). The vital energy which is responsible for the functioning of various organs which form the part of this physical body is called *Prāna*. This *Prāna* enlivens the physical body and activates as well as sustains the internal physiological functions. The field or the level of all these physiological functions together is known by the term *Pranamaya Kosha*. Functioning of the mind and the intellect is subtle than these physiological activities. The level at which our emotions, the memories of the past experiences and the power of attention operates is known as the field of *Manas* and therefore, this level is known as the *Manomaya Kosha*. And, the level at which our intellect with its discriminative power operates is the field of *Vijnāna* and, therefore, this level is known as the *Vijnānamaya Kosha*.

Extremely subtle than all these is the state in which one can experience the existence of oneself as the pure being, the basic ground which alone remains when the sensation, feelings and thoughts, all become silent. This brings the experience of *Ānanda*, the Bliss, and therefore, it is known as the *Ānandamaya Kosha*.

Thus these five Koshas, from the most gross *Annamaya Kosha* to the most subtle *Ānandamaya Kosha*, really speaking, represent the awareness

of the human being of his or her own existence as perceived by him or her at different times or may be at the same time.

Ordinarily the field of awareness remains occupied predominantly with the sensations arising out of the physical body when it operates in the outside world. This pre-occupation with the things happening at *Annamaya Kosha* is primarily responsible for the perception of self only in the form of physical body and this strong identity of the self with the body (*Deha*) is known as *Dehabhāva*. When the field of awareness is occupied with sensations associated with the body alone, it never allows one to realize that there is any existence beyond the body. But when the internal awareness is slowly disengaged from the overwhelming sensations which arise from the gross level and more and more attention is paid to the subtle functioning; one starts becoming more and more aware of the whole of the background reality. This brings in the realization that identity of the self with the body alone is not only partial but also a distorted identity. The true nature of the self is entirely different than the one perceived in ordinary way. This realisation of the true nature of the one's own Self i.e. *Ātman*, is known as *Ātmabhāva*. This process of transformation from the *Dehabhāva* to *Ātmabhava*, is the main goal of Yoga. This process requires a very refined sensitivity, a very alert vigilant mind with extreme attentiveness and a sharp discriminative faculty to understand 'what is what'. Through the practice of *Āsana* and *Prānāyāma*, one learns to become aware of all these subtle happenings at the level of *Prānāyāma Kosha* and through the practice of meditation one can become aware of all the happenings at *Manomaya* and *Vijnānamaya Koshas*.

The more one becomes aware of all the happenings at these different levels, one also realizes that more often than not, there is a lack of harmony and sometimes even there is a tussle between them in opposite direction. All this turmoil leads to physical disorders, mental debilities, emotional instability and intellectual confusion; thus destroying the integrity of the whole human existence.

Through the Yogic practices, one not only becomes aware of all the things which happen within oneself but also learns to regulate them in such a way that perfect integrity is brought in. *Prānāyāma Sādhanā* is one of the major approaches in this direction.

## ***Prāna***

As we have already seen, the vital energy which enlivens the human body is known as *Prāna*. It is responsible for all the functions being carried out within the body. All these functions can be divided into five basic groups and are considered to be governed by the five different aspects of the *Prāna*. Each of these functional aspect of *Prāna* is felt to be more active in some specific region of the body and as such is described as being responsible for the activities of the specific organ - systems situated in that region. Each of these functional aspects has a different name viz. *Prāna*, *Samāna*, *Vyāna*, *Apāna* and *Udāna*; and each of these Sanskrit names etymologically signify the special characteristics of the functions governed by that particular aspect.

### **The Five Major Aspects of *Prāna***

#### **A. *Prāna***

There is a continuous need of the energy for all the activities going on in the human body. When the internal energy is used up, it is necessary to replenish it by bringing in the energy from outside the body - in the form of oxygen through the breath and nutrition through food intake. The functional aspect of the vital force which is responsible for this constant replenishment of the energy is known as *Prāna*. This word is formed with a prefix 'Pra' which means intensively or in the forward direction and the root 'An' which means to breath or to bring about any happening related to living. Therefore, the term Prana indicates all the happenings responsible for sustaining and continuing the life process, the major amongst which is the breathing activity. Its region of activity is from the nose down upto the chest.

#### **B. *Samana***

After having brought in the energy-source, it needs to be converted into suitable form so that the body can use it and assimilate it. That aspect of the vital force responsible for this inner conversion of the energy source

is known as *Samāna*. In this word the prefix '*Sama*' means similar - similar to that which is used by the body. Therefore, the term *Samāna* indicates the activity which converts the food etc. into a form similar to one which is used by the body. Its region of activity is in the upper abdomen, above the level of umbilicus.

### **C. *Vyāna***

After making the energy available in an usable form, it has to be transported to each and every cell of the human body. This transportation of the energy is controlled by that functional aspect of *Prāna*, which is known as *Vyāna*. The prefix '*Vi*' in the word *Vyāna* means separation or taking away, and thus the word *Vyāna* indicates taking away of the energy to the separate areas. Therefore, its field of activity, is the whole body.

### **D. *Apāna***

In the process of continuous utilization of energy required for the various activities, a lot of waste matter is produced. That aspect of the vital force responsible for expelling the unwanted waste matter like urine, faeces and the outgoing air etc. out of the body is known as the *Apāna*. The prefix '*Apa*' in this word means down or in opposite direction and thus the word *Apāna* means which takes the waste matter away from the body. Its region of the activity is the lower abdomen below the umbilicus and the pelvic cavity.

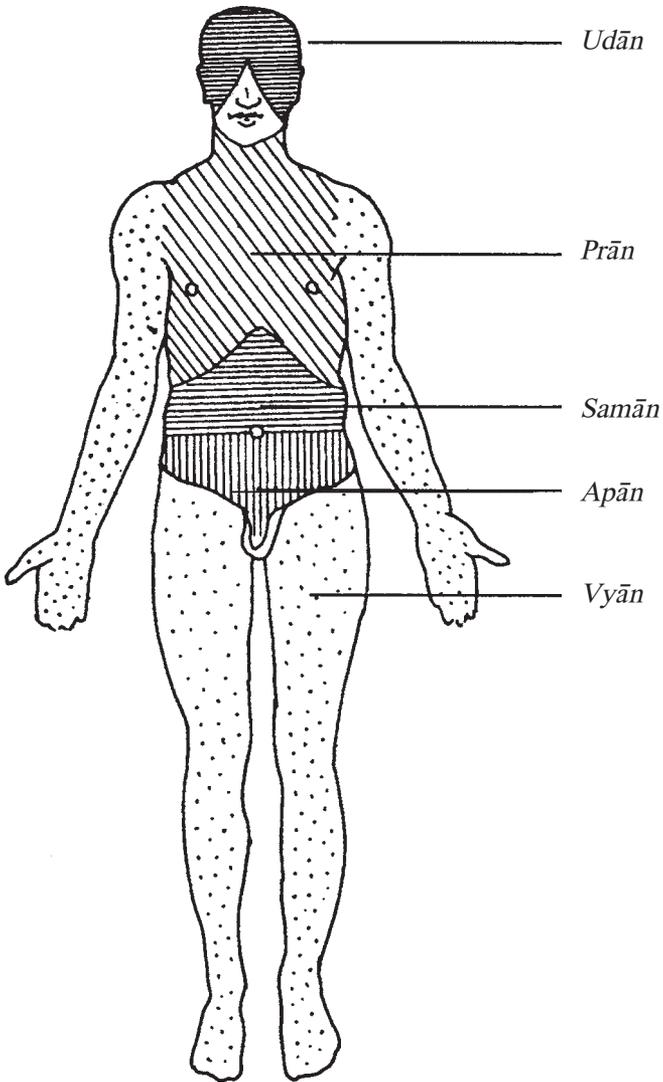
### **E. *Udāna***

Apart from the vegetative functions necessary for the contribution of life, there are also many higher functions like expression and communication, through which the body-mind complex strives to rise above the mundane affairs. The functional aspect of *Prāna*, responsible for these higher activities is known as *Udāna*. The prefix '*Ud*' in this word indicates the upward direction meaning thereby the more refined or more developed entity and thus the word '*Udāna*' means that which is responsible for those activities which are more refined and subtle. Obviously, its region of activity is considered as the head and the neck.

There are also many other minor activities mainly reflexive or instinctive in nature carried out by this *Prāna* and their corresponding functional aspects have also been given some special names. For example the one responsible for the regurgitation reflex is known as *Nāga*, the one responsible for the blinking reflex is known as *Kūrma*, the one responsible for the sneezing reflex is known as *Krukal*, the one responsible for drowsiness is known as *Devdatta* and the one responsible for thirst is known as *Dhananjaya*.

From the above description it is quite clear that the term '*Prāna*' here represents the life principle itself and all the biological and psychological activities driven by it. It is very interesting to note that in *Charaka Samhitā* in *Sūtra Sthāna* Chapter XII, there are more than seventeen distinguishing features ascribed to this *Prāna* or the *Vāta* as *Ayurveda* prefers to call it. It says that *Prāna* is the sustaining principle of life, the upholder of both the structure and the function of the body, the marsheller of all the body elements, the synthesizing principle in the body, the stimulator of the gastric fire, the eliminator of excrement and deobstruent of the gross and subtle body channels, the impeller of upward and downward movements, the impeller of speech, the inspirator of all the senses, the conveyer of all the sense-stimuli, the controller and conductor of the mind, the origin of all excitement and animation etc. Further, it says that when the functioning of the *Prāna* or *Vāta* is obstructed it leads to impairment of bodily strength, loss of feeling of well-being, depression of the mind giving rise to fear, grief, stupefaction and overall disturbance in all the vital functions.

Yoga also subscribes to the same view. The interconnection and interdependence of the physiological and psychological functions governed by *Prān* is underscored when the *Hathapra-dīpikā* (9) says that one who controls the *Prāna* can control the mind and one who controls the mind he alone can control the *Prāna* (IV.21). Therefore, the practices which try to regulate the *Prānic* activity are expected to involve the activity of the mind in their technique as well as in their effect.



**Five Major Aspects of *Prāṇa***

While practising *Prānāyāma*, therefore, it is strongly advocated that the mind should be applied to the practice itself, making the internal awareness as an integral and obligatory part of the *Prānāyāmic* technique. In other words, it means that our inner awareness which otherwise remains occupied with the *Annamaya Kosha* should open out itself through the practices like *Prānāyāma*, to more and more subtle activities taking place in the *Prānāyāma Kosha*, *Manomaya Kosha* and *Vijnānamaya Kosha* and then should learn to regulate all these activities with an aim to reach to state to *Ānandamaya Kosha*.

## ***Nādi***

The Pranic energy which functions all over the body uses some specific channels through which it moves. These channels or passages are known as *Nādis*. According to the ancient scriptures, there is not a single part in the human body which has not been traversed through or connected with any of the *Nādis*. There is a network of the *Nādis*, all over the body. Amongst the thousands of them, *Ida*, *Pingalā* and *Sushumnā* are considered as the three most important *Nādis*. There is an extensive description of three *Nādis* in the Yogic literature but here we will try to get acquainted with their salient features, alone.

### **A. *Idā Nādi***

This *Nādi* originates from the left side of the base of the spine and while traversing upward in a spiral way, reaches the roof of the left nostril. *Idā Nādi* primarily controls all those activities which are anabolic or constructive in nature, which conserve the energy and give cooling effect to the body. This *Nādi* is symbolically equated with the female aspect, is ascribed the blue colour and is being governed by the Moon as its presiding deity.

### **B. *Pingalā Nādi***

This *Nādi* arises from the right side of the base of the spine and while traversing upward in the spiral way reaches the roof of the right nostril. *Pingalā Nādi* primarily controls all those activities which are catabolic or destructive in nature, which consume the energy and generate the heat in the body. This *Nādi* is symbolically equated with the male aspect, is ascribed the red colour and is considered as being governed by the Sun as its presiding deity.

### **C. *Sushumnā Nādi***

This *Nādi* also arises from the base of the spine and traverses up along the mid-line between *Idā* and *Pingalā Nādis*. It reaches the opening in the

base of the skull and through it, the brain itself. It is ascribed the white colour and as being governed by *Agni* (fire) as its presiding deity. In normal circumstances this central channel (*Madhyapatha*) remains inactive and the Prāna *Shakti* does not operate through it. But when through the Yogic practices, the functions governed by the *Idā* and *Pingalā Nādis* are brought in absolute harmony and when they begin to function as an integrated whole, without any disturbance or obstruction, the subtler aspect of the *Prānic* energy as gets freed from the botheration of maintaining these activities, start operating through the *Sushumnā Nādi*. As the *Sushumnā Nādi* gets activated and the *Prānic* energy starts flowing upward, it slowly throws open the entirely new dimension of experience which is not limited by the concept of time and space. The rising of *Prāna* through the activated *Sushumnā Nādi* is known as the awakening of *Kundalinī Shakti*.

We can understand the concept of *Nādis* by comparing it with the pathways in the air, which the aeroplanes have to follow. Though these pathways in the space of the sky are precise and the aeroplane have to abide by the specific traffic rules as they steer their way on it; they cannot be shown in the material form. In the same way *Prāna* follows the specific pathway called *Nādis*, which can be felt in the form of subtle internal sensations but cannot be shown in the form of some objective structure. It is not, surprising therefore that there seems to be a lot of variation in the description about the location and the layout of these *Nādis*, in the Yogic literature.

Some authorities describe that all of these *Nādis* arise from the base of the spine and from there spread all over the body while others give the location of their origin either as the area just behind the naval region, or at the level of the heart or even inside the skull cavity out of the brain.

Amongst the various descriptions, the one given in the *Shivasamhitā* is quite interesting as it agrees to a large extent with the modern anatomical description of the brain and the spinal cord (17). It says that 'there is a

thousand petal lotus called *Sahasrāra*, prominently placed under the roof of the skull. In the bulbous root of the lotus, there is a place of origin called *Yoni*, looking downwards. The hollow root of the *Sushumnā* originates there and extends down upto the *Mūlādhāra Chakra* at the base of the spine. It further mentions that 'all the *Nādis* are like lotus fibres running downwards from the skull and are supported by the spinal column'.

Thus it might be possible to say that these *Nādis* (and some vital nodal or junctional points on the pathway of these *Nādis*, called *Chakra*) could be the same as the Brain, spinal cord and various Nerves including those belonging to Autonomic Nervous System. But this is at best a conjuncture as for the Yogis the knowledge of the *Nādis* arose essentially out of the awareness of internal sensations and not so much out of the dissection of the human body. It has been the aim of the *Prānāyāma* that through its practice one should become aware of the whole network of the *Nādis* and functioning of the *Prāna* through them, thereby gaining an ability to regulate the whole activity of *Prāna*.

## ***Prānaspanda and Swarayoga***

At this juncture, we should also get acquainted with one more fascinating concept related to *Prāna* and its functioning through *Nādis*. It is a concept of '*Spanda*' or the pulsating rhythm which appears in the function of *Prāna* and *Chitta*. This concept says that there is a constant oscillation or movement in the physical and mental functions in between the two polarities of the range of action and when this movement gets disturbed, distorted, agitated or thwarted it portends the trouble for the whole body-mind complex. This concept further states that this pulsating, rhythmic oscillations in the mind-body complex is intimately linked with the similar pulsating, rhythmic oscillations in the environment. This synchrony between the inner and the outer space is the main concern of what is known as *Swara Yoga*.

It is really a great credit to keen and incisive observations of ancient Yogis, who not only studied these fluctuations in the functioning of the mind-body complex or how they are influenced by the changes in the environment, but also used this knowledge just as the great navigator who uses his knowledge of tide and storms linked with the wind and seasons, and navigates the ship in his charge through even the uncharted seas without floundering, and reaches the destination with bold confidence. It is really astonishing that these great Yogis realized on the basis of their observations and experiences alone, that the human body-mind complex is most vulnerable at certain times, or more receptive at the others and certain practices done at specific times give better results.

They observed that the airflow in the right and left nostrils is very rarely equal, one nostril remaining slightly more congested allowing the air to flow through the other nostril more freely. They also observed that this partial obstruction to the air-flow changes every 90 to 120 minutes, with a shift from right to left and from the left to the right nostril in a regular rhythmic way. This oscillation in the nasal air flow pattern was observed to be linked with the environmental changes on the one hand and was found to have concomitant relationship with the physical, physiological

and psychological changes taking place in the mind-body complex, on the other.

They observed that usually at the time of Sunrise, in the first three days of *Shukla Paksha* i.e. after New Moon, the left nostril or lunar side will be more dominant followed by the right nostril or the Solar side on the next three days. Similarly in the first three days of *Krishna Paksha* i.e. after Full Moon, the right nostril will be more open followed by the left nostril for the next three days. Additional to the effect of phase of the moon, the Zodiac signs through which the sun rises is also supposed to have the effect on the flow of the air in any given nostril.

They also observed that when the right nostril is more active, the *Pingalā Nādi* and all the psycho-physiological functions governed by it become more dominant. In this state the individual finds it more easy to indulge in extrovert active actions involving exerting exercises, eating of food, study of physical, mechanical or technical aspects of sciences, writing, sexual intercourse etc. On the other hand when the left nostril is more active, *Idā Nādi* and all the functions governed by it becomes more predominant. In this state the individual finds it easy to indulge in introverting passive actions involving *Upāsana*, *Tapasyā*, gathering of food, consuming invigorating tonics, beginning the studies, appreciating the performing arts and performance of Yogic practices etc.

When this shift from the right to the left and left to the right goes on smoothly and with regular rhythm, the overall functioning of the human being remains in the balanced state. But when this rhythm gets disturbed and only one nostril - either the right or the left one, remains dominant all throughout, it contributes in and also represents the totally disturbed functioning of the mind-body complex.

To set it right and to bring the internal oscillations back in tune with the external environmental rhythmic changes, become an important concern of *Swara Yoga* and obviously this forms a very important concern of the *Prānāyāma*, too.

## ***Chakra, Kundalinī and Chakrabhedana***

Along the *Sushumnā* there are six nodal points or centres, through which the *Idā* and *Pingalā Nādis* criss-cross each other as they move upwards from the base of the spine upto the roof of the nostril, in a spiral way. These nodal points are known as *chakra* the wheel or *Padma*, the lotus.

At each of these centres the *Prānic* energy functions in a specific way. It controls the activities of the internal organs situated near these points and are also associated with the progressively more and more subtle levels of consciousness as one moves from the lower to the higher centres. On the arousal of *Kundalinī*, when the *Prāna* starts rising up along the *Sushumnā*, the energy field at each of these centres gets activated thereby influencing the functions of the internal organs and also making the individual enter into a higher and higher state of consciousness. When the brain (the *Sahasrāra Chakra*), the consciousness gets transformed completely taking the individual into a transcendental state known as *Turīyā* or *Unmanī* or *Samādhi*. There is an elaborate description of these *Chakras* and also of the upward movement of the *Kundalinī* through them. This process involving the piercing of the *Chakras* while moving upward is known as *Chakrabhedana*. A brief description of these *Chakras* is given below.

### **A. *Mulādhāra Chakra***

This is the lowermost *Chakra*, situated at the tail-end of the spine, at the level of perineum. The perineum is an area between the genitals and anal opening and forms the base of the abdominal cavity. *Kundalinī* lies here in a dormant state. This dormant state is equated with the state of the compressed coils of the spring, which when de-compressed releases the energy. For the same reason it is described symbolically as the coils of the sleeping snake which when aroused raises up its head upward. The dormant state of *Kundalinī* represents the existing but yet to be actualized possibilities including the possibility of the highest state of Yoga Consciousness, which are already there in each individual.

As long as the *Kundalinī* remains in the dormant state, the consciousness operates at the ordinary level, remaining engaged with the sense-data produced by the contact with the gross, finite material objects. But when it is awakened through the Yogic process the inner awareness gradually becomes more subtle and refined, ultimately changing the perception of the objective world totally and making the individual aware of the silent unchanging spiritual substratum behind and beyond the ever-changing objective world. This also brings in the realization that the inner individual consciousness and this all-present-substratum, is one and the same entity.

The *Mūladhāra Chakra* in which *Kundalinī* remains in dormant state is symbolically represented as the lotus with four petals because four kinds of subtle energies work at this centre.

### **B. *Swādhsthāna Chakra***

This is a second *Chakra* in the ascending order which is situated at the level of pubic symphysis - a bone just above the genital organ. It is represented as the lotus with six petals as six subtle energies work at this centre.

### **C. *Manipura Chakra***

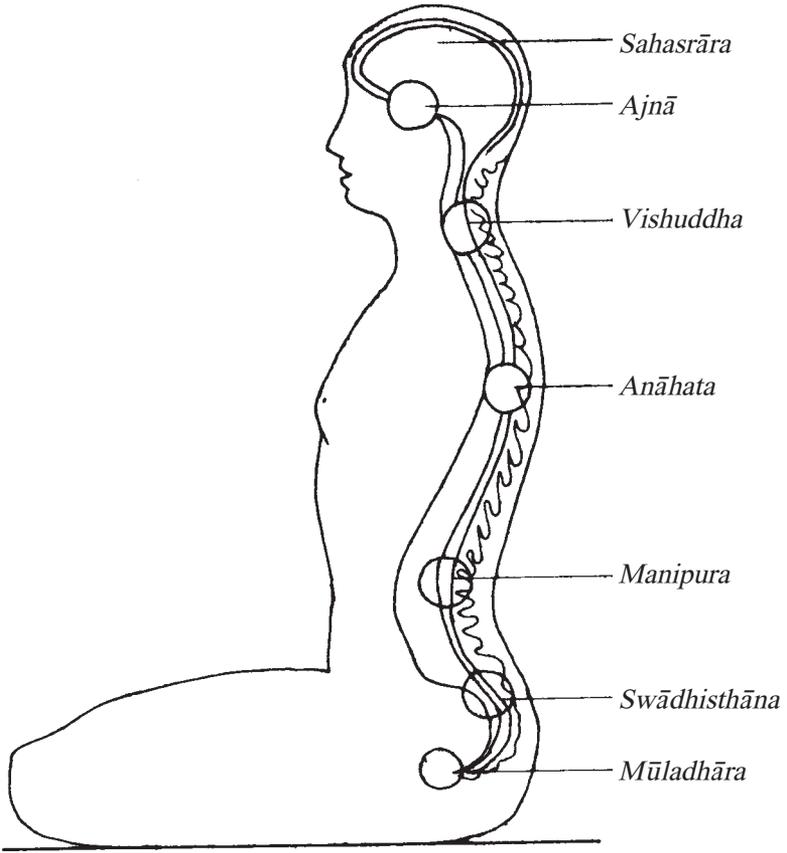
This is a third *Chakra* from below which is situated at the level of umbilicus. It is represented as a lotus with ten petals, as the number of subtle energies working at this centre is ten.

### **D. *Anāhata Chakra***

This is the fourth *Chakra* from below and is situated in the chest at the level of heart. It is represented as a lotus with twelve petals because twelve kinds of subtle energies work at this *centre*.

### **E. *Vishuddha Chakra***

This is the fifth *Chakra* in the ascending order and is situated in the throat at the level of vocal cords. It is represented as a lotus with sixteen petals as the number of subtle energies operating at this centre is sixteen.



**Approximate Location of the  
Chakras along the Spine**

### **F. *Ajnā Chakra***

This is the sixth *Chakra* in the ascending order situated at level of *Bhrumadhya*, the centre of the eyebrows, inside the cavity of the head. It is represented as the lotus with two petals as the two subtle energies converge here.

### **G. *Sahasrāra Chakra***

This the highest centre inside the brain under the roof of the skull cavity and is represented as the lotus with thousand petals. These thousand petals connote the thousand ways or the innumerable ways, the creative energy of the consciousness functions, when the *Kundalinī* power reaches this level. When this centre is fully activated then comes a stage when one transcends all the creation and reaches the source of this creative energy in the form of silent, unchanging, all pervading consciousness. The creative energy of Consciousness is known as the '*Shakti*' and the unchanging Conscious principle is known as the '*Shiva*'. The highest state of Yoga is described as the joining of *Shanti* with *Shiva*, when the process of becoming comes to an end and only the state of being - the '*Sat*', its awareness of being so - the '*Chit*' and the bliss showered by this awareness - the *Ānanda* - the state of '*Satchidānanda*' alone remains.

