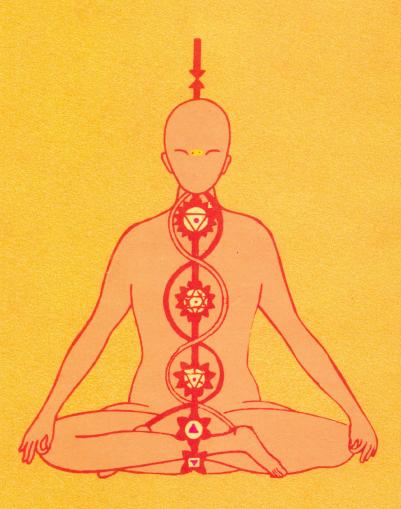
# Yoga and Ayurveda



Prof. Satyendra Prasad Mishra

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## YOGA AND ĀYURVEDA

[Their alliedness and scope as positive health sciences]

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#### FORE WORD

I am happy to write foreword to the Monograph "YOGA AND ĀYURVEDA—their alliedness and scope as positive health sciences" authored by Dr. S. P. Mishra. This monograph is based on the Doctoral thesis of the author submitted under my direct guidance and supervision for the 'Ph.D. degree of Banaras Hindu University. The adjudicators of this doctoral thesis had highly appreciated this work and had unanimously recommended this work for publication.

This monograph discusses in detail the classical concepts of the science of Yoga, its ideology and practical aspects. It brings out specifically the health and therapeutic potential of yoga and deliberates on future scope of yoga as a health science and therapy. It puts powerful arguments to suggest yoga as a branch of Ayurveda, the ancient science of life. For the purpose of comparison the monograph adds few chapters on the fundamental principles of Ayurveda highlighting the basic and applied similarities and alliedness of the two great oriental sciences, Yoga and Ayurveda.

Yoga and Ayurveda, both deal with the Ṣaḍa Dhātvātmaka Puruṣa as described by Caraka in relation to the Brahma; the individual vs the universe or the self vs non-self. It is in this context that Ayurveda propounds two broad streams of Cikitsā viz.-1) Naiṣṭhikī Cikitsā, 2) Laukikī Cikitsā. The Naiṣṭhikī Cikitsā is the branch of Ayurveda which deals with spiritual aspects of life and helps man in getting absolute freedom from pain and suffering of the world through absolute reality. The Laukikī Cikitsā deals with the gross ill health and its care through drugs, diet, exercise etc. The present day science of yoga essentially falls into the realm of Naiṣṭhikī Cikitsā, although Yoga also contributes a lot in Laukikī Cikitsā.

Although, in practice Yoga and Ayurveda are very much separated, conceptually they are very much allied. One finds elaborate description of the concept of Yoga and yogic state in Ayurvedic texts like Caraka Samhita; though technical details are not seen. It is interesting see the concept of

Satyā Buddhi in Caraka Samhitā which strikingly simulates the concept of Rtambharā Prajnā of Patanjali or Sthitprjna of Bhagvadgītā. Caraka also describes in certain details the Astaiśvaryas or special attainments, a Yogi may afford to get. Interestingly Suśruta Samhitā proclaims that such a state adorned by Astaiśvarya can also be achieved by using the devine drugs 'Soma'. Besides, there are elaborate descriptions of the ethical practices of Yoga like Yama, Niyama in the context of Sadvṛtta and Ācāra Rasāyana in Ayurveda

On the other hand several Yogic texts including the classic of Patanjali and later writings on Hathayoga describe the problems of health and disease as also their care and cure by use of Asanas, Prāṇāyama, Kriyā, Mudrā, Bandha etc. They also refer to the Ayurvedic doctorine of Paneamahābhūta and Tridoṣa or more elaborately the concept of Prāṇa and Nāḍis. As a matter of fact the basic approach and the fundamentals of both the sciences, Yoga and Ayurveda, are the same, with variance of emphasis on certain aspects.

Both these sciences are equally ancient and are Indian in origin. Certain scholars believe that both these sciences and athird one Vyākaraṇa Mahābhāṣya were developed by the same seer Patanjali-Yoga Śāstra for purification of *Manas* or mind; Vyākaraṇa Śāstra for correction Vāni or speech and Ayurveda for preservation of Kāya or body. Thus these three sister sciences were developed simultaneously for the care of mind, body and speech and hence they are allied to each other and they derive extensively from each other. Cakrapāṇi, the principal commentator on Caraka Samhitā, quotes this possibility in the very first chapter of his commentary.

Besides the above cited ancient and conceptual linkage, Ayurveda and Yoga are proceeding towards more purposeful union in present times. The contemporary Ayurveda is reorganising as a holistic system of medicine and is reviving as a full health science to meet the newer challenges of medicine today. In this endeavour a joint front of Yoga and Ayurveda will be a great welcome. The contemporary Yoga which has rapidly emerged out of traditional spiritualism, mysticism and cobwebs of mystery is now standing as a scientific discipline, its main stream of prospective development being in the

direction of health science and therapy. Thus Yoga and Ayurveda need to collaborate to compensate each other to form a full science of health from the orient. Modern scientific methods may be applied to study and evaluate these ancient sciences to bring them in the main stream of health care system.

Yoga should be taught as a major subject in the curriculum of Ayurvedic studies both at Post graduate and undergraduate level. Yoga may contribute substantially (1) at the level of teaching of fundamentals principles, (2) at the level of Swasthavrtta and preventive-promotive medicine and (3) at the level of therapy as treatment of a variety of diseases. It is high time that teaching and practice of Yoga is incorporated in the curriculum at all the above levels. Similarly there is a need to expose all Yoga practitioners and teachers to Ayurveda. Yoga has a sound philosophy and elaborate practical technology but it has little pathology and diagnostics, while Ayurveda is a full medical science with its own fundamental principles, life and health concepts, pathology, diagnostics and therapy. Thus putting both together, a complete system of medicine emerges.

It is at the most appropriate time that this monograph is coming out of the press. This timely publication will help in accelerating the idea of collaboration of Yoga and Ayurveda and their adoption in the main stream of medical practice. The author of this monograph Dr. S. P. Mishra who has been my colleague for a number of years deserves congratulations for having brought out such an original work. Dr. Mishra is now a senior faculty member in Ayurveda at Sampurnanand Samskrit University of Varanasi, India. With all good contents it is hoped that the present book will be received highly by scholars and practitioners of Ayurveda and Yoga. Let us hope many more such contributions from the pen of this young writer in future.

With greetings to prospective readers.

#### R. H. SINGH

Professor & Head, Deptt. of Kayachikitsa & Coordinator, Centre for Yoga Institute of Medical Sciences Banaras Hindu University, Varanasi, India.

#### PROEM

I am happy to present the monograph "YOGA AND AYURVEDA" before the readers. This monograph is based on my Doctorate thesis submitted to Banaras Hindu University some years earlier. Yoga and Ayurveda are equally old and ancient Indian sciences practised in India from antiquity and are now under active phase of revival and development. Although they are being developed independently, they are highly complementary to each other. The author feels that there is a need to emphasise the features of alliedness of these two sciences inorder to encourage more and more collaboration and suitable utilisation in health care programme.

It will be useful to adopt many aspects of Ayurveda, specially its Basic Principles, preventive and promotive health practices, dietetics and non pharmacological therapies to the practice of Yoga. Similarly yoga may be added to Ayurveda as a major component of health care and therapy. The present monograph identifies the contents and approaches of these two sciences and highlights their alliedness and scope of further integration.

At national level some collaboration has already been initiated. C.C.I.M. has introduced yoga in the training programme of undergraduate studies in Ayurveda. It is hoped that with the publication of this monograph the two sciences will come more and more nearer to benefit each other on academic levels to help the health care delivery system in better care of the people.

This monograph describes the main features of Ayurveda and yoga and attempts to highlight the similarties and areas of possible mutual integration. All statements made in this monograph are supported with original textual references accommodated as footnotes on each page for the sake of convenience of readers. At the end of the monograph a comprehensive bibliogrophy on yoga has been added which provides a pooled information on contemporary yoga. There is a lot of scope of improvement of this writeup and the author

will be be highly thankful to the readers of this monograph if they communicate their criticisms, observations and suggestions to him for encorporation in the next edition.

I am thankful to the authorities of Banaras Hindu University for granting permission to publish this thesis as a monograph. I am specially thankful to Professor R.H. Singh, Deptt. of Kayachikitsa Institute of Medical Sciences, Banaras Hindu University for inspiring me to publish this work in the present form. I am also thankful to Professor G. P. Dubey Deptt. of Basic Principles Institute of Medical Sciences, Banaras Hindu University for valuable suggestions. Thanks are due to Mr. Rajendra Kumar of Chaukhambha Sanskrit Sansthan, Varanasi for taking necessary steps for publishing this monograph.

Independence Day 15 August 1989 Varanasi SATYENDRA PRASAD MISHRA Reader and Head Deptt. of Sharir State Ayurvedic college & Hospital Sampurnanand Sanskrit University Varanasi (India)

#### KEY TO TRANSLITERATION

ब	भा	•	•	उ	5	荖	
a	ā	i	i	u į	a	ţ	
<b>प</b>	ţ	बो	बी	<b>बं</b>	ब:		
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ya	ra	la	va	śa			
₹ .	æ	8	<b>51</b>	4	त्र		
şa	sa	ha	kşa	tra	jna		

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### YOGA AND AYURVEDA

#### **INTRODUCTION**

A healthful long life of hundred years has been the cherished wish of human race from antiquity. This has been considered essential to achieve the four principal instincts of life namely Dharma, Artha, Kāma and Moksa. For preservation of health in all its dimentions, the stalwarts in Hindu traditions have evolved comprehensive methods of positive health. Health, as also defined to day, is not only the absence of ill health. It is a comprehensive state of wellbeing which refers to a physical, mental, spiritual and intellectual wellbeing of an individual. Such a concept of Total Health has relevance to the unique multidimensional concept of human life as conceived in Indian traditions. Life or living being has been conceived as a composite entity consisting of a physical body superadded with highly sensitive sense apparatus, mind and the soul. This multidimensional concept of Ayu i. e. life is still an advancement over the existing Western thought. The Westernl Sciences have been considering the living being only as the physical body which of course is attributed with many vital functions. They do not provide that status to the sense apparatus which is given to the Indriyas in Indian Medicine. According to Ayurveda the Pancendriyas are not the simple parts of the body but are considered specialised units which function under the control of the Manas and through which the higher perceptual functions are performed. The Western thought has recently started recognising the role of 'psyche' but they even now do not grant adequate attributes to the role of mind whereas the Indian Medicine conceives the mind as the essential dimension of the living being and no consideration of life is possible without

the understanding of the role of mind. The most important advancement that is seen in Indian traditions is the concept of Atmana. It may be pointed out that the Atmana constitutes the fourth and the most important dimension of life which has not yet been recognised by western thinkers. The western thinkers give a relatively less significance even to the third dimension i.e. the mind and they completely ignore the so-called fourth dimension of 'life' i. e. the Soul or the higher consciousness. Thus the western concept of positive health is incomplete and it has to develop itself to coverup the latter and the most important dimension of living being. In order to illustrate the significance of this point, it may be pointed out that the spiritual dimension of a living being is considered to possess the potentialities to grow and ascend higher and higher to reach the level of superconsciousness or supraconsciousness because the limited element of Atmana is considered the part and parcel of the unlimited Paramatmana. The Science and Art of Yoga was evolved in ancient times to assist such spiritual, mental and intellectual extensions of human life.

Thus the Hindu traditions have postulated very comprehensive and totalitarian concept of life and health. Accordingly equally comprehensive health sciences were developed in those days for preservation of physical and mental health and for extension of intellectual possibilities through Ayurveda and Yoga respectively.

A study of Ayurvedic literature reveals that Ayurveda, the science of life, primarily devotes to the care of 'Life' in order to safeguard Arogya both in its physical and mental dimensions. Besides preservation of health, Ayurveda also intends to take care of the diseased person and to relieve the illness. This is the two-fold object of Ayurveda described in different Ayurvedika texts. Thus Ayurveda appears to be a total Life Science taking care of all aspects of health as well as the care of the ill health.

It would be seen from the scope of the total life science that there is a need of developing a specific branch of life science to take care of the normal health specially its mental and spiritual components. There are schools who would believe that independent development of Yoga separate from Ayurv-

eda was with the background referred to above. On the basis of the present literary studies conducted through a critical survey of the authentic literature on Yoga and Ayurveda as well as on the basis of expertise opinion collected by the author on this issue it is felt that Ayurveda is the complete Life Science encompassing both physical and mental including spiritual dimensions of health and disease. Ayurveda also includes the elements of the science and philosophy of Yoga as may be needed for a health and medical science. The need of developing Yoga as a separate discipline at classical levels is evident from the classical work of Patañjali, the Yoga-Sūtras in order to extend the level of consciousness and mental transformation. As also emphasized by a number of contemporary Indian philosophers like Shri Aurobindo, the human race has a plenty of scope and potentials to undergo further evolution and mental transformation from average to a supraconsciousness level. It appears that the ancient scholars could recognise the potentials of man to undergo mental transformation and as an aid to such a pontential, the science of Yoga was developed. The object of Yoga was to extend the level of consciousness and to bring about a mental transformaton of man.

The survey of classical yogic literature does not reveal enough evidence to show that the propounders of Yoga developed this great science originally with the object of utilising it as a system of medicine or as a health discipline; ofcourse the persons enlightened through the practice of Yoga could enjoy better health and could remain free from illness. Thus, though the science of yoga was initially developed as a means of mental development and not as a medical or health science, it appears to be of potential value to contribute in the preservation of health. The present study aims to discuss the authentic contents of the classical concepts of yoga and its potentials as health science.

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#### SCOPE AND DEFINITIONS OF YOGA

The term, Yoga appears to have been used in divergent meanings in the ancient and contemporary literature. Etymologically the word Yoga is derived from the Samskrta root 'yujira' meaning to unite, to combine or to integrate and thus may be taken to mean a state of union or integration i. e. the union of the individual soul or consciousness with the Cosmic, Divine or Supreme Soul or Consciousness or a total integration of the physical, mental, intellectual and the spiritual aspects of the human personality. Yoga is also used to refer to the ways, methods and practices adopted consciously by the votaries of Yoga to attain this ultimate objective or even intermediate goals. The science of Yoga is thus the science of man in depth, the science of conscious evolution or the science of human possibilities. It is an unique science in that it encompasses matter, life and consciousness in one sweep and bridges the gap between the science (as it is understood today) and spirituality. Thus Yoga may be considered as a system of mental, physical and spiritual development. According to Rele (1968) the ultimate aim of Yoga is to prepare the body to achieve that tranquility of mind which may be necessary for the realisation of the supreme.

As mentioned earlier the word Yoga has been used in varied meanings in Indian traditions such as-(1) Compound of drugs in medicine, (2) the special situation of Grahas and Nakṣatras in Jyotiṣ, (3) Proficiency in job in Gītā 'Yogaḥ Karmasu Kauśalam'<sup>2</sup> and (4) Control of the fluctuations of mind in

<sup>1.</sup> Anantharaman, T. R. (1975)

२. योगः कमंसु कौ अलम् । (गीता २।५०)

Patañjali's Yogasūtras—'Citta V<sub>I</sub>tti Nirodha'¹. However, as pointed out earlier literally the word Yoga means "Union', an Union of the Atmā with the Paramātmā i. e. the finite with the infinite. According to Yoga Bija the union of Prāṇa and Apāna or that of one's own Rajas and Retas or that of the Sun and the Moon or that of the Jīvātmā and Paramātmā is called Yoga².

As is evident from the traditional concept, the Hindū scholars had always aimed to perceive or experience every part of knowledge. The ancients would not be satisfied with the mere knowledge of a fact but would always attempt to experience the same. The Upanişads also suggest that an object is perceived not only by simple knowledge but by actual perception or realisation or by subjective experience. All schools of Indian philosophy aim at experiencing an object rather than only knowing it. experienced knowledge which has also been termed as Vijñāna could be believed to be the means of ultimate peace or Moksa. Some time the term Yoga is used to mean the perceptual experience or realisation of Tattvajnāna i. e. Vijnāna as mentioned above. "Nāsti Yoga Samain Balain" (Mahābhārata) indicates that Yoga is most powerful means of Self realisation. The term. Yoga appears to have been used to denote the state of Tativavijāna or Tattvānubhūti as well as to denote the tools or techniques or the method or the practices used for the achievement of the state of Tattvānubhūti. this word has been used to describe the Sādhya i. e. the object in the form of Vijnāna or Anubhava as well as the Sādhaka Vidhi or Sādhanā Paddhati. As also admitted by Sankarācārya, the Indian thought notably differentiates between the knowledge or Jaana of an object obtained through the literature or through a teacher, from the Vijnana or the self realisation of the said object. As mentioned above sometimes the term Yoga is used to denote the same state as indicated by the word, Vijñāna. Sankarācārya considers Vijñāna

१. योगश्चित्तवृत्तिनिरोधः ॥ (योगसूत्र १।२)

२. योऽपानप्राणयोरैक्यं रजसो रेतसस्तया । सूर्याचन्द्रमसोर्योगो जीवात्मपरमात्सनोः । एवं हि द्वन्द्रजालस्य संयोगो योग उच्यते ॥ (योगविणोप० १।६५-६६)

३. ज्ञानं तेऽहं सविज्ञानिमदं वध्याम्यशेषतः । यज्जास्त्रा नेह् भूयोऽन्यंज्ञातव्यमविशिष्यते ॥ (गीता७।२)

as self realised knowledge. It is in this context that Yājñavalkya in Satpatha Brāhmaņa and Brhadāraņyaka Upanisad has advocated the means of Sravaņa, Manana, Nididhyāsana for Atmadarsana, Atmasāksātkāra or Atmānubhūti i. e. self realisation. Yājñavalkya Smṛti considers self realisation by Yoga as the greatest religious act.2 In Vedāntika traditions hearing the factual knowledge of Stutis followed by thinking and meditation on them have been considered as the means of self realisation." Thus Nididhyāsana or Dhyāna which is also known as Yoga is considered as the most potent means of Self realisation as is evident from the statement, 'Nāsti Yogasamam Balam' in Mahābhārata. Probably it is with this objective that Lord Krsna preaches Arjuna to become a Yogi. One finds a number of references showing the use of Yoga as a means of Self realisation in Vedic literature. Mandakopanisad describes that man may realise the self by meditation—'Tam pasyate Niskalam Dhyāyamānāḥ'. The Kathopanisad quotes Naciketā who learned the method of Yoga and could realise the Brahma and advocates that others may also achieve the same.<sup>5</sup> Kathopanisad further indicates that an enlightened man may get rid of pleasure and pain by realisation of the supreme with the help of Adhyātma Yoga. The Svetāśvaropanişad also admits the possibility of the realisation of the Supreme by Dhyāna Yoga. It has been further indicated that such a Self realisation eliminates Māyā and grants absolute freedom from the worldly bondage.8 The other Upanisads also profusely refer to Dhyāna Yoga in this

१. आतमा वा अरे द्रष्टन्यः श्रोतन्यो मन्तन्यो निदिध्यासितन्यः ॥ (शत. ब्रा. १४।४।४।४, १४।७।३।६)

२. वयं तु परमो धर्मो यद्योगेनात्मदर्शनम् । ( याज्ञ० स्मृति १।८, वृहद्योगियाज्ञवल्क्यस्मृति ११।३४ )

३. श्रोतव्यः श्रुतिवावयेभ्यो मन्तव्यश्चोपपत्तिभिः । मत्वा च सततं ध्येय एते दर्शनहेतवः ॥

४. तं पश्यते निष्कलं ध्यायमानः । ( मुण्डकोप० ३।१।८ )

भ. मृत्युप्रोक्तां निकितोऽय लब्ध्वा विद्यामेतां योगविधि च कृत्सनम् ।
 ब्रह्मप्राप्तो विरजोऽभृद्विमृत्युरन्योऽप्येवं योविदध्यात्ममेव ।। (कठोपनि०२।३।१८)

६. अध्यात्मयोगाधिगमेन देवं मत्वा धीरो हर्षं शोकौ जहाति ।। ( कठोपनि० १।२।१२ )

७. ते ध्यानयोगानुगता अपश्यन् देवात्मशक्तिमं स्वगुर्णैनिगृदाम् ॥ (श्वेता० १।३)

तस्यामिध्यानद्योजनात्तत्वभावाद् भूयश्चान्ते विश्वमायानिवृत्तिः ॥ ( श्वेता० १।१० )

context<sup>1</sup>. Thus it appears that in Upanisadika tradition Yoga was considered as the actual state of Self realisation as well as the spiritual means or method which could be used to achieve the state of self realisation. From literary point of view the word, Yoga is used both as the means as well as the object of Self realisation. An analysis of the contexts in which the Yoga occurs in different Sabdakosas reveals the use of the word, Yoga in three different meanings: (1) Ways or means, (2) Union, (3) Samādhi. The use of the word Yoga in these three meanings may be illustrated with a number of contexts in the Epics, Upanisads and other allied literature. The word, Yoga appears to have been used very profusely in Mahābhārata to denote the way or means for achieving a goal or as a means of achieving the state of Self realisation or as a means of Self purification. The means and ways advocated by Lord Kṛṣṇa to the Pāndavas for achieving the victory over the Kauravas which could include the diplomacies of the war and the planning at the battle field, all these appeared to have been referred by the word Yoga. According to certain interpreters Lord Kṛṣṇa was called Yogesvara mainly because he could help the Pandavas in killing their enemies with the help of different Yogas i. e. ways and means leading to their victory2. Lord Kṛṣṇa could also be called Yogesvara because he was able to think of 'Yoga' i. e. Upaya or ways and means of achieving the goal by way of 'Yoga' i. e. self realisation. Probably only he could perceive the Yoga ( means ) who could practise Yoga

१. (१) तस्मै स होवाच पित्तामहश्च श्रद्धाभित्तिध्यानयोगादवेहि ॥	( क <b>ैव</b> ल्योप० <b>१</b> ।२ )
(२) यदिशैलसमं पापं विस्तीर्ण बहु <b>योजनम्</b> ।	
भिद्यते ध्यानयोगेन नान्योभेदः कदाचन ।।	( ध्यान-विन्दूपनिषद् १ )
२. (१) नैषयुद्धेन संग्रामे जेतुं शन्यः कथंचन ।	
सधनुर्धन्विना श्रेष्ठो देवैरपि सवासवैः ॥	( महाभारत ७।१६०।१० )
(२) न्यस्तशस्त्रस्तु संग्रामे शक्यो हन्तुं भवेन्नृभिः।	•
आस्थीयतां जयोगो धर्ममुत्सृज्य पाण्डवा:।।	( महाभारत ७।१६०।११ )
(३) कथमस्मद्धितार्थं ते कैश्च यागैजॅनार्दन।	
जरासन्धप्रभृतयो घातिताः पृथिवीश्वरा।।	( महाभारत ७।१८१।१ )
(४) योगैरपि हता यैस्ते तन्मे शृणुधनंजय।	, ,
अजय्या हि विना योगैमृद्यै ते दैवतेरिप ।।	( महाभारत ७।१८१।६ )
1Y	

(self realisation). Thus there is no fundamental difference between the two aspects of the word 'Yoga'. Similarly the three popular paths of Yoga as enunciated in Bhagavad Gītā namely Karma Yoga, Jñāna Yoga and Bhakti Yoga may be interpreted as the means or methods for achieving a goal and the word Yoga as used in terms, Karma Yoga, Jñāna Yoga and Bhakti Yoga may actually mean the "means" or "method". Probably this could be the reason why one often comes across the word Karmamārga, Jñānamārga and Bhaktimānga in place of Karma Yoga, Jnāna Yoga and Bhakti Yoga.