Though these centres are described as the *Chakra* (wheel) or the *Padma* (lotus), it is but a symbolic description. Though their location inside the body has been described in a very precise way they are not in the form of some anatomical structures which could be demonstrated or examined objectively. Their presence, is perceived mainly by becoming aware of the subtle sensations arising at the level of *Prānamaya Kosha*. These centres are the nodal points where one can feel the subtle activities of *Prāna* in a very intense way. As the subtlety of the inner awareness gradually increases, one slowly starts becoming aware of the higher and higher centres and thus the awareness of the consecutively higher centres is associated with the changes in the field of consciousness itself.

These *Chakras* represent the hierarchial pattern in the control of various psyscho-physiological functions, the lower *Chakras* representing the more gross and mundane life functions while the higher ones represent the more and more refined and subtle functions. This fact becomes clear from the way the *Panchamahābhūtas* - the five basic elements forming the material world, are represented at those centres. Their order of representation is as follows: Prithvi - the earth is represented at *Mūlādhāra*. *Āpa* - the water at *Swādhīsthāna*, *Teja* - the Fire at *Manipūra*, *Vāyu* - the air at *Anāhata* and *Akāsha* - the space at *Vishuddha Chakra*. In *Ājñā Chakra*, the *Manas* - the mind is represented. In the same way, the sway of the three *Gunas* (basic qualities or the tendencies of *Tamas*, *Rajas* and *Sattva*) over these *Chakras*, indicate the concept of this hierarchial pattern in the activities of these *Chakras*. The *Thamas* - the dense, base or the gross qualities predominate in the functions of *Mūlādhāra* and *Swādhīsthāna Chakras*. The *Rajas* - the active, refined and subtle qualities predominate in the functions of *Manipura* and *Anāhata Chakra*. While the *Sattva* - the most refined and illuminating qualities predominate in the functions of *Vishuddha* and *Ājñā Chakra*, to activate the *Sahasrāra Chakra* means transcending all these qualities and find oneself in the state of 'being', unconditioned by any qualities.

When the *Kundalinī* is awakened and the *Prāna* starts moving through *Sushumnā*, the upward journey is much smoother unto *Manipūra Chakra*. But thereafter the journey becomes more tedious with the obstacles at the *Anāhata*, *Vishuddha* and *Ājñā Chakra*. Therefore, they are also known as *Granthīs* or the Knots, difficult to untie. Each of these *Granthīs* is governed by the particular deity representing the particular aspect of the creative force within and accordingly each one is known by the name of that particular deity. The *Granthī* at the level of the heart is known as *Brahma Granthī*, presided over by the deity *Brahma* which represented the incessant creation of the manifested world which impinges upon our inner consciousness. At the level of throat is *Vishnu Granthī* presided over by the deity *Vishnu* which represents the substance of this manifested world

and the continuous entanglement of the consciousness in the web created by it. At the level of the eyebrows is the *Rudra Granthī*, presided over by the deity *Rudra* which annihilates the whole creation, restoring back the whole manifestation to its original source. Unless this knot is untied one would never realize the background Reality which is behind the continuously changing manifested world. When the *Kundalinī* is awakened and *Prāna* starts rising through *Sushumnā*, a student starts getting more and more higher spiritual experiences. But, if the student is not leading a very orderly and disciplined life-style in strict accordance with the basic guidelines given in *Yama* and *Niyama* part of Yoga, the activated *Kundalinī* does not rise up and remains stagnant at either Mooladhara or some other lower *Chakra*. If it remains stagnant at *Mūlādhāra*, it may help the person to achieve some worldly ambitions (31) but could also lead to some unwanted effects too. As the *Mūlādhāra Chakra* is intimately linked with the sex energy, the blockade of the activated *Kundalinī* at this level can lead to excessive or even perverted sexual feelings (28).

This incomplete rise of *Kundalinī* and its stagnation at various centres is considered to contribute in various ailments of the organs under the control of specific *Chakras*. To avoid this the student of Yoga who is interested in the spiritual experiences arising out of *Kundalinī arousal*, is advised to follow very strictly, the guidelines given in *Yama* and *Niyama*.

Here it would not be out of place to refer to another concept found in one of the ancient scriptures known as *Shat-Chakra-Nirūpana*. The description given here has a very great practical bearing for those who take up the path of *Kundalinī* arousal. It says that at the base of the skull where the cavities of skull and spinal canal meet, the *Sushumnā* splits into two branches, one branch takes anterior course reaching the *Sahasrāra* through *Ājnā Chakra* while the other one takes a posterior course going straight to *Sahasrāra*. The first one is called *Pūrva-Mārga* and the other is called *Paschima-Mārga*. According to Yogi Jnaneshwara, there are five more *Chakras* along the *Paschima Mārga* and they are known as *Trikuta*,

*Shrihāta*, *Golhāta*, *Autapitha* and *Bhramaragumphā* (33). While on the *Pūrva Mārga*, the *Kundalinī* has to move from *Vishuddha Chakra* to *Brahma-randhra* through only one *Chakra* i.e. *Ājnā Chakra*, while on the *Paschima Mārga* it has to pierce additional four *Chakras*, making the process still more difficult.

In Patanjali's *Ashtānga Yoga*, there is no mention of *Kundalinī* and the emphasis is mainly on the *Chitta-Vritti-Nirodha* or in other words the *Manojaya*. On the other hand in *Kundalinī Yoga*, the emphasis is on *Prānajaya*. The *Manojaya* is required to take *Pūrva Mārga* while the *Prānajaya* is achieved through the *Paschima-Mārga*. In the broader *Hatha Yoga* tradition the emphasis is on combining these two approaches and to achieve *Prānajaya* and *Manojaya*, in a mutually helpful way. Therefore, a text like *Hathapradīpika* (9) mentions in a very clear terms that all the *Hatha Yoga* techniques involving the methods or *Prānajaya* are basically to help the path of *Rāja Yoga* which involves the approach of *Manojaya*. (vide 1.2).

## **Effects of *Prānāyāma* as Described in Scriptures**

As the emphasis was on *Manojaya*, Patanjali has highlighted the effect of *Prānāyāma* on the mind, in his *Yoga Sutrās*. While describing the various methods which bring the feeling of '*China Prasadanam*' i.e. the blissful tranquil state of mind, one of the methods suggested by him is the use of - '*Pracchardanavidhārānā bhyām Vā Prānasya* (1.34) which means the use of breathing pattern which involves either the forceful exhalation followed by retention of breath outside as in *Bhastrikā* with *Bāhya Kumbhaka* or the practice of forceful exhalation followed by controlled inhalation and retention as in other types of *Prānāyāma* with *Ābhyantara Kumbhaka*'. While defining and discussing the types of *Prānāyāma* he is more forthright. He says - '*Tatah Kshiyate Prakāshāvaranam* (II.52) and *Dhāranasu Cha Yogyatā Manasah* (II.53) - which means - by *Prānāyāma* the covering on the inner illumination disappears - and mind becomes fit to enter into the field of *Dhāraṇa* i.e. the higher practice of Yoga wherein all the mental energies are concentrated, focussed on the inward activities.

On the other hand in *Hathapradīpikā* (9) we find the description of the effect of *Prānāyāma* on the physical systems, too, alongwith the effects on mental operations. It says - 'there is no doubt that by practising *Prānāyāma* one acquires a complete control over one's own body. It cures the dysfunction of the *Vāte*, *Pitta* and *Kapha* (the three basic humours of the body as per the Ayurvedic concepts) and increases the gastric fire (vide II-65).

While describing the one who has successfully mastered *Prānāyāma*, it further says - 'slimness of the body, lustrous face, clarity of voice, brightness of eyes, freedom from diseases, control over the libido, stimulation of gastric fire and purification of *Nādis*, are the characteristics of its mastery (vide II 78).

However the same text warns that 'while proper practice of *Prānāyāma* annihilates all the diseases, the improper practice can give rise to all kinds of diseases', (vide 11-16).

Regarding the effect on the mind, *Hathapradīpīka* says that 'so long as the breathing goes on, the mind remains unsteady, but when it stops, the mind becomes still and the Yogi attains complete stability (vide II-2)'. It also says that 'when the *Nādis* are purified by regular practice of *Prānāyāma* the *Prāna* penetrates the mouth of *Sushumnā* and moves there with ease. When this happens the mind attains steadiness which itself is the state of *Manonmanī*, the highest level of Yogic consciousness (vide 11-41 and 42).

All these descriptions make it very clear that all through the tradition, there had been an acceptance of the fact that *Prānāyāma* has a very profound effect on all the systems of the body and also on the functioning of the mind. *Prānāyāma* had always been given the place of great honour by the generations of Yoga *Sādhakas* and was considered as the integral part of the great triad - the *Āsanās*, the *Prānāyāma* and the *Dhyāna*, which forms the main body of the practical discipline of Yoga.

**2**

**Evolution of  
*Prānāyāma***



## Evolution of *Prānāyāma*

The *Prānāyāmic* practices as they are available to us today are not the same as they were described in some of the ancient scriptures, pertaining to Yoga. There has been a gradual change in their importance, significance and techniques, over the last two thousand years. The accumulated experience and the growing knowledge about how the *Prānāyāma* affects the functioning of the body-mind complex, resulted in the gradual development of the background concepts as well as in the complexity of its techniques.

In his extensive review of the literature pertaining to *Prānāyāma*, Swami Kuvalayananda has lucidly described, how the concept and the techniques of *Prānāyāma* evolved and developed through various stages over the last two thousand years. The following information is based mainly on this review (25).

The earliest reference to *Prānāyāma* is found in the Vedic literature which came into existence in a period, which extends from approximately 1500 B.C. backward into a hoary past. In this period the practice of *Prānāyāma* had no independent position. As described in *Baudhāyanadharmā Sūtra* and *Goutamadharmā Sūtra*, the practice of *Prānāyāma* was mainly a part of some religious ceremony and the word *Prānāyāma* was applied to a practice of holding the breath inside while reciting some *Mantras* in the mind. Probably this was done with an idea that when the breath is held inside, the wavering of the mind gets controlled and the mental recitation of the *Mantra* becomes more fruitful.

Slowly this effect on the mind came to be recognised in more clear terms and the practice of *Prānāyāma* got elevated from the minor religious practice to the more independent and important practice, albeit still associated with *Mantras* or mental concentration on the image of some deity. Evidence of this kind of *Prānāyāma* is seen in *Smṛiti* literature e.g.

*Manusmriti* or *Brihadyogiyājñavalkya Smriti* etc. which covered a time span of approximately 1000 B.C. to 500 A.D.

As the time passed by, the technical aspect of *Prānāyāma* came to be more and more elaborated, as is found in the class of literature known as *Purānās*. They came to be written during the period spanning approximately 500 B.C. to 800 A.D. In *Kūrma Purāna* and *Vāyu Purāna* we find a specific mention of the time-ratio between the phase of *Pūraka* (controlled inhalation) *Kumbhaka* (controlled retention) and *Rechaka* (controlled exhalation) as well as the detailed discussion on how to measure the *Mātrā* (time unit) to arrive at desirable time-ratio.

The next is the most important stage in the evolution of *Prānāyāma*. We find that in the *Yoga Sūtras* of Patanjali, *Prānāyāma* being treated for the first time as a pure and simple psycho-physiological practice devoid of any religious element. This happened around 300 B.C. In the original *Sūtras* as well as in the *Bhāshyas* or the commentaries on these *Sūtras* by Vyasa, Vachaspati etc., the term *Prāna* simply means the breath and the *Prānāyāma* means complete silencing of the in-going and outgoing flow of this breath. In the four varieties of *Prānāyāma* as described in the *Yoga Sūtra* what matters is the cessation of the flow of breath - a pure and simple act. This Treatment of *Prānāyāma* in such a simple way by Patanjali is quite understandable because there is a more emphasis on *Manojaya* in his presentation of Yoga than on *Prānajaya*. The period of Patanjali represents the water-shed in the evolution of *Prānāyāma*, as in this period the practice of *Prānāyāma* began to be divided into two categories, the old one requiring the mental recitation of some *Mantra*, while the new one doing away with *Mantra* altogether.

In the next stage of the evolution, this old type of *Prānāyāma* remained confined to few religious rituals like *Sandhyāvandana*, while the new type got the real boost as the mainstream practice of *Prānāyāma*. This happened as a result of recognition that the manipulation of breathing activity has a

far reaching physiological and psychological effects and can be utilized as a powerful tool to bring about the desirable changes in the functioning of the body-mind complex. In the *Hatha Yoga* tradition, where *Prānāyāma* techniques were harnessed, expressly for this purpose, we find an attempt being made to manipulate the breathing activity in varieties of ways. Herein the deliberate stoppage of breath after inhalation i.e. the phase of *Ābhyantara Kumbhaka* became the most important component of *Prānāyāma*. So much so, that in *Hatha Yoga* literature quite often the word *Kumbhaka* is used as a synonym for *Prānāyāma*. In *Hatha Yoga* tradition breath-manipulation became so important that it gave rise to not only the large varieties of *Prānāyāma* but also of *Shatkriyās*, (*Kapalabhāti* and *Nauli*) and *Mudrās* (*Mahamudrā*, *Mahabandha* etc.) which involve some element of breath-manipulation. In the practice of *Prānāyāma*, the process of inhalation, inner retention of breath and the process of exhalation got elaborated in its minutest detail with clear-cut instructions for some additional techniques to be used alongwith it like *Jālandhara Bandha*, *Uddiyāna Bandha* and *Mūlabandha*. We find a description of this kind of *Prānāyāma* in *Hatha Yoga* texts like *Gorakshashataka* by Gorakhanatha (1000 A.D.), *Hathapradīpīka* by Swatmarama (1400 A.D.), *Gherandasamhita* by Gherenda (1700 A.D.) etc. Most of the techniques of *Prānāyāmic* practices in vogue today, have been evolved during this period.

Another development which occurred during this period was, that the practice of *Prānāyāma* also came to be linked with the mysterious process of *Kundalinī* awakening. Because of this the whole concept of *Prānāyāma*, now in its broad sweep, brought in the possibility of controlling the complete range of the *Prānic* activity, from its most gross form represented by the breathing activity to its very subtle forms represented by the inner physiological and psychological functions. But the description of this subtle aspect of *Prānāyāma* given in the text books is very guarded and it uses a language which is full of metaphors and symbols to keep the essential meaning of the description hidden from the uninitiated student. In the living

tradition, the teacher was expected to impart the knowledge of this subtle aspect to the student, through the personal interaction alone.

While talking about *Kundalinī*, we should be clear about one thing that, though in literature as well as in tradition, Yoga treats the subject of *Kundalinī* with great reverence, it never presents it as the sole custodian for the spiritual experiences. This perspective is very much essential as many new-comers to Yoga have this feeling that awakening of *Kundalinī* is must for the spiritual development and awakening of the *Kundalinī* is the sole aim of *Prānāyāma*. No doubt, it could be one of the major outcome of the diligent and long-term practice of *Prānāyāma*, it still does not have an exclusive claim to be the sole goal of *Prānāyāma*. Numerous references in the literature as well as the personal experiences of many masters indicate that the practice of *Prānāyāma* can still be used with great advantage to expand the consciousness without necessarily involving the process of arousal of *Kundalinī* and the *Chakrabhedana*.

Apart from this, one must also remember that the path of *Kundalinī* arousal is a risky path and if one becomes even slightly negligent in following the guidelines given in *Yama* and *Niyama* part of Yoga, it can very easily lead to harmful effects on the mind and the body. Quite often because of many social responsibilities and duties one is not able to adhere strictly as is required to a disciplined life-style involving the controlled food, proper sleep, judicious physical activity and mental alertness to prevent the mind getting defiled by wrong thoughts and emotions. In that case it is better to follow the royal path of *Prānāyāma* in its gross as well as in subtle aspect, without indulging in the process of activation of *Kundalinī*. In the present book, we have treated The *Prānāyāma Sādhanā*, essentially from this point of view.

# 3

## General Consideration of the Practical Aspect of *Prānāyāma*

- ✧ Components of *Prānāyāma* :  
*Pūraka, Kumbhaka* and *Rechaka*
- ✧ *Sagarbha* and *Agarbha Prānāyāma*
- ✧ *Sahita* and *Kevala Kumbhaka*
- ✧ Consideration of *Mātrā, Desha* and *Kāla*



# General Consideration of the Practical Aspect of *Prānāyāma*

Uptil now, we were dealing with the conceptual aspect of *Prānāyāma* and tried to understand how these concepts evolved over the last two thousand years. Now we will turn our attention to the practical aspect of *Prānāyāma*.

For the convenience of description making it easy to understand, we can divide the practice of *Prānāyāma* in two parts.

The first is the primary and relatively a gross aspect of the *Prānāyāma* which deals mainly with the control of breathing activity. This involves many manipulations of the breathing activity making the process of inhalation and exhalation either fast or slow, shallow or deep or holding the breath inside or gradually slowing down the breathing cycle with a view to reach ultimately the state of complete silencing of the breathing activity. As this part can be easily demonstrated and discussed about, and also being the foundation for the next part, has been described more elaborately in the Yogic literature. Ordinarily most of the people who wish to learn *Prānāyāma* keep themselves confined to the practice of this part alone, either being not aware of the next part or unfortunately not having a teacher who is conversant with the whole range of *Prānāyāmic* practices.

But in the living tradition of Yoga, the study of *Prānāyāma* always included the next part as its legitimate development. As the student advances more and more in the practice of gross aspect of *Prānāyāma*, he is expected to move towards the more subtle aspect of its practice, becoming aware of the subtle *Prānic* activity going on within the body and learning to regulate it in a skilful way. There is an ample description of this subtle *Prānāyāma*

in the class of Yogic literature known as *Yoga Upanishads* (37), as well as in the *Hatha Yoga* texts like *Vashishtha Samhita* (29) and *Hathapradīpikā* (9).

But as the entry into this field depends on certain accomplishments including a fare level of mastery in the gross practice of *Prānāyāma* alongwith the certain level of spiritual maturity to grasp the subtle hints, the description in the above literature treats this topic in an implicit and guarded way. In the ongoing part of this book the major discussion will be, pertaining to the gross aspect of *Prānāyāma* and the discussion on the subtle aspect will be only that much as would be necessary to understand its significance. One can understand this latter part better only through the personal interaction with the knowledgable teacher.

## Three Components of *Prānāyāma*

The *Prānāyāmic* breath involves basically three phases of breathing i.e. inhalation, exhalation and retention and accordingly it has three basic components.

- a. ***Pūraka*** - it is a phase of inhalation, controlled in a Yogic way.
- b. ***Rechaka*** - it is a phase of exhalation, controlled in a Yogic way.
- c. ***Kumbhaka*** - it is a phase of retention, controlled in a Yogic way.

When the breath is retained inside the body after inhalation it is known as *Ābhyantara* or *Āntara* or *Pūrna Kumbhaka*. On the other hand when the breath is retained outside the body after exhalation, it is known as *Bāhya* or *Shūnya Kumbhaka*. Though the use of *Bāhya Kumbhaka* is found sporadically in some practices of *Prānāyāma*, it is mainly the *Ābhyantara Kumbhaka* which is used in the majority of the *Prānāyāmic* varieties especially when they belong to *Hatha Yoga* tradition. Here the *Abhyantara Kumbhaka* remains as the common and the major component of the different varieties, the variation being only in a way a *Pūraka* or *Rechaka* component is performed. But before entering into a detailed understanding of the technique of *Prānāyāma*, let us get familiar with the three main considerations about these techniques.

## ***Sagarbha and Agarbha Prānāyāma***

While discussing the evolution of the concept of *Prānāyāma*, we have already seen that at the time of Patanjali there had been two approaches to *Prānāyāma*; one connecting it with some religious rituals while the other one emphasizing mainly its psycho-physiological aspect. One of the ancient scripture known as *Hastagirimahātmya* says that *Prānāyāma* is said to be *Sagarbha* i.e. with inner content when it is accompanied by concentration on some deity or recitation of some *Mantra*, while the simple holding of breath is called *Agarbha* i.e. without any inner content (14).

In another scripture known as *Brihad-Yogiyājñavalkya Smṛiti*, it is suggested that 'while inhaling the breath meditate upon Vishnu at the naval region, while retaining the breath meditate upon Brahma in the heart region and while exhaling the breath meditate upon Mahesha in the forehead region' (14).

Later on, as in *Shatchakranirūpana* (2), we find the insistence upon meditation on the image of any particular deity or the recitation of some specific *Mantra* has been dropped and this religious aspect has been left to a belief, choice and personal inclination of an individual.

Thus in a nut-shell, the emphasis in *Sagarbha Prānāyāma* is less on the technical aspect of *Prānāyāma* and its psycho-physiological effects, and more on the process of concentration of the mind on some thought process or a symbolic representation of a deity or on a mental verbalization of some *Mantra*. Nonetheless this practice is still expected to have some discernible effect on the body and the mind.

In *Agarbha Prānāyāma*, on the other hand, there is a more emphasis on the technical aspect with a great importance being given to the specific way of carrying out the inhalation, exhalation and inner or outer retention of breath, their time duration (*Sankhyā*), the concentration on various

sensations arising at different locations (*Desha*), the total duration of the practice (*Kāla*) etc. Along with the emphasis on these technical details there is also an insistence upon doing each manoeuvre with full mental attention. The alert and discriminative mind with total awareness of what is happening inside, during each phase becomes an integral part of this type of *Prānāyāma*.

The realization that the activity of the breath and the activity of the mind are linked with each other in an integral way, was very much instrumental for the growth of varieties of techniques of *Agarbha Prānāyāma*. In *Hathapradīpīka* (9) it has been stated that 'the one who controls the breath, can control the mind, and one who controls the mind, alone can control the breath (vide IV.21)'. Therefore, it specifically suggests that 'all practices involving breath should be done with full mental awareness and while practising *Prānāyāma* the Yogi should be alert to see that his mind does not wander away (from whatever he is doing) (vide III.123)'.

From the above description, it becomes quite clear that in both the *Sagarbha* and the *Agarbha Prānāyāma*, the involvement of the mental attention has been incorporated very firmly in their technique. The only difference is of details of, where the mind is made to focus its activity - whether on some religious object or on the sensations arising out of the inner *Prānic* flow. The aim for both these types of *Prānāyāma* is also more or less the same, that is to lead the student on the spiritual path.

## ***Sahita and Kevala Kumbhaka***

As we have already seen in the discussion about the evolution of the concept of *Prānāyāma*, in the Patanjali's *Yoga Sūtras*, the *Prānāyāma* essentially represents the process of bringing the breathing cycle to a standstill.

Patanjali defines the *Prānāyāma* in his *Yoga Sūtras* (3) as follows:- "*Tasmin Sati Shwāsaprashwāsayorgativicchedah Prānāyāmah*" (II.49), which literally means - *Prānāyāma* is the stoppage of the inspiratory and expiratory cyclic movement of the breath which follows, when that (*Āsana*) has been secured. Herein it is important to notice that some authorities interpret the term '*gativicchedah*' as the change in the regular or the normal pattern of breathing and, therefore, feel that according to Patanjali, the *Prānāyāma* means the control over the normal pattern of breathing leading ultimately to its total and spontaneous silencing. On the other hand, some others interpret it as the total and deliberate pause in the movement of the breath and, therefore, equate it with the state of *Kumbhaka*.

In the next *Sūtra* on *Prānāyāma*, Patanjali says - '*Bāhyābhyantarastambhavrittirdeshkālasankhyābhīh Paridrishto Dīrgha Sūkshmah*' (II.50), which means - the breathing movement can come to a standstill, in three ways - *Bāhya* (after the breath has moved out), *Ābhyantara* (after the breath has moved in) and *Stambha* (either way in between, when the breath stops spontaneously after the long-term practice of earlier two types); and when examined in the context of *Desha*, *Kāla*, *Sankhyā* - this stoppage could be described as *Dīrgha* (deep and prolonged and *Sūkshma* (with least efforts)').

In the next *Sutra* Patanjali says - '*Bāhyābhyantar Vishyākshepi Chaturthah*' (II.51)', which means - (having reached the extremes of *Dīrgha* and *Sūkshma* qualities, the breathing movement becomes silent so much so) that the fourth type is beyond the description of being recognised as *Bāhya* or *Ābhyantara* (Variety of *Prānāyāma*).

It all means that when the student practises *Bāhya* and *Ābhyantara Prānāyāma* for a prolonged period, there comes a stage when the respiration is under control and the breathing activity ceases for a short while on its own. But still this is not under sufficient control for this spontaneous cessation of breath to last very long and, therefore, it requires repeated practice of *Bāhya* and *Ābhyantara Vritti Prānāyāma*. Ultimately out of this practice one reaches the stage where the full mastery is achieved and the spontaneous cessation now lasts for as long as one wishes and does not require the practice of *Bāhya* or *Ābhyantara Prānāyāma* just prior to it, anymore. This is the fourth variety of *Prānāyāma*.