Besides the use of the word, Yoga denoting "ways and means" (Upāya), this word is also understood to mean union of two different things. Grammatically the word Yoga has been derived from the Samskrta root "Yujir" "Yujir-yoge" meaning union. The word, Yoga has been used in this meaning in Vedic Samhitäs. Yogasikhi Upaniṣad has considered Yoga as the union of Apāna and Prāṇa, Rajas and Retas, Jīvātmā and Paramātmā etc. Yājñavalkya also considers Yoga as union of Jīvātmā and Paramātmā. In Vedānta, Yoga has been defined as the union of Paramātmā and Jīvātmā i. e. the Brahma and the Jīva i. e. the realisation of the oneness of the self and the Brahma.

The third prevalent meaning of the word Yoga refers to Dhyāna or Samādhi. From grammatical point of view the word, Yoga when taken to mean Dhyāna or Samādhi, i. e. derived from the Samskṛta root "Yuj".

१. युजिर योगे । ( धातुपाठ १४६६ )

२. उक्तं याज्ञवल्वयेन, संयोगो योग इत्युक्तो जीवात्मपरभात्मनोः । इति ।
नापि याज्ञवल्वयवचनव्याकोपः, तबस्यस्यापि योगणव्दस्य समाध्यर्थत्वान् ।
समाधिः समाववस्या जीवात्मपरभात्मनोः । ब्रह्मण्येव स्थितिर्या सा समाधिः प्रत्यगात्मनः ॥
इति तेनैव उक्तत्वाच्च । (सर्वदर्शनसंग्रह पृष्ठ ३४६, ३४७)
आत्मप्रयत्नसापेक्षा विशिष्टा या मनोगितः ।
तस्या ब्रह्मणि संयोगो योग इत्यभिधीयते ॥ (विष्णुपुराण ६।६।७१)
पतंजलिमुनेषिकः काष्वपूर्वा जयत्यमौ ।
पुंप्रकृत्योवियोगोऽपि योग इत्युदितो यथा ॥ (भोजवृक्तः १।१)

(योगसूत्र भाष्य १।१)

Yuj Samādhau<sup>1</sup>. However, Samādhi in its own meaning will be discussed elsewhere<sup>2</sup>. Sankarācārya while interpreting the word, Yoga in his Bhāṣya on various Upaniṣads and Gītā considers the word, Yoga as the derivative of the root "Yuj" meaning Samādhi. The Vyāsa Bhāṣya on Patañjali Yoga Sūtras and Yājñavalkya on Sarvadarśana Samgraha in the context of Patañjali Yogadarśana appear to interpret the word Yoga as Samādhi<sup>3</sup>. From practical point of view the distinction between the above two meanings (Union and Samādhi) appears to be only of linguistic interest because, unless there is an union (Yoga) of the Citta with the particular object Samādhi (Yoga) is not possible. Thus ultimately both these meanings end into one and the same act.

Concluding the above discussion it can be stated that though the word, Yoga has been given three apparently distinct meanings namely 'Upāya' (Means), 'Samyoga' (Union) and 'Samādhi' but all these three have one and the same attributes. Because, unless there is an union between the self and the object there may not be self realisation or Samādhi and in turn unless there is self realisation there may not emerge Upāya. Lord Kṛṣṇa the Yoge-śvara could help Arjuna by showing him many Yogas (Upāya) because he was a great Yogī i. e. he was capable of self realisation or Samādhi.

निरोमिमिस करोति, सम्प्रज्ञातो योग इत्याख्यायते । सर्ववृत्तिनिरोधे त्वसम्प्रज्ञातः समाधिः ॥

१. युज समाधी। (धातुपाठ १२०२)
२. मनीयुंजते विषयेभ्यो निवर्त्य समाहितं कुर्वन्ति।। (तैत्ति० आ० सायणभा० ४।२।१)
युजे वा समादधे। (श्वेता० उप० शाक० २।५)
समाधिः समतावस्था जीवात्मपरमात्मनोः। ब्रह्मण्येव स्थितिः या सा समाधिः प्रत्यगात्मनः।।
( सर्वदर्शनसंग्रह के पातंजल योगदर्शन प्रकरण में याज्ञवल्क्य का वचन )
योगः समाधिः। स च सार्वभौमश्चित्तस्य धर्मः। (भाष्यकार व्यास)
यस्त्वेकाग्रे चेतसि सद्भूतमर्थं प्रद्योतयित, क्षिणोति च क्लेशान् कर्मवन्धनानि श्लथयित,

३. योगः समाधिः । ( योगसूत्र भाष्य १।१ )
योगः समाधिः । ( गीता शा० ४।२१ )
योगेन समाधिना । ( गीता शा० १८।३३ )

The traditional concept of Yoga needs further exposition in relation to the three traditional classics: (1) The early Upaniṣads, (2) Bhagavadgitā and (3) Yoga Sūtras of Patanjali

The central theme of the concept of Yoga in early Upanisads is around the science of meditation and self realisation. The state of Yoga as conceived in Kathopanisad and also in Maitriupanisad reads, "that, they say, is the highest state-when the five senses of knowledge together with the mind cease from their normal activity and the intellect does not stir.\(^1\) This, they consider to be Yoga, this firm holding back of the senses, when one becomes undestracted. Yoga, truely is the origin and the end\(^n\). This and many other statements from Upanisads which are detailed further elsewhere in this monograph indicate that Yaga in Upanisadika contexts is related to spiritual uplift and self realisation including higher consciousness and awareness.

After the classical Upanişads the next and the most important work on Yoga is the Yoga-Sūtras of Patañjali. According to Patañjali, Yoga is the state of ceasation of all fluctuations in the mental being-"Yogaḥ Citta Vṛtti Nirodhaḥ". Though Patañjali describes in detail the Art and Science of Aṣṭāṅga Yoga including a series of Vahiraṅga and Antaraṅga practices but the ultimate aim of Aṣṭāṅga Yoga of Patañjali is self-realisation, through Samādhi. Vyāsa Bhāṣya Kāra admits Samādhi as the sign of Yoga and does not differentiate between Yoga and Samādhi. Similarly Śaṅkarācārya also interprets Yoga as Samādhi, Samādhāna, Manaḥ Samādhāna and Citta Samādhāna—'Yogo Yuktiḥ Samādhanam, Samādhānam Yogaḥ, Yogam Manaḥsamādhānam, Yogaḥ Citta Samād-

१. एवं प्राणमयोङ्कार यस्मात्सर्वमनेकधा । युनिक्त युज्यते वापि तस्माद्योग इति स्मृतः ।।
 एकत्वं प्राणमनसोरिन्द्रियाणां तथैव च ।
 सर्वभाव परित्यागो योग इत्यभिधीयते ।। (मैत्राय० यु० प० ६।२५)
 यदा पंचावतिष्ठन्ते ज्ञानानि मनसा सह । त्रुद्धिश्च न विचेष्टिति तामाहुः परमा गितम् ॥
 तां योगिमिति मन्यन्ते स्थिरामिन्द्रियधारणाम् ।
 अप्रमत्तस्तदा भवति योगो हि प्रमवाष्ययौ ।। (कठोप० २।३।१०-११)

hānam.¹ The details of the Patanjali's concept of Yoga is discussed elsewhere in this thesis.

Next most significant work on Yoga is Srimad Bhagavadgitā. Bhagvadgitā has been written in the form of a devine song depicting in brief the story of Mahābhārata, it does not present the concept of Yoga in a critical manner as that in the Yogasūtras of Patanjali. However, during the course of devine song on the story of Mahābhārata Bhagavadgitā presents a very practical approach on Yoga and its application in day-today life. Besides preaching the three classical paths of Yoga namely Karma Yoga, Jnana-yoga and Bhakti yoga,<sup>2</sup> Bhagavadgitā also presents a very lucid meaning of Yoga. A critical study of the text of the Bhagavadgitā presents several definitions of Yoga which ofcourse denote different facets of the same higher state. Few relevant statements on definition on Yoga from Bhagavadgītā are extracted below-"Let this be known by the name of Yoga, the disconnection from union with sorrow or pain-'Duhkh Samyogaviyogam yogasajnitam', where in the mental being restrained by yogic practice comes to rest, where in one beholds the Self through the self and rejoices in the Self, where one experiences that supreme delight perceived by the intelligence but beyond the reach of the sense wherein established one does not deviate from truth; on gaining which one

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१. योगो यक्तिः समाधानम । समाधानं योगः ।
                                                            (तै० उप० शा० २।४।१)
  योगं मनः समाधानं यः तत्वतोवेत्ति-योगेन - ममाधिना युज्यते ॥ (गीता भारतभावदीप १०।७)
  योगं यंजन मनः समाधानं कुर्वन् ।
                                                                (गीता शांक ० ७।१)
  योगः चित्तममाधानं, स यस्यास्ति स योगी।
                                                                (गीता शांक० ६।१)
२. योगणास्त्रयो मया प्रोक्ता नृणां श्रेयोविधित्सया।
  ज्ञानं कर्म च भक्तिश्च नोप योऽन्योऽस्ति क्त्रचित् ॥
                                                                (भाग० ११।२०।६)
३. ताम ईद्शी तदवस्थां योगम् मन्यन्तः वियोगमेव सातम् ।
  सर्वानर्थ संयोग वियोगलक्षणा
                             हीयमवस्था
                                           योगिनः ॥
                                                           (कठोप० शा० २।३।११)
        तं विद्याद् विजानीयाद् दुःखसंयोगवियोगम् दुःखैः संयोगो दुःखसंयोगः तेन वियोगो दुःखयोग-
  वियोगः तं दृःखसयोगवियोगं योग इत्येव सज्ञितं विषरीत लक्षणेन विद्याद् विज्ञानीयाद इत्यर्थः ॥
                                                                (गीता शा० ६।२३)
  तं विद्याद् दुःखमयोगवियोगं योगमजितन् ॥ (गीता ६।२३)
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can not, conceive of any greater gain beyond it and wherein established one is not shaken even by the heaviest sorrow. Thus Yoga is the state of that eternal tranquility of mind which keeps the mental being undistracted and allows self realisation according to Bhagvadgītā. The earlier definition "Disconnection from union with sorrow or pain-"Duhkha Samyogaviyogam yoga sainitam" is not entity but is the outcome of an aspect of the same tranquility and undistractability of mind as depicted above. Similarly another popular definition of Yoga quoted from Bhagavadgītā is "Samatvam Yogamucyate" meaning thereby an equanimity over Siddhi and Asiddhi, Sukha or Duhkha, is also an outcome or an aspect of the same mental state. The third common definition often quoted from Bhagvadgītā is enterpreted in different ways. Many a times 'Yogah Karmasu Kausalam' is enterpreted as the ability to perform a job with that Kausala or skill which may lead to the successful completion of the work yielding best of its result. However, this enterpretation may appear very practical but it is not at all in accordance with the approach of the orthodox Indian Philosophy. As a matter of fact "Yogah Karmasu Kausalam" refers to performing the Karma in such a way that it may not become the cause of bondage. As a matter of fact the work done without any lust for its reward with Samatva Buddhi does not become the cause of Bondage. Therefore the work done with such approach/attitude or Kausala is considered Yoga. The same has been described as Karma Yoga i. e. Niskāma Karma in Bhagvadgītā. It is in this very spirit that Bhagvadgītā has considered equanimity (Samatva) over Siddhi or Asiddhi of the Karma performed without desire of fruit. Now this definition also depicts a situation which will be possible only when the mental state is evolved further as mentioned above.2

Thus the three popular definitions of Yoga as seen in Bhagavadgītā

१. तत्कर्मयत्र वधायसा विद्यायाविमुक्तये। आयासायापरंकर्मविद्यायाशिल्पनैपुणम्॥

<sup>(</sup> विष्णु पुराण १।१६।४१ )

२. योगः कर्ममु कौशलम् ॥ (गीता २।५०)
योगस्थः कुरू कर्माणि संङ्गं त्यक्वत धनजयः।
सिद्धसिद्धयोः समो भूत्वा समस्वं योग उच्यते ॥ (गीता २।४८)

namely-(1) Duhkha Samyoga Viyogam Yoga sanjnitam; (2) Samatvam Yoga Ucyate, and (3) Yogah Karmasu Kausalm-refer to the same higher state of consciousness and self realisation presenting its different attributes.

The word Yoga also appears to have been used in certain Upanisads and also in Bhagvadgītā as the state of achievement which is generally beyond the achievement of man. Thus Yoga is the achievement of some thing which is unachievable-"Yogah Aprāptasya Prāpaṇam".

Thus Yoga is a very widely used term with multifactorial meaning. It would be difficult to give one single definition to Yoga which may represent all the meanings in which this term appears in the traditional and contemporary literature. In the context of recent revival of the interest in Yoga throughout the world the word Yoga appears to have been used in many more hitherto unknown meanings. Probably it is one term which has been repeated maximum with the most wider meaning in Indian literature as it is one of such throughts which has been brought to the knowledge of the maximum number of the people of the present generation.

However in its most significant meaning referring to its spiritual aspects. Yoga is used both as the means as well as the object. Yoga is classified in different ways in different contexts, by different texts.

( A ) Vaidic Yoga, Jaina Yoga, Boudha Yoga etc.

१. योगोऽनुपात्तस्योपादानम् ॥ (तैतिरीय उप० शा० ३।१०।२)

- (B) Karma Yoga, Jnāna Yoga, Bhakti yoga.2
- (C) Mantra Yoga, Laya Yoga, Hatha yoga, Rāja yoga.3
- योगः अप्राप्तस्य प्रापणम् ।। (गीता शाक ० ६।२२)
  २. योगशास्त्रयो मया प्रोक्ताः नृणां श्रेयोविधित्सया ।
  ज्ञानं कर्म च भवितश्च नोपायोऽस्ति कुत्रचित् ।। (भागव० ११।२०।६)
  ३. योगो हि बहुधा ब्रह्मन् भिद्यते व्यवहारतः ।
- सोगो हि बहुधा ब्रह्मन् भिद्यते व्यवहारतः ।

  मन्त्रयोगा लयर्श्वैव हठोऽसौ राजयोगकः ।। (योगतत्वोप०१६)

  मंत्रो लयो-हठो राजयोगोऽन्तर्भूमिकाः कमात् ।

  एक एव चतुर्द्धा यं महायोगोऽभिधीयते ।। (योगणिखो०१।१२६-१३०)

  मन्त्रयोगो लयर्श्वैव राजयोगो हठस्तथा ।

  योगश्चर्त्विधः प्रोक्तो योगिभिस्तत्वदिशिभः ।। (योगरोजोप०१-२)

- (D) Jnāna Yoga, Karma yoga1.
- (E) Mantrayoga, Layayoga, Hatha yoga2.
- (F) Mantra yoga, Layayoga, Hatha yoga, Rāja yoga<sup>3</sup>.
- (G) Mahā yoga consisting of above four as its components4.
- (H) Āsana, Prāṇāyāma, Dhyāna, Samādhi<sup>5</sup>.
- (I) Karma Yoga, Bhakti yoga, Rāja yoga, jnāna yoga.

Besides, a number of other categories of Yoga appear in different contexts. Each of the eighteen chapters of Bhagvadgītā has been named as Yogasāstra and each chapter is named as Yoga. However, the eighteen chapters are not considered as eighteen varieties of Yoga but are usually classed in three groups i. e. viz. Karma yoga, jnāna yoga and Bhakti yoga. The terms like yoga, yogabal, yoga yajna, yoga sevā, Yoga dhāranā, Yoga Yukta, Yogavittama, Yogi, Yogesvara, Mahayogesvara Abhyāsa yoga, Dhyāna yoga, Brahma Avikampa yoga, Sanyāsa, Bhakti yoga, Sāmkhya yoga, jnana yoga and Karma yoga which occur in Bhagvadgītā refer to different aspects of yoga. Similarly, certain other terms like Samādhi yoga, Kriyā, Hansa Yoga, Sparasa yoga, Suratiyoga and Pūrna yoga are also seen in different texts.

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१. ज्ञानयोगः कर्मयोग इति योगो द्विधा मतः। (त्रिशिखित्रा० उप ● २३)
२. लयमंत्रहठायोगाः।। (वाराहोप० ४।१०)
३. मन्त्रयोगो लयक्ष्चैव हठोऽसौ राजयोगकः। (योगतत्वोप० १६)
४. एक एव चतुर्द्वाऽयं महायोगा भिधीयते।। (योगिशिखो० १।१२६-१३०)
मन्त्रयोगो लयक्ष्चैव राजयोगो हठस्तथा।
४. आसनं प्राणसंरोधो घ्यानं चैव समाधिकः।
एतच्चतुष्ट्रयं विद्धि सर्वयोगेषु सम्मतम्।। (योगराजोप० २-३)
६. योग। (गीता ६।१२, १६, ३६ आदि)
योगवल। (गीता ६।१०)
योग यज्ञ। (गीता ४।२०)
योग सेवा। (गीता ६।२०)
योगयुक्त। (गीता १।२०, ६।२७)
योगयुक्त। (गीता १।६७, ६।२०)
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However, the above mentioned schools of Yoga are very much allied to each other but in a relatively specific terms, Mantra yoga refers to the achievement of certain Siddhis with the help of Japa of certain Mantras of the Gods like Brahmā Visņu Šiva etc. This category of Yoga has been considered as inferior type of Yoga—"Alpabuddhirimam yogam sevate Sādhākādhamh", (Yogatatvo-Upanisad).2 Similarly Laya Yoga is the method of achieving certain Siddhis of Yoga by getting oneself absorbed in the nine Cakrās.3 Laya Yoga has also been considered as Citta Laya—Layayogascitta Layah,4 (Yogatatvoupanisad and Yoga Sikhoupanisad). On the other hand in Hathayoga emphasis is given on physical culture. Hathayoga appears to have been described in detail in Yogatatvoupanişad. The author of Hathayogapradīpikā considers Asana, Prāṇāyāma Mudrā and Nāda Anusandhāna as the major Hathayoga practices and advocates that these Hathayogic practices may be practised till the achievement of Rajayoga considering such practices as preparatory for Rāja yoga—"Sarvānyapi Hathābhāse Rāja yoga Phalāvadhi." Hathayogapradipikā further advocates six purificatory practices namely Dhauti, Basti, Neti, Trāţaka, Nauli and Kapālabhāti for the physical purification of Yogis specially

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योगी। (गीता प्रारथ, दारप्र, २७, २८)
महायोगेश्वर। (गीता ११।६)
अभ्यासयोग। (गीता १२।६, दाद, ६।३४)
ध्यानयोग। (गीता १८।६, दाद, ६।३४)
ब्रह्मयोग। (गीता १८।५२, १३।२४)
ब्रह्मयोग। (गीता प्रार१, अनन्ययोग गीता १३।१०, १२।६)
१. ब्रह्मविष्णुशिवादीनां मन्त्रं जाप्यं विशारदैः। साध्यते मन्त्रयोगस्तु वत्सराजादिभियंथा।।
(योगराजोप० ३-४)
मातुकादियुतं मन्त्रं द्वादशाब्दं तु यो जपेत्। क्रमेण लभते ज्ञानमणिमादिगुणान्वितम्।।
(योगतस्वोप० २१-२२)
२. अत्पबुद्धिरिमं योगं सेवते साधकाधमः॥ (योगतत्वोप० २२)
३. कृष्णद्वैपायनाचैस्तु साधिते लयसंज्ञितः। नवस्वेव हि चकेषु लयं कृत्वा महात्मिभः॥
(बोगराजोप० ४-५)
४. लययोगश्चित्तलयः कोटिशः परिकीर्तितः। गव्छंस्तिष्ठन्स्वपन्भंजन्ध्यायेश्विष्कलमीश्वरम्।
स एव लययोगः स्यात्॥ (योगतत्वोप० २३)
४. सर्वाण्यपि हठाभ्यासे राजयोगफलाविध ॥ (हठयोगप्र० १।६६)
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the obest ones. This text emphatically agrees that Laya-yoga and Hathayoga are only the preparatory measures for achieving Rāja yoga—(1) Sarvānyapi Hathābhyāse Raja yoga phaladhi, (2) Sarve Hathalayopāyā Rājayogasya Siddhaye<sup>3,2</sup>. (3) Kevalam Rājayogaya Hathavidyoupadişyate.

Thus Raja yoga appears to be a term used for describing the most superior quality of yoga. We find many controversies on the nature of Rajayoga. Yogasikhopanisad considers Rājayoga as the union of the Rajas and the Retas-"Rājaso Retaso yogāt Rājayogatismṛtaḥ".3 Certain authors considering the Manas as the master of Indrivas accept the Yoga of mind ( Raja ) i. e. Monovijaya as Rājayoga. However, conventionally the Science and Art of Yoga described by Patañjali is known as Rājayoga and generally it is called Rāja yoga because it is the best quality of yoga, although Patañjali himself has never named his system of Yoga as Raja yoga. Moreover, from Grammatical point of view the correct term in the sense of best quality of Yoga should be Yoga Rāja not Rāja yoga. However, in a less conventional manner the word Rāja yoga may also be used to designate the most superior quality of yoga. For all practical purposes—Rājayoga should be considered as the superior most quality of the Yoga while all other types of Yoga are only preparatory for the ultimate practice of Raja yoga. The Patanjali's Raja yoga essentially means the control of the fluctuations of the mental being -"Yogascitta vṛtti Nirodhaḥ". Pramāṇa, Viparyaya, Vikalpa, Nidrā and Smṛti have been considered as the Cittavṛttis. The withholding of these Vittis within the seat of their origin namely the mind is considered Yoga. The mind being the most unstable entity, it is very diffi-

१. धौतिर्वस्तिस्तथा नेतिस्त्राटकं नौलिकं तथा। कपालभातिष्रचैतानि षट् कर्माणि प्रचक्षते ॥ (हटयोगप्र० २।२२)

२. सर्वे हठलयोपाया राजयोगस्य सिद्धये ॥ ( हठयोगप्र० ४।१०३ )

श्रेतिमध्ये महाक्षेत्रे जपाबन्धूकसंनिमम्।
 रजो वसित जन्तूनां देवीतत्वं समावृत्तम्।।
 रजसो रेतसो योगाद्राजयोग इति स्मृतः।
 अणिमादिपदं प्राप्य राजते राजयोगतः।। (योगशिखोप०१।१३६-१३७)

cult to withhold it. Such a state of Yoga can be achieved by Abhyāsa and Vairāgya as admitted both by Bhagvadgītā as well as by the Yoga Sūtras of Patañjali—"Abhyāsana tu Kauntēya Vairāgyena ca gṛhyate" (Gītā 6-35); "Abhyāsa Vairagyābhyām Tannirodhaḥ" (Yogasūtra 1-12). The Aṣṭāṅga Yoga described by Patañjali is the Art of practice (Abhyāsa) for Rāja yoga. In Aṣṭāṅga Yoga, Samādhi has been considered as the highest state of Yoga. This is why some times Yoga and Samādhi are considered synonymous while some scholars that Samādhi is the means (Sādhanā) through which the ultimate object (Sādhya) i. e. Yoga is achieved.

१. चंचल हि मनः कृष्ण प्रमाथि बलवद् दृढम्। तस्याहं निग्रहं मन्ये वायोरिव सुदुष्करम्।। (गीता ६।३४) असंशयं महावाहो मनोदुनिग्रहं चलम्। अभ्यासेन तु कौन्तेय वैराग्येण च गृह्यते।। (गीता ६।३५)

२. अभ्यासवैराग्याभ्यां तन्निरोधः ॥ ( योगसूत्र १।१२ )

#### PHILOSOPHY OF YOGA

Yoga forms the most prominent values in the applied aspects of Indian philosophy. As a matter of fact Yoga is the central theme in Indian philosophy which is otherwise considered to advocate a negative or scapist attitude. It is only the concept of Yoga and its achievements including the bliss of Moksa which determines the positive aspects of Hindu philosophy. Before one proceeds to discuss the philosophical background of Yoga it is worthwhile to examine in sequence the traditions of Indian philosophy as relevant to Yoga. So far as the actual contents on this aspect are concerned one can divide the history of evolution of Yoga in the following three phases:

- (1) Foundations of Yoga consisting of the theory and practice of Yoga in ancient India as reflected in the earlier Upanisads (pre-Buddhist, before 600 B C., the Bhagvad Gitā (around 500 B. C.) and the Yogasūrtras of Patañjali (around 300 B. C.).
- (2) Yoga down the ages covers the development of specialised yogic disciplines in Hindu, Jain, Buddhist, Sūphī and Sikh traditions from 200 B.C. to 1800 A. D.
- (3) Contemporary yoga which is featured by the recent trends in the science of yoga with special reference to the teachings of Swami Vivekananda (1863 to 1902), Sri Aurobindo (1872-1950) and Mahatma Gandhi (186) to 1948) and some other thinkers.

An examination of the contents of the above three phases of the development of yogic discipline would show obvious distinctions but the background-philosophy of yoga remains the same. Conceptually the Universe is a Ṣaḍdhā-

tvātmaka creation consisting of the five physical factors namely the five Bhūtas and the Avyakta Brahma which is the sixth and the eternal component of the Şaddhātmaka creation. An individual living-being which is a constituent entity of the Sad-dhātvātmaka creation is also considered to consist of the same six constituents. The five physical matters as found in the 'Universe' and the 'Individual', though may not be in continuum but are qualitatively similar. On the other hand the Avyakta Brahma which is the conscious element of the creation is considered to beer a continuum from the individual to the Universe though there may appear some qualitative difference. As a matter of fact the individual consciousness i. e., the Atmā is a mere reflection of the universal consciousness i. e. the Paramātmā An average individual is unable to perceive the continuity between the individual and universal consciousness due to ignorance or Avidyā (or Māyā or Mamatā or Şvatā) and remains in illusion. The word is a matter of illusion and is a creation of Avidyā which prevents the individual from realising its continuity with the universal reality. moment the state of  $Avidy\bar{a}$  is removed the individual reaches the state of realization and the same is called 'Yoga'. Gne finds a continued debate on the doctrine of . Māyā. According to Swāmī Vivekanand who is considered a neovedāntin, Māyā is the power of the creater, a Śakti that makes creation possible. But in Advaita Vedānta the Māya is considered the power that creates illusion, a divine Sakti which deludes man into believing that the world is real. There is an equally detailed debate on the nature of the cosmas; The Time, the Space and the Causation are considered the influencing factors. The Absolute becomes universe by crossing through Time, Space and Causation. The literature shows comprehensive discussions on the ways of realisation. The three broad paths of realisation as advocated in Hindu traditions are Jūīna, Bhakti and Karma. Shri Aurobindo conceives creation as a double process. It is firstly a 'Descent' of the spirit into the worldly frm and then it also implies an 'Ascent' of the worldly forms to its original higher Thus creation according to Shri Aurobindo is a process of 'Descent' and 'Ascent' or Involution and Evolution. Descent means a plunge of the spirit into ignorance. This is similar to the Vedantic thought that creation is a cosmic delusion or an act of Lilā. The spirit descends to matter due to

delusion. Thus creation is an act of Līlā which present through Māyā which is also considered the cause of all worldly sufferings. It is only the realisation of the Atman that relieves the entire suffering. Sankarācārya also says that the world is delusion and therefore he thinks that it is useless to discourse on the history of the world. The Brāhman is the reality which is to be realised within the world. The same reality is within the man and then it is called Atman. Thus the Atman and the Brahman are one and the same. Therefore if you know or realise the one, you know or realise the other i. e. the whole. It is from this Brahman that the whole creation or the whole world is created. On the other hand Sāmkhya considers creation out of Prakṛti while the Nyāya system considers it out of the elements. On this issue Śankarācārya opines that it is useless to know the history of the world because the world is not real and is only delusion. Thus the Indian philosophy appears passimistic in its approach.

Passinism of Indian philosophy lies in the fact that it believes that life itself is suffering but later it believes and gives hope of Moksa. In fact indian philosophy begins with passimism but leads to optimism. Indian philosophy is the only philosophy in the world where the other life is conceived and the purpose of life is to get Nirvāna. Apparently it means that we are not interested in life. It is really passimistic. But it is not so. In fact the life here is worth living; the life ahead (i.e. in company with gods) is more worthy to live. Brahman is realised here in this world, on this earth. So there is the possibility of liberation here. So, there is no question of passimism. However, as a matter of fact passimism is a tendency of mind i. e. to see the darker side of every thing i. e. a feeling of helplessness, which reflects the general consideration in Indian philosophy. If the Indian religions and philosophical thoughts are examined critically one would find five prominent features—(1) Spirit of tolerance, (2) Belief in Moksa, (3) Belief in Rebirth i. e. transmigration of Soul, (4) Belief in law of karma, (5) Negation of world or a typical attitude towards the world.

The most of the western philosophers charge that Hinduism is escapist. Hinduism is essentially other worldly, the life is delusion and ethical considera-

tions are not essential in the Hinduism, this being beyond good and evil. Morality is not the ultimate objective, it is only of secondary significance. Here it may be pointed out that Hinduism does not advocate the denial of morality. It is only to emphasise that there is some thing more important than morality and that is the Moksa or liberation. Morality is only one step in path of Moksa. It is further charged that the Hindu concept of divine Līlā rolls the morality of all significance. Many westerners feel that if the whole universe is a play-Līlā of the God then where is the question of morality. But the actual meaning of the concept of divine Līlā does not mean like that. It does not mean to ignore morality.

The Hindu philosophy appears definitive in advocating that ultimate aim of life is to attain Moksa; this is one thing which all Hindus believe. What is Moksa? There are different words used to define Moksa in different sets of Hindus such as Moksa, Mukti, Nirvāna, Kaivalya, Apavarga and so on. The actual literal meaning of these words slightly differ but they generally refer to that state which may be called liberation, or salvation. Liberation is the best English words for Moksa because the opposite of Moksa is Bandha or bondage. When Bandha or bondage is released one is liberated. Another word for Bandha is Samsāra. This is a peculiar Indian concept, no other religion believes in Moksa. Some systems believe that this liberation is the communium with God, but not all. There is already a further discussion on the concept of God. Some Hindus believe in God while few others do not believe; even in those who belive in God, the God is conceived in different forms. It may not be essential to discuss the nature of God and its personal and impersonal concepts because it does not fall under the direct perview of this write up. There are three kinds or three main types of Hinduism in view of the paths to be adopted to achieve Moksa. In other words there are three basic types of spiritual paths in Hindiusm.

- (1) Metaphysical attitude as in Advaita Vedānta
- (2) Theological attitude as in Vaisnavism
- (3) Ritualistic attitude as in Mimāmsā

These are the predominant attitudes in the respective symptoms, though all the three attitudes can be seen in all systems of Indian philosophy.

- (1) Metaphysical attitude is to know knowledge or  $Moksaj\bar{n}ana$ . What is that knowledge, by knowing which every thing becomes known? Aspect of knowledge or revealation is important in Advaita Vedanta. They are interested in the knowledge of  $J\bar{n}ana$ . This is metaphysical attitude. According to Vedanta even God is not the ultimate reality. Vedanta is derived from Upanisad and the word Upanisad mean a secret document or a secret knowledge.
- (2) In Theological approach as in Vaisnavism the attempt is to come nearer to God, ofcourse not to become God. They are interested in coming nearer to God.
- (3) In Ritualism as in Mimāmsā they do not believe, neither they interested in the knowledge nor in coming near to God. They are interested in following certain rituals viz., getting up in the morning, doing sacrifices etc. in order to attain liberation.

As also referred above Bhagvad Gītā most emphatically puts forward three principal paths of life namely jñāna. Karma and Bhakti which are overlap ed and interdependent on each other. The proceedings of Mahābhārata and its settings, problems and teachings put forward the most powerful advocation on the above paths. In Bhagvad Gītā yoga means the "way of life. It is advocated that one should go in consonance with the cosmic scheme-'Nimitta mātram bhava sabya Sācī (Gītā)'. Now the question arises how to know as what is the cosmic scheme. Bhagvad Gītā does not give direct answer in this question. However Gītā roughly gives three ways by which one can make his actions in consonance with the cosmic scheme. As a matter of fact these are the three prescribed ways of life which of course are overlapped and independent on each other. They are-(1) Jīnāna Yoga, (2) Karma Yoga, (3) Bhakti Yoga. In gross meanings jīnāna litrerally means knowledge but its actual meaning is wisdom, Karma is duty and Bhakti is devotion or dedication.

A study of Bhagvad Gītā would indicate that Bhagvad Gītā is an Upaniṣad. It is Brahma Vidyā and the Yogasāstra dealing with—

(1) Sāmkhya yoga (jñāna yoga) i. e. the path of knowledge.

- (2) Karma yoga i. e. the path of action with detatchment.
- (3) Bhakti yoga i. e. the path of devotion or dedication.
- (4) Dhyāna yoga i. e. the path of meditation.

This is not an independent path. This is association of the previous three principal paths.

Thus the essential teaching of Bhagvad Gītā is self-discovering and above measures are the ways of self-discovery. The central theme of Jnana Yoga is that only Jijāāsu (one who desires) can pursue the path of Jāāna Yoga. Here the aspirant must know what is the cosmic scheme and then he should act in its consonance. As such Jāāna Yoga is a way of philosophy or a way of enquiry or a way of discrimination. For a Hndū the highest Jāāna is the knowledge about himself. To find what one is, one has to look within. In Jaana yoga the knowledge or the wisdom is the central theme. What is that knowledge by knowing which everything becomes known or by knowing which the state of Yoga is achieved? The Sāmkhya system of philosophy is the answer to this question. The Sāmkhya system of philosophy reveals the cosmic scheme including the nature and identity of the Prakti and the Purusa i. e. matter and spirit or the active and inactive principles of the creation. An aspirant has to realise what is Puruso, what is Prakti, and what is their relationship (actually there is no connection or relation between Prakti and Purusa). They go parallel but never join. Knowing this fact is the real knowledge or Jñāna, by knowing which every thing is known. Thus the Jñāna yoga is the path of self discovery or self knowledge.

The Karma yoga means the path of selfless action. Bhagvad Gita very emphatically teaches that the action should not start with desire of its fruits neither one should become inactive. One should be active without the desire of the fruits of his action. This means that one has to act but his actions are to be desireless. For achieving such an ability one has to transform himself. because without that one will not act without motivation. However if the aspirant develops and transforms himself by Abhyāsa and Vairāgya he may become able to act desirelessly i. e. Niskāma karma and the same is Niskāma karma yoga. Only a Sthitaprajña (one with stable mind) can follow the path of Karma yoga. Thus one has to transform himself in to a Sthitaprajīa in order to make himself able to follow the path of Karma yoga. A man who is not afflicted by pain nor is hankering for pleasure is Sthitaprajīa. In Gitā he is the Yogt. This is a type of psychological transformation. The Niskāma karma is renunciation in action. Such Niskāma karma is basically agreed upon by all systems of philosophy but it has been emphasised predominantly in Bhagvad Gitā. It is difficult to become a Sathitaprajīa. A secret path to Niskāma karma is a surrender of every thing to God. If you surrender to God, it becomes easier to perform an action. This is a transition of teaching of Gitā from Karma yoga to the Bhakti Yoga. Do every thing after offering to God. Whatever you do (good or bad) do as an offering to God. In fact the very idea of offering to God makes one indirectly to do good things and to avoid bad things. Because even bad man offer only good things to God. Therefore if one is asked to offer everything to God, he will have to do everything good and he has to leave bad acts and things.

Bhakti yoga implies a complete sacrifice of oneself towards God i. e. Prapatti or self surrender. This is in addition to acting after offering to the God. In fact Prapatti or complete self surrender is the central theme of Bhakti yoga. This is a complete self surrender befor God i. e. allowing the God to act through oneself. Thus whole of one's being is lost is the God. This is a type of denial of egoism. But mind it, it is not Samnyāsa. Bhakti yogī is not a Samnyāsī. In Bhakti the concept of offering (as in Karmayoga) is also not prominent, because there it is the complete subjugation of oneself. One has nothing to offer, he himself is to be completely surrendered.

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#### APPENDIX

The Philosophy of Yoga as developed in 20 Yogoupanisads adapted from the Summary by Ayanger, T. R. Srinivas (1938) in Yogoupanisad by Adayer Library Madras.

## ) 1 ) Advaya Tārakopanişad

This Upanisad which is the fifty third among the 108 Upanisads and forms part of the Sukla-yajurveda, fixes its goal in the Brahman and the Brahman only and seeks to expound the essentials of Rajayoga.

## (2) Am<sub>1</sub>ta Nadopanisad

This Upanisad which is the twenty first among the 108 Upanisads and forms part of the Kṛṣṇa-yajurveda, demonstrates that the pure minded attain the end and aim of existence by adopting the expedients of Sravaṇa study, Manana-reflection, etc., while those with an impure mind attain their enfranchisoment from worldly existence by having recourse to the meditation of the Brahman and the practice of Ṣaḍaṇga yoga (yoga with six stages).

## (3) Amrta-Bindupanisad

This Upanisad, which is the twentieth among the 108 Upanisads and forms part of the Kṛṣṇa-yajurveda, expediates on the mind as the cause of bondage as well as liberation of man and shows how, by the knowledge of the Brahman only, the final goal is attainable.

## (4) Ksurikopanişad

This Upanisad which is the thirty-first among the 108 Upanisads and forms part of the Kṛṣṇa-yajurveda, deals with yoga as the instrument where with the obstructions to the knowledge of the Brahman are cut.

## (5) Tejo-Bindupanisad

This Upanişad, which is the thirty seventh of the 108 Upanişads and forms part of the Kṛṣṇa-yajurveda, deals with the realization of Videha-mukti,

the state of existence of the form of absolute, all pervading bliss and consciousness and the illusionness of qualified, material existence, which is not of the Atman.

## (6) Tri-Sikhi-Brahmanopanisad

This Upanisad, which forms part of the Sukla-yajurveda and is the forty-fourth of the 108 Upanisads, deals entirely with the attainment of the non-relative Brahman and expounds, as aids thereto, the Yoga and its eight Agnas.

## (7) The Darsanopanisad

This Upanisad which forms part of the Sāmaveda and is the ninetieth of the 108 Upanisads deals with the detailed exposition of the eight-fold yoga, along with the acquisition of the knowledge of the supreme Brahman and ends with the description of the non-relative absolute Brahman.

#### (8) Dhyāna-Bindupanisad

This Upanişad, which is a part of the kṛṣṇa-yajurveda and forms the thirty ninth of the 108 Upanişads, deal with the exposition of the absolute Brahman and the import of the praṇava, the Ajapā Hamsa-Vidyā and the six-fold yoga on the means of attaining it.

## (9) The Nada-Bindupanisad

This Upanisad, which is the thirty eight among the 108 Upanisads and forms part of the Rgveda, deals with the attainment of *Videhamukti*, as a result of the annihilation of the three kinds of *karma*, by those that are equipped with the expedient of *Nāda*, through the exposition of the real nature of the absolute *Brahman*, after dealing with the means of attaining the *Brahman* in its qualified aspect, by those that are possessed of the knowledge of the qualified *Brahman* indicated by the *Praṇava* in its *Vairāja* aspect.

## (10) The Pasupata Brahmopanisad

This Upanisad, which is the seventy seventh among the 108 Upanisads and forms part of the Atharva Veda, specially deals with the real forms of

Hamsa and Sutrātman and has as its ultimate aim the attainment of the non-relative absolute Brahman.

## (11) The Brahma-Vidyopanisad

This Upanişad is the fourtieth among the 108 Upanişads and is part of the Kṛṣṇa-yajurveda, deals with the *Praṇavahamsa Vidyā* and the realization of the *Brahman* through the knowledge of the same.

## (12) The Mandala-Brāhmanopanisad

This Upanisad which is the forty-eighth among the 108 Upanisads and forms part of the Sukla-yajurveda after dealing with the subtle Astānga yoga, treats of the essentials of Rājayoga by explaining its constituents the three kinds of introspection, the five-fold ether, the two-fold Tāraka, etc.

## (13) The Mahā Vākyopanisad

The Upanisad which is the ninety second among the 108 Upanisads and forms part of the Atharva Veda, deals with the impossibility of the phenomenal world that is apart from the *Ātman* and with the realization of the *Brahman* alone, through such knowledge.

## (14) The yoga Kundaly-Upanisad

This Upanisad, which is the eighty sixth among the 108 Upanisads and forms part of the Kṛṣṇa-yajurveda, incidently deals with an exposition of the *Hatha* and *Lambikā yoga* and concludes with an account of the non-qualified *Brahman*, the quest of all seekers.

## (15) The yoga-Cūdāmani-Upanişad

This Upanisad, which is the forty sixth among the 108 Upanisads and forms part of the Sāmaveda, after expounding the six-fold expedients to yoga, deals with the Brahman that has no counterpart.

## (16) The yoga Tattvopanisad

This Upanişad, which is the forty first among the 108 Upanişads and forms part of the Kṛṣṇa-yajurveda, after setting forth the four kinds of Mantra,

Laya, Hatha and  $R\bar{a}ja$ -yoga, together with the eight subdivisions, Yama and others, deals with the supreme state of resting in the Brahman alone.

## (17) The yoga Sikhopanisad

This Upanisad which is the sixty third among the 108 Upanisads and forms part of the Kṛṣṇa-yajurveda deals with all that relates to jūāna yoga along with the means to be employed for its ecquisition.

## (18) The Varahopanisad

This Upanisad, which is the ninety eighth among the 108 Upanisads and forms part of the Kṛṣṇa-yajurveda gives an exposition of jñāna yogu after dealing with the ninety six eternal varieties and closes with a description of the Brahman which has no counterpart and the Turya-turya the import of the Praṇava.

## (19) The Sandilyopanisad

This Upanisad which is the fifty eight among the 108 Upanisads and forms part of the Atharvaveda, deals with the eight stages of *Yoga* and the principal and subsidiary accomplishments resulting therefrom and points to the ettainment of the state of the *Brahman*, which has no counterpart, as the final resort.

## (20) The Hasmopanisad

This Upanisad which is the fifteenth among the 108 Upanisads and forms part of the Sukla yajurveda, deals with the esoteric nature of the Hamsa vidyā leading unto the Brahma vidyā."



#### ART AND ETHICS OF YOGA

As discussed earlier Yoga is a system of mental and spiritual development with a scope of mental transformation. The propounders of Woga have described certain ethical values and techniques to be used for spiritual development on the path of Yoga which forms the basic approach to the practice of Yoga as agreed upon by the classics including both the Yogasūtras of Patañjali and Śrīmadbhagvad Gītā and other Upaniṣads. All these texts unanimously agreed that—(1) Abhyāsa (continued practice) and (2) Vairāgya (Renunciation) are the two fundamental ways for progressing in the field of Yoga—'Abhyāsa Vairāgyabhyām tannirodhaḥ' (Yoga Sūtras 1:12); 'Abhyāsen Tu Kaunteya Vairāgyena Ca grhyate' (Gītā 6:35). Similarly the four material means through which one can achieve the Sidhi of Yoga as admitted by certain ancient Indian texts including the Yoga Sūtras of Patañjali are—(1) Ability by birth (Janma), (2) Drugs (Auṣadhi), (3) Meditation (Tapa), (4) Chanting (Mantra) and (5) Trans (Samādhi)—"Janma-Auṣadhi Mantra Tapaḥ Samadhi Jaḥ" (Yoga Sūtra 1:4).