In his *Yoga Sūtras* Patanjali does not use the words *Pūraka*, *Rechaka* or *Kumbhaka*. But in the later period many of the commentaries on these *Yoga Sūtras*, use these words, so much so that *Prānāyāma* being described in the terms of deliberate stoppage of breath, the term *Kumbhaka* became synonymous with it. They described the *Bāhya* and *Ābhyantaravritti Prānāyāma* where the breath is stopped deliberately involving some efforts as *Sahita Kumbhaka*, the state of *Stambhavritti Prānāyāma* where the occasional spontaneous cessation of breath occurs, mixed with the deliberate stoppage of breath as *Mishrita Kevala Kumbhaka* and the state of *Chaturtha Prānāyāma* where the breathing cycle becomes completely silent, totally spontaneously without any efforts what-so-ever as *Kevala Kumbhaka*.

Even the *Hathapradīpikā* (9) makes it very clear, when it says - 'when *Prānāyāma* is done with *Rechaka* and *Pūraka* it is called *Sahita Kumbhaka* and when the breath gets retained spontaneously without preceding inhalation or exhalation and with ease, it is called *Kevala Kumbhaka* and further advocates that 'one should continue practising the *Sahita* variety until one attains *Kevala Kumbhaka*' (vide II.71).

Regarding this *Kevala Kumbhaka*, while commenting on the relevant *Yoga Sūtras*, Swami Kuvalayananda has said that 'one should perform many rounds of *Sahita Kumbhaka* daily, over a fairly long period of time

trying to maintain the *kumbhaka* phase progressively for a longer time and involving progressively lesser physical efforts, until the stage is reached when the breath ceases spontaneously, which is a stage of *Kevala Kumbhaka*' (9).

Thus from the technical point of view, we find that the *Prānāyāma* has been treated at two different levels. First one involves deliberate stoppage of breath, for a specific period of time, incorporating either the phase of the inner retention (*Ābhyantara*) or the outer retention (*Bāhya*) of breath.

The second one, on the other hand, involves the spontaneous cessation of the breath without any immediate preceding efforts. This occurs as a result of long-term practice of *Sahita Kumbhaka*. But as observed in actual practice it can occur even through the long-term practice of simple *Pūraka* and *Rechaka* without the phase of intervening *Kumbhaka*. This slows down the breathing cycle itself, ultimately bringing it to a complete standstill.

## **Consideration of *Mātrā*, *Desha* and *Kāla***

'*Mātrā*' is the term, used in the Yogic literature for denoting the measure of time-unit. In the ancient times there was no precise, and universal method easily available for the measurement of time-span. The methods used for deciding the measure of the time-span were quite arbitrary. Many of them were open to a lot of personal error. The length of the time unit was quite variable. For example, the one *Mātrā* could be considered as the time taken for the twinkling of the eye, or for pronouncing a short vowel, or for snapping together the thumb and forefinger, or for moving the hand around the knee or for giving the three claps. Obviously, this way of measuring the time span was not only imprecise but was not of much practical use.

Especially in connection with *Prānāyāma*, while measuring the time duration of *Pūraka*, *Kumbhaka* and *Rechaka*; we need, not only precise time but also the possibility of deciding the final time-ratio amongst the three phases in the light of individual's abilities and limitations. We find one such way of measuring time units in one ancient scripture known as *Skandapurāna* (26). Here the one *Mātrā* is the time required for one normal respiration. This is really a very useful and appropriate standard, as the time measured for the *Prānāyāmic* breathing would always be in relation to the individual's own breathing pattern. This seems to be not only reasonable but quite safe, because in this way the individual can work out as to how much time is to be given for each phase of *Prānāyāmic* breathing and how gradually should it be changed to bring it to the desired level; keeping in tune with his existing abilities. This would definitely prevent him from doing anything in excess. Ordinarily in the usual resting state, the speed of the normal breathing would be around fifteen breaths per minute, thus requiring four seconds for one breath. Using this scale of, one *Mātrā* equal to four seconds; one can easily workout the desired duration of *Pūraka*, *Kumbhaka*, and *Rechaka* in the more convenient way.

Compared to the time taken for the normal inhalation and exhalation, the time duration of the *Pūraka* and *Rechaka* process of *Prānāyāmic* breathing is expected to become more and more prolonged. The *Hathayoga* texts suggest that time ration between the *Pūraka* and *Rechaka* should be 1:2 and wherever the *Kumbhaka* phase is incorporated it should become 1:2:2 or 1:4:2. It all means that *Rechaka* should always take double the time of *Pūraka* and the time duration of *Kumbhaka* should be at least double or four times that of *Pūraka*. Ultimately the time-duration of *Kumbhaka* phase is expected to become even longer than this, as one's mastery over the *Prānāyāmic* breathing increases.

As the time duration of *Kumbhaka* phase goes on increasing, the intensity of its effects felt within the body also goes on increasing. The student, practising *Prānāyāma* for a long time, gradually becomes aware of the upward impulse felt within his abdomen during the phase of *Kumbhaka* when the downward flow (*Apāna Gati*) of the *Prānic* energy is arrested at the *Mūlādhāra* and is directed upward i.e. converted into *Prana Gati* with the help of three *Bandhas*. Until the process of *Rechaka* begins, flow of the *Prānic* energy remains arrested and goes on giving the feeling that something is pushing or striking upwards. This is known as '*Udghāta*'. In this connection, in his commentary on Patanjali *YogaSūtra*, the *Badarayana* says -

*Prānenotsarpamānena Apānah Pidyate Yadā /  
Gata Chordhvam Nivarteta Hyetadudghāta Lakshnam //*

- which can be explained as : 'In the *Kumbhaka* phase as the time passes by, the breath becomes impatient to come out and starts pushing itself outward and due to this one feels in the lower abdomen a sensation of *Prāna* striking upwards and this is known as *Udghāta*'.

According to the intensity of this *Udghāta*, *Kumbhaka* is said to be of three kinds. The *Vāyupurāna* mentions that when the *Kumbhaka* phase is of 12 *Mātrās* i.e. around 48 seconds or around one minute, it is known as

*prathama Udghāta* or the first level of *Udghāta*. When the *Kumbhaka* phase is of 24 *Mātrās* i.e. around 96 seconds or around one and half minute, it is known as *Dwitīya Udghāta* or the second level of *Udghāta*. And, when the *Kumbhaka* phase is of 36 *Mātrās*, i.e. around 124 seconds or approximately 2 minutes, it is known as *Tritīya Udghāta* or the third level of *Udghāta*. When the *Kumbhaka* reaches the first level of *Udghāta*, it leads to the feeling of *Prānic* energy spreading all over the body and causes the perspiration. When the *Kumbhaka* reaches the second level of *Udghāta*, the whole body feels the vibrations and when the *Kumbhaka* reaches the third level there is an upward rising of *Kundalinī* (26).

During the *Kumbhaka* phase, one feels the subtle flow of the *Prānic* energy all over the body alongwith its concentration in certain areas. Focussing of one's attention on these internal phenomenon is indicated through the use of the term *Desha*, by Patanjali in his *Yoga Sūtras*. In the beginning this is in the form of '*Pīpilikā Sadrishsparsha*' i.e. sensation resembling the creeping of the ants all over the body. Then one gradually becomes aware of the pulsating intensification of the *Prānic* flow at the location of different *Chakras* which ultimately take the form of strong force surging upward along the spine. Simultaneously there is a continuous change taking place at the level of consciousness, making it expand and deepen its ordinary field. Ultimately, it explodes breaking all the barriers or conditioning, operating at the level of consciousness, entering the extraordinary state of *Turīya*, *Samādhi* or *Manonmani*. This is known as the arousal of *Kundalinī*

Patanjali, in his *Yoga Sūtras* has described that *Bāhya*, *Ābhyantara* and *Stambhavritti Prānāyāma* become *Dīrgha* and *Sūkshma*, when measured in terms of *Desha*, *Kāla* and *Sankhyā*. By *Desha*, he indicates these subtle *Prānic* sensations, felt at different locations during the progressively more intense levels of *Kumbhaka*. By *Sankhyā*, he indicates the time measure of these *Kumbhakas* and by *Kāla* he indicates the total duration of the time devoted for the complete *Prānāyāmic* session.

In *Hathapradīpikā* (a) it is said that the serious student should practise *Prānāyāma* four times in duration of 24 hours : at dawn, at noon, at dusk and at midnight. In each session he should practise around 80 breaths of *Prānāyāma*. (vide II. 11) Side by side, it also warns that this practice should be done '*Yathā Shakti*', i.e. keeping in view one's own strength. According to it, just as a Lion, an Elephant or a Tiger is tamed by degrees, similarly the breathing is to be brought under control gradually; otherwise it would harm the student' (vide II.15). All the serious students of *Prānāyāma* should heed this warning.

## 4

# Technical Consideration of the Practical Aspect of *Prānāyāma*

- ✧ Correct Posture for *Prānāyāma*
- ✧ Technique of *Pūraka*
- ✧ Technique of *Kumbhaka*
- ✧ Technique of *Rechaka*
- ✧ Different varieties of *Prānāyāma*



# Technical Consideration of the Practical Aspect of *Prānāyāma*

The manipulation of breath in *Prānāyāma* is a conscious, skilful, precise and definitive technique. Most of the techniques of *Prānāyāma*, in vogue today incorporate only the *Ābhyantara Kumbhaka* i.e. the phase of the inner retention of the breath. The increased pressure inside the cavity of the chest and the abdomen during this phase, apart from the time-duration for which this phase is maintained, has become all important factor in the technique of *Prānāyāma*. To sustain and maintain these pressures at a very high level, an additional techniques called *Bandha* is used. It essentially involves the contraction of some specific cervical, abdominal and perineal muscles. The contraction of the perineal muscles as well as the anal sphincters is known as *Mūla Bandha*, while the contraction of the anterior abdominal muscles is known as *Uddiyāna Bandha*. And the contraction of the anterior cervical muscles and vocal cords is known as *Jālandhara Bandha*.

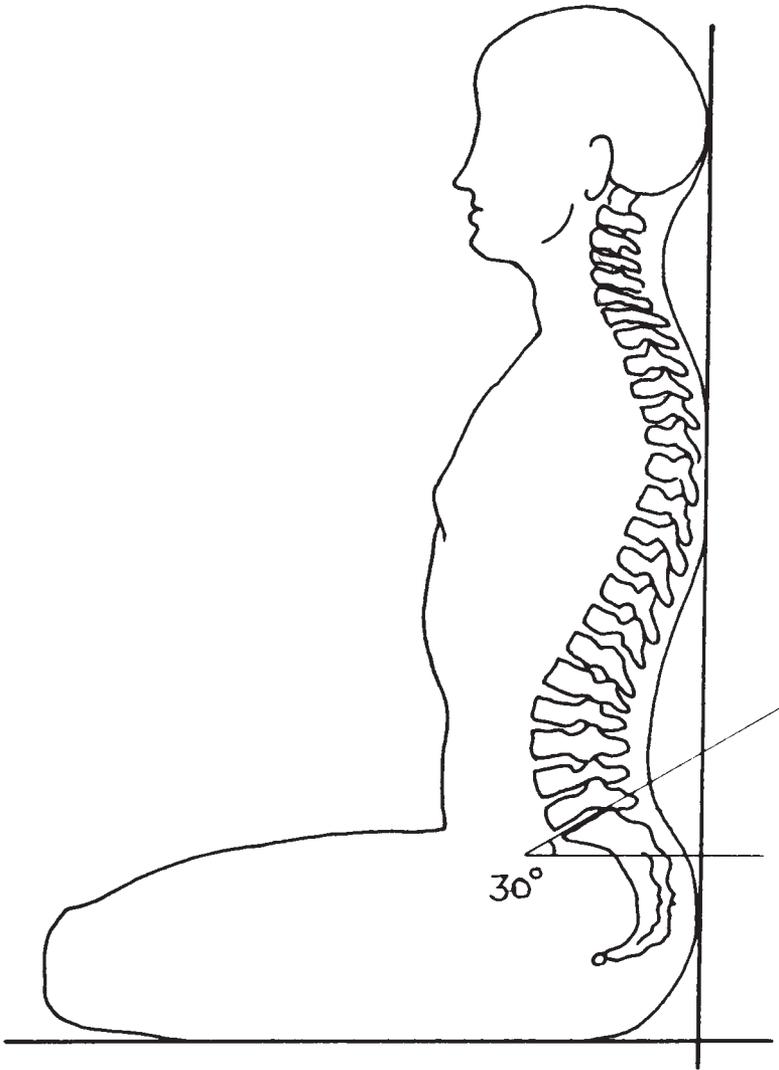
Thus technically speaking we find that in *Prānāyāma* there is an emphasis on the manipulation of the internal pressures and maintenance of these pressure changes for considerable length of time. This helps in expanding the range of voluntary control over the whole of the respiratory cycle, especially over the phase *Kumbhaka*.

The actual technique of *Prānāyāmic* breathing is quite an elaborate one. We find that there are specific rules laid down in Yogic literature regarding the posture in which it is to be performed; the method, the force and the duration of each phase of *Prānāyāmic* breathing and also the attention to be paid to the various sensations arising within the body space during different phases of *Prānāyāma*. The essential features of each of these technical details are given below.

## The Correct Posture for the Practice of *Prānāyāma*

During the performance of *Prānāyāma* one needs to sit in the same position for a long time. Whichever sitting posture one selects, it needs to be stable (*Sthira*), so that minimum efforts are required to maintain it (*Prayatnashathilya*) and it should also be comfortable (*Sukha*) so that it can be maintained with the mind free from any distraction arising from the physical discomfort (*Anantasamāpatti*). There are four meditative postures which fulfil these requirements. They are *Padmāsana*, *Siddhāsana*, *Swastikāsana* and *Samāsana*. The salient features which are common to all these postures, include the broad base which gives the stability to the body posture, and the erect trunk which allows the spinal column to remain in the natural state where all the natural curves are maintained without any distortion. In the natural state, when seen from the side there is a forward curvature in the neck and in the lumber region; and backward curvature in the dorsal and in the sacral region. By sitting *erect*, all these curves are maintained in natural shape and the head-neck-chest and abdomen find themselves in a balanced state in relation to each other (*Sama Kāya Shirogrivah*). This gives a free play to all the muscles involved in a breathing activity. This kind of posture also requires a minimum of effort to maintain the body position and the energy consumption being least, causes minimum strain on cardio-respiratory system.

Regarding the position of the spine, there is one additional point which also has a great importance in the tradition of Yoga, and that is the forward inclination of the pelvis with respect to the spinal column at the Lumbo-sacral junction, at an angle of 30 degrees. This forward tilt of the pelvis, allows the perineum to get pressed by the heel kept against it as in the posture of *Siddhāsana*, or by the ground itself as in a posture like *Padmāsana* or *Guptāsana*. This increased pressure over the perineal region is supposed to stimulate *Mūladhāra Chakra* situated at the centre of perineum. This pressure from below, helps in opposing and overcoming the force, flowing



**Correct Position of the Spine with  
forward inclinis**

downward as felt during the phase of *Pūraka* and *Kumbhaka* and helps in re-directing it upwards during the phase of *Rechaka*. Ultimately, this helps in making the *Prāna* flow upward through the central channel, as one gradually enters the subtle practice of *Prānāyāma*. That is why, while describing the meditative posture Saint Jnaneshwara, specifically mentions that one should lift the tip of the spine up, tilting (the base of the sacrum) forward at the pelvis but keeping the trunk erect (20).

The ability of a person to sit in this type of comfortable and stable posture, fairly for a long time is known as *Āsanasthairya* and when one gets a perfect mastery over the posture resulting in the freedom from the tyranny of *Dvandvas* (the opposing forces causing the disturbance in a balanced functioning of the body-mind complex), it is known as *Āsanajaya*.

As we have already seen, Patanjali in his *Sūtra* (II.49) gives a specific emphasis on the fact that *Prānāyāma* should be done only after securing the 'state' of *Āsana*. The term '*Tasmin Sati*' used by him, can be interpreted in two ways. The word *Tasmin* may stand for 1. *Dvandvānabhighātah* or 2. Just simply the *Āsana*. If the first interpretation is accepted then the *Sūtra* would mean that *Prānāyāma* should be practised only after *Dvandvānabhighātah* state i.e. unaffectedness from conflict - in other words the complete mastery over the *Āsana*, is achieved. With second interpretation, the *Sūtra* would mean that the *Prānāyāma* is to be done while sitting in the posture of *Āsana* - just the stable and comfortable posture (without necessarily waiting for its final mastery) (2).

Many authorities, therefore, are of the view that there is no need to wait till the stage of *Āsanajaya* is reached. One can start the practice of *Prānāyāma* as soon as one is able to sit in any meditative posture for a fairly long time, meaning thereby that one can begin the practice of *Prānāyāma* even with the *Āsanasthairya* stage. As the practice of *Āsana* and *Prānāyāma* continues together, one gradually progresses towards the level of *Āsanajaya* while simultaneously mastering the skill of *Prānāyāma*.

## The Technique of *Pūraka*

In our usual 'ordinary normal' breathing-in process, three main actions are involved.

1. First of all there is an expansion of the chest in all directions which increase the inner space and thereby reduces the pressure of the air inside the chest. This results in the outside air, which now being relatively under higher pressure, start flowing - in through the nose.

2. While this is happening simultaneously the horizontal muscular partition between the chest and the abdominal cavity known as Thoracic Diaphragm starts contracting and thereby it moves downward towards the abdominal cavity. This increases the space in the chest cavity still further which in its turn increases the inward flow of the air, still further.

3. When the diaphragm gets pushed downward, the organs inside the abdominal cavity also get pushed downward, which in its turn pushes the front wall of the abdomen outward.

In a nut-shell, in the ordinary breathing-in process the chest expands from all the sides, the diaphragm moves downward and the abdominal wall bulges out. In some people, the movement of the chest may be more prominent while in others the movement of the diaphragm and abdomen, may be more prominent. When this 'normal' breath becomes a 'deep' breath, then of course, virtually in all the people, all the three movements occur to their fullest extent.

The process of *Pūraka*, though slightly different, is very much like a movement occurring in the deep breath. Very gently and with full awareness, the chest is allowed to expand in its Clavicular (i.e. upper) as well as Costal (i.e. middle and lower) regions and in both the directions from front to the back and from side to side. Simultaneously the diaphragm is also allowed to contract as much as possible, moving it down towards the abdominal cavity to its maximum possible range. But unlike in the

deep breathing where the abdominal wall comes out automatically due to the downward movement of diaphragm; it is prevented from doing so in the process of *Pūraka*. The muscles in the front wall of the abdominal cavity and also those of perianal and perineal region (the region around the anus and between the anus and the genitals, respectively which form the base of the abdominal cavity) are kept under constant control and are used for counteracting the outward push felt from within. As the diaphragm is pushed down to its full extent, the outward push on the abdominal wall, too, becomes quite forceful and as a result, inspite of the restrain on these muscles, the abdominal wall bulges out slightly - more so in the upper part above the umbilicus. But this bulge is much less than that in the deep breathing.

Due to this restrain one may feel in the lower part of the abdomen (below the umbilicus and above the genitals) as well as in the area of the perianal and perineal region, an inward contraction and the upward force - counteracting the downward force generated by the downward movement of the diaphragm. This is a *Mūlabandha*, which remains there all through the process of inhalation.

During the *Pūraka*, one has to be constantly vigilant as to the nature, force and the speed of the contraction of various muscles, thereby controlling the flow of the air. In *Pūraka*, the breath which comes in has to be as complete as possible and the process of inhalation should be as gentle as possible. The time required for *Pūraka* has to be worked out by keeping in mind, that its relation in time to the phase of *Kumbhaka* and *Rechaka*, has to be of some specific ratio, selected on the basis of one's capacity and progress in the practice of *Prānāyāma* and also taking into consideration that the total time of one breath should be such that at the end of *Rechaka* one should never feel suffocated or short of breath. If this fact is overlooked, and one feels the need of taking the next breath in a hurried way; one would lose the whole control over the breathing cycle of *Prānāyāma*.

While during the *Pūraka*, when the breath is coming in, one can feel the touch of the flowing air inside the nostrils or at the back of the throat.

At the same time one can feel the movement of the ribs as well as the gradual rise of the pressure inside the abdominal cavity due to the downward movement of the diaphragm alongwith the counteracting force produced by the muscles of the abdomen and perineal region. During the *Pūraka*, one has to pay full attention to all these sensations, associated with the gross movements of breathing. Through this heightened inner awareness, one then gradually starts becoming aware of the subtle flow of the *Prānic* energy at the different locations inside the body-space. During the inhalations one may feel it flowing downwards from the roof of the nostrils (*Ājnā Chakra*), down through the throat (*Vishuddha Chakra*), chest (*Anāhata Chakra*), upper abdomen (*Manipura Chakra*), lower abdomen (*Swādhīsthāna Chakra*), upto the bottom of the abdominal cavity (*Mūlādhāra Chakra*). This downward flow of the *Prānic* energy is known as *Apānagati*. It moves from *Ājnā Chakra* upto *Mūlādhāra Chakra* and is arrested there due to *Mūla Bandha*. Later on in *Kumbhaka*, this downward flow is not only arrested but is vigorously counteracted by generating the upward flow with the help of more vigorous *Mūla Bandha* and *Uddiyāna Bandha*; and in *Rechaka* it actually starts flowing upward and then it is known as *Prānagati*. Here, one should remember that quite often the words *Prāna* and *Apāna* are equated with the breath inhaled and the breath exhaled, respectively. But, here when we are talking about the '*gati*' or the subtle inner flow of the *Prānic* energy and not the gross breath; the order in which these words are used gets reversed. The *Apānagati* or the downward flow is associated with inhalation and the *Prānagati* or the upward flow is associated with the exhalation.

In the initial stage one has to concentrate on the gross sensations arising from the flow of the air as well as from the contraction of various muscles. But soon, one starts becoming aware of these *Prānic* currents which are associated not only with the flow of the breath but are also perceived during, the *Kumbhaka* phase, even when the breath has stopped moving. Thus slowly this inner awareness becomes the most important component of the *Prānāyāmic* technique, including that of *Pūraka*.

## The Technique of *Kumbhaka*

Most of the *Prānāyāmic* practices which are in vogue today, come from the *Hatha Yoga* tradition, and, therefore, incorporate the phase of internal retention of breath. In this state of internal retention it becomes important to deal with the increased pressure inside the cavity of the chest and abdomen; and to maintain it for a long time without any adverse effects. For this purpose, the use of the *Bandhas* become imperative.

At the end of near-maximum inhalation the vocal cords are contracted and the gap between the vocal cords, known as glottis is completely closed. This closes the air-passage completely. Then by expanding the chest further, even though it may be very slight, an effort is made as if one is breathing-in further, across the closed glottis. By this, the air won't flow in, but the rib cage gets slightly elevated and the muscles of the abdominal wall, especially in the upper region just below the chest become quite tense. This is known as the *Uddiyāna Bandha*. This helps in the process which is already going on, of counteracting the push felt from within; and by reducing the pressure inside the chest slightly, makes it also possible to maintain the phase of *Kumbhaka* for long time without any discomfort. Readers should note here that this technique of *Uddiyāna Bandha* is not a simple contraction of the abdomen but involves the process much similar to the one, which one has to perform in the state of outer retention of the breath as a preparation for the *Nauli Kriyā*.

The contraction of the muscles of the pelvic diaphragm the *Mūla Bandha*, is not only maintained but is further intensified along with the contraction of the anterior abdominal wall during the phase of *Kumbhaka*.

Simultaneously by bending the neck forward one presses the chin firmly against the upper end of the sternum, in the jugular notch. This is known as *Jālandhar Bandha*. Sometimes alongwith this forward bending of the neck, the tongue is also pressed against the root of the front upper teeth and the

adjacent front part of the palate (The hard palate which forms the roof of the mouth) and this is known as *Jihvā Bandha*. Please note that the technique of *Jihvā Bandha* is slightly different here, than when it is done as an independent practice alternating with *Simhamudrā*, when the head is slightly raised up and the mouth is opened widely to make the frenulum at the base of the tongue stand out.