However, more practical approach as regards the Ethics and Art of Yoga has been described by Patañjali in his Yoga-Sūtras through Astānga Yoga. He describes Eight steps in the pursuit of the path Yoga as mentioned below.<sup>1</sup> (FIG-IA)

Astāngas are also referred in certain Upanisads.2

१. ज्ञानयुक्तमाद्यष्टाङ्गयोग उच्यते । (यमाः नियमाः आसनितयमः प्राणायामः प्रत्याहारः धारणं ध्यानं समाधिः )। (मण्डलबा• १।१।२-३)

२. यमनियमासनप्राणायामप्रत्याहारधारणाध्यानसमाधयोऽष्टावाङ्गानि । ( पातंजलयोगसूत्र २।२६ ) यम-नियमासन-प्राणायाम-प्रत्याहार-धारणा-ध्यानसमाधयोऽष्टाङ्गानि ।। ( शाण्डिल्योप● १।१।२ )

# EIGHT STEPS IN THE PRACTICE-OF YOGA

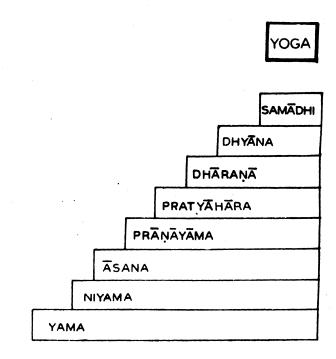


FIG. 1 (A) Showing the stops of the practice of Aşţānga Yoga described by Patanjali in his Yoga Sūtras. This consists of—
(i) Vahiranga Practices like Yama, Niyma, Asana, Prānayāma, and Pratyāhāra, (ii) Antaranga practices such as Dhāranā, Dhyāna and Samādhi eollectively known as Tamyama.

- (1) Yama (Abstinences)
- (2) Niyama (Observances)
- (3) Asana (Body postures)
- (4) Prāṇāyāma (Energy control)
- (5) Pratyāhāra (Abstraction)

- (6) Dhāraṇā (Concentration)
- (7) Dhyāna (meditation)
- (8) Samādhi (Absorption or Trans)

These are the eight constituent parts of the discipline of Yoga. A person desirous of achieving the full goal on the path of Yoga is supposed to practise all these eight steps in sequence and it is postulated that one can not progress to the stage ahead unless he has mastered the stage behind. Though the practice of each of these constituents of the Astānga yoga involves its own Art and Ethics, but the first two steps namely Yama and Niyama are primarily the ethical practices preparatory for further technical practices.

Among these eight steps first four namely-Yama, Niyama, Āsana, Prāṇāvāma have been graded as Vahiranga yoga or external yoga practices while the
further four steps namely Pratyāhāra, Dhāraṇā, Dhyāra, Samādhi are considered
as Antaranga yoga. Among these, Pratyāhāra is actually the link between the
Vahiranga and Antaranga yoga. Even by adequate practice of Yama, Niyama,
Āsana and Prāṇāyāma unless one successfully practises Pratyāhāra which essentially is the withdrawl of senses, he may not be able to prasctise the higher
mental practices like Dhāraṇā, Dhyāna and Samādhi The latter three practices
are the integral part of the same process designed to transform the mental
being and Patañjali describes all the three as a composite entity namely
Samyam. Thus the Aṣṭāṇga yoga appears to consist of some ethical practices
(Yama, Niyama), the physical practices (Āsana, Prāṇāyāma), sensorial practices
(Pratyāhāra) and the higher mental and spiritual practices (Dhāraṇā, Dhyāna,
Samādhi)

- (1) Ethical practices: Yama, Niyama
- (2) Physical Practices: Āsana, Prānāyāma
- (3) Sensorial Practices: Pratyāhāra
- (4) Mental Practices: Dhāraṇā, Dhyāna, Samādhi

Besides the above mentioned Patanjali's schedule of the practice of Yoga, many other technical categories of Yoga have been described by different schools of thought. Some of the relatively more popular methods of Yoga are described below.

- (1) Karma-yoga, Jñāna-yoga, Bhakti-yoga
- (2) Mantra-yoga, Laya-yoga, Hatha-yoga, Rāja-yoga
- (3) Jñāna-yoga, Karma-yoga
- (4) Mantra-yoga, Laya-yoga, Hatha-yoga
- (5) Mahā-yoga (consisting of Mantra-yoga, Laya-yoga, Hatha-yoga, Rāja-yoga as its components)
- (6) Āsana, Prāņāyāma, Dhyāna, Samādhi
- (7) Vaidic-yoga, Jñāna-yoga, Bodha-yoga

While discussing the Art and Ethics of Yoga it would be desirable to describe the ethical and technical aspects of the above mentioned categories of Yoga practices. However, at the outset the ethical and technical aspects of different steps of Astanga yoga described by Patanjali will be described, because the Patanjalis approach to the practice of Yoga through Astanga yoga appears more systematic and covers both the physical as well as the spiritual aspects of Yoga. Aiming at the achievement of Samadhi, the Patanjali's Astanga yoga appears to be a real Raja yoga that is the most superior quality of yoga as conceived in the classics.

## YAMA ( Abstinence )

Yama or abstinence is the first step in the practice of Patanjali's Astanga Yoga. The word, Yama literally means control. Thus the principle which requires and individual to control some activity or behaviour is called Yama without which moral behaviour is not possible. Though some Upanisads describe ten-fold Yamas, the Yoga system of Patanjali admits the following five Yamas or abstinences.

१. अहिंसासत्यमस्तेयं ब्रह्मचयं दयाजंवम् ।

क्षमा धृतिर्मिताहारः शौचं चेति यमा दश ।। (त्रिशिखद्वा० प० ३२)
अहिंसा-सत्यास्तेय-ब्रह्मचर्य-क्षमा-धृति-मिताहार-शौचानि चेति यमा दश । (शाण्डिल्योप० १।१।४)
तत्र दश यमाः तथा नियमाः । आसनान्यष्टौ त्रिःप्राणायमः पंचप्रत्याहाराः । तथा धारणाः ।
द्विप्रकारं ध्यानं । समाधिस्तत्वेकरूपः ।। (शाण्डिल्योपनिषद १।१।३)

२. अहिंसासत्यास्तेयब्रह्मचयापरिग्रहा यमाः ॥ (योगसूत्र २।३०)

- (1) Ahimsā or Non-violence
- (2) Satya or Truthfullness
- (3) Asteya or Non-stealing
- (4) Brahmacarya or Abstention from sex
- (5) Aparigraha or Non-possession

Ahimsā or non-violence means that an aspirant should not injure any living being through body, mind or speech i. e. by action, thought or speech. Ahimsā inspite of being a negative command compells one to avoid physical, verbal or mental violence. It incalcates universal love and brotherhood which is essential for the purification of the mind. The non-violence implies non-hatred and as such non-hatred love and fellow feeling are the constituents of the practice of the non-violence i. e. Ahimsā. Sir Radhakrisnan considers Ahimsā as abstinence from malice towards all living creatures in every way and all times. He also believes that friendship, sympathy, cheerfulness and imperturbility with regard to things pleasant or painful, good or bad, produces serenity of mind. Mahatma Gandhi develops his philosophy of universal love considering Ahimsā or non-violence as a highest virtue.

The observance of non-voilence indirectly implies the observance of truthfulness i. e. Satya which is the second and the most important constituent of Yama described by Patañjali.<sup>2</sup> In contrast to Ahimsā, Satya is a positive command as in this case an individual aspiring for the practice of Yoga is required to adopt truthfulness but it is simultaneously a restrained on indulgence in falsehood. Truthfulness is the fundamental ethics which forms the background for the practice of other Yamas and Niyamas. Mahatma Gandhi gave special emphasis to Satya and used it as a means of revolution. He advocated that a Satya-Grāhā Society may proceed with further revolution by way of Satyāgraha.

Asteya or nonstealing, broadly means non-appropriation i. e. restrained

अहिंसाप्रतिष्ठायां तत्सिन्निधी वैरस्यागः ।। (योगसूत्र २।३४)

२. सत्यप्रतिष्ठायां क्रियाफनाश्रयत्वम् ॥ ( योगसूत्र २।३६ )

from appropriating the property of other persons for personal use.<sup>1</sup> This not only includes physical stealing but refers to misappropriation of a property in any way and at all times. Asteya is important not only as a means of purification of mind but also as a great medium for reducing social tension and conflict.<sup>2</sup>

Brahmacarya or continence or non-indulgence in sex refers to non-deviation from Svadharma, the law of one's being. Brahmacarya is not only restrained from sexual activity, however observance of celibecy is an important aspect of Brahmacarya as it purifies a yogi and helps in conserving his energy and keeps him physically and mentally fit, besides playing a significant role in the purification of mind.<sup>8</sup>

Aparigraha or non-possessiveness essentially refers to the restrained on a yogt for limiting his requirements. The tendency of possession is the weakness of a common man in the society. This tendency has a relevance to his evergoing requirements. The yogic discipline advocates a man to put limits on these instincts. The principle of non possession is of great significance as a restrained because yoga itself has been considered as the separation of mental modifications which obstructs the understanding the nature of the self. tendency of possessiveness would always produce undesired mental fluctuation. Besides its spiritual role, the principle of non-possession has a great potential which may help the society to grow more and more classless and free from Such a voluntary and spiritual communilism without socio-economic conflicts malice and hatred against any one could be a great boon to the modern society. The Sarvodaya movement specially its Bhūdāna aspects moved by Ācarya Vinova Bhave is actually based on the philosophy of Aparigraha which was emphasised by Mahatma Gandhi as an advocation for minimising the individual requirements.

१. अस्तेयप्रतिष्ठायां सर्वरत्नोपस्थानम् ॥ (योगसूत्र २।३७)

२. आत्मन्यनात्मभावेन व्यवहारविवर्णितम् । यतस्तेयमिथ्युक्तमात्मविद्भिर्महामुने ।। (दर्शनोप॰ १।१२)

३. ब्रह्मचर्यप्रतिष्ठायां वीर्यताभः ।। (योगसूत्र २।३८)

Thus Aparigraha or the principle of non-possession is not only a method of mental purification but has a scope of application in social uplift in the modern world.<sup>1</sup>

#### THE NIYAMAS

The second step in the practice of Astānga yoga is the five-fold system of Niyama i. e. cultivation of certain virtues. The Niyamas which form the routine code of conduct consist of certain good habits which lead to the development of the total personality of a man and also influence attitude towards spiritual pursuits and facilitate the spiritual progress. The following five factors have been accepted as the fundamental Niyamas.<sup>2</sup>

- (1) Śauca or purity
- (2) Samtosa or contentment
- (3) Tapas or austerity
- (4) Soadhyāya or self study
- (5) Iśvarapranidhāna or Dedication to the divine

Sauca is the first element of the five-fold Niyama. This refers to the practice of purity in every sphere of the bodily and mental activity. As pointed out by Taimini (1961), "Purification or Sauca is a positive practice. It does not take place by itself. One has to go through purificatory exercises, day after day, for long periods of time. That is why it has been included in Niyama. The word, purity is used in relation to our vehicles, not only the body which we can recognize with our physical senses but also the superphysical vehicles which serve as the instruments of emotion, thought and other spiritual faculties. A thing is pure in relation to a vehicle of it. It enables the vehicle to serve efficiently as an instrument of the Devine Life expressing through it at the particular stage of evolution. It is impure if it hinders the full expression of that life.

१. अपित्रग्रहस्यैयं जन्मकयन्तासंबोधः ।। (योगसूत्र २।३६)
योगस्य प्रथमं द्वारं वाङ् निरोधोऽपित्रग्रहः ।
 निराशा च निरीहा च नित्यमेकान्तशीलता ।। (विवेकचूडामणि ३६८)
२. शौच-सन्तोष-तपः स्वाध्यायेश्वरप्रणिधानानि नियमाः ।। (योगसूत्र २।३२)

Grossly speaking Sauca consists of physical cleaning of the body externally by washing and internally by taking pure and suitable food in appropriate quantity and quality. It also consists of maintaining the purity of the mind by avoiding passion, anger, greed, delusion, pride and jealousy. Further Sauca also refers to the purity of the intellect which can be achieved by useful studies to procure correct wisdom. Thus by keeping one's body, mind and intellect neat and clean one can easily progress on the path of spiritual development.<sup>1</sup>

Samtoşa or contentment is another important principle of Yogic Niyama. A mind which is not in the state of contentment cannot concentrate and meditate. Discontentment is the root cause of all miseries and it produces all sorts of conscious or unconsciousness conflicts in our mind. Therefore, Asamtoşa or discontentment should be always avoided in order to have smooth progress on the path of spiritual attainment.<sup>2</sup>

Grossly speaking Samtosa or contentment refers to non-pursuance of the pleasure of the world and being satisfied with whatever one gets as a result of his honest labour. As described by Taimini (1961) "Samtosa is based on perfect indifference to all those personal enjoyments, comforts and other considerations which sway man kind. Its object is the attainment of that peace which takes one completely beyond the realm of illusion and misery. The cultivation of this supreme discontentment and consequent tranquility of the mind is the result of prolonged self discipline. It can not be acquired by a mere assertion of the will once for all. That is why this virtue is placed under Niyama."

Tapasah or austerity refers to the perfection of the sense organs and body after destruction of impurity by austerities—"Kāyendriyasiddhirasuddhi Kṣayāttapasah" (Patanjali II 43). It stands for the habit of hearing the Arts of Life and the suffering caused by heat and cold, sun and rain etc. (Sharma, 1965). This involves a Siddhi or perfection of the body and the senses meaning thereby a functional perfection which enables the Yogi to use the body for the purpose of Yoga without any kind of resistance or hindrence from it (Taimni, 1961).

१. सत्वशुद्धिसीमनस्येकाग्रयेन्द्रियजयात्मदशंनयोग्यत्वानि च ॥ (योगसूत्र २।४१)

२. संतोषादनुत्तमसुखलामः ॥ (योगसूत्र २।४२)

The essential purpose of *Tapasa* is to purify the body and it is under the control of the will, there fore it is included under *Niyamas*. The living body cannot be used as a perfect instrument of consciousness in the presence of the impurity of the body and lack of control.<sup>1</sup>

Svādhyāya or self study consists of developing a habit of devoting regular time to the study of philosophy and spiritual texts, which reminds the aspirant that the spiritual self is the reality. Svādhyāya refers to the union with the desired diety by self study. Though Svādhyāya starts with study of problems relating to spiritual life, its main purpose is to open up a channel between the Sādhaka and the object of his search. The nature of this communication depends upon the make up of the Yogī and his diety—'Svādhyāyādiṣṭadevatāsamprayogaḥ' (Patanjali II: 44).<sup>2</sup>

Isvarapranidhāna consists of complete surrender to the God and the constant meditation. Isvarapranidhāna can lead ultimately to Samādhi—"Samādhi—Siddhirīsvarapranidhānntā" (Patanjali, II: 45). Thus the path of Isvarapranidhāna appears to be an alternate and independent path of achieving the ultimate reality which is attainable by the practice of Astānga Yoga as a whole.

# ASANA ( BODILY POSTURES ):

The next important aspect of the practice of Yoga consists of a variety of Asanas or postures. According to the Patanjali's schedule of Asstānga Yoga, the Asana is placed as the third step in the practice of Yoga. In the Pancadasānga schedule of the practice of Yoga, Asana occupies the seventh step in the comprehensive practice of Yoga. Dhyāna-Vindu and Yoga-Cuṇāmaṇi Upaniṣads where the Sadanga schedule of the Yoga has been described, Asana is placed as step first because Yama and Niyama have been considered as the prerequisite of the practice of Yoga and not as the actual practice of yoga. Similarly Hathayoga Pradīpikā also considers Asanas as the first step in the practice of Yoga—'Hatha-

१. कायेन्द्रियसिद्धिरणुद्धिक्षयात्तपसः। (योगसूत्र २।४३)

२. स्वाध्यायादिष्टदेवतासम्प्रयोगः ॥ (योगसूत्र २।४४)

३. समाधिसिद्धिरीश्वरत्रणिधानातु ।। (यो॰ सू॰ २।४५)

sya Prathamānga tvadašānam pūrvamucyate' (Hathayoga Prad. 1:19). Some rudimentry descriptions about Asana are also evailable in Amṛtanādoupaniṣad but these Upaniṣads do not present the definition and the classification of Asanas. Manḍala Brāhmaṇoupaniṣad describes Asana as a comfortable posture for prolonged sitting—'Sukhāsana vṛttiściravasaścaivamāsananiyamo bhavati (Manḍal-Bra. 1:1.5).¹ Tejovinḍu Upaniṣad also gives a similar definition² These difinitions are similar to the definition given by Patanjali—'Sthirasukham asanam' (Yogasūtra 2:46).

In view of the generalised criteria of Asanas in general, there can not be a fixed number of such postures, any posture which is comfortable and suitable for prolonged sitting would come under the category of Asana, and thus their number may be unlimited. Still one finds some classification and numbers on the types of the Asanas. We find the mention of the following types of Asanas in different Upanişadic texts as mentioned below.

Upanişads	No. of Asanas mentioned	Name of Asanas
Yogacūḍāmaṇi upaniṣad	2	Siddhāsana   Kamalāsana
Yogakundalyupanişad <sup>3</sup>	2	Padmāsana Vajrāsana
Amṛtanādopanişad <sup>‡</sup>	3	Padmāsana Swastikāsna Bhadrakāsana
Dhyānabindupaniṣad <sup>5</sup> Yoga tattvopaniṣad	4	Siddhāsana Padmāsana

- १. सुखासनवृत्तिश्चिरवासश्चैवमासनिवयमो भवति ।। ( मण्डलब्रा० १।१।४ )
- २. सुखेनैव भवेद्यस्मिन्नजस्रं ब्रह्मचिन्तनम् । आसनं तद्विजानीयादन्यत्सुखविनाशनम् ।। (तेजवि० १।२५)
- ३. आसनं द्विविधं प्रोक्तं पद्मं वज्जासनं तथा ।। (योगकु० ४)
- ४. पद्मक स्वस्तिकं वापि भद्रासनमथापि वा । (अमृतोनादोपनिषद्-१८) वद्धवा योगासनं सम्यग्तराभिमुखः स्थितः ॥
- ४. सिद्धं भद्रं तथा सिहं पद्मं चेति चतुष्टयम् ॥ ( ध्यानविन्दूउपनिषद्-४२ )

Upanişads	No. of Asanas mentioned	Name of Asanas
		Simhāsana Bhadrāsana
Śāndilyopanisad <sup>1</sup>	8	Swastikāsana
·		Gomukhāsana
		Padmāsana Virāsana
		Simhāsana Bhadrāsana
		Muktāsana Mayūrāsana
Darśanopanişad <sup>2</sup>	9	Swastikāsana
•		Gomukhāsana
	•	<b>Pa</b> dmāsana
	75	Virāsana
		Simhāsana
		Bhadrāsana Muktāsana
	•	Mayūrāsana Sukhāsana
Vārāhopanişad³	11	Gakrāsana
•		Padmāsana
		Kūrmāsana
		Mayūrāsana

१. स्वस्तिकगोमुखपग्रवीरसिंहभद्रमुक्तभयूराच्यान्यासनान्यष्टौ । ( शाण्डिल्योपनिषद १।३ )

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    ३. एकादशासनानि स्युश्चकाद्या मुनिसत्तम ।
    चकं पद्मासनं कूर्म मयूरं कुक्कुटं तथा ।। १४ ।।
    वीरासनं स्वस्तिकं च भद्रं सिंहासनं तथा ।
    मुक्तासनं गोमुखं च कीर्तितं योगिवत्तमैंः ।। १६ ।। (वाराहोपनिषद् ४।१४, १६)
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२. स्वस्तिकं गोमुखं पद्मं वीरसिंहासने तथा ।
भद्रं मुक्तासनं चैव मयूरासनमेव च ।।
सुखासनसमार्क्यं च नवमं मुनिपुंगव ।। (दर्शनोपनिषद् ३।१)

Upanişads	No. of Asanas mentioned	Name of Asanas		
		Kukkuţāsana		
		Virāsana		
		Swasthkāsana		
		Bhadrāsana		
		Simhāsana		
	·	Muktāsana Gomukhāsana		
T risikhibrahmaṇopaniṣad¹	17	Svastikāsana		
		Gomukhāsana Virāsana		
	•	Yogāsana		
		<b>Pa</b> dmāsana		
		Baddhapadmāsana		
		Kūputāsana		
		Uttānakurmāsana		
		Dhanurāsana		
•		Simhāsana		
	•	Bhadrāsana		
		Muktāsana		
		Mayūrāsana		
		Matsyāsana Siddhāsana		
		Pascimotiānāsana Sukhāsana		
hyān vindu-upanişad²	Innumerable	only knowable to		
	•	the God		
risikhabrāhmano-	1	Qudasinya		
panişad		(Vairagya + Abhyāsa)		

रै. त्रिशिखत्राह्मणोपनिषद् मंत्रभाग—३४ से ५२ २. जासनानि च तावन्ति यावन्त्यो जीवजातयः। एतेषामतुलान्भेदान् विजानाति महेश्वरः ॥ (ध्यानविन्दू उपनिषद्-४२)

As would be discussed later the practice of Asanas have multidimensional roles to play in the practice of yoga and welfare of the mankind namely (1) relaxation, (2) meditation as well as (3) correction and the culture of the physical body. Yogacūṇamaṇiupaniṣad also considers Yoga Siddhi as the means of relieving the disease, "Asanama rujam hanti".

Thus essentially Asana means seating oneself in comfortable sitting position. However, in Hathayoga Yogāsana is to assume a certain bodily position in order to encourage various vital organs and endocrine glands to function more efficiently leading in turn to an overall development of the body and the mind. As a matter of fact Yogāsanas have been considered as the most unexpensive and convenient method of achieving certain desired effects of the practice of the yoga namely the mental and the physical development, prevention of ageing and disease. These Asanas can be practised without causing any undue disturbance in the daily routine of life by any body irrespective of age, sex, place, climate or any other such factor.

A study of these Asanas would show that these postures have been devised in such a way that besides many other desired effects they induce varying degrees of mental and physical relaxation. Thus Asanas as practised in yoga system are not only a form of physical culture but are also the methods of achieving perfect mental and physical relaxation. There fore, these Asanas may be practised as a means of reducing the stress of the daily life of the modern society.

In contrast to the common physical exercises, the yogic postures specifically influence various organs of the body rather than producing simple skeletal muscles actions. It is postulated that by virtue of these specific physical effects the yogic practices rehabilitate various vital organs and make them functionally more competent. Due to similar effects various endocrine glands also get vitalised and endocrine functions improve which may reflect in to an improved pattern of different metabolic activities in the body. This may be the basis of variou beneficial effects of the practice of Yogāsanas.

A large number of yogic postures or Anasas have been described. These Asanas can be broadly classified into two groups: (1) The meditative postures sech as Siddhāsana, Padmāsana, Bhadrāsana, Muktāsana. Vajrāsana and Svastikāsana. These postures are usually practised as a pre-requisite of meditative procedures namely Dhyāna ete.; (2) Cultural Asanas such as Simhāsana, Gomukhāsana, Virāsana, Dhanurāsana, Mṛtāsana, Guptāsana, Mtsyāsana, Pościmattānāsana, Matsyendrāsana, Gorakṣasna, Utkaṭāsana, Sankantāsana, Mayūrāsana, Kukkuṭāsana, Kūrmāsana, Uttānamandukāsana, Garuṇāsana, Vṛṣāsana, Salabhāsana, Makarāsana, Uṣṭrāsana, Bhujangāsana and Yogāsana etc. Most of this category of postures are practised mainly for developing the physique.

These postures have been described in detail in different texts on *Hathayoga* such as Gheranda Samhitā, Hathayoga Pradīpikā, Šivasamhitā etc. Various postures appear to have been devised to rehabilitate various parts of the body or to provide appropriately stable and comfortable postures facilitating *Dhyāna* and *Samādhi*. Different *Asanas* have been named after the name of different animals depending upon the final appearance of the human body during a particular posture.

As emphasized by Singh and Chhinna (1974) "The practice of Yogāsanas essentially tends to exercise and relax almost all the muscles of the body to prepare it for a prolonged steady, stable and coordinated activity without producing fatigue." They classify Asana in to three categories. One of these is ment only to relax the muscles of the body, along with the mental relaxation. The second type of Asanas are meant for an improved coordination as well as exercise of different groups of muscles for maintaining steady postures. For this a posture is steadily and slowly acquired and maintained as long as an individual can hold it, followed by a gradual return to the initial position. Thus such Asanas have a static as well as a dynamic phase of muscle action. While practising such Asanas fatigue should be avoided and a regular practice should be undertaken. The third variety of Asanas are essentially ment to maintain a stable position of the body for a prolonged period usually needed for meditation ( Dhyāna ), for breathing exercises ( Prāṇāyāma ) and for Kundalini Yoga. Singh and Chhinna (1974) rightly emphasised that this methodical use of the muscles of the body for the control of physical, mental, and visceral

functions, depicts a highly specialised interest in kinesiology and related fields of muscle action."

The recent scientific studies (Udupa and Singh 1973) suggest that Asanas besides providing suitable body postures conducive for Dhyāna and Samādhi (meditative Asanas) or their role in developing the physique (cultural Asanas), the practice of Asanas bring about a number of physiological, biochemical and psychological changes in the body. Among such changes reduction in body weight, reduction in rate of respiration, increased chest expansion, increased vital capacity, reduction in blood sugar and serum lipid levels, increase in serum proteins, improvad adrenocortical functions, and certain improved psychological functions viz, Performance Quotient, Memory Quotient, reduced mental fatigue and reduced neuroticism index accompanied by conforming electrophysiological and neurohumoral changes are notable (Udupa et al., 1971 & 1973; Singh, 1973).

## PRANAYA MA

Prāṇāyāma is the next important step in the practice of Yoga. Tejobindu Upaniṣad keeps Prāṇāyāma as step Four in its fifteen phase schedule of Yoga practice. The Aṣṭānga yoga of Patanjali also considers Prāṇāyāma as step Four in the comprehensive practice of Yoga. The Upaniṣads describing Saḍanga Yoga, place Prāṇāyāma as step one, two or three in the practice of Yoga. The

Mandala-Brahma, Amrtanād, Yogakundali, Darsan and Sādilya Upanisads describe the *Recaka*, *Pūraka* and *Kumbhaka* components of *Prānāyāma* Some times in View of three dimensions *Prānāyama* is considered *Trividha*.

Ordinarily Pūraka refers to an input of atmospheric air in side the body, Kumbhaka means the retention of external air in side the body and Recaka refers to the exhalation of the air inhaled earlier. On the other hand in certain Upanişads the terms, Pūraka, Kumbhaka and Recaka have been considered in certain spiritual dimensions where the term, Pūraka is used to affirm Godly state-'Brahmaivasmiti Yā Vrttih Purako Vāyurucyate' (Tejobindu 1/23-33). And a continuum of such an affirmation is considered Kumbhaka while an avoidance of Prapanca is considered Recaka. The Vārāho-upaniṣad states that all matters contained in the external world are Recaka while the materials available in the Sastras fall in the category of the Pūraka and the self experience is Kumbhaka. Dhyanavindu Upanisad designate Pūraka, and Kumbhaka and Recaka as Brahmā, Viṣṇu and Rudra respectively. According to Triśikkibrāhma. Upanişad Prānāyāma has been considerd synonymous to the state of realisation of the illusive nature of the universe. and the Tejobindu Upanişad considers Prāṇāyāma as a state of ceasation of all Vyttis—"Nirodhah sarva vyttinam prānāyāmah" ( Tejobindu, 1/31 ).2

In certain Upanisads *Prānāyāma* and *Kumbhaka* have been used as synonymous. In this concept of *Prānāyāma (Kumbhaka)* one finds two types as described below:

१. प्राणायाम्—

उत्सिप्य वायुमाकाशे सून्यं कृत्वा निरात्मकम् ।

सून्यभावे नियुजीयाद्रेचकस्येति लक्षणम् ॥ (अमृतनादोपनिषद् )
ववत्रेणोत्पलनालेन तोयमाकर्षयेन्नरः ।

एवं वाबुर्महीतन्यः पूरकस्येति सक्षणम् ॥ (अमृतनादोपनिषद् १२)

नोच्छ्वसेन्न च निश्वासेन्नैव गात्राणि चालयेत् ।

एवं भावं नियुजीयात् कुम्भकस्येति लक्षणम् ॥ (अमृतोनादोपनिषद् १३)

२. चित्तादिसर्वेभावेषु ब्रह्मत्वेनैव भावनात् ।

निरोधः सर्वेवृतीनां प्राणायामः स उच्यते ॥ (तेषविन्द्पनिषद् १।३१)

- (1) SAHITA (Recaka-Pūraka yukta Kumbhaka Prānāyāma) further classified into (i) Sūrya Bheda, (ii) Ujjayī, (iii) Šītalī, and Bhastikā.
- (2) KEVALA (Recak-Pūraka Vivarjita Kumbhaka Prānāyāma). Among these the Kewala Kumbhaka has been conidered as the most difficult practice and it has been admitted to be one of the higher practices. One who is able to practice Kewala Kumbhaka successfully, his Kundalinī is activated.

In the context of  $Pr\bar{a}n\bar{a}y\bar{a}ma$ ,  $N\bar{a}dis$  have been considered to be of great significance—' $Pr\bar{a}n\bar{a}y\bar{a}mah$  sv $\bar{a}ndibhih$  tasm $\bar{a}nn\bar{a}dih$  pracaksate' (V $\bar{a}r\bar{a}$ . 5:18). Different Upaniṣads have described the  $N\bar{a}di$  Cakra' in the context of  $Pr\bar{a}n\bar{a}y\bar{a}ma$  and  $Pr\bar{a}n\bar{a}y\bar{a}ma$  has been considered as  $N\bar{a}di$  Suddhi. Different texts have described different number of  $N\bar{a}dis$  using different names. Among these Susumn $\bar{a}$ , Pingl $\bar{a}$  and Id $\bar{a}$  have been considered important, Susumn $\bar{a}$  being the most important. It has been postulated that the ten-fold  $V\bar{a}yu$  flows through these  $N\bar{a}dis$ —'Avama-tasu  $n\bar{a}disu$ , caranti Dasa  $V\bar{a}yavah$ ' (Varah. 5:31). It has been furthes stated that  $N\bar{a}di$  Suddhi leads to healthful life with improved digestion and metabolism. It also delays the onset of ageing. Darsano-upaniṣad has discussed in greater detail various types of  $N\bar{a}di$  Suddhi and considers it as the promotor of Jivanamukri.

The Prāṇāyāma (Prāṇa = Breath + Ayam = Pause) is concerned with the controlled breathing exercises and in a broader sense the control of the vital force l. e. Prāṇa. Basically Prāṇāyāma consists of three phases namely—(1) Pūraka (Inhalation), (2) Kumbhaka (Pause or breath holding), and (3) Recaka (Exhalation). The best proportion of time to be alloted to the

तिशिखन्नाह्मणोपनिषद्, (मन्त्रभाग-६७ से ८६)
 हस्तेन दक्षिणेनैव पीडयेन्नासिकापुटम् ।
 शनैः शनैरथ बहिः प्रक्षिपेत्पिगलानिलम् । (तिशिखन्नाह्मणोपनिषद् ।। ६४ ।।)
 शनैरशीति पर्यन्तं चतुर्वारं समध्यसेन् ।
 एकाह मात्रं कुर्वाणिः सर्वपापैः प्रमुच्यते ।। (तिशिखन्नाह्मणोपनिषद् १०१)
 राणायामकनं वक्ष्ये सांकृते श्रृणु सादरम् ।
 प्राणायाम इति प्रोक्तो रेचपूरककुम्भकैः ।। (दर्शनोपनिषद् ६।१)

three steps is 1:4:2 respectively for inhaling, controlling and exhalling the breath. The practice of breath control must be under the guidance of an experienced Yogin. Kumbhaka may be practised during Recaka phase (Vāhya kumbhaka) or in the Pūraka phase (Abhyāntara Kumbhaka).

Prāṇāyāma is described to be of many kinds.¹ But primnrily eight types of Prāṇāyāma have been described as mentioued below

- 1. Ujjaī i. e. to pronounce a loud
- 2. Sūryabhedana i. e. inhalation through Sūrya Nādi (Right nostril).
- 3. Śitkārī i. e. producing typical sheezing sound during inspiration.
- 4. Sitali i. e. a cooling procedure by inhaling with a protruted tongue and beak like opening of the lips
  - 5. Bhastrikā i. e. breathing like vellows
- 6. Bhrāmarī i. e. imitating humming of bees during inhalation and exhalation
  - 7. Mūrcohā i. e. rendering the mind passive
- 8. Plāvinī i. e. enabling the person to float on water while practising Prāṇāyāma

Though *Prāṇāyāma* is primarily a system of breathing exercise, it is practised in a specised manner and accord-ingly it yields comprehensive effects including systemic physiological vitalisation and psychosomatic relaxation.

## PRATYAHARA

Pratyāhāra is the fifth step in the Astānga Yoga of Patanjali. It has been considered as step first in Sadanga Yoga of Amṛtanādo-upaniṣad<sup>2</sup> and as step Twelve in the Pancadasānga Yoga of Tejovindu Upaniṣad. Pratyāhara has been

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वर्णत्रयात्मकाः प्रोक्ता रेचपूरककुम्भकाः ।
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स एव प्रणवः प्रोक्तः प्राणायामश्च तन्मयः ।। (दर्शनोपनिषद् ६-२)

१. पूरककुम्भकरेचकैः षोडमचतुष्विटदात्रिंशत्संस्यया यथाक्रमं प्राणायामः ॥

<sup>(</sup> मण्डलबाह्यणोपनिषद १।१।६ )

२. प्रत्यारारस्तथा ध्यानं प्राणायामोऽय धारणा । तर्कश्चैव समाधिश्च षडंगो योग उच्यते ।। (अमृतोपनादोप● ६)

considered as an act of withdrawl of the mind from the sensory object, meaning thereby an inhibition of the mind from the sensorial perceptions. Yogattatva, Yogacūṇāmani, and Darsanoupaniṣads, consider *Pratyāhāra* as an ability of active withdrawl of the senses from their objects. Sāndilyoupaniṣad describes Five-fold Pratyāhāra.

The Pratyāhāra is a process of self-restraint where an individual tries to keep his senses away from their objects. In other words he lives the life of Vairāgya which is considered to be an essential pre-requisite for subsequent yogic practices which are mostly higher psychic manipulations. As a matter of fact Pratyāhāra is a bridge between the Vahiranga and Antaranga phases of Āsṭānga Yoga, described by Patanjali.

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१. विषयेभ्य इन्द्रियार्थेभ्यो मनोनिरोधनं प्रत्याहारः ।। ( मण्डलब्राह्मणोपनिषद् १।१।७)
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२. इन्द्रियाणीन्द्रियार्थेभ्यो यत्प्रत्याहरणं स्फुटम् ।
योगीकुम्भकमास्थाय प्रत्याहारः स उच्यते ॥ (योगतत्त्वोपनिषद्-६८)
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४. बलादाहरणं तेषां प्रत्याहारः स उच्यते ।

यत्पश्यति तु तत्सर्वं ब्रह्म पश्यनसमाहितः ।। (७१२)

प्रत्याहारो भवेदेष ब्रह्मविविद्भिः पुरोदितः ।

यद्यच्छुद्धमशुद्धं वा करोत्यामरणान्तिकम् ।। (दर्शनोपनिषद् ७।३)

तत् सर्वं ब्रह्मणे कुर्यात् प्रत्याहारः स उच्यते ।

अथवा नित्यकर्माणि ब्रह्मारायनतद्धितः ।। (दर्शनोपनिषद् ७।४)
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## ५. पञ्चविधा प्रत्याहारः --

अथ प्रत्याहारः । स पश्विविधः । विषयेषु विचरतामिन्द्रियाणां बलादाहरणं प्रत्याहारः । यद्यत्पम्यति तत्सर्वमात्मेति प्रत्याहारः । नित्यविहितकर्मफलत्यागः प्रत्याहारः । सर्वविषयपराड्-मुखत्वं प्रत्याहारः । अष्टादशसु मर्मस्थानेषु कमाद्वारणं प्रत्याहारः ॥

( शाण्डिल्योपनियद १।८।१ )

३. चरतां चक्षुरादीनां विषयेषु यथाक्रमम् । तत्प्रत्याहरणं तेषां प्रत्याहारः स उच्यते । (योगचूडामण्यूपनिषद्-१२०)

"A layman draws himself into the viscious circle of longing for sensual objects by constantly striving to satisfy sensual desires and by giving unlicensed

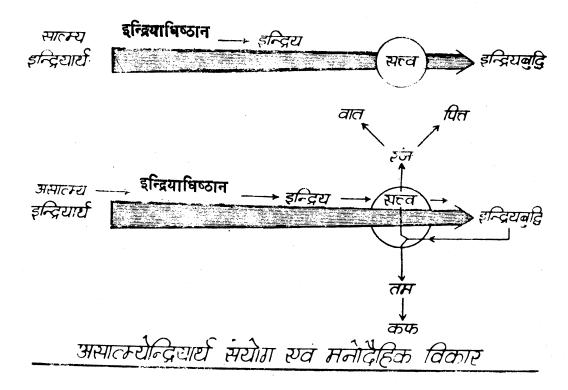


FIG. 1. Diagramme depicting Panca-Pancaka concept of Perception as described in Ayuaveda indicating the central role of Sattva, the Mind. The diagramme further shows the results of reactions of Indriya Buddhi with the Sattva causing the vitiation of Doşas at the mental and physical planes which forms the basis of the Ayurvedic concept of Asātmyendriyārtha Samyoga in the aetiology of Psychosomatic disorders.

freedom to the play of senses. Such behaviour both diminishes his psychophysi-

cal powers and renders him unfit to advance on the path of Yoga. Hence the withdrawl of the senses from their external objects or stimuli and bringing them under the control of mind i. e. Pratyāhāra is advocated by this system as the Fifth means of the practice of the Yoga. It has been remarked that when the senses are introverted the mind is not distracted by external stimuli, and that the senses so controlled by mind add to its power of concentration. Thus the restraint of the senses helps the aspirant to progress towards the stage of Samādhi. This gradual march of the aspirant prepares him for the total stoppage of mental modifications, which does not abolish knowledge but makes his knowledge all pervasive as a result of spiritual discipline, the Five stages of which we have described above. These Five steps are designated as outer means ( Bahiranga Sādhanās ) because of their aim of controlling the environment, or the effect of the environment, on the Yogi through Yama, Niyama, Asanas, Prāṇāyāma and Pratyāhāra. These means, however, are not enough to put a full stop to mental modifications. They must be supplemented by the remaining three means of Yoga, viz. Dhāraṇā (attention), Dhyāna (contemplation) and Samādhi or pure meditation or concentration, which are called the inner means of Yoga ( Antaranga Sādhanās )" ( Quoted from Sharma, I. C., 1968 ).

Though Pratyāhāra is an important step in the practice of Yoga, its descriptions in the texts are not very much clear. Ordinarily Pratyāhāra refers to the withdrawl of the senses from their objects. The actual mechanism of such a withdrawl is not easy to understand. It is rightly suggested by Taimni (1968), in order to understand that Pratyāhāra really means one has to recall how mental perception of the objects in the outer world takes place. One perceives an object when different kind of vibrations which imanate from it, strike the sense organs and the mind is then joined to the sense organs thus activated. From the physiological and the psychological point of view the reception of the vibration by the sense organs and the perception by the mind are intervened by many intermediary stages. The Ayurvedic concept of Pancapancaka in the context of perception is the simple representation of the mechanism of sensorial perception. The same is summarised bolow.

(also see Fig. 1).

Bhūtas ( elements )	Indriyas ( sense- organs )	Tanmātrās ( sensations )	Citta ( mind )	Buddhi (percep- tion)	Ātmā (spirit)
Pṛthvī	Nose	Smell		Ghrāṇa	
(éarth)				Buddhi	p
Jala (water)	Tongue	Taste		Rasa Būddhi	e r c
Tejas ( light )	Eye	Light	Mind	Rupa B <b>u</b> ddhi	e i v
Vāyu ( air )	Skin	Touch		Sparša Buddhi	r
Akāśa ( ether )	Ear	Hearing		Sravaṇa Buddhi	·

It is a matter of common experience that unless the mind joins, inspite of the physical contact of the object and the sense-organ, there is no perception. It is also commonly experienced that although the mind is automatically ignoring a large number of objects vibrating its sense organs, it cannot close itself voluntarily from all the objects if it wants to do so. Certain vibrations always manage to catch the attention and the mind is generally helpless against the inroads of these unwanted intruders. In fact, the more it tries to shut them out the more numerous and insistent they become.

However, for the practice of  $R\bar{a}ja$  yoga the external world has to be completely shut of so that the mind is free and alone for yogic achievement. Taimni (1968) has rightly pointed out that when we are making any particular mental effort we shall find that the mental images which are present and changing constantly may be divided into following three categories:

- (1) Ever changing impressions produced by the outer world through the vibrations reaching the sense organs.
  - (2) Memories of the past experiences floating in the mind, and.
  - (3) Mental images connected with the anticipation of the future.

Among these Nos. Two and Three are purely mental and are not dependent upon any objective reality outside the mind, while No. 1 is the direct result of contact with the outer world. The object of *Pratyāhāra* according to Taimni (1968) is to eliminate No. 1 completely from the mind thus leaving only No. 2 and 3 which are then mastered through *Dhāraṇā* and *Dhyāna*. Thus *Pratyāhāra* interposes a shutter between the sense-organs and the mind and thus isolates the mind completely from the external world. Ordinarily *Pratyāhāra* appears to be a control of the senses by the mind but essentially the technique of *Pratyāhāra* is really the withdrawl of the mind into itself. It is a kind of abstraction so complete that sense organs cease to function.

# **DHARANA**

Dhāraṇā has been considered as step Six of the Aṣṭānga Yoga of Patanjali, step Four in the Ṣaḍanga Yoga and step Thirteen of the Pancadašānga Yoga.¹ of certain Upaniṣads. Patanjali describes as a part of Antaranga Yoga and includes it as a constituent of Saṃyam, a term applied to the composite entity of the three higher practices of Antaranga Yoga namely Dhāraṇā, Dhyāna and Samādhi. The practice of Dhāraṇā appears to have been described in different ways in different Upaniṣads. Trisikhbrahmano-Upaniṣad has considered Dhāraṇā as a condition of non-fluctuation (Niscalī bhāva) of the mind and considers it as a means of liberation. Dhāraṇā has been conceived as an act of localisation of mental being within the five eternal substances of the body.² Daršanoupaniṣad describes Five-fold Dhāraṇā refering the containment of the Five Panca-

१. प्राणायामः, प्रत्याहारो, ध्यानं, धारणा, तर्कः, समाधिः —षडंग इत्युच्यते योगः । ( मैत्रायण्यूप० ६।१८ )

२. पश्चभूतमये देहे भूतेब्वेतेषु पश्चसु । मनसो धारणं यत्तद्युक्तस्य च यमादिनिः ।। (त्रिशिखब्राह्मणोपनिषद्-१३३)

mahābhūtas of the external world within the Pancamahābhutas of the living body. Yogatattvoupanişad has described the Siddhis of Dhāranā and has considered these Siddhis as obstacles in the path of Mahāsiddhi so much so that it has advocated the avoidance of the attraction towards the Siddhis attainable by *Dhāranā*. *Dhāranā* has also been stated to effect strength to the body and to win the death. Yogatattvoupanisad has also considered Dhāranā as the sense of Atmā or Paramātmā in the objects of the Five senses in Sandilyoupanişad refers to the Dharana of mind into the Atma, Dhāranā of the Vāhyākāsa into the Dehākāsa and the Dhārana of the Pancamūrtis into Pancabhūtas. Thus Dhāraṇā though generally appears to be a mental practice and may be conidered as an important aspect of the Toga of mind but the survey of Upanisadic literature presents a varied picture and over the spectrum of Upanişadic statement it appears difficult to form a consolidated single concept of Dhāranā. However, for all practical purposes it appears useful to develop the science of Dhāraṇā in the light of the descriptions available in the Yoga Sūtras of Patanjali. Patanjali considers Dhāraņā (concentration) as the act of confining the mind within a limited mental area i.e. the object of concentration—"Desabandhascittasya Dhāraṇā" (Yoga Sūtra, 3.1). Sharma (1968) interprets Dhāranā as an act of holding the object of attention before the mind. It is the first step towards Samādhi. During Dhāraṇā the practitioner fixes his mind on some external object which may be either a solid object like the image of a diety or a part of his own body like the tip of the nose etc. As a matter of fact *Dhāraṇā* is a mental exercise which helps a Yogi to undertake the subsequent practices namely Dhyāna and Samādhi without difficulty. The practice of *Dhāraṇā* and subsequent higher practices can be persued only by an aspirant who has already perfected Pratyāhāra preceded by other Vahiranga Yogic practices. It is rightly pointed out by Taimni (1968) that theoretically it is possible for the student to start right away with the mind and he maysucceed in practising meditation to a certain extent but he can not go very far in this manner and his progress is bound to come to a stop sooner or later. It

१. अथ धारणा । स पञ्चिविधः । आत्मिन मनोद्यारणं देहराकाणे बाह्याकाणधारणं पृथिव्यप्तेजोवाय्वा-काशेषु पञ्चमूर्तिधारणं चेति ।। ( गांडित्योपनिषद् १।८ )

is only when he has prepared himself in the manner indicated above that he can go on steadily right upto the end. Though in rare conditions the meditative practices can be perfected without going through the preceding preparatory practices. However, Patanjali has pointed out the absolute necessity of going through the first five steps of Astanga Yoga before taking up the practice of Dhāranā.