The upward pull felt in the pelvic region due to *Mūla Bandha* is accentuated by the upward and backward pressure from the anterior abdominal wall which has tightened up due to *Uddiyāna Bandha*. At the same time the *Jālandhara Bandha*, *Jihvā Bandha* and the closure of the glottis add into this feeling. The already existing downward pressure due to the expansion of the chest and downward movement of the thoracic diaphragm, combines with this new upward force generated by *Bandhas* and give rise to a peculiar sensation in the upper abdomen just below the rib case.

In the Yogic literature, this is described as meeting and mixing of the *Prāna* and *Apāna*. When they interact, their combined force intensifies the activity of the *Prānic* energy, felt within the upper abdomen and from there, one can feel it flowing all over the body space in the form of pleasant tingling feeling. During *Kumbhaka* phase, as one gradually masters the technical skill, one focuses more and more attention on these sensations.

According to the tradition, the time for which the *Kumbhaka* phase is maintained, should be double or four times that of *Pūraka*; and as the practice grows one can prolong it still further. But if without prior preparation, one tries to increase it forcefully, it can be very harmful. One must, therefore, remain always alert to the fact that at the end of full cycle of *Pūraka - Kumbhaka - Rechaka*, one should never feel any discomfort in the form of suffocation or feeling of shortness of breath. In the beginning, it is rather more advisable to keep the *Kumbhaka* only as long as *Pūraka* and only with great caution should one go on increasing its period.

## The Technique of *Rechaka*

During the 'ordinary normal' breathing-out process, three actions occur.

First the abdomen which might have bulged out during the inhalation, now starts contracting and moving inward. This increases the pressure over the organs inside the abdominal cavity which in its turn starts pushing the thoracic diaphragm upward towards the cavity of the chest.

Simultaneously chest which had expanded during the inhalation starts contracting.

The upward movement of the diaphragm and the contraction of the chest leads to increase in the pressure over the air inside the chest cavity which then starts flowing out through the nostrils.

This movement of abdomen, thoracic diaphragm and the chest would be of different proportion in different people. In the ordinary normal breathing, the process of inhalation is, more active and relatively takes longer time; while the process of exhalation is, more passive and takes shorter time. In the 'deep' breathing in all the people, all the three actions of exhalation described above take place fully and the act of exhalation may become as active as the act of inhalation taking the same amount of time.

In the *Prānāyāmic Rechaka*, the act of exhalation is very much similar to the act of ordinary deep exhalation. It varies only in few aspects. First, the process of exhalation is supposed to be more controlled and is expected to take longer time. Traditionally, the *Rechaka* phase is supposed to be double in time duration than the *Pūraka* phase. Secondly, the movement of the pelvic diaphragm becomes the additional important part of the technique of *Rechaka*.

At the end of *Kumbhaka*, one releases the *Jālandhara Bandha* by straightening the neck and opening the glottis; and then begins the process of exhalation by progressively increasing the contraction of the muscles of the pelvic diaphragm and abdominal wall. This contraction pushes the

thoracic diaphragm upward more and more towards the cavity of the chest. The simultaneous contraction of the chest, then starts squeezing the air out. The process is kept fully under control and by regulating the speed of contraction of the various muscles, the rise in the internal pressure is finely regulated; thus, ultimately regulating the flow of air itself in a very smooth and complete manner.

During the *Rechaka*, due to contraction of the pelvic diaphragm and abdominal wall, pressure rises up inside the abdominal cavity and so also in the cavity of the chest. This increased internal pressure and flowing out of the air gives rise to various inner sensations and during *Rechaka* one is expected to focus his attention on these sensations. As in *Pūraka*, even in *Rechaka* this attention to the various internal sensations associated with the gross physical movement of breathing, gradually makes one aware of the more subtle sensations arising out of the flow of *Prānic* energy. First, one becomes aware of its flow from the *Mūlādhāra* to *Ājnā Chakra*, connected with the process of exhalation, and then one becomes aware of the flow of *Prāna* in other directions too, all over the body and not specifically and necessarily related to the breathing process of inhalation or exhalation.

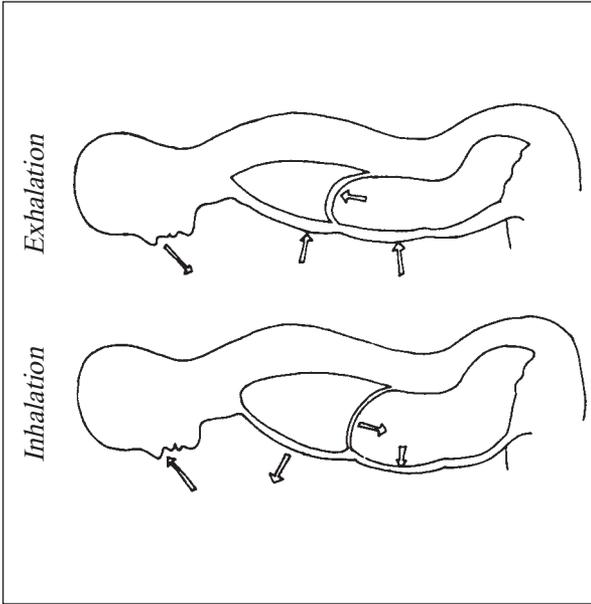
## **Basic Pattern of *Prānāyāmic* Breathing**

From this description of *Pūraka*, *Kumbhaka* and *Rechaka*, one can clearly understand all the salient features of the techniques of 'Basic pattern of *Prānāyāmic* breathing'. We can briefly summarize it as follows:

The main important features of *Prānāyāmic* breathing includes;

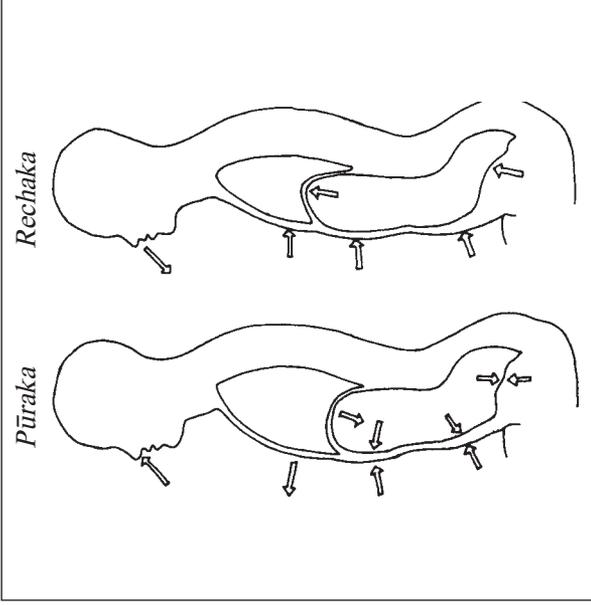
1. the deep and excessively slow inhalation and more slow exhalation, intervened with the phase of inner retention of breath;
2. brought out with the full conscious control at every stage; and
3. maintenance of increased internal pressure with the help of *Bandhas*, as well as

**Simple Deep Breathing**



While Breathing in, Abdominal wall is allowed to come out freely and there is no *Mūlabandha*

**Prānāyāmic Breathing**



While breathing in, Abdominal wall is restrained from coming out and there is *Mūlabandha* during inhalation as well as in exhalation

4. heightened awareness of all the internal sensations associated with this act of breathing.

The excessive prolongation of *Pūraka* and *Rechaka* is brought about mainly by two manoeuvres. One involves the active contral, exercised over the muscles of the chest, thoracic diaphragm abdomen and pelvic diaphragm. The second one involves the creation of finely controlled, resistance, to the air flow at three points of the air passage.

- a. at the entry point - by closing one nostril as in the practice of *Anuloma-Viloma* or *Sūryabhedna Prānāyāma*;
- b. at the junction of nasopharynx and oropharynx by tightening the free border of the soft palate as in the practice of *Bhrāmari Prānāyāma*; and
- c. at the level of vocal cords - by partial closure of the glottis as in *Ujjāyī Prānāyāma*.

The detailed description of these manoeuvres is given in the next part, at relevant places while describing the different types of *Prānāyāmic* breathing. Here one should remember that these obstructs created in the air passage are kept fully under control and are very finely regulated, in a very precise manner.

## **Different Varieties of *Prānāyāma***

The basic form of *Prānāyāma* always includes three phases i.e. *Pūraka*, *Kumbhaka* and *Rechaka*. Their basic technique as described earlier, remains the same albeit with some minor modifications leading to different varieties of *Prānāyāma* as we come across in tradition and in literature. These modifications may be in the form of closure of one or the other nostril, or the contraction of the air passage at the level of free border of soft palate or the vocal cords or using the mouth for inhalation etc. But inspite of these minor differences, the main technique of *Pūraka*, *Kumbhaka* and *Rechaka* remains same as described in basic pattern of *Prānāyāmic* breathing.

Here we have described the varieties of *Prānāyāmic* breathing by highlighting only their salient features and the distinguishing character alone. Those who would like to pursue these descriptions in further details, are requested to read the book : '*Prānāyāma*,' written by Swami Kuvalyananda (27).

### **A. *Anuloma-Viloma Prānāyāma***

In this variety, one begins by performing *Pūraka* through left nostril at the start keeping the right nostril closed. Then the *Kumbhaka* phase is maintained while keeping both the nostrils closed. Thereafter the *Rechaka* is performed through the right nostril keeping the left nostril closed. In the next breath, the whole process is reversed. The *Pūraka* is done through the right and after *Kumbhaka* with both nostrils closed, the *Rechaka* is done through the left nostril. These two breaths together constitute the one round of *Anuloma-Viloma Prānāyāma*.

Sometimes, the *Kumbhaka* phase is not included in this practice and only the *Pūraka* and the *Rechaka* is performed using one nostril at a time, alternately. Then it is known as *Nadi-Shodhana Kriyā* or *Mala-Shodhana Kriyā*. '*Mala*' is the term used for all the factors which disturb the functioning of body and mind. This *Mala-Shodhana Kriyā* is an important method to eliminate these disturbing factors. Same is equally true even when the *Kumbhaka* phase is included, as in *Anuloma-Viloma Prānāyāma*. Therefore, in tradition it is strongly recommended that the *Sādhaka* should begin with this alternate-nostril breathing, before undertaking the practice of other varieties of *Prānāyāma*.

While closing the nostril either during *Pūraka* or *Rechaka*, one should remember not to press the nostril with the fingers so hard as to distort the tip of the nose. Only the soft part of the nostril is to be pressed against the middle partition of the nose called nasal septum. The pressure of the fingers on the soft part of the nostril should be very gentle. Always the right hand is used to close the nostril. The thumb is used for the closure of the right

nostril while the ring and the little finger are used for the closure of the left nostril. The forefinger and the middle finger are never used and are kept curled downward towards the palm.

### **B. *Sūryabhedana Prānāyāma***

Just as in *Anuloma-Viloma* variety, this also involves uni-nostrilar breathing except for the fact that it is not alternated. In every breath of this *Prānāyāma*, the *Pūraka* is performed through right nostril and the *Rechaka* through left nostril. This breathing is thought to stimulate the *Sūrya Nādi* or the *Pingalā Nādi*; and, therefore, it is known as *Sūryabhedana Prānāyāma*. On the activation of the *Sūrya Nādi*, the heat in the body increases. It is also expected to help in the process of awakening of *Kundalinī*.

### **C. *Ujjāyī Prānāyāma***

Herein, both the nostrils are kept open during *Pūraka* and *Rechaka* but the glottis is kept partially closed, narrowing the air - passage at the level of vocal cords. This results in the production of characteristic low pitch, hissing sound and depending upon the control over the flow of breath, is expected to be very smooth, uninterrupted and of uniform quality. In *Ujjāyī Prānāyāma* one should keep his attention focussed on this sound, which makes the mind very quiet. Like the *Sūryabhedana* variety, this also is said to increase the heat within the body. Following the *Anuloma-Viloma*, *Ujjāyī Prānāyāma* is the next important practice and is always to be included in the daily *Prānāyāma Sādhanā*.

### **D. *Sitkāri Prānāyāma***

In this variety the *Pūraka* is performed through the mouth, along the flat surface of the tongue, while making the sound Sssi.....Sssi, and therefore it is known as *Sitkāri* (the one which produces the sound Sssi.....Sssi). The *Rechaka* is done, through the nose using both the nostrils.

For this purpose in *Pūraka*, the upper and the lower teeth are kept slightly apart and by making the tongue flat, its borders are pressed in the gap on both the sides, while in the front the tip of the tongue is turned down pressing against the inner surface of the lower teeth. This leaves a small gap in the front, through which the air is sucked in and as it passes along the surface of the tongue; it makes the saliva which is continuously formed and coats the tongue, evaporate. This evaporation brings the feeling of coolness. At the end of, *Pūraka*, the mouth is completely closed and after doing the usual *Kumbhaka*, the *Rechaka* is performed through the nostrils as usual. The long-term practice of this variety, counterbalance the effects of activation of *Sūrya Nādi* and the heat produced by it, by bringing the cooling effect of its own.

### **E. *Shītalī Prānāyāma***

In this variety the *Pūraka* is performed through the mouth, just as in *Sītkāri Prānāyāma*. But herein the tongue, instead of being kept flat inside the mouth, is allowed to protrude outside the lips, and by curling up its sides it is formed into a *shape* resembling the lower part of the '*Kakachanchu*' i.e. the beak of the crow. The air is inhaled through this beak like formation of the tongue during *Pūraka*, while the *Rechaka* is performed through both the nostrils. This variety also produces the feeling of '*Shītalatā*' (the coolness) in the body and, therefore, it is known as *Shītalī Prānāyāma*.

### **F. *Bhrāmari Prānāyāma***

In this variety, both the *Pūraka* and *Rechaka* is performed through the nose using both the nostrils but throughout the process of inhalation and exhalation a soft humming sound resembling that of the '*Bhrāmara*' (the bee) is produced. This humming sound could be generated by slightly tightening the free border of the soft palate near Uvula and narrowing the air passage between the nasopharynx and oropharynx i.e. the junction between the area of throat behind the nasal cavity and at the back of the mouth respectively. Just as the tension in the string of the musical instrument

when plucked produces a vibrating sound; the plucking of the free border of the soft palate by the incoming and outgoing air currents produces this humming sound. In this variety one has to use the quality of the sound as a key to control the flow of the breath. By focussing one's attention on this humming sound, mind can become very tranquil and peaceful.

### **G. *Murchanā Prānāyāma***

In this variety, the *Pūraka* and the *Kumbhaka* phase is exactly the same as described in the basic pattern of *Prānāyāmic* breathing, before. Only in the *Rechaka*, there is some modification. Usually at the end of *Kumbhaka* and before beginning the *Rechaka* in basic pattern, one releases the *Jālandhara Bandha*, by making the neck straight and by opening the glottis. But in the *Rechaka* of the *Murchanā Prānāyāma*, though the glottis is opened fully, the neck remains in the bent position as in *Kumbhaka* phase. This partial continuation of *Jālandhara Bandha*, throughout the *Rechaka* phase results in the continuation of the pressure in front part of the neck, including on those blood vessels and nerves on either side of the laryngeal box, which are known as *Vijnāna Nādis*. This stimulation of the *Vijnāna Nādis* (which probably could be identified as the carotid bodies in modern anatomy) affects the function of the brain and influences the state of consciousness making one slightly oblivious of the external world. This peculiar state is known as the state of *Murchhā* or the state of unconsciousness and therefore the variety of *Prānāyāma* leading to this state is known as *Murchhanā Prānāyāma*.

### **H. *Plāvini Prānāyāma***

In this variety, one first does what is known as *Vāyubhakshana* i.e. deliberately swallowing the air by gulping it down through the mouth and filling the stomach with it, to its maximum capacity. Thereafter one performs the *Pūraka - Kumbhaka - Rechaka* part of *Prānāyāma* as usual. The already accumulated air in the stomach, alongwith the air present in the fully expanded chest, now increases the buoyancy of the body during

the *Kumbhaka* phase and if the individual is swimming in the water, it would make him *plava* i.e. float on the water very easily. That is why, this variety is known as *Plāvinī*. But this increased possibility of the floating on water is only an outer facade. Its real significance lies in the intensification of inner sensations as a combined result of stretching of the expanding stomach wall and also of the lungs. Through the enhanced awareness of these sensations, one can gain a more easy access to the subtle field of *Prānāyāma*.

### **I. *Bhastrikā Prānāyāma***

One single cycle of this variety consists of two parts. First part begins with quick expulsions of breath following one another in rapid succession. When necessary number of expulsions (say 20 or 40), is done, then the second part begins. This consists of usual *Pūraka*, *Kumbhaka* and *Rechaka* form of *Prānāyāma*.

Thus in this variety of *Prānāyāma*, one additional type of breathing pattern is incorporated, which distinctly differs from slow and deep breathing pattern of all the earlier varieties of *Prānāyāma*. Besides being a part of *Bhastrikā Prānāyāma*, this fast breathing pattern has also an independent position as one of the cleansing process of Yoga i.e. the *Shodhan Kriyās* and there it is known as *Kapālbhāti Kriyā*.

In *Kapālbhāti Kriyā*, the active exhalation and passive inhalation is brought about mainly by the movement of abdominal muscles. The chest is expanded only mid-way and not fully; and is kept fixed in the same position, all throughout the practice. The expulsion of the breath is brought about by the rapid inward stroke of the abdominal muscles and at the end of each expulsion, the abdominal muscles are immediately and fully relaxed, which then go back to its original un-contracted position. This makes the breath come-in, passively and automatically. This rapid contraction and relaxation of the abdominal muscles is performed at a very fast rate of approximately two strokes per second.

When performed as a part of *Bhastrikā Prānāyāma* the usual *Prānāyāmic* deep and slow *Pūraka* is performed after the 20 to 40 strokes of *Kapālabhāti*. The *Kumbhaka* phase which follows, is usually more prolonged because due to preceding fast breathing of *Kapālabhāti*, one is able to maintain the phase of inner breath retention more easily and for fairly long time. The *Rechaka* phase at the end is as usual. This *Bhastrikā Prānāyāma*, due to its fast breathing part and also due to more longer *Kumbhaka* phase has a very honoured place in the daily practice of *Prānāyāma Sādhanā*.

### Some other variations

In the text books of *Hatha Yoga* like *Hathapradīpikā* (9) and *Gheranda Samhitā* (10) we find the description of only eight varieties of *Prānāyāma*. But in the living tradition, when the student learns the *Prānāyāma* through the personal guidance of his teachers; quite often the teachers have been seen to be using many other patterns or the varieties of breathing to develop the abilities of the student. For example in *Samāvartī Prānāyāma*, all the four phases of breathing cycle i.e. inhalation, inner retention, exhalation and outer retention are used in the equal proportion of 1:1:1:1, keeping rest of the injunctions for the *Prānāyāmic* breathing as before. In other variety known as *Samavritti Shvāsa Prekshā*, the breathing is regulated just as in *Nādishodhana Kriyā* but instead of using the fingers to close the nostril, it is only through the conscious awareness alone, one tries to regulate this flow. In some other variety, during the *Pūraka*, the process of inhalation is done in a step-ladder pattern i.e. interrupting the inhalation at specific interval till reaching its final end and *Kumbhaka - Rechaka* as usual, or it could be done with *Pūraka*, *Kumbhaka* as usual followed by the *Rechaka* in the same step-ladder pattern. Even in the *Bhastrikā Prānāyāma*, there are at least four more variations, followed by the different schools.

Here we should remember that the description of the varieties of techniques as given in the text books of the ancient or modern times, do not exhaust all the possibilities which one may come across in the living

tradition. Here the teacher takes into account the abilities and the needs of the student and then accordingly can choose, modify or devise the specific technique for the specific student. Therefore, it is imperative that one should not restrict and base one's understanding of *Prānāyāma* only on the information gleaned through the various books; but should seek it from the personal contact with the teacher trained in the living tradition.

# 5

## Preparation for *Prānāyāma Sādhanā*

- ✧ Consideration of Season,
- ✧ Physical Activity and Diet
- ✧ Physical Preparation by
- ✧ Elimination of *Mala*



## Preparation for *Prānāyāma Sādhanā*

By Now we have become sufficiently conversant with the concept of *Prānāyāma*, its evolution, its basic technique and its different varieties. When these practices are used in the form of *Sādhanā* i.e. performed in a very diligent and serious way for the purpose of self-realization, the *Sādhakā* - the follower on this spiritual path has to be vigilant for many other factors. In the living tradition as well as in the literature of Yoga, there is an elaborate discussion about the specific season when one should undertake this *Prānāyāma Sādhanā*, or what should be the diet and physical activity during this period or what additional preparations would be necessary before beginning the *Sādhanā*, etc. Some of these points are discussed below.

### Consideration of Season, Physical Activity and Diet

In the Indian system of medicine i.e. *Ayurveda*, there is a very important concept of *Ritusātmya* which emphasises that according to the change in the season, there would be a corresponding change in the functions of the body and therefore, one should adjust the regimen of diet and physical activities keeping in view these changing circumstances (13). As the yogis also are very much concerned with the functions of the body and want to influence it in a particular way, through various Yogic practices, they had to be very much alert to these basic changes taking place within the body functions in response to the environmental changes, which otherwise could very easily interfere with the effects of Yogic practices.

In the *Gheranda Samhitā* (10), it is recommended that one should begin the *Prānāyāma Sādhanā* in the season of Spring and Autumn. In India, the season of spring roughly corresponds to the temperate months of February

- March - April and the season of Autumn corresponds to August - September - October. In these months, as there are no extremes of temperature, the functions of the body are not exposed to any excessive demands, allowing them to remain in an undisturbed, balanced and harmonious state; the state necessary for the serious practice of *Prānāyāma*. From the same point of view, the *Sādhaka* has been advised to avoid all kinds of strenuous activities, travelling, fasting, physical austerities of extreme nature as well as the indulgence in sex, during the *Sādhanā* period.

Regarding the diet, it is recommended that it should be clean, appetizing and balanced with adequate qualities of all the ingredients (10). The food should not be stale, dry, too hot or too cold or spicy. One should eat in a moderate quantity which would fill only half the space of the stomach, leaving the 1/4th space for the liquid and remaining 1/4th empty. One should follow the regimen of two meals a day, avoiding frequent eating as also the total fasting (10, vide v.16 and 30).

When the *Kundalinī* arousal has taken place, it is recommended that one should eat every three hours and should not keep the stomach empty for more than three hours. When the *Kundalinī* is aroused, it also activates the gastric fire and if the food is not offered to this kindled fire, it would become uncontrollable and can cause widespread damage.

Thus moderation is the Key-rule, to be observed for the maximum and risk-free benefits from the *Prānāyāma*. Moderate climate, moderate physical activity and moderation in diet, help the *Sādhaka* to keep his internal functions in the balanced state so that the effects of *Prānāyāma* are not minimized or distorted. According to *Bhagavadgītā* (35), 'for a man who is temperate in food and recreation, who is restrained in action, whose sleep and thinking are regulated, the discipline of Yoga becomes destroyer of all the sorrows. On the other hand, for the one who eats too much or abstains too much from eating or one who sleeps too much or keeps awake too much, Yoga has no use (vide VI.17 and 16)'.

## Physical Preparation by Elimination of '*Mala*'

As we have already seen, the term '*Mala*' indicates all those factors that give rise to an imbalance in the functioning of mind and body. These *Malas* act like a block in the pathways of the *Nādis*, obstructing the free flow of *Prāna* through it. As long as the blockage is not removed and *Nādis* are not made functional once again, one cannot regulate the flow of *Prāna* in a correct way and, therefore, elimination of these *Malas* with a view to do the *Nādishodhana* i.e. cleaning of *Nādis* with the help of *Shodhan Kriyās*, becomes essential before undertaking the *Prānāyāma Sādhanā*.

For the purpose of *Nādishodhana*, varieties of practices are used by the Yoga tradition. The *Hathapradīpikā* (9) says that even by the practice of *Āsana* like *Siddhāsana* one can cleanse the *Nādis* (vide I-39). The practice of *Prānāyāma* also, especially the *Anuloma-Viloma* variety, is considered to be very much helpful for cleaning the *Nādis* when practised over the period of three months. In *Ghereanda Samhitā* (10), we find a mention of six group of practices, specially meant for this purpose. Being six in number, it is called *ShatKriyās* and it includes *Dhauti*, *Neti*, *Basti*, *Kapālabhāti*, *Nauli* and *Trātaka Kriyās*. These *Shat Kriyās* clean the various body cavities viz. Nasal, Gastric and Colonic cavities either with water, air or cloth in a prescribed manner. The process of *Nādishodhana* through these *Shat Kriyās* is known as *Nirmanu Nādishuddhi*, and when it is brought about through *Anuloma-Viloma* or *Nadi-shodhana Prānāyāma* it is known as *Samanu Nādishuddhi* (vide V-36). The *Hathapradīpikā* (9) mentions that according to some ancient authorities, *Nādishuddhi* carried out through *Nādishodhana Prānāyāma* alone is sufficient, while according to others, both the *Samanu* and *Nirmanu* approaches, are necessary (vide II.38).