Literally *Dhāraṇā* means concentration, though the English word 'concentration' does not fully represent the meaning of the term *Dhāraṇā* as conceived in Yoga psychology. In this context it may be pointed out that according to modern psychology the mind cannot be fixed on any object for any considerable time. The mind remains moving even during the highest degree of concentration. Thus concentration only means the controlled movement of mind within a limited sphere and such a concentration of mind is supposed to yield its remarkable result. On the other hand according to Indian psychology upon which the science of Yoga is based, though concentration begins with the controlled movement of the mind it can reach a state in which all movements or changes stop. In this ultimate stage the mind becomes one with the essential nature of the object concentrated upon and can thus move no further (Taimni, 1968). Modern psychology does not believe that the mind can fully realise the essential nature of the object concentrated upon.

Thus Dhāraṇā is a type of concentration where the mind is confined within a limited sphere defined by the object which is being concentrated upon. The word, Deśabandha means confinement within a territory which allows a limited freedom of movement. The main work in Dhāraṇa consists in keeping the mind continuously engaged in the consideration of the object and to bring it back immediately after the connection is broken. The objective is to reduce increasingly the frequency of such interruption leading to their complete elimination ultimately with complete focussing of the mind on the object.

## DHYĀNA ( MEDITATION )

As mentioned earlier *Dhāraṇā*, *Dhyāna* and *Samādhi* are the developed states of mind and are collectively designāted as *Samyama*— 'Trayamekatra Samya-

maḥ" (Yoga Sūtra III. '4). Dhāraṇā is the process of concentrating the mind in a particular area which is followed by Dhyāna when the mental waves attain equilibrium under the influence of Dhāraṇā Samādhi is the state of trans. As a matter of fact Dhāraṇā, Dhyāna and Samādhi are the constituent stages of the same psychic achievement which finally develops into trans or Samādhi a state, of complete relaxation and creative awareness. This is how Yoga is considered as the means or method of getting the ultimate awareness or a means of approaching the God by way of an absolute control of mind i e. "Yogaḥ cittauṛtti Nirodhaḥ" precipitating the Yoga i. e. the union of the Ātmā with the Paramātmā or the man with the God.

Thus Dhyāna is the stage of the practice of Yoga which is generally placed immediately before the stage of Samādhi. Tejovindoupaniṣad has considered Atmadhyāna as the fourteenth step. Yogatattvoupaniṣad places Bhagvaddhyāna as step seven while the Maitrayai and Amṛtnādoupaniṣads have considered Dhyāna as third and second step respectively. The popular meaning of Dhyāna has been described above. However, certain Upaniṣads describe Dhyāna from different angles. Maitrayi and Skandhupaniṣads consider Dhyāna as the Nirviṣaya state of the mind 'Dhyānam nirviṣayam manaḥ'. The Triśikhbrāhmanoupaniṣad describes Dhyāna as the state of thinking, oneself as Cinm tra brahmatattva-'Soaham Cinmātrameveti Cintanam dhyānamucyate'. The Yogatattvoupaniṣad considers the meditation over the diety as Saguṇa Dhyāna capable of yielding Aṣta-siddhis.¹ Only Nirguṇa Dhyana has been considered as the means of attaining Samādhi². Sandilyoupaniṣad also considers the Saguṇa and Nirguṇa varieties of Dhyāna.³ Mandala Brāhmanoupaniṣad considers Dhyāna as the continuity of

१. समभ्यसे तथा ध्यानं घटिकापिष्टिमेव च।
वायुं निरूध्य चाकाशे देवतािमिष्टदािमिति ।। (योगतत्त्वोपनिषद्-१०४)

२. सगुणं ध्यानमेतत्स्यादणिमादिगुणप्रदम् । निर्गुणध्यानयुक्तस्य समाधिश्च ततो भवेत् ।। (योगतत्त्वोपनिषद-१०५)

३. अथ ध्यानं । तद्विविधि सगुणं निर्मुणं चेति । सगुणं मूर्तिध्यानम् । निर्मुणमात्मयाथात्म्यम् ।। ( ग्राण्डिल्योपनिषद् १।१० खण्ड )

consciousness of all living beings. Yoga Kundalinupanişad describes *Dhyāna* as a way of negation of the world. Yogacūdamaņi Upanişad describes twelvefold *Dhyāna* as the means of attainment of samādhi.

However, inspite of varied descriptions of Dhyāna in traditional literature Dhyāna appears to be a higher mental practice which is immediate preparatory in contrast to Dhūranū which is oscillating and short term. Dhyāna is an act of continuous contemplation and consists of fixing the mind on its object without a break. The Sūtra, 'Tatra Pratyayaikatānata Dhyānam' from the Yogasūtras of Patanjali literally means that Dhyāna is an uninterrupted flow of the mind towards the object chosen for meditation. Taimni (1968) rightly points out that an aspirant should aim at climinating the distracting thoughts and should aim at reducing the frequancy of such interruptions in a progressive manner. By such an effort when the aspirant succeeds in eliminating the distraction completely and becomes able to cont nue the concentration on the object without any interruptions for as long a time as he desires, he is supposed to reach the stage of Dhyāna. Thus the essential difference between Dhāranā and Dhyāua is the occasional occurence of distractions in the mind during Dhāranā. The continuity of concentration is the essential measure of the necessary control over the mind and the quality and depth of the concentration. Such a qualitative improvement in concentration is an essential pre-requisite for the practice of Samādhi.

#### *SAMĀDHI*

Samādhi is the eighth and the final step of the Astānga Yoga of Patanjali Samādhi is considered the final stage of all schools of Yoga. The Trisikhbrāhmana and Manḍalabrāhmana Upaniṣads describe Samādhi<sup>2</sup> as a state of Dhyāna vismṛti. It is a state of ceasation of all the Vṛttis of the mind. Vārāha Upaniṣad

१. सर्वशरीरेषु चैतन्यैकतानता ध्यानम् ॥ (मण्डलबाह्यणोपनिषद्-१।१।६)

२. ध्यानविस्मृतिः समाधिः । (मण्डलबाह्मणोपनिषद् १।१।१०)

३. वनेकनयनाकीणं सूर्यकोटिसमप्रभम् । ध्यायतो योगिनः सर्वं मनोवत्तिविनश्यति ।। (त्रिशिखन्नाह्मणोपनिषद् १५५)

considers  $Sam\bar{a}dhi$  as the continuum of the mind with the  $Atm\bar{a}$ . Yogatattvoupaniṣad describes  $Sam\bar{a}dhi$  as a state which is characterized by the equanimity of the  $J\bar{\imath}v\bar{a}tm\bar{a}$  and  $Param\bar{a}tm\bar{a}$ . According to Darśanoupaniṣad  $Sam\bar{a}dhi$  is the union of  $Param\bar{a}tm\bar{a}$  and  $Jiv\bar{a}tma$ . Sandilyoupanisad describes this union of  $Jiv\bar{a}tm\bar{a}$  and  $Param\bar{a}tm\bar{a}$  as a state of extreme bliss and parity of consciousness. According to Triśikh Brāhmanoupaniṣad  $Sam\bar{a}dhi$  is that state of being, where the  $Yog\bar{\imath}$  perceives his "Godly" status and merges into or blends with the Brahma and thereby achieves salvation (spiritual liberation) which ultimately isolates the  $Yog\bar{\imath}$  from the cycle of "rebirth" or Punarjanma and its miseries.

Tejovindu Upanişad describes double Samādhi while vārāhoupanişad mentions the Asamprajnāta Samādhi. Though one does not get the clear description of the two types of Samādhi namely Samprajnāta and Asamprajnata. Moreover, Sandilyoupaniṣad conceives only one type of Samadhi—'Samadhistvekarupah' Daršanoupaniṣad considers Samadhi as a Bhāvanāšaka state. Yogasikha and Yogakundlyupaniṣad state that a Yogā becomes immortal right after the achievement of Samadhi.¹

Patanjali describes that state as Samadhi when there is consciousness only of the object of meditation and not of the mind itself-"Tadevartha mātra nirbhasam swarūpasūnyamiva samādhiḥ". This is the last stage of the concentration of the mind. This is the climex of the mental manipulation during the practice of Yoga. "When the state of Dhyāna has been well established and the mind becomes able to hold the object of meditation without any distraction it is possible to know the object much more clearly than in ordinary thinking, but even then a direct knowledge of the object is not obtained and the reality hidden within the object seems to elude the Yogi (Taimni, 1968).

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समाधिः स तु विज्ञेयः सर्वद्वित्तिविर्विजतः ।

ब्रह्मसंपद्यते योगी न भूयः संमृति व्रजेत् ।। (त्रिशिखब्राह्मणोपनिषद्-१६२)
१. समाधिमेकेन सममृतं यान्ति योगिनः ।

यथाग्निर्दाहमध्यस्यो नोतिष्ठेन्मयनं विना ।। (योगकुण्डत्युपनिषद्-३।१४)

वायु बिन्दु चक्रं चित्तं चैव समभ्यसेत् ।

समाधिनैकेन सममृतं यान्ति योगिनः ।! (योगशिखोपनिषद । अ७५)
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This is the situation where all the distractors have been completely eliminated and the consciousness is fully focussed on the object of meditation. Still the aspirant is not able to realise the very essence of the object. At this juncture the mind itself interferes with the realisation of the ultimate truth regarding

THE PATTERN OF FREQUENCY OF DISTRACTIONS & MENTAL SELF AWARENESS IN THE ORDINARY

	THINKING, DHĀRAŅĀ	Å, DHYÁI	NA & SAI	MÅDHI				
ORDINARY THINKING	1· [Z	Y	X	W	V	$\bigcirc$	T	
DHĀRAŅĀ	2- <b>2</b> 3- <b>2</b>	<b>Z</b> <b>Z</b>	Y	(Z) (Z)	(Z) (Y)	(X) (Z)	(Z) (Z)	<b>(Z</b> )
DHYÁ <b>NA</b>	4- Z 5- Z 6- Z	Z Z Z	Z Z Z	Z Z Z	Z Z Z	Z Z Z	Z Z Z	(Z) (Z)
SAMĀDHI	LZ 7-	Z Z Z	Z Z Z	Z Z Z	Z Z Z	Z Z Z	Z Z <b>Z</b>	Ž Ž Z

Z \* OBJECT CHOSEN FOR SAMYAM

YXWVUT - DISTRACTIONS

# CIRCLES ROUND THE LETTERS-MENTAL SELF AWARENESS

FIG. 2. Showing the qualitative difference between ordinary thinking, Dhāraṇā, Dhyāna and Samādhi as regard to the pattern of frequency of distraction and mental self-awareness (Modified after Tamini) Z=Object chosen for concentration; XYWVUT= Distractions; Circles around the letters=Mental Self-awareness.

the object of meditation. As pointed out by Taimni (1968) the consciousness of the mind of itself separates the consciousness of the Yogi and the ultimate truth and thus interferes with the further progress. It is the disappearance of the self consciousness which may open the door of a new world. Similar transition occurs when Dhyāna passes into Samādhi. Patanjali describes the phenomenon of disappearance of the self consciousness of the mind as Svarūpa-

Here 'Svarūpasunyam' means reducing the self awareness of all the subjective roles of the mind to the atmost limit. The Dhyāna precipitates into Samādhi with the complete disappearance of the self-awareness. As a matter of fact as also rightly postulated by Taimni (1968) the apparent disappearance of the self awareness means dissolution of subject-object relationship and their fusion in consciousness. With the disappearance of the self-awareness of the mind a higher consciousness starts operating and the perception of the ultimate reality i. e. the reality hidden behind the object takes place. Here the perceiver, the object of perception and the perception become fused in one phase. Thus Samādhi is only an advanced state of Dhyāna, the only difference being the elimination of the self-awareness of the mind during Samādhi. The qualitative pattern of ordinary thinking, Dhāranā, Dhyāna and Samādhi may be detected as shown in the following diagram (Fig. 2).

As shown in Fig. the frequency of distractions goes on decreasing in Dhāranā and the frequency and degree of mental self-awareness goes on decreasing in Dhyāna, while is Samādhi there is complete freedom both from distractions and self-awareness and the object alone remains in the field of consciousness. The transformations which take place in Dhāraṇā, Dhyāna and Samādhi are purely mental phenomena and are related to consciousness. The mind is already disconnected from the body and so the mental activities will not reflect in the body. The physiological functions of the body may continue but there is no response of the body to the internal or external world. However, it may be kept into mind that every kind of unresponsiveness and inertness of the body cannot be considered as Samādhi. The essential feature of the Samādhi is the disappearance of self-awareness leading into the realisation of Ultimate Truth which may be associated with unresponsiveness of the body. The unresponsiveness of the body alone without the transformation of the consciousness is some times known as Jada Samādhi. This is not a true Samādhi. The person coming out of the Jada-Samādhi will not have any mental achievement while a person coming out of a true Samādhi brings with him the transcedental knowledge, wisdom, peace and strength of the inner life.

Types of Samādhi: The subject of Samādhi has been described at several places in different contexts in Yoga Sūtras of Patnijali the main contexts are summarize below.

1. The three stages of Meditation i. c. Dhāraṇā,	Yogasutra 3:1-4			
Dhyāna and Samādhi				
2. Samprajnāta and Asamprajnāta Samādhi	Yogasūtra 1:17-18			
3. The essential features of Sabija Samādhi	Yo asutra 1:41			
4. Different phases of Sabīja Samādhi	Yogasūtra 1:42-50			
5. The technique of Nirbīja Samādhi	Yogasutra 1:51, 3:8,			
	4:26-29			
6. The three kinds of transformation involved in Samādhi.	Yogasutra 3:9-12			

The different stages of Samādhi represent progressive release of consciousness from its limitations and Kaivalya is that state in which it can again function in perfect freedom. The consideration of the distinction between Samprajnānta and Asamprajnāta Samādhi should not be confused with the concept of Sabīja and Nirbīja Samādhi. Though many people use Samprajnāta and Asamprajnāta Samādhi as synonyms of Sabīja and Nirbīja Samādhi.

Samādhi is a Samādhi without Prajnā. Prajnā means the higher consciousness operating through the mind with all its stages. In Samprajnāta Samādhi there is a nucleus in the field of consciousness to which the consciousness is fully directed. In Asamprajnāta Samādhi there is no such nucleus to draw the consciousness outwards. Thus as soon as such a nucleus is eliminated the consciousness begins to recede inwards.

As described by Taimni (1968), "The Samprajnāta Samādhi begins when the consciousness is completely cut-off from the outer world of the passing through  $Dh\bar{a}ran\bar{a}$  and  $Dhy\bar{a}na$ . In the first stage of Samprajnāta Samādhi the consciousness is centred in the lower mental world and functions through the Manomaya Koša. The essential function of the mind in this stage is denoted by the word, Vitarka. It should be noted that when a person can leave a physical body and function in the subtle vehicles, he is not necessarily in a

state of Samādhi. After mastering the technique of Savitarka and Nirvitarka phases in the first stage the aspirant practises Asamprajnāta Samādhi and withdraws his consciousness into the next higher plane passing through the clouds which accompanies Asamprajnāta Samādhi. Then his consciousness emerges into the higher mental world and functions through the Vijnānamaya Koša i. e. the causal body. The essential function of the mind working through this vehicles is called Vicāra. Now he starts practising Samādhi on this plane, slowly masters the technique of the Savicāra and Nirvicāra phases and again practises Asamprajnāta Samādhi to free his consciousness from the higher mental plane.

The whole cyclic process has to be repeated twice during the last two stages of Samprajnāta Samādhi in order to release the consciousness of the Yogī from the extremely subtle vehicles namely Anandamaya Koša and Atmā whose essential functions are Ananda and Asmitā. Thus the Vitarka, Vicāra, Ananda and Asmitā are the important characteristics of different stages of consciousness. The characteristics of the four stages of consciousness, the stages of the Guṇas and the vehicles through which the states of consciousness are expressed are described below.

Characteristics of the state of consciousness	Stages of the Gunas	Vehicle for expression in Vedāntic terminology.
Vitarka	Viśeşa	Manomayakośa
Vicāra	Aviśesa	Vijnānamaya kośi
Ānanda	Linga	Ānandamaya kośa
Asmitā	Alinga	Ātmā

It is only after all the stages of Asamprajnāta Samādhi have passed and Nirbija is practised to remove the final and the subtlest veil covering. The reality, the consciousness of the Puruşa. The stages of Samādhi described above are depicted in the following diagram. (Fig. 3).

Thus the Astanga yoga is a comprehensive discipline its ultimate objective being the realization of the supreme. These eight stages, though in themselves

are comprehensive procedures of mental and physical development, they individually form only a step in the practice of Yoga in real sense. Besides the above mentioned eight ladders of the practice of Yoga, some scholars hold another,

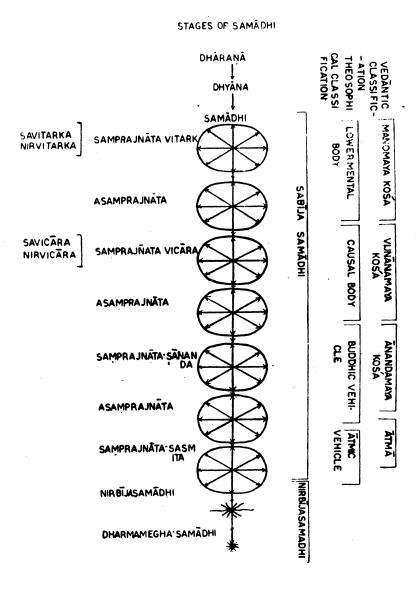


FIG. 3. Diagram modified after Tamini showing the stages of Samādhi as described in Yoga Sūtras of Patanjali and their correlation with Vedāntic and Theosophical classification.

similar methodology of the practice of Yoga i. e. Yama, Niyama, Asana, Kriyā, Bandha, Mudrā, Prānāyamā, Dhāranā, Dhyāna and Samādhi. These also cover the same aspects of mental and physical development as mentioned above.

# MADRAS, MAHAMUDRAS, BANDHAS AND SATKRIYAS.

Besides the procedures described under Astānga Yoga there are Twelve Mudrās (Symbolic gestures), Ten Mahāmudrās (the great gestures), Three Bandhas (blocking the passages of certain organs by contraction of certain muscles) and Six Kriyās (Saṭkriyās or Saṭkarmas i. e. the Six purificatory procedures). Some of these procedures are commonly practised. Mudrās are Inānamudra, Simha mudrā, Yoga mudrā, Khecarī mudrā and Mahāna mudrā The Three Bandhas are Uddayana i. e. raising of diaphragm. Jalandhara Bandha i. e. Chinlock and Mūla Bandha i. e. forceful contraction of anal region.

The Saţkriyās are the internal purificatory measures similar to Pancakarmas or Saţkarmas as described in Ayurveda. These procedures are concerned with the maintenance of normal bodily functions. For this the Yoga system advocates the cleansing of the inlets and outlets of the body. The Saţkriyas of Yoga system consist of the following Six purificatory measures: (1) Netī (cleansing the nasal passages), (2) Dhoutī (cleansing the stomach), (3) Vasti (cleansing the rectum and colon), (4) Trāṭaka (cleansing the eye by fixing the gaze on certain object without blinking and keeping it fixed until the lachrymal secretion starts flowing freely), (5) Kaṭālabhātī (cleansing the nasopharynx and nasal air sinuses), (6) Naulī (moving the abdomen by contracting the recti, keeping the diaphragm fixed, thus massaging the abdominal visceral). Thus all these procedures consist of the purification of the body by the nasal, oral, rectal, urinary, or any other routes.

## THE KUNDALINĪ YOGA

Recently lot of interest has been shown about Kundalinī yoga i. e. awakening of the Kundalinī Śakti or the serpent power. A number of interesting anatomical structures are described in Tāntrika texts concerned with Kundalinī Yoga. Prāṇa which is the vital force of life is said to reach each part of the body through numerous channels called Siras or Nādis. Idā, Pingalā and

Suşumnā Nādis are the most important ones among these channels. These channels function in relation to six main centres called Sat-Cakras which are believed to perform certain physical, mental and autonomic functions in the body. The following table describes the sites and the functions these Cakras (Fig. 4).

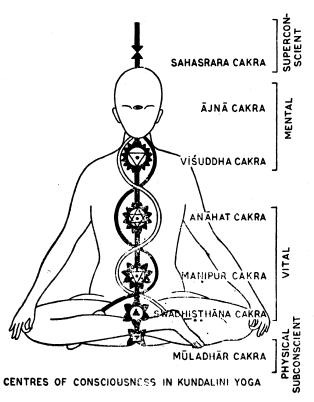


FIG. 4. Diagramme showing the concept of Kundalini Yoga and the seat of Satcakras i. e. the levels of consciousness as conceived in Tantra Texts of Hindu tradition.

CAKRAS	SITES	VŖTTIS
<ol> <li>Mūlādhāra         Cakra</li> <li>Svadhisthāna         Cakra</li> </ol>	Between genitals and anus At the root of genitals between muladhara and manipuraka Cakras	Creative desire Kāma, pleasure. Suspicion, distrust, delusion, false knownledge etc.

	CAKRAS	SITES	VŖTTIS
3.	Maṇipura Cakra	At the nābhi (navel) in relation of spine	Shame, fickleness, jealousy, desire, laziness, Sadness, dullness, ignorance, avertion etc.
4.	Anāhat Cakra	In the region of heart	Hope, care, anxiety, endeavour, sense of possession, arrogance, hypocrisy, longour, conceit, discrimination, indecision and regret.
5.	Viśuddha Cakra	Lower end of throat	Production of seven musical notes, venom and ambrosia.
6.	Ājnā Cakra	In the fore-head between the eyebrows	Has all the three Gunas and its characteristics in mind.

Further above is situated Manas Cakra having six Nādia denoting the five special senses and the sensations initiated in the brain during dreaming and hallucination. The Soma Cakra is agove the Manas. Above all is the Sahasrāra cakra where all the sounds and energies of lower Cakras manifest in their causal states and different forms. The static and the kenotic forms of Sakti unite in Sahasrāra cakra, which contains the qualities of all the lower Cakras in potential state. It is at this Cakra that quiescent consciousness is realised and so also the Supreme Consciousness. Thus the activity of each Cakra manifests in the form of Vrttis or qualities which are individual experiences as moral qualities. The Vrttis of the lower Cakras i. e. of the Mūladhūra and Swadisthūna are materialistic and selfish while those of Anāhat Cakra are mixed. The Cakras above this are associated with good qualities.

Each Cakra is represented in symbolic form of a lotus, the number of petals of a lotus signify the number of Nadis and the energies related to Cakra. Each Cakra constitutes a Yantra or instrument, and one of these procedures i. e. Yantra, Tantra, Mantra alone combined, could be employed for activating the Kundalinī Śakti for its ascent to different Cakras which are situated one cranial to the other as mentioned earlier.

Ordinarily only few of these Cakras and Nādis are in functional order. These however, can be made active from their potential forms by certain Yogic practices. The Kundalinī Śakti exists in potential and dynamic form in the body. The Mūlādhāra Cakra is the centre of dynamic form, while Sahasrāra Cakra is the seat of Kundalinī Śakti in potential form. The linking of these two forms involves its activation and direction at the Mūlādhara Cakra and the realization of different planes of consciousness as it is made to rise upwards along the other Cakras towards the Sahasrāra. Cakra. This realization is called Kundalinī Yoga which leads to awakening of the serpentine power providing the individual, in turn, the successively increasing virtues.

Ordinarily the Ida or Pingla, sirā functions to transmit prāņa to the body. The Pinglā also known as Sūryā is related to the right nostril while Idā also known as Candrā refers to the left nostril. These two function alternatively laa and Pingla connect to Muladhara Cakra below, and through spiral course upwards around Susumnā, tend to meet at Ajnā Cakra from where they separate out and establish connection with left and right nostrils respectively. The Susumnā nādi starts from the Mūlādhāra cakra and extends upto the Brahma-randhra located in the crown of the head, the Brahma nādi being situated within the innermost sheath of Susumnā. It is this Brahma nādi through which the Prāna i. e. the Kundalinī sakti passes up after it gets opened. Ordinarily the  $Susumn\bar{a}$  is closed and the  $Kundalin\bar{a}$  (primordial energy) lies coiled up at the Mūlādhāra Cakra. When the Suṣumnā opens, the functioning of Idā and Pingalā is diminished and as the Prāṇa enters along the Susumna nadī, their activity stops completely, and the breathing takes place through both the nostrils. The awakened Kundalini courses upwards to the Sahasrāra Cakra which relates the individual Prāṇa with the universal Prāṇa, thus revealing the great Siddhis of Yoga Sādhanā.

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# YOGA AS A HEALTH SCIENCE .

As also emphasized earlier Yoga, as founded in ancient times, is primarily a system of philosophy centred around the practical approach to the mental. and spiritual development of man enabling him to realise the ultimate truth. Whether such a discipline could have any health potential i.e. whether practice of Yoga could be a method of preservation of health and treatment of diseases are not, is a matter of controversy. Even today, quite a few experts in the field feel that Yoga has no medical and health potentials and it should be limited to the efforts of mental and spiritual development leading to higher consciousness and mental transformation, while many others plead Yoga to be of great value as a method of preservation of health and treatment of various diseases so much so as to use Yoga as a system of medicine. In view of the growing application of Yoga to the problems of health and disease, it was considered useful to examine the classical literature on Yoga to workout whether the ancients had conceived the medical and health applications of A critical analysis of the classical literature on Yoga indicates that though Yoga is primarily a system of philosophy and psychological science, it appears to have been deemed to be of value in health care. A few relevant statements available in the Upanisads and other related texts on Yoga indicative of its health potential are being reviewed below. The major portion of the classical statements on health and medical potential of Yoga reproduced below is adapted from (1) Yoga Upanisad English translation from Theosophical Society Adayar publications and (2) Hathayoga Pradipikā English translations published from Kaivalya Dhāma, Lonavla and that from Theosophical Society Adayar.

#### CLASSICAL STATEMENTS ON HEALTH POTENTIALS OF YOGA

The Yogin gets rid of a disease by means of Asana, sin by Prāṇāyāma and gives up the mental disorders by withdrawing the mind (Pratyāhāra). By Dhāraṇā (firmly fix the mind) he attains mental fortitude and in Samādhi (Absorption) acquires marvellous consciousness and with the renunciation of observence auspicious and inauspicious, attains liberation.<sup>1</sup>

#### PRACTICE OF ASANA

According to Sandilyopanisad, the use of Asanas specially Bhadrāsana by placing two ankles of the leg below the testicles, on either side the frenum of the prepuce, then with the two hands holding firmly the two feets by their sides and remaining motionless, will be the panacea for all ills and the antidote against all poisons.<sup>2</sup>

The practice of Mayūrāsana is also the destroyer of all sins. All diseases that affect the body perish and the poisons are assimilated (without any evil effect). According to Hathayoga Pradīpikā the practice of Matsyendrāsana stimulates the gastric fire and is the means for cure of a group of terrible diseases, bestows upon the gift of arousal of the Kundalinā and stability of Candra. Candra is supposed to be located at the root of the palate and is said to be constantly oozing nectar which is absorbed by Sūrya supposed to be located in the navel. The practice of this Asana stops the flow of this nector from the Candra to the Sūrya. This seems to be the Candra-sthiratvam in this context.

The most excellent of all Asanas, Pascimottana, makes the breath flow through the Susumna, stimulates the gastric fire, makes the loins lean and

१. आसनेन रूजं हन्ति प्राणायामेन पातकम् । विकारं मानसं योगी प्रत्याहारेण मुञ्चति ।। (योगचुडामण्युपनिषद् १०६)

२. शरीरान्तर्गताः सर्वरोगा विनश्यन्ति । विषाणि जीर्यन्ते ॥ (शाण्डिल्योपनिषद् १।३।१२)

३. हरति सकलरोगानाशुगुरुमोदरादीनिमयति च दोषानासनं श्रीमयूरम् । बहुकदशनभुक्तं भस्म कुर्यादशेषं जनयति जठराग्निं जारयेत्कालकृटम् ॥ (ह० प्र०१।३१)

४. मत्स्येन्द्रभीठं जठरप्रदीष्ति प्रचण्डरूड्मण्डलखण्डनास्त्रम् । अभ्यासतः कुण्डलिनीप्रवोधं चन्द्रस्थिरत्वं च ददाति पुंसाम् ॥ (ह० प्र०१।२७)

remove all the diseases of man. The Viparitakarni practice increases gastric fire, the practitioner should always have plenty of food. 2

#### THE PRACTICE OF PRANAYAMA

The regular practice of  $Pr\bar{a}n\bar{a}y\bar{a}ma$  is useful for a healthy life. It is evident from Hathayoga Pradīpikā. One who is able to restrain the breath as desire I when the (gastric) fire becomes more active and the  $N\bar{a}da$  (inner sound) is heard, there is a perfect health, because the  $N\bar{a}dis$  are purified. The practice of Kumbhaka, raising the  $Ap\bar{a}na$  upwards (by contracting the anus) the  $Pr\bar{a}na$  should be brought downwards from the throat. The yogin (then) becomes a youth of sixteen, free from old age. The practice of Kumbhaka removes disorders of the throat caused by Kapha and stimulates the Agni i. e. the digestive fire in the body. Having performed Kumbhaka as prescribed, the breath should be exhaled through the left nostril. This removes the disorders arising from excess of  $V\bar{a}ta$ , Pitta and Kapha and increases Agni i. e. the digestive fire in the body.

### PRACTICE OF MUDRAS AND BANDHAS

For the practitioner of *Yogic Mudrās* there is nothing wholesome or unwholesome. All things of whatever taste, even those which are insipid and even virulent poisons, if consumed, are digested as if it were nectar.<sup>5</sup> The *Khecarīmudra* or turning back of the tongue, one who remains for half a *Kṣaṇa* 

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    इति पश्चिमतानमासनाग्रयं पत्रनं पश्चिमवाहिनं करोति ।
        उदयं जठरानलस्य कुर्यादुदरे काश्यंमरोगतां च पुंसाम्।। (ह० प्र० १।२६)
    तित्यमभ्यासयुक्तस्य जठराग्निवित्रधिनी ।
        आहारो बहुलस्तस्य सम्पाद्यः साधकस्य च ।। (ह० प्र० ३।८०)
    पूर्ववत्कुम्भयेत्प्राणं रेचयेदिड्या ततः ।
        श्लेष्मदोषहरं कण्ठे देहानलविवर्धनम् ।। (ह० प्र० २।५२)
    विधिवत्कुम्भकं कृत्वा रचयेदिड्यानिलम् ।
        वातपित्तश्लेष्महरं शरीराग्निविवर्धनम् ।। (ह० यो० प्र० २।६५)
    न हि पथ्यमपथ्यं वा रसाः सर्वेऽपि नीरसाः ।
        अपि भुक्तं विष घोरं पीयूषिव जीयंति ।। (ह० यो० प्र० ३।१६)
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(i. e. for 24 minutes) is saved from poisons, disease, death and old age. By constant practice of the *Mūlabandha*, an union of *Prāṇa* and *Apāna* is achieved. Urine and excrement decrease and even the aged become young.<sup>2</sup>

According to Trisikhi Brahmanopanisad the Yogin who has conquered his vital air and vanguished his senses, becomes an accomplished adept. He will become temperate in food with a little sleep, lustrous and lusty and will attain longevity,3 having overcome unnatural death. He, in whom there is profuse perspiration generated during Prāṇāyāma is of inferior type. He, in whom there is tremor of the body during Prānāyāma, is of the middle type. He whose body rises up is known as of superior type. In one of the inferior type, there will be destruction of ailment and sin; while in the case of one of the middle type, there will be the destruction of skin, ailment and incurable disease; and in the case of one of the superior type, he will become one, passing small urine, evacuating small faecal matter, living having a light body, subsisting on moderate food, having ever alert sense organs, commanding a quick intellect, possessed of a clear vision penetrating the three durations (the past, the present and the future ) and (verily) the master of his ownself.4 The effect of Prāṇāyāma on health according to Darsanoupanisad on the following being distinctly seen, he attains the purification of the Nādis. Lightness

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१. रसनामूर्ध्वगां कृत्वा क्षणार्धमिप तिष्ठित ।
विषैर्विमुच्यते योगी व्याधिमृत्युजरादिभिः ।। (ह० प्र०३।३८)
२. अपानप्राणयौरैनयं क्षयो मूत्रपुरीषयोः ।
युवा भवति वृद्धोऽपि सततं मूलबन्धनात् ।। (ह० प्र०३।६५)
३. योगसिद्धो भवेद्योगी वायुजिद्धिजितेन्द्रियः ।
अल्पाणी स्वल्पनिद्रश्च तेजस्वी बलबान् भवेत् ।। (त्रिणिखब्राह्मणोप०१०३)
४. प्रस्वेदजननं यस्य प्राणायामेषु सोऽधमः ।
कम्पनं वपुषौ यस्य प्राणायामेषु मध्यमः ।
उत्थानं वपुषौ यस्य स उत्तम उदाहृतः ।।
अधमे व्याधिपापानां नाणः स्यान्मध्यमे पुनः ।
पापरोगमहाव्याधिनाणः स्यादुत्तमे पुनः ।।
अल्पम्बोऽल्पविष्ठश्च लघुदेहो मिताणनः ।
पटिन्द्रियः पटमतिः कालत्रयविदात्मवान् ।। (त्रिणिखव्रा०१०४-१०७)
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of the body, glowing of the fire situated in the belly and the clear manifestation of the sound; these symptoms indicate the successful accomplishment thereof. He should continue in this effort, till he distinctly sees these symptoms.<sup>1</sup>

# VARIETIES OF PRANAYAM HAVING CURATIVE VIRTUES

Drawing in the Prāṇa air outside and filling up with ( that in ) the belly, in the morning and evening twilights, in the hour before the dawn i. e. Brahma, at noon or at all times, and holding it at the tip of the nose, in the middle navel and at the big toes of the feet, the man will live for a hundred years, and get rid of all diseases. By holding it at the tip of the nose the Prana air will be brought under complete control; by holding it in the middle of the navel there will be avoidance of all disease and by confining it to the big toes of the feet, there will be lightness of the body. He who always drinks air by inhaling it throught the tongue, that Yogin will attain immunity from disease, rid of fatigue and thirst, he who should confine the air at the root of the tongue, after inhaling it by means of the tongue, will colly drink the nectar of immortality and enjoy all happiness; he who, after inhaling the air through the Ida, confines it at the middle of the eye brows, will drink pure nectar and will surely be released from all diseases, he who confines the air inhaled through the Ida as well as the Pingala in the navel, that man is released from all diseases. If during the three Saindhyās (twilights) for one full month one should, after inhalling the air by means of the tongue, and drinking that nectar little by little, confine it in the navel (for him ) all ailments arising from a preponderance Vāta and Pitta will undoubtedly perish.2 According to Yoga

१. नाड़ी शुद्धिमवाष्नोति पृथक् चिह्नोपलक्षितः ।

शरीरलघुता दीप्तिर्वह्ने जांठरवितनः ।। (दर्शनोपिनवद् ४१११)
नादाभिव्यक्तिरित्येतिच्चिह्नं तिसिद्धिसूचकम् ।

या वैतानि संपश्येत् तावदेवं समाचरेत् ।। (दर्शनो प० ४।१२)
२. इडया वेदतत्वज्ञ तथा पिङ्गलयैव च ।
नाभौ निरोधयेत्तेन व्याधिभिर्मुच्यते नरः ।। (दर्शनोपिनषद् ६।२८)
मासमात्रं त्रिसंध्यायां जिह्वयारोप्य मास्तम् ।
अमृतं चिष्वज्ञाभौ मन्दं मन्दं निरोधयेत् ।। (दर्शनोप० ६।२६)

Kundlyoupanisad the practice of *Bhastrikā Prāṇāyāma* takes away the heat produced in the throat, raises the warmth of the body, kindles the *Kundali*, is endowed with good qualities and kills sin, is auspicious and healthgiving, destroys the *Kapha* and other obstructions in the interior of the mouth of the *Brahma Nādis*.<sup>1</sup>

According to Yoga Tattvoupanisad the practice of Kumbhaka for three months leads to the purification of the  $N\bar{a}dis$ . When the purification of the  $N\bar{a}du$  is attained external symptoms in the body of the yogin arise like lightness of body, lusture, the strengthening of the  $Jathar\bar{a}gni$  (increase of digestive power) and slimness of the body.<sup>2</sup>

The practitioner who is the best versed in yoga should abstain from the foods which would prove harmful to yoga, such as salt, mustard, acid, hot, astringent and pungent (dishes), all vegetables, orafoetida and the like, proximity to fire, sexual intercourse and travel. He should also avoid early-morning baths, fasting and all kinds of bodily exertion. At first during practice, a diet rich in milk and ghee is appropriate, cooked wheat, green gram and rice are conducive to the development of Yoga.<sup>3</sup>

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वातजाः पित्तजा दोषा नश्यन्त्येवं न संशयः।
  नासाभ्यां वायमाकृष्य नेत्रद्वन्द्वे निरोधयेत ॥ (दर्शनोपनिषद् ६।३०)
१. क्रम्मकं पूर्ववत् कृत्वा रेचयेदिड्यानिलम्।
                         शरीराग्निविवर्धनम् ॥
   कण्ठोत्थितानलहरं
                                                ( योगकुण्डलिन्योपनिषद् १।३७ )
   कुण्डलीबोधकं पृण्यं पापघ्नं शुभदं सुखम ।
   ब्रह्मनाडीमुखान्तस्थकफाद्यगं लाशनम् ।। (योगकृण्डलिन्योप • १।३८)
२. एवमासत्रयाभ्यासान्नाडीशृद्धिस्ततो
                                      भवेत ।
  यदा त् नाडीभृद्धिः स्यात् तदा चिह्नानि बाह्यतः ।। (योगतत्त्वोपनिषद् ४४)
   जायन्ते योगिनो देहे तानि वक्ष्याम्यशेषतः ।
  शरीरलघुता दीप्तिजीठराग्निविवर्धनम् ॥
                                             (योगतस्वोपनिषद् ४५)
३. योगविघ्नकराहारं
                        वर्जयेद्योगवित्तमः ॥
                                            (योगतत्त्वोपनिषद् ४६)
  लवणं सर्षपं चाम्लमुख्णं रूक्षं च तीक्ष्णकम ।
  शाकजातं रामठादि विह्नस्त्रीपिशसेवनम् ॥
                                             (योगतत्त्वो० ४७)
  प्रातः स्नानोपवासादिकायक्लेशांश्च वर्जयेत ।
  अभ्यासकाले प्रथमं शस्तं क्षीराज्यभोजनम् ॥
                                             ( योगतत्त्वोप० ४८ )
  गोधुम मृद्गशाल्यन्न योगवृद्धिकरं विद्ः॥
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According to Yoga-Sikhopanişad the description of Sūryabheda Kumbhaka is all alone should a secluded spot be reached (by the practitioner) temperate in food and of a resolute frame of mind and form of the prāṇa and the like and the imperishable truth of the highest import should be mediated upon. This is the unique measure—which would effectively cure the disease of wordly mindedness.<sup>1</sup>

Drawing-in the air through the two  $N\bar{a}dis$  the intelligent practitioner should direct it along the two sides of the  $Kundal\bar{\imath}$ , hold it in the belly (udara) and thereafter spell it through the  $Id\bar{a}$ . This kills the malignant influence of Kupha and the like in the throat, raises the  $Sar\bar{\imath}r\bar{a}gni$  (temperature of the body), removes the rheum out of the  $N\bar{a}dis$  and rectifies the defects inherent in the humours of the body. This Kumbhaka known as Ujjayi should be performed by the practitioner while moving and standing.<sup>2</sup>

Drawing-in air through the mouth, one should expel it through the nostrils. This is performing the Sitali (Kumbhaka) and eliminates pitta, hunger and thirst.<sup>2</sup>

Bhastrikā Kumbhaka removes the excess of the Vāta, pitta, Kapha, vitalises the Agni rouses the Kundalī, removes defects in the mouth, bestows auspicious-

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१. अथास्य लक्षणं सम्यक् कथयामि समासतः ।
एकािकना समुपगम्य विविक्तदेशं
प्राणादिरूपममृतं परमार्थतत्त्वम् ।। (योगिशखोपिनषद् १।८६)
लघ्वािगना धृतिमता परिभावितव्यं ।
संसाररोगहरमौषधमदितीयम् ।। (योगिशखोपिनपद् ६०)
२. नाडीभ्यां वायुमाकृष्य कुण्डल्याः पाष्ट्वयोः क्षिपेत् ।
धारयेदुदरे पश्चाद्रेचयेदिडया सुधीः ।। (योगिशखोपिनपद् ६३)
कण्ठे कफादिदोषघनं शरीराग्निविवर्धनम् ।
नाडी जलापहं धातुगतदोषिवनाशनम् ।।
गच्छतस्तिष्ठतः कार्यमुज्जाय्याख्य तु कुम्भकम् ।
उज्जायी कुम्भकलक्षणमाह नाडीभ्यामिति ।। (योगिशखोपिनषद् ६४)
३. मुखेन वायुं संगुद्धा द्वाणरन्ध्रेण रेचयेत् ।। (योगिशखोपिनषद् ६४)
शीतलीकरणं चेदं हित्त पित्त क्षुधा तृषम् ।
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ness, is wholesome, removes impediments such as Kapha remaining in the interior of the opening of the *Brahma-nāḍi* and is capable of bursting through the three knots as the result of effectively practising the Bandhas.<sup>1</sup>

According to Sandilyopanisad the intermingling of the *Prana* and *Apana* occurs by making the *Apana* to rise upwards and leading the *Prana* downwards from the throat; by this the *yogin* becomes free from old age attains the youth of sixteen years of age.<sup>2</sup>

Drawing-in the air through the nostrils slowly, so as to cause a noise and (so as to fill the region) between the heart and the throat, holdding it in Kumbhaka as far as it lies in his power and expelling it through the  $Id\bar{a}$  the yogin should practise this, while walking and standing. This results into the increase of  $Jath\bar{a}r\bar{a}gni$  i.e. the digdstive fire, which eliminates Kapha (from the system).

Sucking-in the air through the mouth, with the Sitkārī i.e. hissing sound holding it in Kumbhaka as long as possible the Yogin should expel it through the nostrils. This induces first hunger and sleep through indolence. From the pure state of the Nādis is attainable the ecstatic state of the mind.

Holding the breath as long as desired causes rousing of the fire, the manifestation of the  $N\bar{a}da$ , and freedom from diseases from the purification of

१. वातिपत्तक्षेष्महरं शरीराग्निविवर्धनम् ।। (योगशिखोपनिषद् ६५) कुण्डलीबोधकं ववत्रदोषध्नं शुभदं सुखम् । ब्रह्मनाष्टीमुखान्तःस्थककाद्यगंलनागनम् ।। (योगशिखोपनिषद् ६६) सम्यग्वन्धसमुद्भूतं ग्रन्थित्रयविभेदकम् ।

२. अपानमूर्ध्वमुत्थाप्य प्राणं कण्ठादधो नयन् । योगी जराविनिर्मुक्तः षोडशो वयसा भवेत् ॥ (शाण्डिल्योपनिषद् १।७।१३)

३. हृदयादिकण्ठपर्यन्तं सस्वनं नासाभ्यां शनै. पवनमाकृष्य यथाशक्ति कुम्भियत्वा इडया विरेच्य गच्छंस्तिष्ठन् कुर्यात् । तेन श्लेष्महरं जाठराग्निवर्धनं भवति ॥ (शाण्डिल्योपनिषद् १।७।१३-२)

४. वक्त्रण सीत्नारपूर्वकं वायुं गृहीत्वा यथाशक्ति कुम्भियत्वा नासाभ्यां रेचयेत् । तेन क्षुतृष्णा स्थिनिद्रा न जायन्ते ।। (शाण्डिल्योपनियद् १।७।१३-३)

the Nādis (the above consequences) are produced. Symptoms noticed at the time of purification of the Nādis are as below. Therefrom, lightness of the body, beauty of form, increase of vital warmth, and the manifestation of the Nāda are attained.

### THE PRAACTICE OF PRATYAHARA

All the sins as well as the diseases of worldly existence of that high souled person who has undergone the practise of this kind, perish all together.<sup>2</sup> *Pratyāhāra* is essentially the practice of withdrawl of senses.

## 'PRACTICE OF DHARANA

The Yogin should project and hold his vital air along with his mind in the centre of the navel, the tip of the nose and the big toe of the foot, with great effort, during the morning and evening twilights or always. Such a Yogin would live freed from all disease and rid of fatigue. By the practice of such a Dhāraṇā as described above in the knots of the navel, all abdominal diseases (Kuksi Rogas) will be cured. By Dhāraṇā în the tip of the nose, loogevity and lightness of the body will be attained. He who drinks the air after drawing it with his tongue, at Brahma Muhurta for three months, there will be a great accomplishment in the power of speech. He who continues this practice for six months, is relieved of the great maladies. By the holding of the Vāyu in which ever limb that is afflicted with disease, that limb is cured of the affliction by the Dhāraṇā of the Vāyu alone.