In actual practice, we find it is immensely beneficial to start with both the *Nirmanu* and *Samanu* approaches and as one advances, one can reduce

the use of *Nirmanu Nādishodhana Kriyās (Shatkriyā)* and continue only with *Samanu Nādishodhan Kriyā (Anuloma-Viloma Prānāyāma)*. This would help in two ways; first by using both the approaches, all the *Nādis* would get cleansed very thoroughly, restoring the function of the body-mind complex to a balanced and harmonious state thereby making it easy to undertake the *Prānāyāma Sādhanā* in a correct way. Secondly the use of *Samanu Nādishodhana Kriyā*, it being a part of *Prānāyāmic* technique itself, would facilitate the entry into the *Prānāyāma Sādhanā*, directly. Therefore, in tradition, instead of waiting for gaining a proficiency in the practices of *Nādishodhana Kriyā* including *Āsanās*, before beginning the practice of *Prānāyāma* one is advocated to start everything together and as one progresses, to shift one's attention from *Āsanās* and *Kriyās* to *Prānāyāma* practices.

## 6

# Important Practical Hints for the Daily Practice of *Prānāyāma*

- ☆ Daily Routine During the Course of *Prānāyāma Sādhanā*
- ☆ Use of Some Other Yogic Practices as an Adjuvant for *Prānāyāma Sādhanā*
- ☆ The *Āsana* for the Practice of *Prānāyāma*
- ☆ The Time, Duration and the Sequence of the Practice of *Prānāyāma*
- ☆ The Place for the *Prānāyāma Sādhanā*
- ☆ The Seat for the *Prānāyāma Sādhanā*
- ☆ The Daily Regimen of *Prānāyāmic* Practices
- ☆ The Use of *Kumbhaka*, in the Daily Practice of *Prānāyāma Sādhanā*
- ☆ Other Difficulties Arising During *Prānāyāma Sādhanā* and How to Deal with them



# Important Practical Hints for the Daily Practice of *Prānāyāma*

The information through which we have gone upto now is sufficient enough to get a comprehensive idea regarding the conceptual and technical aspect of the *Prānāyāmic* practices. Now we would like to discuss those aspects which are of immediate practical importance and deal with the difficulties which arise during the course of *Prānāyāma Sādhanā*.

To get the best results from the daily practice of *Prānāyāma* and minimize the risk involved in the incorrect handling of these techniques, it is very much essential that one should insist not only on the technical correctness of the practice but should perform it with clear understanding as to its background which is essentially of spiritual nature. It helps in preventing the mistakes which are otherwise sure to arise due to wrong understanding, over enthusiasm and absent-mindedness. In the literature as well as in the living tradition many useful things have been recommended with a view to make the *Prānāyāma Sādhanā*, safe and fruitful. Additional to these recommendations from the tradition, we have also to deal with some newer difficulties which have arisen essentially out of modern life-style and more complex, more stressful and more away - from - the - nature way of living. We have tried to address ourselves to as many points here, as we felt are important from the practical point of view.

## **Daily Routine During the Course of *Prānāyāma Sādhanā***

The student should organize his daily routine in such a way, that it would remove all those factors which would pose as an obstacle in the practice of *Prānāyāma*. Unless there is a supporting congenial situation, mere practice of *Prānāyāma*, even if technically most correct, would not be able to deliver its full benefits. Therefore, if one wants to use *Prānāyāma* for the spiritual purpose, one should understand the importance of appropriate diet, sound sleep, judicious physical activity and purity of mind.

### **1. Diet**

During the period of *Sādhanā*, one should be careful to eat only that food which is easily digestible. The vegetables and the fruits should form the major part of the daily food intake. As far as possible spicy and fried things should be avoided. Those who wish to enter into subtle levels of *Prānāyāma* practices, should be particular to avoid meat, fish, chicken and eggs. Also the consumption of tea, coffee and cold-drinks should be kept to the minimum.

It is better to distribute the daily food intake into 4 or 5 small meals rather than taking it in the form of one or two heavy, meals. It is also better to avoid taking heavy meals late at night. If one develops heaviness or indigestion or gaseous distention in the abdomen it would definitely interfere in the practice of *Prānāyāma*.

Also it is important to keep in mind that the quality and quantity of food has an important bearing on the state of the mind. Quite often the consumption of the food of wrong quality and in wrong quantity can make the mind restless and easily distractible. That is why it is necessary to be very much particular as to the kind of food one eats, how much one eats and when one eats.

One should also be careful to avoid consumption of any substance like alcohol or tobacco, which influences the functioning of brain, during *Prānāyāma Sādhanā*. This artificial stimulation of brain function would interfere in a harmful way, when one is doing *Prānāyāma*.

## 2. Sleep

During the period of *Sādhanā*, it is extremely important that one should have adequate and sound sleep. Keeping late night should be assiduously avoided. Feeling of freshness, which one feels after having slept well facilitates the practice of *Prānāyāma*. Otherwise the feeling of drowsiness, restlessness, repeated yawning which occurs due to inadequate sleep creates a nuisance during the practice of *Prānāyāma*.

## 3. Physical Activity

During the period of *Sādhanā* one should avoid all kinds of physical activities which would bring on exhaustion. Any strenuous exercise including walking for a long distance should be avoided. A little walk, practices of *Yoga-Āsana*, and exercise like *Sūryanamaskār* can be done. But even this should be done with moderation so that it does not lead to any feeling of tiredness.

## 4. Mental Activity

Uncontrolled thought process and the un-chastened emotions, make one waste his/her mental energy continuously. It is necessary to make a vigorous effort to check it, especially during the period of *Sādhanā*. For this purpose, one should try to cultivate the following qualities.

**a. Forgiveness :** One should remember that instead of giving undue importance to either the short-comings in people around us or the mistakes committed by them, one should learn to accept them, understand them and to forgive them for their follies in a large-hearted way. Even if one is not able to forget many unpleasant incidents, one can learn how to forgive, if

one wants to. It makes the *Sādhakā* tolerant and the possibility of losing temper too often and too quickly, becomes progressively less. It also helps in reducing impatience, thereby making it easier to apply all the available energy in a right manner when one strives to achieve success in any field, including the field of spiritual knowledge.

**b. Contentment:** One should strive constantly to overcome the habit of constant dissection or analysis of the happenings from the past and constant grieving over the things which did not happen according to one's desires. In the same way one should see that the mind does not remain continuously preoccupied worrying all the times with the things of the future which may or may not happen. To help in these efforts, one should cultivate the habit of remaining connected with the things happening in the present, trying to participate in it with full pleasure and contentment. As is to be expected mind would wander again and again to the past or to the future; but without getting discouraged by it one should bring the mind back to the present with the same perseverance. This process is of course very difficult in the initial period but with unfailing persuasion one can learn to remain in the present for a longer and longer time. This increases the efficiency of whatever one is doing in a very significant way.

**tc. Purity of the Mind :** One should also be vigilant to see that there should not be any deliberate effort to harm or destroy any person or any thing around us, not only through action and speech but also in thoughts. Any bitterness which we may harbour in our mind against any person should be diligently thrown out. The pure mind is a free mind and it is one of the most important assets on the path of spiritual knowledge.

**d. Empathy for the Others :** It is always necessary to remember that we are a part of this world and not apart from it. We have a great responsibility towards all things and the people around us as they and we, share the same life. There is no better way to allow the inner creativity to flow out freely, than to extend the helping hand without ever waiting for

any invitation in a situation where we know that our help is needed. The whole path and the final destination of spiritual endeavour is filled with this feeling of sharing with the whole world - the feeling which culminates in the realization that 'I am the world and world is within me'.

One may feel that the cultivation of above qualities, is an utopian idea and virtually an impossible goal for the common man. No doubt it is a very difficult task, but it is not impossible. Even a little effort in this direction would bring those results, which make life more enjoyable and more fruitful. More diligent striving would definitely bring more radical changes. Though it is true that many of these changes would occur as a natural consequence of *Prānāyāma Sādhanā* itself, some deliberate efforts to cultivate these qualities and to make the mind tranquil would be necessary help in the *Sādhanā*.

## **Use of Some other Yogic Practices as an Adjuvant for *Prānāyāma Sādhanā***

To succeed smoothly in the practice of *Prānāyāma*, there are three main factors which one has to take care of.

1. The first one is to develop on ability to be able to sit in meditative posture for a fairly long time. For this, it is necessary to have a good flexibility in the joints of lower limbs as well as in the whole spine, and also the ability to use the muscles in different parts of the body in the most efficient and effective manner. This can be accomplished by practising various *Yoga-āsanas* for some sufficient time, before beginning the serious practice of *Prānāyāma*. The practice of *Āsanas* like *Halāsana*, *Bhujangāsana*, *Dhanurāsana*, *Paschimottanāsana*, *Bhadrāsana*, *Gomukhāsana* etc. make the body supple and agile; and gradually lead the student towards the Meditative postures. One starts enjoying so much

freedom in the body that one can sit undisturbed for a long time, allowing the mental energy flow freely to concentrate on the *Prānāyāmic* practices.

2. The second important and absolutely necessary factor is that the air-passage from the nose, down through the throat and wind-pipe should not have any unnatural obstruction, due to inflammation or congestion, and one should be able to use the muscles of the chest, thoracic diaphragm, abdomen and pelvic diaphragm in a completely free manner. If there is a chronic cold with the problem of one or both the nostrils remaining partially blocked due to congestion or mucoid discharge, or chronic throat irritation with recurrent cough, or inflammation of wind-pipe as a Bronchitis or Bronchial Asthma; one would not be able to breath in a free way and would not be able to perform *Prānāyāma* properly. For this purpose practice of *Shodhan Kriyās*, especially of *Dhauti* and *Neti Kriyās*, before undertaking the *Prānāyāma Sādhanā* is very useful. Also the various *Āsanas*, help in it, apart from endowing the *Sādhanā* with the skill of using various muscles required for the different phases of *Prānāyāmic* breathing in a refined way. For this purpose, one should try to maintain the final posture of each *Āsana* for some time, while breathing in and out deeply and slowly and generally by paying more attention to the activities of the various muscles involved in the breathing during the movement as well as during the maintenance period of each *Āsana*. When in the distorted position of these various *Āsanas*, the muscles involved in the breathing activity are used to their fullest extent, then in the Meditative *Āsanas* with the erect spine one can use the same in the most easy, free and comfortable manner. Also the awareness of various sensations arising within the body-space during different *Āsanas*, would help in the practice of *Prānāyāma*, as the same muscles are involved in *Prānāyāma*, in a more specific way.

3. This ability to become aware of various sensations arising within the body space during the movements associated with the breathing activity, is the third important factor in the *Prānāyāma Sādhanā*. By increasing the sensitivity, through the process of 'Inner Awareness' one can learn to

regulate the whole range of the *Prānāyāmic* practice from its most gross to its most subtle level.

For this purpose the technique described in *Yogopanishads* (37) like *Kshurikopanishad* and *Trishikhibrahmanopanishad*, and in the *Hatha Yoga* text like *Vashishtha Samhitā* (29) is extremely useful. Though this technique has been described as a part of *Pratyāhāra* which is described after *Prānāyāma* and before *Dhāranā*, the whole matter of inner awareness seems to have been dealt here as the continuous process running as an undercurrent through all these practices of *Prānāyāma*, *Pratyāhāra* and *Dhāraṇa*.

In *Vashishtha Samhitā*, four varieties of *Pratyāhāra* are described. One of it is the same as described by Patanjali in his Yoga Sutras (3) involving the disciplining of senses, disengaging them from their contact with the outward sensory objects and thus having nullified all the possibilities of getting distracted from the external stimuli, all the energies of the senses are then directed centrally towards the self-realization (vide Sutra II-54).

But amongst the other three varieties of *Pratyāhāra* described in *Vashishtha Samhitā* one is exactly what we can describe as the process of inner awareness or *Prānadhāranā*. It involves flowing mentally through eighteen *Marmasthānas* or vital locations within the body space namely : big toe, ankle, centre of the calf muscles, root of knee, knee, and centre of the thigh (all these six locations in both the legs), anus, perineum, sex organ, naval, heart, throat, root of the tongue, root of the nose, centre of both eyes, the middle of the brows, forehead and the top of the head (vide 3.61-74).

It is like taking the mind for a walk through all the parts of the body and moving through each region to pick up whatever sensation is arising in that place. This makes one aware of the whole range of *prānic* activity and then one can learn to regulate it in a specific way. That is why the word used for the body space is '*Prānāyathana*' the abode of Prāna and way of becoming aware of it is through the technique of '*Drushtimanah Prānah*' which means to track the inner sensation arising from the *Pranic*

activity with the eye of the mind. It should be noted here that this is not a process of visualization combined with any imagination of the things which are not there but it is a process of becoming aware of whatever 'is' there. This process of awareness combines within itself the process of *Dehadhāranā* the awareness of body space, *Prānadhāranā* the awareness of *Prānic* activity including the activity of breath going on within that space and *Chittadhāranā* the awareness of mental operation. This last component is with a view not to allow the mental distractions to interfere with this whole process.

When the *Sādhaka* practises this technique of inner awareness, everyday alongwith the practice of *Prānāyāma*; it makes it more easier for him to enter into subtle level of the *Prānāyāma Sādhanā*. To develop a skill in this technique, one can either sit in any comfortable position or can lie down on the ground. Then, keeping the eyes closed and relaxing the whole body, one should go on becoming aware of each part of the body one by one in a specific sequence, so that no part is left out. As one's mind is focussed in any particular area, one becomes aware of some sensation arising from that area which is the only way through which one can become aware of the body space from which these sensations arise. After having become aware of the whole of the body space then one can become aware of the breath flowing through this space and try to remain connected with it, without any interruption. In this process mind becomes absolutely still and only its faculty of awareness remains dynamically active. This process of inner awareness, when practised independently, it by itself can lead to the state of meditation and when practised as an adjuvant to *Prānāyāma*, it can help the *Sādhaka* to enter into the subtle field of *Prānic* activity and can lead even to the awakening of *Kundalinī*, if one wants to move in that direction.

This process of inner awareness is so subtle that it needs to be learnt through the personal contact with the teacher, experienced in this field, Merely reading about it, would not be sufficient to understand the subtlety of this practice.

## The *Āsana* for the Practice of *Prānāyāma*

While discussing the necessary condition and position of the body for the practice of *Prānāyāma*, we have already seen that the posture of (a) *Swastikāsana* or *Sukhāsana* (b) *Padmāsana* (c) *Siddhāsana* (d) and *Samāsana* or *Guptāsana* are the four meditative *Āsanas* useful for this purpose. Out of these, the posture of *Swastikāsana* being most easy, one can sit in this position for a long time without feeling any discomfort, from the beginning itself. In the *Hatha Yoga* tradition where the emphasis is given on the awakening of *Kundalinī*, it is specifically recommended that *Prānāyāma* should be practised in the posture of *Siddhāsana*. The recommendation of *Guptāsana* and *Padmāsana* comes only after that. But in the initial period of *Sādhanā* to be able to sit in any of these three postures for a long time is quite difficult for most of the *Sādhakas*. Therefore they can begin, safely with the *Swastikāsana* posture and if they are not specifically interested in the part of *Kundalinī* awakening, they can continue using this posture even later on. Even in *Swastikāsana*, one would still be able to enter into deeper and subtler levels of *Prānāyāma*. They should only ensure that in this posture there is stability and comfort, and the trunk is kept correct which allows full freedom to the muscles of the chest and abdomen.

In case of those, who due to some reason e.g. arthritis of knee etc., are not able to sit with legs crossed on the ground; they can safely perform the practice of *Prānāyāma* while sitting in a chair. But they should keep their spine erect, and free from resting on the back of a seat, and feet properly resting on the ground.

## **The Time, Duration and the Sequence of the Practice of *Prānāyāma***

The tradition recommends for the serious student of Yoga, that they should practise *Prānāyāma* four times, in a period of twenty four hours, i.e. at dawn, at noon, at dusk and at midnight. Even so, in the initial period of his training, student should practise *Prānāyāma* at least twice a day i.e. in the morning and in the evening. As he advances he may start the practice at midday and ultimately at midnight.

For those who may not have such an intense motivation, practising *Prānāyāma* twice a day is quite sufficient. Whenever the practice of *Prānāyāma* is done as a part of a whole curriculum of Yogic discipline, the sequence of practice should be *Shodhana Kriyā*, *Āsana*, *Prānāyāma* and Meditation. If the *Prānāyāma* is done in this way alongwith the other practices in the morning, then it can be done alone second time in the evening.

While doing *Prānāyāma*, it is very much necessary that the stomach should be empty as it would be in the morning before breakfast, or three hours after any meal, or two hours after a light refreshment or half an hour after a cup of drink. For good results, one should not eat within half an hour of completion of the *Prānāyāmic* practice.

When the body and mind feels cleansed and fresh, one can do *Prānāyāma* in a more pleasant way. Therefore, it is recommended that *Prānāyāma* is done better after having moved the bowels, after voiding urine and after having a full body bath.

## **The Place for the *Prānāyāma* *Sādhana***

The practice of *Prānāyāma* should be done in a well-ventilated place, therefore, practising it in the open would be very beneficial. However if

the climate is unsuitable, or there is a heavy drought or the possibility of continuous distraction due to noise - pollution or insects, then one should prefer the closed place. But even there one should avoid sitting under the fan. It would also be helpful, if one is able to keep some area, reserved exclusively for this spiritual practice. This reinforces the mental attitude required during the practice of *Prānāyāma* when one sits at the same place sanctified by the long practice.

## **The Seat for the *Prānāyāma* *Sādhanā***

As per tradition, a seat for practising *Prānāyāma* should consist of a mat made out of special kind of grass called '*Kusha*', covered by deer-skin which in its turn is covered by a daily-washed piece of cloth. In modern times there is no need to follow this advice rigidly. A seat made up of folded woollen blanket covered with a daily-washed bed-sheet is equally useful. What is important, is that, the seat should be firm and unyielding, but at the same time should not be hard and uncomfortable. Therefore, one should avoid the use of foam mattress or sitting directly on marble or granite tiles. One should also see that the cloth used for covering the seat is clean and is washed daily.

## **The Daily Regimen of *Prānāyāmic* Practices**

In the literature as well as in living tradition, quite a large variety of *Prānāyāmic* practices are advocated. Out of these, only few practices are important for inclusion in daily regimen, rest being used for achieving some specific purpose or in some specific individuals as a part of their training requirements.

In the initial period, the *Sādhanā* should begin with the practice of *Kapālabhāti Kriyā*, *Anuloma-Viloma Prānāyāma* and *Ujjāyi Prānāyāma*.

As one progresses in his practice, the practice of *Kapālabhāti Kriyā* can be reduced and in its place the practice of *Bhastrikā Prānāyāma* and *Bhrāmarī Prānāyāma* be started. Rather than using many techniques and practising them in a chaotic way, the *Sādhaka* is strongly advised that he should restrict himself to two or three selected varieties of *Prānāyāma* and should practise them diligently over a long period of time.

In the daily practice session of *Prānāyāma*, one can begin with the technique of inner awareness for 10 to 15 minutes, to increase one's ability to become aware of all the things which would happen during the practice of *Prānāyāma*. After this, one can start the practice of *Kapālabhāti Kriyā*. It could be in the form of three rounds of *Kapālabhāti* of one minute duration with sufficient rest in between. At the end of *Kapālabhāti*, with enough gap one can begin with *Anuloma-Viloma Prānāyāma*, doing it for approximately 5 minutes, which may include about 15 rounds of this variety, followed by *Ujjāyī Prānāyāma* for further 5 minutes which may include about 20 to 30 rounds of this variety. After completing this programme one should not get up from the seat immediately but should continue sitting for further 5 to 10 minutes, flowing on with the process of inner awareness. Those who are interested may also add the chanting of *Aum* or some *Mantras* like *Gāyatri* or *Tryambaka Mantra*, at the end of the practical session. We have discussed about this part in the last portion of this book. The whole of the practical session, from the beginning till end would take at least 40 to 45 minutes.

As one gradually masters these techniques one can slowly change over to the *Bhastrikā Prānāyāma*, instead of *Kapālabhāti Kriyā* - first without *Kumbhaka* and after few days of practice with *Kumbhaka*. If the time permits, the practice of *Bhrāmarī Prānāyāma* also could be added.

This sequence has been suggested keeping in view the general needs of an average person. Depending upon the ability and the intensity of desire to travel on the spiritual path, this programme of course would be different

for different individuals and it is possible to formulate this individual specific programme only through the personal interaction with the teacher experienced in this field.

## **The use of *Kumbhaka* in the daily programme of *Prānāyāma Sādhanā***

In the initial period, it is advisable to concentrate more on making the breathing pattern regular, gaining a better control over the process of inhalation and exhalation, alone. For this purpose, at least in the beginning, one should practise the *Prānāyāma* with the phase of *Pūraka* and *Rechaka* alone without *Kumbhaka*, till one gains a satisfactory control over the whole process of inhalation and exhalation. This practice of *Prānāyāma* without the phase of *Kumbhaka* is still very much beneficial and has a significant influence on the functioning of mind-body complex. After about 3 to 40 months of the practice of this *Kumbhaka*-less *Prānāyāma*, one should gradually introduce the phase of *Kumbhaka* in a guarded manner. That is why in the initial period of the *Prānāyāmic Sādhanā*, one is advised to practise the *Anuloma-Viloma Prānāyāma*, *Ujjāyi Prānāyāma* and even the *Bhastrikā Prānāyāma* only with the phase of *Pūraka* and *Rechaka*, and to add the *Kumbhaka* phase only as one advances in the practice of *Prānāyāma*.

Even though the ratio between *Pūraka* and *Rechaka* is always supposed to remain constant at the level of 1:2, the phase of *Kumbhaka* when introduced in between, can become progressively longer than both these phases. In the beginning the ration of *Pūraka* : *Kumbhaka* : *Rechaka* could be 1:1:2 which later on, can become 1:2:2, 1:4:2 etc. ultimately the permission being granted to prolong the *Kumbhaka* phase for as long as is possible and comfortable. Of course, one should never make any haste in this process and should never introduce the *Kumbhaka* phase unless one is

sufficiently in control of *Pūraka* and *Rechaka* phase. Any impatience, over-enthusiasm and unrealistic compulsion on oneself for increasing the period of *Kumbhaka* can create a great harm and, therefore the *Kumbhaka* phase should always be handled with great care and precaution.

## **Other difficulties arising during *Prānāyāma Sādhanā* and how to deal with them**

1. The first problem which one faces during the *Prānāyāmic* session of a long duration, is the feeling of pain or numbness which arises in the legs especially if one is not used to sit for a long time in a meditative posture. When this feeling arises, one should immediately change the position, or if necessary should stretch the legs out. This is better than containing in the same posture to test one's endurance capacity either physical or mental, as is being insisted upon in some schools as a part of their meditational programme. While doing *Prānāyāma*, it is of utmost importance that the mind should be free from any physical discomfort which otherwise can act as the cause of mental distraction. This requirement is much different than that in the meditational programme where one learns more about the interference, from the mind, itself. After changing the position and after giving a little rest to the legs, one should return back to the original posture. But better than this is to see that one develops a sufficient ability to sit in the meditative posture by following a regimen of various corrective *Āsanas* by practising them daily. Related to this problem, the other two difficulties are inability to keep the spine erect and the feeling of increased tension in the muscles of the neck and shoulders, when meditative posture is maintained for a long time. These problems also need to be dealt in the same way, first by giving some rest which is a temporary solution and secondly by gradually increasing the ability through the practice of various *Āsanas* which is a permanent solution.

2. During the session of *Prānāyāma* quite often one finds, the mouth getting filled with saliva. Quite often this happens as a result of increased activity of the salivary glands. Whenever one is profoundly relaxed and has some kind of blissful feelings there are many accompanying changes in the body known as *Sāttvic Bhāva* and one of that is increase in the salivary secretion. This being quite natural, one should not get disturbed or annoyed by it. One should simply stop the practice of *Prānāyāma* for a moment, swallow the saliva and should continue with the practice as if nothing has happened.

3. Sometimes, if there is a problem of indigestion or if one has developed a practice of swallowing of air while talking or eating very fast, there might be accumulation of some air in the stomach. When one begins with the *Prānāyāmic* practice, due to increased pressure over the abdomen during different phases of *Prānāyāma*, this accumulated air might start coming out in the form of belching. The student should remember that, it is not the practice of *Prānāyāma* which fills in the air, nor does it indicate some adverse effect of *Prānāyāma*; rather what *Prānāyāma* does is to release the already accumulated air from the stomach. So, one need not have to bother about this problem except seeing that the diet consumed would not lead to any indigestion, and also to see that one talks and eats slowly and not hurriedly, to avoid swallowing of air.

4. In the practice of *Prānāyāma*, the normal spontaneous pattern of breathing is altered in a very conscious manner. This conscious interference in the spontaneous activity of the brain-centres which are responsible for normal breathing can lead to repeated yawning during *Prānāyāma* before one learns how to control the respiration properly. Quite often physical tiredness, inadequate sleep or even simple boredom can cause yawning. That is why it is necessary to see that one has a right diet, adequate sleep and no feeling of physical tiredness during the whole of *Sādhanā* period. One should also be ready to accept the fact that every day would not be exactly the same and at least in the initial period before one has settled in

the disciplined life of Yoga, there would be few days when one would be in low spirit and may not feel any enthusiasm for doing the practice of *Prānāyāma*. But the student should remember that these feelings of ups and downs would disappear as one would progress in one's *Sādhanā*.

5. During the performance of various techniques of *Prānāyāma* one needs to keep a track of multiple details of these techniques simultaneously and in the initial period it may be extremely difficult. For example, while doing *Kapālabhāti Kriyā*, if one focuses one's attention on the speed of the breathing trying to keep it fast but rhythmic one may not be able to keep the *Mūla Bandha* simultaneously; or while doing *Anutoma-Viloma Prānāyāma* or *Ujjāyi Prānāyāma* if one is attending to the movement of chest, thoracic diaphragm, abdomen and pelvic diaphragm, one may not be able to keep time ratio between *Pūraka*, *Kumbhaka* and *Rechaka* same in all the breaths. But one should never get discouraged by these difficulties. One would definitely overcome them, through constant practice, though it may take some time.

6. There would also be some problems, which might arise due to incomplete or wrong understanding of some technical details. For example, if one is not very clear as to what is meant by the partial closure of the glottis as in *Ujjāyi* and what kind of sound is to be produced during *Pūraka* and *Rechaka* of this *Prānāyāma*; it can strain the delicate tissues of vocal cords and soft tissues of the throat region leading to the feeling of dryness in the mouth and the sensation leading to coughing. Similarly, if one does not know how to close the nostril in the practice of *Anuloma-Viloma Prānāyāma* one may press too hard on the soft part of the nostril leading to the feeling of irritation or burning sensation inside the nostril. While doing the *Kapālabhāti* if one does not know how to move the abdomen and how to keep the chest unmoving, the whole breathing pattern would get out of control, with each consecutive breath becoming shallower and ultimately compelling the student to terminate the practice due to the feeling of

suffocation or lack of breath. The only solution to all these problems is to learn all these practices, not from the books or audio-video tapes but under the personal supervision of the experienced teacher.

7. Quite often, one faces the difficulty of not knowing whether to continue with the practice of *Prānāyāma* or to discontinue it in the presence of some physical conditions like during the menstrual period or during pregnancy in women etc. During menstrual periods, women should stop the practice of *Kapālabhāti Kriyā* and *Bhastrikā Prānāyāma* completely. But they can continue the practice of *Anuloma-Viloma* and *Ujjāyi* without incorporating the phase of *Kumbhaka* and *Mūla Bandha*. Also the process of inner awareness may be highly beneficial in this period. In the same way, if one suffers from common cold or fever etc. during the period of *Sādhanā*, one should stop the practice of *Prānāyāma* completely till one recovers. If the sickness is of serious nature and recovery period is of long duration, one should restart *Prānāyāma* practices only after consulting one's own teacher. Even during the state of pregnancy, one can do *Prānāyāma* with certain modifications and for this personal guidance of an experienced teacher is absolutely essential.

Pertaining to the practice of *Prānāyāma*, two words are used again and again in the literature of Yoga. One is '*Shanaihi Shanaihi*' which means that the practice of *Prānāyāma* should be undertaken step by step, in a systematic and methodical manner, without any haste whatsoever. And the second is '*Yathāshakti*' which means one should practise *Prānāyāma* always according to one's capacity and should advance cautiously maintaining an attitude of patience and perseverance. If one keeps these two guidelines always uppermost in the mind, one would be able to deal with most of the difficulties arising during the *Prānāyāma Sādhanā* in a right way.



7

**Appraisal of the  
Scientific Investigations on  
*Prānāyāma***



# Appraisal of the Scientific Investigations on *Prānāyāma*

When we study the description given in the ancient literature of Yoga, as to the effects of *Prānāyāma*, we find virtually all the functions of the body are expected to be influenced by it. For example, by the long term practice of *Prānāyāma* the body becomes supple, the digestive and metabolic functions become very efficient making it possible for the body to extract full essence of the food consumed and use it fully, thereby wastage in the form of urine and stool gets produced less in quantity. So also the perspiration is less in quantity and never has an unpleasant odour to it. One feels extremely energetic, the complexion of the skin is improved, the need of the sleep becomes less and the libido comes under full control. Apart from this the *Prānāyāma* also affects the mind, increasing the power of concentration. It also stabilizes the emotional upswings or down swings, making the mind, fully tranquil. The *Sādhakas* practising *Prānāyāma* in a very serious way confirm all these effects in their subjective experiences.

When we want to understand the rationale of all these effects, many questions need to be answered satisfactorily. For example, is it possible first of all to confirm that all these effects really do occur as a result of long term practice of *Prānāyāma* and when they occur what could be the exact psycho-physiological mechanism through which they appear and to what extent the different component of the *Prānāyāmic* techniques are responsible for these effects, and many such questions could be raised.

The first-ever attempt in this direction to study the effect of *Prānāyāma* in a scientific way was made by Swami Kuvalaynanda, the founder of the Kaivalyadhama Yoga Institute, in 1924. Since then a lot of work has been carried out at Kaivalyadhama, as well as by many research groups all over the world. The author of this book had an opportunity to work in this field

during his doctoral, research work. In this part a brief resume of various results obtained through these scientific investigations and the possible conclusions, have been presented without going into technical description of the scientific experiments. The more interested students are advised to go through the original articles which have appeared in different scientific journals, including the *Yoga-Mimāmsā* - a journal brought out by Swami Kuvalayananda from the 1924 onwards. The references to these articles are given at the end of the book and indicated by the number, in the main text.

### **The Resume of the Scientific Observations**

1. Normally when we breathe there is a movement of chest and thoracic diaphragm. These movements are always interdependent. Ordinarily it is not easy to move them independently or separately. But through the practice of *Prānāyāma* by using some specific technique one can learn to do so. This increases the ability of the student to use the muscles of the chest and thoracic diaphragm in an independent way as is necessary in the different phases of *Prānāyāma* (23).

2. In our normal breathing the pressure inside the cavity of the chest and abdomen goes on increasing or decreasing during the process of exhalation and inhalation. In the *Pūraka*, *Kumbhaka* and *Rechaka* of *Prānāyāma*, these pressure changes become more intense, resulting into vigorous massage of the various internal organs. It also enhances the blood circulation inside these organs, which stimulates their functions, and by exciting the nerve endings lying in the pleural lining of the chest and peritoneal lining of the abdominal cavity as well as those inside the various internal organs brings about widespread effects all over the body through various neural reflexes (24).

3. During the practice of *Prānāyāma* one performs *Mūla Bandha*, *Uddiyāna Bandha* and *Jālandhara Bandha*. Through the application of these *Bandhas* two things happen. Firstly, they increase the ability of the student

to maintain *Kumbhaka* for a long time. Secondly, it prevents any adverse effects on the very delicate organs like lungs, heart, liver etc., which would otherwise result from the increased internal pressure during *Kumbhaka* phase (15,16).

4. Due to the breathing action, the air goes on moving continuously in and out of the lungs and this is known as 'ventilation'. The amount of air moving in and out of the lungs in one minute is known as minute ventilation. In *Ujjāyi Prānāyāma*, when the breath is deep but very slow, the number of breaths in one minute being much less, there is a marked reduction in the minute - ventilation. But at the same time as the amount of air taken in, being more and as it remains inside for a long time, the exchange of oxygen and carbon-dioxide inside the lungs is not much affected. Due to this, inspite of the minute ventilation having gone down, the effective alveolar ventilation (i.e. amount of air taking part in actual gas exchange across the alveolar surface of the lung) remains the same and due to this there is no significant change in the level of oxygen and carbon-di-oxide in the blood (7,19,34). On the other hand, in the practice of *Kapālbhāti Kriyā* or the first part of the *Bhastrikā Prānāyāma*, as the breathing is very fast, the number of breaths in one minute is remarkably high and even though each breath is shallower than the normal breath; the minute ventilation as well as the effective alveolar ventilation show marked increase. As a result, the gaseous exchange is affected to some extent in the form of more extraction of carbon-di-oxide from the blood into the alveolar air. The absorption of oxygen in the blood which even in normal breathing is around 92% to 96% of the saturation level, cannot be increased further and therefore does not show any change. Thus carbon-di-oxide washout is the main effect of this fast breathing variety of *Prānāyāma*, but when compared to the same effect as in hyper-ventilation it is still much less and does not lead to any imbalance in the acidity or alkalinity of the blood as represented by the pH. Of course, this carbon-di-oxide washout is sufficient enough to allow the student to remain in *Kumbhaka* phase for a much longer time than in

other varieties of *Prānāyāma*. This is because ordinarily when one holds the breath, the CO<sub>2</sub> level in the blood slowly starts rising up and when it goes beyond certain critical level one has to start a process of breathing-out to remove this CO<sub>2</sub>. But if the CO<sub>2</sub> level is already low as after *Kapālabhāti*, then one can retain the breath much longer till CO<sub>2</sub> level in the blood could reach that critical level (4,5,7,19). It all means that whether in a slow breathing or fast breathing variety of *Prānāyāma*, there is not much alteration in the level of O<sub>2</sub> and CO<sub>2</sub> or the pH, sufficient enough to disturb the body homeostasis.

5. Whatever amount of oxygen is absorbed through the breath, a part of it is required for the breathing activity itself. For the breathing pattern of *Prānāyāma* a little more energy is required as indicated by the oxygen utilization for the breathing activity itself. But this increase is very mild and is of temporary nature and as soon as the *Prānāyāma* practice is terminated it goes down to a level much lower than even the normal breath when the *Prānāyāma* was started. Thus at the end of *Prānāyāma* especially after the practice of *Kapālabhāti* and *Bhastrikā Prānāyāma*, the breathing pattern becomes so gentle that it requires the amount of oxygen less than that required for normal breathing. It means that through the long-term practice of *Prānāyāma* one can train oneself to breath in such a way that even in normal circumstances the breathing pattern would consume less oxygen for itself and thus the major portion of the absorbed oxygen would then be available for the body functions. Thus in other words the whole breathing activity would become more cost-efficient. (3,7,36).

6. At high altitudes as one moves up from the sea level, air pressure goes on becoming less and less, affecting the availability of oxygen making it poorer and poorer. That is why while doing any work at high altitude level, one feels tired more quickly and the circulatory and respiratory systems have to strain, to provide enough oxygen to the body in this oxygen-poor atmosphere. Through the long-term training of *Prānāyāma* at sea level before going to high altitude, one can train oneself in such a way that after

going to high altitude one does not have that much strain on his cardio-respiratory system and one can get acclimatized to the high altitude situation early and more easily (36).

7. While studying the effect of *Prānāyāma*, on the functions of the heart, it has been observed that the blood pressure increases slightly in *Kapālabhāti Kriyā* and in *Bhastrikā Prānāyāma*. These effects are less when one does in the practice of *Prānāyāma* without the application of *Bandhas*, but when they are applied the effects are more pronounced. (6,16,37).

8. Normally functioning of the heart, the general blood circulation and the intensity of the metabolic processes, all are regulated by the Autonomic Nervous System. Through the specific techniques of *Prānāyāma*, especially the one involving *Kumbhaka* for a long time, one is able to gain a voluntary control over many of these visceral functions. One is able to reduce the heart rate or alter the circulation of blood in different regions of the body or can slow down the metabolic process to make the body consume less energy, in a willful way (7,8,18,22,30).

From all these observations, one can easily understand how *Prānāyāma* effects the various functions of the body in an extensive way. But the scientific work presented here suffers from some lacunae. For example many of the investigations carried out had so few subjects, that it is quite hazardous to extrapolate and say that the same would occur in every case. Also in some investigations the technique of *Prānāyāma* used is not properly defined thereby leaving the ambiguity as to what is the exact causative factor for the results observed. Also quite often in the efforts to investigate the effects of any particular component of the *Prānāyāmic* technique say like *Bandha*, the whole dynamics of the complete breathing cycle is not taken into consideration. Moreover, in most of these investigations, *Prānāyāma* is studied merely as some sort of breathing manipulation alone, without much emphasis on its psycho-spiritual component. This may have

made it more easy to study the effects of *Prānāyāma* in a scientifically controlled manner but due to this, practice of *Prānāyāma* as if gets wrenched away from its Yogic context.

With a view to fill up some of these lacunae and to study the total profile of the effect of *Prānāyāma* on the body mind complex the author of this book carried out the extensive investigations in 1976-1980 while working for his doctoral thesis under the guidance Prof. G. S. Chhina, Professor of Physiology, All India Institute of Medical Sciences, New Delhi. The general format and the important observations and conclusions of this study are as follows:

### **Objectives**

The objective of this study was to find out -

1. If there are any changes in the respiratory, cardio-vascular, metabolic and neural functions by doing the specifically defined practices of *Prānāyāma*.
2. Whether the changes are produced as an immediate response to the practice or is it that some of them represent adaptive processes to the repeated alterations produced by *Prānāyāma*.
3. How does the basal profile of the body functions of an individual change due to the *Prānāyāmic* activity.

For this purpose the elaborate study was carried out on 35 subjects in the age group of 21 to 31 years through 142 experimental sessions and more than 400 investigations.

The subjects were classified into 4 groups depending upon their experience in *Prānāyāmic* and other yogic practices including the one group which performed the non-*Prānāyāmic* breathing so that its effects could be compared with the effects of *Prānāyāmic* breathing.

**1. Group A :** There were 10 subjects in this group. They were experts already trained and experienced in various yogic practices including *Prānāyāma*. They were doing *Prānāyāma* daily for minimum of 6 months prior to the investigations and it was a part of their daily yogic regimen which included the practice of *Kriyās*, *Āsanās* and *Meditation* apart from *Prānāyāma*. The observations in this group were useful to know the long-term effects of the whole yogic regimen which incorporates *Prānāyāma* in a major way and also to know whether the immediate effects, after *Prānāyāma* in these experts vary from the immediate effects seen in the newly trained subjects.

**2. Group B :** To know how the immediate effects and the long-term effects go on changing as one advances in the practice of *Prānāyāma*, a group of 5 young and healthy Delhi University students were selected and were given a training in the *Ujjāyi Prānāyāma* and *Kapālabhāti Kriyā*, each of 15 minutes duration over the period of 3 months. The investigations were carried out before the beginning of the training and at the end of 6 weeks and 12 weeks, as they progressed in their training.

**3. Group C :** To know what would be the effect, when the *Prānāyāma* is not done alone but as a part of total Yogic discipline, a group of 10 subjects was trained in the 2 practices of *Prānāyāma* (*Ujjāyi* and *Anuloma-Viloma*) and 8 *Āsanās* (*Bhujangāsana*, *Ardha-Shālābhasana*, *Paschimottānāsana*, *Vakrāsana*, *Chakrāsana*, *Tadāsana*, *Makarāsana* and *Shavāsana*) over the period of 8 weeks and the investigations were carried out periodically to observe the changing profile of the basal level of the different functions.

**4. Group D :** To understand the distinctive features of *Prānāyāma* from the other non-yogic breathing exercises, a group of 10 subjects were investigated for the effects of the non-yogic voluntary breathing exercise in the form of Hyper-ventilation.

## Observations and Conclusions

The results of these investigations indicated that the different practices of *Prānāyāma* viz. *Ujjāyi*, *Bhastrikā* and *Kapālabhāti Kriyā* do show a widespread effect on the various body functions and the changes in the respiratory cardio-vascular, biochemical, metabolic and neural functions are quite consistent with the various claims made in the yogic literature. The changes in the respiratory functions during these practices are of such a nature that they do not lead to any significant disturbance in the body homeostasis and their effect on the level of oxygen and carbon-di-oxide in the blood does not show any significant change, thus confirming that though these practices involve a lot of change in the respiratory parameters like respiration rate, tidal volume, minute ventilation etc. they actually do not have any specific value from the point of view of making more oxygen available to the body (unless the previous values are abnormally low due to some disease state like Bronchial asthma). This observation disproves the belief made popular by many of the modern writers in their book on *Prānāyāma*, that *Prānāyāma* somehow improves the oxygenation of the blood. As would be seen later, and as already been emphasized by Swami Kuvalyananda in his pioneering work on *Prānāyāma*, the real value of *Prānāyāma* is not its oxygen value but its effect on the nervous system.

The observations on the effects of *Prānāyāma* on cardiovascular, biochemical and metabolic functions, show that the magnitude of the response depends on the physical efforts involved in the different techniques of *Prānāyāma*. The intensity of these responses is least in *Ujjāyi Prānāyāma* and highest in *Kapālabhāti Kriyā* with *Bhastrikā Prānāyāma* in between. However, all the practices lead to identical neural response in the form of increased Alpha pattern of the brain waves as seen in EEG. This increase in Alpha waves all over the brain area is called Synchronization and it was always more when subjects reported a subjective feeling of more mental quietude and alert restfulness.

The physical and physiological responses in the form of immediate effects of *Kapālabhāti Kriyā* or *Ujjāyi Prānāyāma* of 15 minutes period, show a gradual adaptive response over the 12 weeks training period. In the beginning the magnitude of these changes were much more but as one developed more and more mastery, these immediate changes became less and less. But the neurophysiological responses to these practices in the form of alterations in the EEG and in the subjective feeling of mental quietude and restful alertness instead of becoming less, became more and more intense. This indicates that the body learns to be more efficient and effective in dealing with any physical or physiological stress as one progresses in *Prānāyāma* and thus makes the inner energy more easily and in more quantity accessible for the inner psycho-spiritual transformation.

When the training period was of 8 weeks and it comprised of 2 *Prānāyāmas* of very light intensity alongwith the practice of 8 *Āsanas*, it did not show any significant alteration of the basal profile of the body functions except the change in the palmar GSR which showed a significant increase indicating that the individual is less tensed and more relaxed. This observation shows that when the training period is short or when the time given for the *Prānāyāma* as it is done alongwith the other practices is not sufficient enough then the changes in the basal profile of the body functions are not very significant. In other words, it means that whether the daily practices involve *Prānāyāma* alone or the *Āsanas* alone or both together they need to be performed for a sufficiently long time and with enough intensity to get their maximum benefits.

When the effects of the non-yogic voluntary breathing in the form of hyperventilation were studied, they showed that the changes in the respiratory and the cardio vascular parameters were much similar to those which occur due to *Kapālabhāti Kriyā*, but the neural responses and the subjective experiences produced by it were much different from that due to the *Kapālabhāti* or for that matter due to any *Prānāyāmic* breathing. This strongly indicates a very pivotal role of Inner Awareness and constant

mental vigilance which is there in the *Prānāyāmic* practices but is absent in the breathing exercise like hyperventilation. So more than the mere technique of breathing manipulation alone it is the process of inner awareness, which seems to be the more important factor in *Prānāyāmic* practice and mainly responsible for the psycho-spiritual effects of *Prānāyāma*.

All these observations confirm the various claims about the effects of *Prānāyāma*, as well as the significance of its various technical components including the part of inner awareness and also the need to practice it for the fairly long time. It also shows that apart from the many beneficial effects on the body, the practice of *Prānāyāma* trains the mind and by reducing its restlessness prepares it for the higher spiritual experiences of Yoga.

## Prayers and *Mantropāsanā*

- ✧ Significance of Praying
- ✧ *Shāntih Pātha*
- ✧ *Mantropāsanā*:
  - *Chittashuddhi* and *Manolaya*
  - *Kriyāyoga*
- ✧ *Om* : The *Pranava Japa*
- ✧ The *Savitru-Gāyatri Mantra*japa
- ✧ The *Tryambaka Mantra*japa
- ✧ The *Ajapājapa* - *Soham Japa*
- ✧ *Om Stavana*
- ✧ Prayer for the Well-being of all



## Prayers and *Mantropāsanā*

Alongwith the meditational practices, Prayers and the chanting of *Mantras*, form a main part of the spiritual discipline of Yoga. During the special courses conducted by the Kaivalyadhama, lot of emphasis is given to this aspect alongwith the regular practice of *Āsanas* and *Prānāyāma*.

There is a vast repertory available for this purpose; and out of this, very many different prayers, *Mantras* and *Stotras* are used at different occasions. We are presenting here few of them which are customarily used during various *Adhyātma Shibirs*, *Prānāyāma Sādhanā Shibirs*, *Yoga Sādhaka Sangha* classes and Special Yoga Courses conducted by Kaivalyadhama.

In *Chāndogya U pan is had* it is said :

‘यदेव विद्यया करोति श्रद्धयोपनिषदा  
तदेव वीर्यवत्तरं भवति’ (I. 1. 10)

- whatever is done with knowledge, faith and attitude of *Upāsanā*; becomes most vigorous and fruitful. It means that when done with proper attitude, it gives best results, and for proper attitude it is essential to have right understanding of whatever one is doing. Keeping in view this fact, we have tried to give here as much information as is necessary regarding each of the prayers, *Mantras* and *Stotras* included in this part. As the main objective of this information is to highlight the spiritual import, we have tried to keep it as simple as possible without any pretension of scholastic interpretations.

To make it easy for the *Sādhakas* who are not able to read Devenagari script, each Sanskrit *Mantra* is given in Romanic script as well. Instead of using the conventional diacritical marks used by the scholars, we have followed a simple colloquial system of transliteration. One should remember that the correct pronunciation of a *Mantra* cannot be learned by merely reading it, but should be learned by listening to it again and again

as chanted by the knowledgeable person. We have also included brief comments on the significance of Prayers and *Mantra Japa*, based on the discourses given by Swami Kuvalayananda and Swami Digambarji to Spiritual *Sādhakas*.

'May the maker of all help us on the spiritual path. May He give us the courage to remain steady in our resolve. May He bestow on us the strength to realise our true nature'.

*'Om. Shāntih. Shāntih. Shāntih,'*

## Significance of Praying

*(From the Discourse on Prayers by Swami Kuvalayananda, Yoga Mimamsa, Vol. VIII, Nos. 3 & 4)*

### The place of prayer in *Sādhanā*

The efficacy of prayer has been universally accepted by all religions and even by the psychologists. It creates the power of faith and helps in achieving the objective. Naturally for the spiritual objective, prayer becomes all the more useful. A prayer offered with proper attitude gives peace of mind and leads the aspirant quickly to the goal of *Samādhi*.

### A collective prayer

A collective prayer has its own advantages as well as disadvantages. If such a prayer is offered with full accord of mind, the total power vastly increases and each one gets an advantage of the total power. On the contrary, if the participants have discordant minds, the power gets thwarted and disturbed. It is therefore, absolutely essential that each one should properly understand the meaning of the prayer and try to establish contact with the Supreme Divine Power while offering the prayer.

### One mind - One prayer

In *Rigveda* (10.191. 3 & 4), we find a great emphasis being laid on having a common accord while praying.

समानो मन्त्रः समितिः समानी  
समानं मनः सह चित्तमेषाम् ।  
समानं मन्त्रमभिमन्त्रये वः  
समानेन वो हविषा जुहोमि ॥

*Samaano Mantrah Samithi Samaani  
Samaanam Manah Saha Chittameshaam  
Samaanam Mantramabbhimantraye Vah  
Samaanena Vo Havishaa Juhomi.*

Common be the prayer, common the assembly,  
Common the mind, so be their thoughts united  
A Common purpose do I lay before you and  
Worship together with your common oblation.

समानी व आकूतिः समाना हृदयानि वः ।  
समानमस्तु वो मनो यथा वः सुसहासति ॥

*Samaani Va Aakootih Samaanaa Hridayaani Vah  
Samaanamastu Vo Mano Yathaa Vah Susahaasati.*

Common be your desires;  
United be your hearts;  
United be your intentions;  
So that you may remain happily united.

## *Shānti Pāth*

### The Peace Invocation

Following are some of the important prayers selected from the *Upanishads*. Herein the *Sādhaka* prays, not for any material gains but for inner peace, which pervades one's being as a result of realisation of true nature of Self. They are, therefore, known as *Shānti Pāth* or the invocation for Peace. Usually they are recited at the beginning of each session of *Prānāyāma Sādhanā Shibir*, *Yoga Sādhaka Sangha* meetings and Special Yoga Courses.

1

ॐ सह नाववतु । सह नौ भुनक्तु । सह वीर्यं  
करवावहै । तेजस्विनावधीतमस्तु । मा विद्विषावहै ।  
ॐ शान्तिः शान्तिः शान्तिः ।

*Om. Saha Naavavatu. Saha Nau Bhunaktu.*

*Saha Veeryam Karavaavahai.*

*Tejaswinaayadheetamastu. Maa Vidvishaavahai.*

*Om. Shāntih. Shāntih. Shāntih.*

*Om* - Brahman; *Saha* - together; *Nau* - to us; *Avatu* - protect; *Saha* - together; *Nau* - to us; *Bhunaktu* - accept or nourish; *Saha* - together; *Veeryam* - efforts with great vigour; *Karavaavahai* - we shall do; *Tejaswi* - bright; *Nau* - to us; *Adheetam* - knowledge gained; *Astu* - let it be; *Maa* - should not be; *Vidvishaavahai* - discord amongst us; *Om* - Brahman; *Shaantih* - peace; *Shaantih* - peace; *Shaantih* - peace.

Om. May God protect us together.

May he accept and nourish us together.

May we work together with great vigour.

Let our learning shine brightly (without ever becoming dull through our absentmindedness).

Let there be no discord amongst us.

Om. Peace. Peace. Peace.

This *Mantra* which occurs in *Katha* and *Shvetāshvatara Upanishad* emphasises the importance of fruitful relationship between the teacher and the students. The feeling of togetherness and the unity of purpose enhances the efficacy of their efforts in the pursuit of spiritual knowledge. The desire for having this relationship free of any discord arises from the deep humility and the unbounded love felt in His presence - the presence of Divine energy within one's own self.

The invocation of peace three times, at the end of *Mantra* refers to the desire of overcoming the misery arising from three sources:

- a. ***Adhidaivika*** - pertaining to higher forces of destiny.
- b. ***Adhibhautika*** - pertaining to the material world surrounding oneself and
- c. ***Adhyātmika*** - pertaining to the internal world, the operative field of the self or the individualised consciousness. Quite often, '*Om Shaantih. Shaantih. Shaantih.*' is recited independently also at the end of the session involving spiritual practices.

## 2

ॐ भद्रं कर्णाभिः शृणुयाम देवाः  
 भद्रं पश्येमाक्षभिर्यजत्राः ।  
 स्थिरैरङ्गैस्तुष्टुवाँसस्तनूभिः  
 व्यशेम देवहितं यदायुः ॥

*Om. Bhadram Karnebhih Shrunuyaama Devaah  
 Bhadram Pashyemaakshabhriya jatraah.  
 Sthirairangaistushuvaamsastanoobhih  
 Vyashema Devehitam Yadaayuh.*

*Om* - Brahman; *Bhadram* - auspicious; *Karnebhih* - through ears; *Shrunuyaama* - let us hear; *Devaah* - O Gods; *Bhadram* -auspicious; *Pashyema* - let us see; *Akshabhiih* - through eyes; *Yajatraah* - we who are engaged in sacrifice or the pursuit of spiritual knowledge; *Sthiraih* - stable;

*Angaih* - limbs; *Tushtuvaamsah* - engaged in praying; *Tanubhih* - through the body; *Vyashema* - enjoy; *Devahitam* - in the service of God; *Yat* - that; *Aayuh* - whole life.

*Om*. O Gods, may we who are engaged in the pursuit of spiritual knowledge, hear only the auspicious with our ears and see only the auspicious with our eyes. Praying with steady limbs and bodies, may we enjoy whatever life is given to us by God, in His service.

This *Mantra* occurs in *Prashna*, *Mundaka* and *Māndukya Upanishads*. It highlights the very creative, constructive, positive attitude of the spiritual *Sādhaka*. All the energies which are responsible for bringing in the information, about the external world through hearing and vision etc., are addressed as the gods. They are requested that they should allow entry only to those things which are auspicious, beautiful and would help in enlightening one's understanding of one's true nature. These energies are nothing but the *Sādhaka's* own discriminative faculty. In other words, the *Sādhaka* realises and owns the responsibility for choosing those things which would help him in the process of spiritual integration and shunning those which would bring disintegration. He also prays for the strong and healthy body which could be engaged in the service of God - in the service of all that is created by God by appreciating it, enjoying it and experiencing it as His creation.

## 3

ॐ असतो मा सद्गमय ।

तमसो मा ज्योतिर्गमय ।

मृत्योर्मामृतं गमय ॥

*Om*. *Asato Maa Sadgamaya*.

*Tamaso Maa Jyotirgamaya*.

*Mrutyormamrutam Gamaya*.

*Om* - Brahman; *Asato* - from that which is unreal or false; *Maa* - to me;

*Sat* - towards that which is Real; *Tamaso* - from the darkness of ignorance; *Maa* - to me; *Jyotih* - light of knowledge; *Gamaya* - lead; *Mrutyoh* - from that which is perishable or suffers from death; *Maa* - to me; *Amrutam* - towards that which is imperishable or eternal existence; *Gamaya* - lead.

*Om*. From the unreal lead me to the Real.

From darkness lead me to Light.

From death lead me to immortality.

This *Mantra* occurs in *Brihadāranyaka Upanishad* (1,3,28). Herein the emphasis is laid on the need of constant vigilance which would keep the spiritual seeker on right path. There could be many concealed traps in his spiritual path which can lead him astray. But with the grace of God, he would surely be able to recognise them and would be able to avoid them. He prays, that God should help him in knowing what is unreal and perishable so that he can choose only that which is Real and imperishable, This knowledge will lead him to the experience of his own Real, Eternal Self. This is the experience of '*Amruta*'.

#### 4

ॐ पूर्णमदः पूर्णमिदं  
 पूर्णात् पूर्णमुदच्यते ।  
 पूर्णस्य पूर्णमादाय  
 पूर्णमेवावशिष्यते ॥

*Om*. *Poornamadah Poornamidam*

*Poornaat Poornamudachyate.*

*Poornasya Poornamaadaaya*

*Poornamevaavashishyate*

*Om* - Brahman; *Poornam* - Infinite; *Adah* - that invisible; *Poornam* - Infinite; *Idam* - this visible; *Poornat* - out of Infinite; *Poornam* -Infinite; *Udachyate* - arises; *Poornasya* - from Infinite; *Poornam* -Infinite; *Eva* - the same; *Avashishyate* - is left over.

*Om.* All that is invisible is verily the Infinite Brahman.  
 All that is visible is also the Infinite Brahman.  
 The whole universe has come out of the Infinite Brahman,  
 and whatever is left is still that Infinite Brahman.

This *Mantra* occurs in *Ishāvāsyā* and *Bṛihadāranyaka Upanishads*. In a very precise language of mathematics, it brings out the fact of Oneness of *Jīva* (an individual), *Jagat* (the world) and the *Īshwara* (God). All these three are the manifestation of the infinite *Brahman* which remains beyond any measure, beyond any definition and beyond any description. The *Sādhaka*, through the unwavering *Sādhanā* reaches the state, wherein he experiences the Oneness of the whole creation. He realises the ground reality of Oneness behind all the apparent multiplicity and diversity present in the external as well as the internal world; and also realises the true nature of his own self as the same all pervading Infinite *Brahman*.

ॐ शान्ति : शान्ति : शान्ति : ।

*Om Shāntih Shāntih Shāntih.*

## ***Mantropāsana***

### ***Chittashuddhi and Manolaya***

One of the aims of the Yogic discipline is to develop the internal awareness at every level of our existence. All the activities at the level of *Indriya* (the body), *Prāna* (the internal functions) and *Manas* (the mind) can then be brought under control with the help of this internal awareness. As one becomes more and more adept in the Yogic discipline, this ability could be seen to progress through following stages.

**1. Stage of *Shuddhi* or purification** - The first effect is that of purification. All the elements which bring the distraction or disturbance in the functioning of *Indriya*, *Prāna* and *Manas* are recognised for what they are; and efforts are made to eliminate them. This requires constant vigilance. The aim is to see that each of the function reaches its full potential.

**2. Stage of *Sthairya* or stability** - The further progress in Yogic discipline brings in the perfection in each of the activity and develops an ability to maintain this activity undisturbed and unaffected even in the presence of most difficult situations.

**3. Stage of *Jaya* or mastery** - As all the activities at each level get stabilised and can function in an integrated and harmonious way, one is able to direct them towards the single goal of Self-realization. All the functions are brought under the full command and all the energies involved in its operation are channelised in one direction.

**4. Stage of *Laya* or perfect silence** - As through the perfectly clear and transparent glass one can see without any obstruction or distortion; one can realize the true nature of self when all the functions become absolutely pure, without any impurities that bring the disharmony. This stage of perfect purity, perfect silence is the stage of *Laya*.

As the *Indriya*, *Prāna* and *Manas* are inter-linked and together form a whole; the process of purification at any of these three levels cannot be carried out separately. They have to be gone through together and simultaneously. *Ashtānga Yoga* as described by Patanjali in his *Yoga Sūtra*, does advocate the same approach.

The regulated life pattern based on the guidelines of *Yama* and *Niyama*, complemented by the practice of *Āsanas* lead to the *Ghatashuddhi* affecting all the physical activities.

The practice of *Prānāyāma*, on the other hand affect all the internal physiological activities, leading to *Nādishuddhi*.

The meditational practice of *Dhāranā*, *Dhyāna* and *Samādhi*, preceded by *Pratyāhāra* affect the mental activities, reducing all the mental disturbances, ultimately bringing the perfect inner silence known as *Manolaya*.

## ***Kriyāyoga***

To enhance the purification process, it is necessary to reinforce the *Ashtānga Yoga* with *Kriyā Yoga*. It acts as a propelling force for the vehicle of *Ashtānga Yoga*, taking the *Yoga Sādhaka* through the stages of *Shuddhi* upto *Laya*, in a steady, smooth and sure way. That is why, Patanjali has described *Kriyā Yoga* before describing the *Ashtānga Yoga* in the second chapter of *Yoga Sūtras*.

As described by Patanjali, *Kriyā Yoga* is an action-oriented aspect of Yogic discipline and gives a broad framework within which the *Ashtānga Yoga* is to be followed for achieving Self-realization. *Tapas*, *Swādhyaya* and *Īshwara Pranidhāna* together form the *Kriyā Yoga*.

### **a. *Tapas***

*Tapas* denotes the vigour and intensity of the efforts through which all the energies are channelized in the undertaking of spiritual discipline. It can be in the form of austerities, fasting, *Mauna* (complete silence) etc.; which minimizes the usual wastage of energy taking place in unnecessary activities. It allows the inner awareness necessary for spiritual development to remain undiminished and undisturbed; ultimately ending up in an unbroken stream of inner awareness known as '*Akhanda Anusandhāna*.'

In Yogic tradition *Prānāyāma* is described as the greatest *Tapas*: *Prānāyāmah Paramtapah*. It leads to inner cleansing and helps in increasing the ability to remain undistracted in a meditative state for a long-time. *Prānāyāma*, therefore, has been traditionally accepted as the very important part of the *Kriyā Yoga*.

### **b. *Swādhyāya***

In Yoga tradition *Swādhyāya* is considered as the another important practice, in the direction of knowing 'Who am I'. With the help of the scriptures, one tries to understand deeply within oneself, all that is described in those Truth revealing scriptures.

*Swādhyāya* has got three stages : *Pathanam* (recitation or reading), *Adhyayanam* (deep study) and *Chintanam* (constant reflection). In the beginning, recitation is the prominent factor. The chaste pronunciation, of the various *Mantras*, is considered as the indispensable factor. After one learns this, he has to devote himself for the deep study of what has been recited. It gives him a knowledge about the *Mantra*, its meaning and its relevance etc. It makes him learned but does not give him wisdom. It can come only through constant reflection and struggle for translating the precept into practice. It clears the hidden meaning behind the each *Mantra*. This is known as *Chintanam*.

*Swādhyāya* becomes more effective and powerful when it is done with an attitude of '*Anusthāna*'. It is an attitude of firm resolve backed up by thorough discipline. Most often it is done for a specific period of time, from three days, extending to seven days, fifteen days, one month or even one year. At the beginning of the *Anusthāna*, *Sādhaka* has to announce his commitment for undertaking specific spiritual activity in sincere, diligent and earnest way. This is known as *Sankalpa*. It is obvious that for this purpose one has to have free time, suitable place and the congenial environment so that he can carry out the task in hand, without any distraction. His whole attention, enthusiasm and energy should revolve around the *Sāadhanā* alone. During this period he should be vigilant, to follow a regulated daily life. He should get up from the bed before Sunrise. He must consume only *Sāttvik* food, preferably only once at noon. The evening meal is either skipped or some light liquid is taken. He should try to maintain *Mouna* (complete silence) refraining from any type of communication with any one.

There are varieties of practices which are undertaken in the form of *Anusthāna*. Use of *Mantra* is one of it. In the tradition of Yoga, chanting of *Mantra* known as *Mantra Japa* is given a lot of importance; so much so that one of the schools of Yoga uses it as a sole spiritual practice and is known as *Mantra Yoga*. For daily practice, the use of *Savitru-Gāyatri Mantra*,

*Tryambaka Mantra* and *Pranava* as well as *Ajapā Japa* are considered as the most helpful ones for spiritual development. We have included them in the present work.

### c. *Ishwarapranidhana*

It is an action in the form of *Archanā* or worship, undertaken to strengthen the humility and to increase in the inner awareness of presence of divine spirit within oneself. One's True nature is the nature of *Ishwara* - the SELF which is pure, blissful consciousness, untinted by any *Kleshas*. Whether one uses the concept of *Paramatman* having a form or no form, one has to use some symbol to denote it. It may be a *Mūrti* (statue or figure), a *Jyoti* (sacrificial fire) or some *Yantra* (design pattern). By constant association with this symbol, through the action in the form of *Pujan*, through the speech in the form of *Japa* and through reflection in the form of *Akhanda Anusandhāna*; one realizes the oneness with that which is represented by the symbol.

Thus for the spiritual seeker, it is necessary to perform some stipulated action as an obligatory discipline, everyday.

This action is called *Prayoga*, but as it is done with an attitude of *Upāsana* it becomes *Samprayoga*, ultimately giving the blissful experience known as *Samprāsada*. Thus the *Kriyā Yoga* combines the powerful trial of '*Karma-Upāsana-Jnāna*' i.e. 'Action-worshipful attitude-self-realization', as advocated all throughout the *Vedic* tradition and which forms the basis of most of the spiritual disciplines in India.

From the practical point of view, for the *Yoga Sādhaka*, *Kriyā Yoga* means the daily practice of *Prānāyāma*; chanting of *Gāyatri*, *Tryambaka* and *Pranava*; and some *Archanā* in the form of some simple act of worship. It forms a strong base for the spiritual development.

*(The part dealing with Kriyā Yoga is based on the various discourses given on this topic, by Swami Digambarji, published in Chidambaram and SKY - periodicals.*

## ***Om: Pranava Japa***

In his Yoga Sutras, Patanjali says that *Pranava* i.e. 'OM' is the symbol or the verbal expression of the *īshwara* - the unconditioned blissful consciousness. Chanting of Om with the constant awareness of what it represents, leads to the realization by the *Sādhaka* that his individual self is the same as that pure blissful consciousness. This chanting also helps in overcoming all the obstacles on the path of self-realization, which arise because of waywardness of mind.

The *Pranava Japa* or the chanting of Om can be done either loudly or in a soft whispering way, or by verbalising it in the mind. In Sanskrit it is known as *Vaikhari*, *Upānshu* and *Mānasa Japa* respectively. In the initial period it is better to chant it loudly, so that one learns the proper pronunciation of it. After getting used to it for sufficient time, one should start the *Upānshu Japa* in low, soft whispering way. Ultimately one should learn to chant it in the mind. As it requires the *Akhanda Anusandhāna* (constant inner awareness), success in it is considered as great achievement. Quite often, during *Mānasa Japa*, there is a likelihood of falling asleep, if the power of inner concentration has not been developed sufficiently. Therefore, it is better for the beginners to have loud recitation whenever the inner concentration wavers.

The syllable OM is formed of three letters : 'A', 'U' and 'M'. 'A' and 'U' together, when pronounced, become 'O'. While chanting Om, from the spiritual point of view, one should pronounce 'O' for a short period, say for three seconds, followed by 'M' prolonged as long as possible. At the beginning, one should take a deep breath and then should start exhaling with the pronunciation of 'O', slowly tapering it into 'M...' and continuing it as long as the breath lasts. In this process the abdominal wall starts gradually going inward, to expel the maximum amount of air from the chest. At the end of 'OM', one would notice that the abdominal wall has gone in completely and is in fully contracted state. This contracted abdomen

should be relaxed when the breathing out process is over. This relaxing of the abdomen is usually accompanied by a little inhalation. But thereafter, one should remain without any further breath, till the desire for taking the next breath arises. This stage of remaining without breathing should not be a forced one but should be in the form of observing the inner activities including that of breathing allowing it to function without our conscious interference.

It is advantageous to chant Om with each consecutive breath. But, in the initial period, one should be alert to avoid any feeling of fatigue and shortness in the breath, which may come with over enthusiasm. For this purpose, it is better to take few normal breaths between the chanting of two Om, at least in the initial period. After one has developed sufficient practice of chanting Om for a comfortable long time and is able to remain without breathing in immediately for at least few seconds, one should start chanting Om with each consecutive breath.

Customarily Om is chanted for 10 or 21 times and for counting it without creating much distraction in the process of chanting, one can use the fingers of right hand in a traditional way as follows: Let the right hand rest on the knee with the fingers curled and the thumb free to touch any of the fingers as necessary. Begin with the middle part of the ring finger counting it as one, then its lower part as two, then lower part of little finger as three, middle part as four and tip as the five, then tip of the ring finger as six, tip of the middle finger as seven, tip of the index finger as eight, its middle part as nine and lower part as ten. Thus when one begins with the middle part of the ring finger and moving clockwise ends up at the lower part of the index finger, one knows that he has completed ten counts. If one wants to count 21, one proceeds counting eleven with the lower part of the middle finger, twelve with the middle part of the same finger and then reversing the direction count thirteen with the lower part of the middle finger, fifteen with the lower part of the index finger and all the way back upto lower part of the little finger, where the count twenty-one gets over. The use of the fingers for counting in this way is known as *Karamāla*.

By chanting Om in this way, the mind gradually becomes tranquil and all restlessness alongwith the tension and worries disappear. Sometimes one feels so peaceful that even the desire to continue the Japa further, just disappears. When it happens, one should not hesitate to stop chanting and immerse oneself in the inner blissful silence. The important thing is that one should do everything lovingly and in a relaxed manner, allowing the inner feeling of silence to emerge gradually without forcing the mind to concentrate too much. When the mind gets filled with tranquillity, the individual self emerges out of it and transcending the limitations imposed by the time and space, realizes the oneness with the unconditioned blissful consciousness - the Self.

## The *Savitru-Gāyatri Mantra Japa*

ॐ भूर्भुवः स्वः ।

ॐ तत् सवितुर्वरेण्यं । भर्गो देवस्य धीमहि ।

धियो यो नः प्रचोदयात् ।

ॐ आपो ज्योती रसोऽमृतं । ब्रह्म भूर्भुवः स्वरोऽम् ।

असावादित्यो ब्रह्म ।

*Om Bhoor Bhuvah Swah.*

*Om Tat Savitur Varenyam.*

*Bhargo Devasya Dheemahi.*

*Dhiyo Yo Nah Prachodyaat.*

*Om Aapojyoti Raso'mrutam.*

*Brahmabhurbhuvah Swaro'm.*

*Asaavaadityo Brahma.*

*Om* - Brahman; *Bhoor* - outer world; *Bhuvah* - inner world; *Swaha* - innermost world; *Tat* - that; *Savituh* - the generator, creator; *Varenyam* - adorable; *Bhargah* - bright light that burns off ignorance; *Devasya* - of divine; *Dheemahi* - we meditate; *Dhiyah* - understandings; *Yah* - who, *Nah* - ours; *Prachodayaat* - should enlighten; *Aap* - water; *Jyoti* - energy; *Rasa* - essence; *Amrutam* - eternal; *Brahma* - Brahman; *Bhooh* - outer world; *Bhuvah* - inner world; *Swah* - outer world; *Bhuvah* - inner world; *Swah* - innermost world; *Om* - Brahman; *Asou* - is verily; *Aaditya* - the first one, the Sun; *Brahma* - Brahman.

Om, the Infinite *Brahman* which pervades the outer, inner and innermost world.

Om. We meditate upon the bright luster of Lord *Savitā* (represented by the orb of the Sun). May He enlighten our Understandings.

Om. He is the eternal presence behind the manifested world formed of energy and matter. He is the *Brahman*, pervading all the spheres of *Bhuh-Bhuvah-Swah*. The Sun, is verily the Brahman.

The *Savitru Mantra* is one of the most important Mantras found in the *Vedic* tradition. It occurs in all the *Vedas* except *Atharvaveda* and we find a lot of discussion taking place around this *Mantra* in many of the *Upanishads*, especially the *Brihadāranyaka* and *Chāndogya Upanishads*. At one place it is described that as a honey in the flower and Ghee in the milk, this *Mantra* is the essence of all the *Vedas*. As it is composed in the specific form of poetic construction or meter known as *Gāyatri Chanda*, it is more popularly known as *Gāyatri Mantra*. The first part of the *Mantra* : *Om Bhur Bhuvah Swah*, is known as *Vyāhrties*. In Sanskrit, *Auyāhru* means that which is beyond expression and *Vyāhru* means that which could be expressed through words. The One which is beyond expression, beyond description, is also known as *Brahman*. Its first expression is in the form of 'OM' - the first word, out of which the whole creation came into existence. The words *Bhoor-Bhuvah-Swah* express this and therefore, they are known as '*Vyāhrtis*'. *Bhooh* indicates the external sphere or the '*Bahyākāshā*', the outer world full of material things and beings, which could be perceived through senses. *Bhuvah* indicates the internal sphere or the '*Antarākāsha*' the world which arises mainly out of mental conception. The *Swah* indicates the innermost state of one's being, the '*Hrudayākāsha*' or '*Chidākāsha*'; which is beyond the realm of perception conception and which could only be experienced or realized. The idea behind reciting the *Vyāhrtis* is to remind oneself that the one supreme Lord - the only Reality pervades everywhere.

The second part of the *Mantra* forms the main body of *Mantra*. It is addressed to Lord *Savita*. He is represented by the Sun. The Sun is the starting point of the creation, the first manifestation of the unmanifested *Brahman*. Therefore, He is also known as *Āditya*, the first one. For us he is the *Brahman*, as our intellect cannot reach beyond him. He is *Varenyam*, the most adorable, worth all our adoration. By nature he is *Bhargah* with the bright luster and brilliant glow which burns off all the impurities arising out of ignorance. By meditating on this lustrous, bright, divine symbol of

*Brahman*, one prays for enlightenment. This enlightenment brings the clear perception of the world, subtle discriminative power of the intellect and experience of the blissful unconditioned Consciousness within.

The last part of the *Mantra* is known as '*Shiras*'. It concludes the feeling evoked by the *Mantra*, saying that whole of the creation, whether experienced in the outer, inner or the innermost sphere is permeated by the same Reality and for us the Sun is the ultimate representation of it.

During the daily changing of *Gāyatri Mantra*, one recites the *Vyāhrutis* only once at the beginning; followed by the repetition of main body of the *Mantra* as many times as one wants and then concluding the *Japa* with the recitation of the *Shiras*.

There are some who follow the injunctions given in the *Mantra Shāstra* very strictly, as to where and when it should be chanted, who should or should not chant it and what other procedures should be followed alongwith the chanting. But this is not universal. There are many others who believe that for the spiritual purpose, which is aimed at transcending all the barriers created by the mind, these restrictions are not relevant. Any one with pure intention and dedication can chant this *Mantra*, irrespective of sex, caste or creed and get its spiritual benefits.

## **The *Tryambaka Mantra Japa***

ॐ ऋचंबकं यजामहे सुगंधिं पुष्टिवर्धनम् ।

उर्वारूकमिव बंधनान्मृत्योर्मुक्षीय मा मृतात् ॥

*Om Tryambakam Yajamahe Sugandhim Pushtivardhanam*

*Urvaarukamiva Bandhanaanmrutyormukshiya Maamrutat.*

*Om* - Brahman; *Tryambakam* - Lord of the three worlds; *Yajamahe* - we worship; *Sugandhim* - fragrance; *Pushtivardhanam* - sustains and nourishes; *Urvaarukam* -cucumber; *Iva* - like; *Bandhanaat* - from bondage; *Mrutyoh* - of the fear of death; *Mukshiya* - liberate, detach; *Maa* - not; *Amrutat* - from immortality.

Om. We worship the Lord of all the three worlds, who is permeated everywhere like a fragrance and gives the sustenance to it.

May He detach us from the bondage of death just as the ripe cucumber gets detached from its stem, but may He not keep us away from immortality.

This *Mantra*, which occurs in *Rigveda* (VII, 59,12) is second in importance after the *Gāyatri Mantra*. It is addressed to the Lord *Tryambaka* the Lord of three worlds, the same as expressed in the *Gāyatri Mantra* by three *Vyāhritis* - the outer, the inner and the innermost world. He is the ground reality behind everything.

The *Sādhaka* prays for His help, so that the bondage of ignorance and the fear of death arising out of it disappears; and he realizes his true nature which is the same as the eternal blissful unconditioned Consciousness.

This *Mantra* is also known as *Mahā Mrutyunjaya Mantra* as it helps the *Sādhaka* in overcoming the fear of death and leads him to the state which is beyond the birth and death.

Customarily this *Mantra* is chanted either alternately after the *Gāyatri Mantra* or after completion of the full chanting of *Gāyatri Mantra*.

## ***The Ajapa Japa - So'ham Japa***

This is the Japa of *So'ham Mantra* linked with the awareness of the breath. 'So' i.e. '*SAH*' stands for He, the all pervading Brahman and '*HAM*' i.e. '*AHAM*' stands for 'I am'. It is essentially a *Mānasa Japa* and though in the initial period one has to 'to' it; later on it gets repeated without any conscious habit but rather with constant, total awareness of being 'That I am', without any need of some special efforts for doing it. That is why, it is called *Ajapā Japa*, the one which takes place on its own without any conscious efforts of chanting it.

In the initial stage, one has to become aware of his normal breathing, during both the phases of inhalation and exhalation. Thereafter, slowly the

*Sādhaka* associates in his mind the pronunciation of the word 'SO' with inhalation and 'HAM' with exhalation. One has to feel it being chanted in his mind constantly with each breath.

When the chanting begins with inhalation, the Mantra becomes *So'ham* and when one begins with exhalation it becomes '*Humsa*'. One may choose any one of this. In some tradition chanting of this *Mantra* is associated with the concentration on different centres along the spine known as *Chakras* and with the help of this one tries to awaken the power of *Kundalini*. But without taking the recourse to this aspect one can still gain a great spiritual benefit from this *Japa*.

The constant repetitions of the *Sohum* in the mind, linked with the breath, helps in increasing the mental concentration and heightened perception of internal sensations. Using this increased awareness of internal field one can slowly enter the higher stages of meditation and ultimately to the awareness of the self as the blissful, unconditioned Consciousness. This *Ajapā Japa* is so important as a spiritual practice, that some *Sādhakas* use it as a complete *Sāadhanā* by itself.

## **Ātmashatak**

This beautiful and melodious Stotra is composed by the Adi Shankaracharya. In it he described the process of self-realization, wherein one makes an attempt to know who really he is and what he is not. Usually what one identifies oneself to be, is only the attributes or the outer coverings. One by one, when the *Sādhaka* overcomes the exclusive identity of oneself with these things, he reaches the inner essence of the SELF which is eternal, unchanging, unconditioned consciousness, the same as the blissful, all-pervading, all-inclusive existence. This is described as the *Sat* (existence). *Chit* (Consciousness) and *Ānanda* (Bliss). This Stotra is called *Ātmashatak* as it describes what the *Atman* (self) is in six stanzas. Sometimes it is also called as *Nirvanashatak* as it describes the state of *Nirvāna* - the state of liberation from the identity of all that is non-self and realization of true self.

1

मनोबुद्ध्यहंकाराचित्तानि नाहं  
 न च श्रोत्रजिह्वे न च घ्राणनेत्रे ।  
 न च व्योमभूमिर्न तेजो न वायुः  
 चिदानंदरूपः शिवोऽहम् शिवोऽहम् ॥

*Manobudhyahamkaarchittaani Naaham  
 Na Cha Shrotrajihve Na Cha Ghraananetre  
 Na Cha Vyomabhoomirna Tejo Na Vaayuh  
 Chidaanandaroopah Shivo 'ham Shivo' ham.*

I am not the mind, intelligence, ego or the individualised conditioned consciousness. Nor am I the sense organs of hearing, tasting, smelling or seeing. Nor am I the (body formed of) five great elements viz. earth, water, fire, air and space. I am the auspicious, blissful, unconditioned consciousness.

2

न च प्राणसंज्ञो न वै पंचवायुः  
 न वा सप्तधातुर्न वा पंचकोशः ।  
 न वाक् पाणिपादौ न चोपस्थपायू  
 चिदानंदरूपः शिवो ऽहम् शिवो ऽहम् ॥

*Na cha Praanasanjno Na Vai Panchavaayuh  
 Na Vaa Saptadhaaturna Vaa Panchakoshah.  
 Na Vaak Paanipaadou Na Chopasthapaayoo  
 Chidaanandaroopah Shivo'ham Shivo'ham.*

I am not the *Prāna* or its five divisions (known as *Prāna*, *Apāna*, *Vyāna*, *Samāna* and *Udāna*). Nor am I the seven basic tissue elements (known as *Rasa*, *Rakta*, *Māmsa*, *Meda*, *Asthi*, *Majjā* and *Shukra* which form the physical body) nor the five *Koshas* (known as *Annamaya*, *Pranamaya*, *Manomaya*, *Vijnānamaya* and *Ānandamaya Kosha* which enwrap the

*Ātman*). Nor am I the five organs of action namely the hands, legs, mouth, anus and penis (which carry out the action of working, walking, speaking, excretion and procreation). I am the auspicious, blissful, unconditioned consciousness.

## 3

न मे द्वेषरागौ न मे लोभमोहौ  
 मदो नैव मे नैव मात्सर्यभावः ।  
 न धर्मो न चार्थो न कामो न मोक्षः  
 चिदानंदरूपः शिवो ऽहम् शिवो ऽहम् ॥

*Na Me Dvesharaagou Na Me Lobhamohou  
 Mado Naiva Me Naiva Maatsaryabhaavah.  
 Na Dharmo Na Chartho Na Maamo Na Mokshah  
 Chidaanandaroopah Shivo'ham Shivo'ham.*

I do not have the abhorrence of anything, nor the obsession, nor the greed, nor the delusion, nor the arrogance, nor the jealousy. Nor is the need for me to pursue any more, any of the *Purushārthas* (object of human life) namely the *Dharma*, (righteous behaviour), *Artha* (material prosperity), *Kāma* (sensual enjoyment) and *Moksha* (liberation); as I have now realized that I am nothing but the auspicious, blissful, unconditioned consciousness.

## 4

न पुण्यं न पापं न सौख्यं न दुःखं  
 न मंत्रो न तीर्थं न वेदा न यज्ञाः ।  
 अहं भोजनं नैव भोज्यं न भोक्ता  
 चिदानंदरूपः शिवो ऽहम् शिवो ऽहम् ॥

*Na Punyam Na Paapam Na Soukhyam Na Dukham  
 Na Mantra Na Teertham Na Vedaa Na Yajnaah.  
 Aham Bhojanam Naiva Bhojyam Na Bhoktaa  
 Chidaanandaroopah Shivo'ham Shivo'ham.*

I am not affected by the merit and sin, nor the pleasure and pain. Nor is the need for me of *Mantra*, pilgrimage, scriptures and sacrifice. Nor am I the enjoyment, the thing enjoyed or the enjoyer. I have transcended all these things as I have realized that I am the auspicious, blissful, unconditional consciousness.

5

न मे मृत्युशंका न मे जातिभेदः  
 पिता नैव मे नैव माता न जन्मः ।  
 न बन्धुर्न मित्रं गुरुर्नैव शिष्यः  
 चिदानंदरूपः शिवो ऽहम् शिवो ऽहम् ॥

*Na Me Mrutyushankaa Na Me Jaatibhedah  
 Pitaa Naiva Me Naiva Maataa Na Janmah.  
 Na Bandhurna Mitram Gururnaiva Shishyah  
 Chidaanandaroopah Shiv'ham Shivo'ham.*

I am not concerned by the fear of death nor by the differences arising out of caste distinctions. I have no father or mother as I am that which has no birth and no death. Nor do I have any brothers, friends, Guru or *Shishya*. I am the auspicious, blissful, unconditioned consciousness.

6

अहं निर्विकल्पो निराकार रूपो  
 विभुर्व्याप्य सर्वत्र सर्वेन्द्रियाणाम् ।  
 सदा मे समत्वं न मुक्तिर्न बन्धः  
 चिदानंदरूपः शिवो ऽहम् शिवो ऽहम् ॥

*Aham Nirvikalpo Niraakaara Rupo  
 Vibhurvyapya Sarvatra Sarvendriyaanaam.  
 Sadaa Me Samatvam na Muktirna Bandhah  
 Chidaanandaroopah Shivo'ham Shivo'ham.*

I am beyond distinction and form. I am everywhere, in everything, in all that could be perceived and also in that apparatus which perceives. I am, all that is unchanging and unaffected by the time. I am the blissful, auspicious, unconditioned consciousness.

## ***Om Stavana***

This Hindi composition in a very simple and moving language describes the spiritual journey of a *Sādhaka* with the help of *Pranava Japa*. *Sādhaka* is invited to take a plunge into the holy Ganga, which is flowing within himself in the form of spiritual force. It flows along the path of *Sushumnā*, from the *Mūladhara Chakra* at the base of the spine to the *Sahasrāra Chakra* at the crown of the head. He is assured that with the help of *Pranava*, he can reach the highest point where the identification with the body disappears and one experiences the indescribable bliss emerging out of realization of one's true nature - the nature of all - pervading, eternal, unconditioned consciousness.

This *Om Stavana* should be chanted in a low tone, in a unhurried way. The chanting of Om at the end of each line should be enjoyed leisurely and one should not rush to the recitation of the next line. At the end of the *Stavana*, first two lines are repeated in a more softer tone.

1

भृकुटि महल चढ देख पियारे, जागे ज्योति अपारा ॐ  
सो ऽहम् सो ऽहम् जपते जपते, पहुँचे दशंमे द्वारा ॐ

*Bhrukuti Mahala Chadha Dekha Piyaare*

*Jaage Jyoti Apaaraa Om.*

*So'ham So'ham Japate Japate*

*Pahunche Dashame Dwaaraa Om.*

O dear One, when you rise above the *Bhrukuti Mahala* i.e. the *Ājnā Chakra*. You would see the inner light of Infinite wisdom. Through the

constant chanting of 'That-I-am', 'That-I-am'; you would reach the entrance of the tenth opening. (The rest nine open towards outside or *Bāhyākāsha*, while the tenth one known as *Brahmarandhra* is a spiritual opening which opens inwards towards the *Chidākāsha*).

2

मेरुदण्डमे बंकनाल है, उलटी गंग कहावे ॐ  
उसी गंगमे सुनलो प्यारे, जो कोई घुसकर न्हावे ॐ

*Merudandame Bankanaala hai*

*Ulati Ganga Kahaave Om.*

*Usee Gangame Sunalo Pyaare*

*Jo Koi Ghusakara Nhaave Om.*

The stream of spiritual consciousness flows in a reverse way from the bottom to the top, through the serpentine spinal cord, situated within the backbone. O dear one, you should plunge yourself into this stream to ascend to higher consciousness.

3

प्रणवयानसे उंचा चढकर, सुखमनिगढमे जावे ॐ.  
तनका भान भुलाके वहासे, सो ऽहम् सो ऽहम् गावे ॐ.

*Pranavyaanase Unchaa Chadhakara*

*Sukhamanigadhame Jaave Om.*

*Tanakaa Bhaana Bhulaake Vahaase*

*So'ham So'ham Gaave Om.*

Using the vehicle of *Pranava Japa*, You should ascend higher and higher reaching the top of *Skushumnā Patha*. There, overcoming the identity of the self with the body, you would find yourself singing with joy, 'That-I-am', 'That-I-am'.

4

वहाँसे उँचा बेहद उँचा, ब्रह्मशिखरपै जावे ॐ.  
 ॐ, ध्वनीसे चढते चढते, निश्चल घुमरी आवे ॐ.

*Vahaanse Unchaa Behada Unchaa*  
*Brahmashikharapai Jaave Om.*  
*Om Dhwanise Chadhate Chadhate*  
*Nischala Ghumari Aave Om.*

Even higher than that, to the highest peak of experience of *Brahman* within, reaching there with the sound of Om, you should enjoy the bliss of creative dynamism of all-pervading consciousness.

5

अपने आप आप अपनेमे, निर्विकल्प निरवाणी ॐ.  
 शिवानंद गुरु केवल चेतन, निजानंद आनंदी ॐ.

*Apane Aap Aap Apaneme*  
*Nirvikalpa Niravaani Om.*  
*Shivaanandaguru Kevala Chetana*  
*Nijaananda Aanandi Om.*

You would find yourself, spontaneously, in a state of indescribable joy, with an experience of blissful pure consciousness. I pay my obeisance to Guru Shivananda, who has guided me to this experience.

## Prayer for the Well-being of all

At the end of spiritual session, our heart is filled with the deep abiding peace, love and compassion; and out of this, emerges the strong desire to share this feeling with all the beings around us. With a deep conviction of oneness of all; this desire, like the spreading rays of the Sun, reaches out to all the beings around us. While reciting the following *Mantra*, one should have this feeling in his heart.

सर्वेतु सुखिनः सन्तु  
 सर्वे सन्तु निरामयाः ।  
 सर्वे भद्राणि पश्यन्तु  
 मा कश्चित् दुःख भाग् भवेत् ॥

*Sarve Tu Sukhinah Santu*  
*Sarve Santu Niraamayaah*  
*Sarve Bhadraani Pashyantu*  
*Maa Kashchit Duhkhabhag Bhavet.*

*Sarve tu* - all; *Sukhinah* - happy; *Santu* - be; *Sarve* - all; *Santu* - be; *Niraamayah* - healthy; *Sarve* - all, *Bhadraani* - auspicious; *Pashy-antu* - let them see; *Maa Kascit* - no one; *Duhkhabhag* - subject to misery; *Bhavet* - become.

May all be happy here  
 May all be free from diseases.  
 May all realize what is auspicious  
 May none become subject to misery.

ॐ शान्ति : शान्ति : शान्ति : ।

*Om Shāntih. Shāntih. Shāntih.*



## References



## References

1. Anand, B. K. and Chinna, G. S. : Investigations of Yogis claiming to stop their heart beat. Ind. J. Med. Res. 49, 90-94, 1961.
2. Arthur, Avion : Shat Chakra Nirupana Eng. Tran - The Serpent Power, 1918.
3. Basu, S. C. : Patanjali's Yoga Sutra, with original Sanskrit text, Ed. by Ram Prasad. Tran. Eng. Panini office, Bhuvaneshwari Ashram, Allahabad, 1924.
4. Bhole, M. V. : Study of the effect of Yogic practices on human physiology, Thesis submitted for M.Sc. (Physiology), A.I.I.M.S. New Delhi, 1961.
5. Bhole, M. V. : Breath Holding Time and Different Conditions of the Abdominal Wall, Yoga Mimamsa, XVIII. Nos. 3&4, 27-39, 1977.
6. Bhole, M. V. : Some Studies on Jalandhar Bandha during breath holding in beginners (a preliminary communication), Yoga Mimamsa. XIX, 4,27-35, 1979.
7. Byramjee, D. : YOGA ET PRANAYAMA (TECHNIQUES DE RESPIRATION) Reflexions a partir de notions theoriques pratiques et experimentales. Thesis submitted for Docteur En Medicine to University of Grenoble, France, 1975.
8. Chinna, G. S., Sachdeva, U., Manchanda, S. C., Khanna, N. K. and Singh, B. : Voluntary Induction of Hypometabolic state in the subjects practising Yoga. Proc. Int. U. Physical. Sci. XXVIII, Congr. Budapest, Vol. XIV. 1980 p.82, 370, Budapest H-1445, Hungary.
9. Digambarji Swami and Kokje, R. : Hathapradipika of Swatmaram Edited with original Sanskrit text and English translation Kaivalyadhama, S.M.Y.M. Samiti, Lonavala, Pune, (India) 410403 1970.

10. Digambarji Swami and Gharote, M. L. : Gheranda Samhita, Edited with original Sanskrit text and English translation Kaivalyadhama, S.M.Y.M. Samiti, Lonavala, Pune, (India) 410403.
11. Dikshit, Y. G. : Sartha Sushruta Samhita, edited with original Sanskrit Text, Translated in Marathi, Bookseller, Budhwar Peth, Pune, 1934.
12. Ewing, A. H. C. : The Hindu Conception of the Function of Breath, J.Am. Oriental Soc., XXII:249-308 1901.
13. Garde, G. K. : Sartha Vagbhata, Edited with original Sanskrit text with translation in Marathi, Aryabhushan Mudranalaya, Pune 4, 1956.
14. Gharote, M. L. and Bedekar, V. A. : Brihadयोगीयज्जनायक्या स्मृति Edited with original Sanskrit Text and English Translation, Kaivalyadhama, S.M.Y.M., Samiti, Lonavala, Pune (INDIA)410403, 1982.
15. Gopal, K. S. and Lakshmanan : Some observations on Hathayoga - The Bandhas : An Anatomical Study Ind. Jou. Med. Sciences : 9 : 564, 1972.
16. Gopal, K. S. and Anantharaman V. Bhachander, S. and Nishith, S. D.: The Cardiorespiratory adjustment in Pranayama with and without bandhas in Vajrasana, Ind. Jour. Of. Med. Sci. 27:9 (Sep 1973).
17. Goswami, Ramacharanapuri : Shivasamhita, Edited with original text and Hindi Translation, Shri Venkateshwar steam Press, Bombay, 1948.
18. Green, E. E. : How to Make use of the Field of Mind Theory. In :The Dimensions of Healing A Symposium. Published by the The Academy of Parapsychology and Medicine, Los Altos, California, pp. 41-53, 1972.
19. Hebbar, K. Personal communication, 1981.
20. Jnaneshwari editorial sub committee : Shri Jnaneshwari Published by Education Deptt. Maharashtra State, Bombay, 1977.

21. Karamblekar, P. V. : Personal Communication, 1985.
22. Karambelkar, P. V., Vinekar, S. L. and Bhole, M. V. : Studies on human subjects staying in air tight - pit. *Ind. J. Med. Res.*, 56:8:1282-1288, 1968.
23. Kuvalayananda Swami : The Diaphragm and the Ribs. Part I *Yoga Mimamsa*, Vol. III, 18-37 and 210-222, 1928.
24. Kuvalayananda Swami : Pressure Changes in Pranayama. *Yoga Mimamsa*, Vol. IV, No. 1, 9-13 and 47-61, 1930.
25. Kuvalayananda Swami : Evolution of Pranayama. *Yoga Mimamsa* Vol. VI, 55-60, 1956.
26. Kuvalayananda Swami : Pranayama in *Yoga Sutra* and *Vyasa Bhashya*, *Yoga Mimamsa*, Vol. VI., 41-54 and 129-145 and 225-357, 1956.
27. Kuvalayananda Swami : 'Pranayama', *Bombay Popular Prakashan*, 35C, Tardeo Road, Bombay (400 034), 1966.
28. Kuvalayananda Swami and Shukla, S. A. : *Goraksha Shatakam*. Edited original Sanskrit text with English Translation. In: *Yoga Mimamsa*, Published by *Kaivalayadhama, S.M.Y.M. Samiti*, Lonavala, Pune, (India), 410403, 1974.
29. Kuvalayananda Swami, Digambarji Swami and Kokaje R. J. : *Vashishtha Samhita (Yoga Kanda)* Edited with Introduction, Selected Text and English translation, Published by *Kaivalyadhama, S.M.Y.M. Samiti*, Lonavala (Pune) 410 403, 1969.
30. Laubry, C. and Brosse, T. : Data gathered in India on a Yogi with simultaneous registration of the pulse, respiration and electrocardiogram. *Presse Medicale*, 44:1601-1604, 1936.
31. Miles, Walter, R. : Oxygen consumption during three Yoga type breathing patterns. *J. Appl. Physiol.*, 19:1:75-82, 1964.

32. Narayananda, S. : The Primal Power in man of the Kundalini Shakti. Narayananda Universal Yoga Trust, Dehra Dun Road, Rishikesh, U.P. (India), 4th revised ed., 1975.
33. Pendse, S. D. : Bhagwatdharma of Maharashtra., Jnanadeva and Namadeva (Marathi) Continental Prakashan, Pune 30, 1972.
34. Pratap, V., Berrettini, W. H. and Smith, C. : Arterial Blood Gases in Pranayama Practice. *Percept. Mot. Skills* 46 (I): 171-174, 1978.
35. Radhakrishnan, S. : The Bhagvadgita with an introductory essay, Sanskrit Text, English Translation and notes, Blackie and Sons (India) Ltd., Bombay, 1977.
36. Rao, S. : Oxygen consumption during Yoga type breathing at altitudes of 520m and 3000m, *Ind. J. Med. Res.* 56:8:1282-1288, 1968.
37. Shastri Mahadeo, A. (Ed.): The Yoga Upanishads - with the commentary of Sri Upanishad Brahmayogin - the Adyar library, Madras - 20, India, 1983.
38. Wenger, M. A. and Bagchi, B. K. : Studies of autonomic functions in practitioners of Yoga in India, *Behavioural Science*, 6:312-323.

## ABOUT KAIVALYADHAMA

Kaivalyadhama is one of the leading institutions in the world, which is trying to interpret the ancient wisdom of Yoga in a modern scientific way and to make it easily accessible to the common man.

Kaivalyadhama was established in 1924 at Lonavala (Pune) by **Swami Kunalayananda**, a great pioneer in this field. He had realized that Yoga is helpful not only for the betterment of physical, mental and spiritual life of a man but also has a great potential in improving his social and material life. He initiated the work of investigations in the effects of Yogic practices on the body and mind through the scientific experiments. To publish the conclusions of these investigations he started the journal -**Yoga Mimamsa**. He also established the **G. S. College of Yoga and Cultural Synthesis** in 1951, to train the young people in the Yogic culture and the **S.A.DT.G. Yogic Hospital** in 1964, to treat the patients of various psycho-somatic disorders through Yoga. Today Yoga has spread all over the world and has become acceptable to people from all walks of life; and this has become possible mainly due to the work initiated by Swami Kunalayananda and carried forward by his institute - Kaivalyadhama.

To spread the work of Yoga, a centre was established in Mumbai in 1932 at Borivali. In 1936 it was shifted to its present site on the Marine Drive. Providing a service of Yoga therapy under the supervision of medical doctors trained in Yoga alongwith personalized teaching by expert Yoga teachers, is the unique feature of this centre. Since its inception more than 1.5 lakh people have taken training at this centre. It also conducts non-residential spiritual workshops called **Pranayama Sadhana Shibir** and the year-long **non-residential courses for training the Yoga therapists and Yoga teachers**.

*For further details please contact :*

- a. Kaivalyadhama, Swami Kunalayananda Marg, Lonavala (Pune) 410403,  
• Tel.: (02114) 273001, 273039 • Website : [www.kdham.com](http://www.kdham.com)
- b. Kaivalyadhama, 43, Netaji Subhash Road, Mumbai - 400 002.  
• Tel. (020) 22818417, 22886256 • Website : [www.kdhammumbai.org](http://www.kdhammumbai.org)