१. यथेष्टधारणं वायोरनलस्य प्रदीपनम् ।नादाभिव्यक्तिरारोग्यं जायते नाडिशोधनात् ।। (शाण्डित्योपनिपद् १।७।८)

२. एवमभ्यासयुक्तस्य पुरुषस्य महात्मनः । (७।६) सर्वपापानि नश्यन्ति भवरोगश्च सुवत ।। (दर्शनोपनिषद्)

३. नाभिकन्दे च नासाग्रे पादागुंब्ठे च यत्नवान्। धारयेन्मनसा प्राणान् सध्याकालेषु वा सदा ॥ (त्रिशिखका० १०६) सवंरोगैविनिर्मुक्तो जीवेद्योगी गतवलमः। कुक्षिरोगविनाशः स्यान्नाभिकन्देषु धारणान् ॥ (त्रिशिखबा० ११०)

Drawing-in the  $Pr\bar{a}na\ V\bar{a}yu$  from outside, in-filing it in the belly with effort, one should hold it alone with the mind i.e.  $Dh\bar{a}ran\bar{a}$  in the middle of the navel, in the tip of the nose and toes of the feet, either in the twilights or always. By doing so, the Yogin will be freed from all diseases and be rid of his fatigue. This is a sort of immunity attainable through a special kind of  $Dh\bar{a}ran\bar{a}$ .

### THE THERAPEUTIC POTENTIALS OF SOME YOGA PRACTICES

The Mayūrāsana cures quickly all diseases like Gulma, Udara Roga etc. and overcomes the imbalance af the humours namely Vāta, Pitta, and Kapha. It reduces to ashes i. e. enables digestion of all food indiscriminately taken, increases the gastric fire i. e. the Agni and digests even the Kālakūṭa i. e. a terrible poison.<sup>2</sup>

By practice of  $Viparītakarņ\bar{\imath}$  increasing the duration gradually every day; after six months wrinkles and grey hair disappear. He who practices this for a  $Y\bar{a}ma$  i. e. three hours daily conquers death.<sup>3</sup> Through the proper practice

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नासाग्रधारणाद्दीर्घमायुः
                            स्याद्देहलाघवः ।
   बाह्य मुहर्ते सम्प्राप्ते वायुमाकृत्य जिह्नया ।। (त्रिशिखब्राह्मणोप० १११)
   पिवतस्त्रिषु मासेषु वात्रिसद्धिमंहती भवेतु ।
   अभ्यस्यतुश्च षण्मासान्महारोगविनाशनम् ॥ (त्रिशिखन्ना० ११२)
   यत्र यत्र धृतो वायुरङ्गे रोगादिदिषते ।
  धारणादेव मरूतस्तत्तदारोग्यमण्तुते ॥ (त्रिशिखब्राह्मणोप० ११३)
१. बाह्यात् प्राणं समाकृष्य पूरियत्वोदरं स्थितम् ।
   नाभिमध्ये च नासाग्रे पादाङ्गुष्ठे च यत्नतः ॥ ( शाण्डिल्योपनिषद् १।७।४३ )
   धारयेन्मनसा प्राणं संध्याकालेषु वा सदा ।
   सर्वरोगविनि मुक्तो भवेद्योगी गतक्लमः ॥ ( शाण्डिल्योपनिषद् १।७।४४ )
२. हरति सकलरोगानाशुगुल्मोदरादिनमिभवति च दोषानासनं श्रीमपूरं ।
  बहुकदशन मुक्तं भस्म कुर्यादशेषं जनयति जठराग्नि जारयेल्कालकृटम् ॥
                                                               ( हठयोगप्रदीपिका प्रथम ३१ )
रे क्षणाच्च किचिद्धिक मध्यसेच्च दिने दिने ।
  विलतं पलितं चैव पण्मासोध्वं न दृश्यते ॥
  याममात्रं तु यो नित्यमभ्यसेत् स तु कालजित् ॥ ( हठयोगप्रदीपिका तृतीय ६२ )
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of *Prāṇāyāma* along with right food and proper *Bandhas* there is freedom from all diseases. The practitioner may bring upon himself all diseases by a mistaken course of Yoga. A wrong course of *Prāṇāyāma* produces hiccup, asthma. bronchial diseases; pain on the head, ears and eyes and various other diseases.<sup>1</sup>

The Sūryabhedana (Kumbhaka) should be practised again and again, as it purifies the brain, destroys diseases arising from excess of wind, and cures maladies caused by worms <sup>2</sup> It cures the diseases of the Nāḍis and the Dhātus, as also ascites. This Kumbhaka called Ujjayī should be practised while walking and standing. The Kumbhaka and Sītalī cures diseases of the abdomen and spleen and other diseases as also fever, biliousness, hunger, thirst, and the bad effects of poisons. The practice of Mahāmūdrā (relieves consumption. leprosy, constipation, abdominal and anorectal diseases, indigestion, etc. 5

The practice of *Mahābedha* confers great *Siddhis*. It removes wrinkles, greying of hairs and trembling (consequent on old age).<sup>6</sup> For him who knows *Khecarī mudrā* there is no disease, death, drowsiness, sleep, hunger, thirst,

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    श्राणायामादियुक्तेन सर्वरोगक्षयो भवेत्।
अयुक्ताभ्यासयोगेन सर्वरोगसमुद्भवः॥ (हठयोगप्रदीपिका द्वितीय १६)
हिक्काश्यासश्च कासश्च शिरः कर्णाक्षिवेदनाः।
भवन्ति विविधा रोगाः पवनस्य प्रकोपतः॥ (हठयोगप्रदीपिका द्वितीय १७)
    कपालशोधनं वातदोषघ्नं कृमिदोषहृत्।
पुनः पुनिरदं कार्यसुर्यभेदनमृत्तमम्॥ (हठयोगप्रदीपिका द्वितीय ४०)
    नाडीजलोदराधातुगतदोषविनाशनम्।
गच्छता तिष्ठता कार्यमुर्ग्जाय्याद्यं तु कुम्भकम्॥ (हठयोगप्रदीपिका द्वितीय ४३)
    गुल्मप्लीहादिकान् रोगांच्वरं पित्तं क्षुधां तृषाम्।
विषाणि जीतलो नाम कुम्भिकेयं निहन्ति हि॥ (हठयोगप्रदीपिका द्वितीय ४६)
    श्र. क्षयकुष्ठगुदावर्त्तगुल्माजीणपुरोगमाः।
तस्य दोषाः क्षयं यान्ति महामुद्रां तु योऽभ्यसेत्॥ (हठयोगप्रदीपिका तृतीय १७)
    महावेधोऽयमभ्यासान्महासिद्धिप्रदायकः।
वलीपलितवैपघ्नः सेव्यते साधकोत्तमैः॥ (हठयोगप्रदीपिका तृतीय २६)
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or fainting. Such a person is not affected by disease nor by the effect of Karman and Kāla.

The practice of *Dhauti* cures cough, *Asthma*, splenomegaly, leprosy and similar skin diseases and twenty other diseases caused by *Kapha*. There is no doubt about it.<sup>2</sup> Practice of *Vasti* cures *Gulma*, splenomegaly and all diseases arising due to the vitiation *Vāta*, *Pitta* and *Kapha*.<sup>3</sup> The *Jalavasti*, when practised appropriately refines the bodily tissues, sense-organs and the internal organ i. e. *Antaḥkaraṇa*; it resolves all the *Dasika* vitiations.<sup>4</sup> *Netī* purifies the region of the skull and makes the sight capable of perceiving subtle things. *Netī* also quickly removes all diseases of the head and neck.<sup>5</sup>

 $Tr\bar{a}taka$  relieves all diseases of the eyes,  $Tandr\bar{a}$  etc. It should be carefully kept secret like a golden casket.<sup>6</sup>

Nauli, the crown of Hathayoga practices stimulates the digestive fire, improves digestion, produces happiness and destroys all diseases and disorders of the humours. Freed from obesity, disorders of Kapha and other Malas etc.

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    त रोगो मरणं तन्द्रा न निद्वा न क्षुधा नृषा ।
    त च मूच्छा भवेत्तस्य यो मुद्रां वेत्ति क्षेचरीम् ।। (हठयोगप्र॰ तृतीय-३६)
    कासभ्वासप्लीहकुष्ठं कफरोगाश्च विश्वतिः ।
    घौतिकर्मप्रभावेण प्रयान्त्येव न संशयः ॥ (हठयोगप्र॰ द्वितीय-२५)
    गुल्मप्लीहोदरं चापि वातिपत्तकफोद्भवाः ।
    विस्तकर्मप्रभावेण क्षीयन्ते सकलामया ॥ (हठयोगप्र॰ द्वितीय २७)
    धात्विन्द्रयान्तः करणप्रसादं दद्याच्च कान्ति दहनप्रदीप्तिम् ।
    अशेषदोषोपचयं निहन्यादभ्यस्यमानं जलवस्तिकर्मं ॥ (हठयोगप्र॰ दि॰ २८)
    स. कपालशोधनी चैव दिव्यदृष्टिप्रदायिनी ।
    जत्रुध्वं जातरोगौघं नेतिराशु निहन्ति च ॥ (हठयोगप्र॰ द्वि॰ ३०)
    मोचनं नेत्ररोगाणां तन्द्रादीनां कपाटकम् ।
    यत्ततस्त्राटकं गोप्यं यथा हाटकपेटकम् ॥ (हठयोगप्र॰ द्वितीय ३२)
    मन्दाग्नसन्दीपनपाचनादिसन्धापिकानन्दकरी सदैव ।
    अशेषदोषामयशोषणी च हठिकयामौशित्रयं च नौिलः ॥ (हठयोगप्र० द्वितीय-३४)
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by the performance of the above mentioned Satkarmas, one should practise Prāṇāyāma. Then success in Yoga is achieved without strain.

## PRĀŅĀYĀMA

Such a practice cures diseases like piles and anal fistula, besides all diseases, sins, both small and great. With disappearance of sin, that most wonderful mirror of Citta i. e. the thinking of mind becomes perfectly clear.<sup>2</sup>

For the rousing of Sarasvatī (Sarasvatī nādi) one should expel the vital air through the Solar Nādi (pingalā) by the constriction of the throat, thus the vital air of the chest being forced to take an upward course. Hence the Yogin should always rouse the Sarasvatī pregnant with Sound and by such rousing alone the Yogin will be rid of diseases. Gulma, ascites, enlargement of the spleen and such other diseases affecting the middle of the belly, all these diseases perish of a certainty by the nousing of the Sarasvatī.

### SŪRY AKU MBHAKA

One should fill in the air as much as could be desired and then expel it through the  $Id\bar{a}$  or drive up the air slowly for purifying the skull. This destroys the four kinds of disorders arising out of  $V\bar{a}ta$  and also intestinal worms. This should be practised again and again and is known as the  $S\bar{u}rya$ -bhedana variety.<sup>4</sup>

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१. षट्कर्मनिर्गतस्थौल्यकफदोषमलादिकः ।
प्राणायामं ततः कुर्यादनायासेन सिद्धचिति ॥ (हठयोगप्र॰ द्वितीय ३६)
२. भगन्धरं च नष्टं स्यात् सर्वरोगाश्च सांकृते ।
पातकानि विनश्यन्ति क्षुद्राणि च महान्ति च ॥ (दर्शनोपनिषद् ६।४५)
३. तस्मात् संचालयेन्नित्यं शब्दगभी सरस्वतीम् ।
यस्याः संचालनेनैव योगी रोगैः प्रमुच्यते ॥ (योगकुण्डल्युपनिषद् १।१७)
गुल्मं जलोदरप्लीहो ये चान्ये तुन्दमध्यगाः ।
सर्वे ते शक्तिचालेन रोगा नश्यन्ति निश्चयम् ॥ (योगकुण्डल्युपनिषद् १।१८)
४. कपालशोधने वापि रेचयेत् पवनं शनैः ।
चतुष्कं वातदोषं तु कृमिदोषं निहन्ति च ॥ (योगकुण्डल्युपनिषद् १।२५)
पुनः पुनरिदं कार्यं सूर्यभेदमुदाहृतम् ॥ (योगकुण्डल्युपनिषद् )
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# UJJAYA KUMBHAKA

This meritorious and excellent practice removes the heat produced in the head, and the *Kapha* of the throat and further relieves all diseases and raises the wrmth of the body, cures ascites and disorders affecting the humours This should be practised regularly while sitting, walking or working.<sup>1</sup>

# **SITALI**

Dyspepsia, enlargement of the spleen and the like disorders, consumption, biliousness, fever, thirst and poisons are relieved by this *kumbhaka* known as Śitalī.<sup>2</sup> The practice of *Prāṇāyāma* is the dispeller of all diseases.

The practitioner of  $Pr\bar{a}n\bar{a}y\bar{a}ma$  is relieved of all diseases. Those who are devoid of  $Pr\bar{a}n\bar{a}y\bar{a}ma$  suffer from all kinds of diseases. Hiccup, cough, asthma, painful diseases of the head, ears and eyes and various kinds of other diseases are caused by the ill-regulation of the  $V\bar{a}yu$ .

# SURYABHEDANA PRANAYAMA

By practising it the yogin should drawn-in the  $V\bar{a}yu$  through the  $S\bar{u}rya$   $N\bar{a}di$ . After performing Kumbhaka he should expel it through the  $Lunar \dot{N}\bar{a}di$ . Such a practice which kills many diseases of the belly and extirpates the malignant influences of the intestinal worms, should be performed. This is known as  $S\bar{u}ryabheda$ .<sup>4</sup>

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शीर्षोदितानलहरं गलक्लेब्सहरं परम् ।
सर्वरोगहरं पुण्यं देहानलिविवर्धनम् ।। (योगकुण्डल्युपनिषद् १।२८)
नाज्ञीजलोदरं धानुगतदोषिवनाशनम् ।
गच्छतस्तिष्ठतः कार्यमुंजाय्याख्यं तु कुम्मकम् ।। (योगकुण्डल्युपनिषद् १।२६)
र गुल्मप्लीहादिकान् दोषान् क्षयं पित्तं ज्वरं तृषाम् ।
विषाणि शीतली नाम कुम्भकोऽयं निहन्ति च ।। (योगकुण्डल्युपनिषद् १।३१)
र प्राणायामेन युक्तेन सर्वरोगक्षयो भवेत् ।
प्राणायामिवयुक्तेभ्यः सर्वरोगक्षमुद्भवः ।। (योगचूडामण्युपनिषत् ११६)
हिक्काकासस्तथा श्वासः शिरः कर्णक्षिवेदनाः ।
भवन्ति विविधा रोगाः पवनव्यत्ययक्रमात् ।। (योगचूडामण्युपनिषद् ११७)
४. सूर्यनाङ्या समाकृष्य वायुमभ्यासयोगिना ।
विधिवत् कुम्भकं कृत्वा रेचयेच्छीतरिश्मना ।। (योगिशाखोपनिषद् १।६१)
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The expedient to be adopted for the purification of the cranium: the yogin assuming a comfortable posture, drawing-in the external air through the right i. e. Pingalā Nādi and performing Kumbhaka till it reaches as far as the roots of the hair and the tips of the nails, should expel it through the left i. e.  $ld\bar{a}$  Nādi. By means of this one is able to achieve the purification of the head and relief from the diverse diseases inherent in the Nādis, through which the Prāna Vāyu flows. 1

### ŚĪTALĪ

Drawing-in the air through the tongue, holding in Kumbhaka as long as possible the yogin should expel it through the nostrils. Therefrom, dyspepsia, enlargement of the spleen, fever, biliousness, hunger, and similar other diseases are destroyed. Means to be employed for the conquest of the Prāṇa Vāyu during practice. Pressing the genitals with the left heel, stretching the right leg and holding it by both hands, in filling the vital air through the nostrils, having brought about the Kantha-bandha the yogin should hold the vital air in Kumbhaka from above. By doing so, all troubles vanish. Thereafter, poisons will be easily assimilated as nectar and constipation, dyspepsia, consumption, affections of the skin and other ailments perish. This is the means to be employed for conquering the vital air for the destruction of all forms of death.

उदरे बहुरोगध्नं ऋिमिदोषं निहन्ति च । मुहुर्मुहुरिदं कार्यं सूर्यभेदमुदाहृतम् ॥ (योगशिखोपनिषद् १।६२)

१. सुखासनस्थो दक्षनाड्या वहिस्थं पवनं समाकृष्याकेशमानखाग्रं कुम्भियत्वा सव्यनाड्या रेचयेत् । तेन कपालशोधनं वातनाड़ीगतसर्वरोगविनाशनम् भवति । (शाण्डिल्योपनिषद् १।७।१३।१)

२. जिह्नया वायुं गृहीत्वा यथाश्वक्ति कुम्भियत्वा नासाभ्यारेचयेत् । तेन गुल्मप्लीहज्वरपित्तक्षुधादि नश्यति ।। (शाण्डिल्योपनिवद् १।७।१३।४)

३. वामपादमूलेन योनि संपीड्य दक्षिणपादं प्रसार्यं तं कराभ्यां धृत्वा नासाभ्यां वायुमापूर्यं कण्ठवन्धं समारोप्योध्वंतो वायुं धारयेत् । तेन सर्वक्लेशहानिः । ततः पीयूषिमविवषं जीर्यते । क्षयगुल्मगुदावर्तं जीर्णत्वगादिदोषा नश्यन्ति । एष प्राणजयोषायः सर्वमृत्युपद्यातकः ।।

<sup>(</sup> शाण्डिल्योपनिषद् १।७।४२--२ )

## CURRENT TRENDS IN THE SIUDY AND PRACTICE OF YOGA

As mentioned earlier, Yoga is the most ancient thought prevalent in the Vedic and Upanisadic texts. Subsequently with the evolution of the systematic schools of Indian philosophy, Yoga appears to have been developed as a discipline, Yoga forms the central theme of Indian philosophy and is the most original approach of man kind to the pursuit of truth. The science of Yoga though appears to have been described in several Upanisads but it appears to have given practical orientation in the writings of Srimad Bhagvadgītā and the Yoga Sūtras of Patanjali. Bhagvadgītā deals the subject with philosophical bias while Patanjali deals the subject as a system of psychology in a scientific manner both a ming to the development of a science of mental transformation.

The subject of Yoga remained in ancient times as a method of individual transformation to achieve higher consciousness and liberation with minimal scope for mass application. The contemporary philosophers like Sri Aurobindo, Swami Vivekananda, Mahatma Gandhi and several other philosophers and thinkers attempted to study the concept of Yoga in view of its mass application. With the efforts of the contemporary philosophers Yoga could be brought to the awareness of the society before which it was only a subject of academic interest for a common man though rare individuals could practise Yoga.

The growing popularity of Yoga and its increasing socialization attracted many workers for scientific enquiry in the science of Yoga. It must be emphasized here that the current height of interest in Yoga could not have

emerged unless there was a real need for it. During last one and a half decade there has been an amazing arousal of interest in yoga through out the world specially in the industrially developed countries of the west. sudden disproportionate arousal of interest in this subject coincides with the rapid increase in the level of anxiety and tension in the modern society. With the growing urbanization and industrial development in western countries, the society has been faced to varying degree of social conflicts, mental tension and stressful situations which have precipitated into a very high incidence of major psychosomatic diseases like Hypertension, Ischaemic Heart Diseases, Bronchial asthma, Diabetes mellitus, Peptic Ulcer, Ulcerative Colitis The modern medical profession has failed to prevent this class of ailments which has emerged as a dreadful problem before the modern society. As these problems have been found to be the by-products of Westernization, it has been generally felt that necessary dewesternization of the society and life style could be of some help It is in this context that many enlightened persons with the collaboration of certain Indian workers became interested in the application of the science of Yoga as a measure for relief from anxiety and tension. Thus the current arousal of interest in Yoga Centres around the scope of possible utility of yoga as an anti-anxiety measure, and it is definitely not around the scope of yoga as a means of liberation and ability to perceive the ultimate truth. Thus the current trends of study, research and practice of yoga is centred around a limited objective,

Thus the current trend of the study and interest in yoga is to evaluate the physiological effects of various yogic practices to establish its scientific basis so that such practices may be applied to tackle certain problems on mental and physical health. Another aspect of the current interest in this field is to evaluate the therapeutic utility of different practices and to use them as a method of treatment of different diseases specially those of psychosomatic origin. Thus there is a trend to use Yoga as a system of Medicine specially its positive health aspect. The current interest in Yoga may be categorised under the following heads.

(1) Practice of Yoga as a positive health measure.

- (2) Practice of Yoga as an anti-stress and ante-anxiety measure.
- (3) Practice of Yoga as a measure to prevent stress disorders and psychosomatic diseases.
- (4) Practice of Yoga as a method of treatment of certain psychosomatic diseases.
- (5) Practice of Yoga as a system of physical medicine.
- (6) Practice of Yoga i.e. some yogic. practices as physical culture.
- (7) Less commonly Yoga is practised as a means of spiritual progress.
- (8) Propagation of Yoga in the society for social correction.

#### PRESENT STATE OF AFFAIRS

In order to assess the current trends of interest in the study and practice of Yoga the author conducted an opinion survey among the experts in the field and others interested in the practice of Yoga. The observations made during this survey will be summarized in this chapter. However, it may not be out of place to discuss the circumstanes responsible for the revival of interest in Yoga.

Yoga is the central theme of Indian philosophy. One finds a profound emphasis on this concept in Indian traditions. Thus Yoga has been an important content of Indian approach to life. Inspite of this traditional significance, Yoga did not remain a living discipline till a decade and a half back except for few scattered yogis practising certain aspects of yoga in certain remote areas of the country and for a common man, it was only a subject of academic interest.

However, during last two decades Yoga has attained the world wide significance. It has not remained only a science of spirituality but has proved to be a discipline of biological significance. A large number of people specially from modern educated class have shown interest in the study and practice of Yoga. This sudden arousal of interest in this ancient discipline is due to the popular belief that practice of yoga may provide mental peace and freedom from stress. This event is associated with the rapid explosion of stress and

anxiety in the modern society probably due to rapid urbanization and industrial development in recent years.

The increasing stress and anxiety has not only given rise to a restless life in the population but has also started contributing to the increasing incidence of a number of psychosomatic and stress disorders, such as anxiety neurosis, hypertension, ischaemic heart disease bronchial asthma, peptic ulcer, diabetes mellitus, rheumatoid arthritis and so on. Such diseases have almost taken a shape of epedemics in the Western countries. The present day modern medical profession has failed to prevent and to provide adequate treatment for these newer problems.

At this juncture certain enlightened Indian scholars conjointly with some foreign seekers have succeeded in bringing yoga to the scene. Thanks to the efforts of such individuals and institutions who have rightly acted and have succeeded in creating a belief and conviction in large masses who belive that the yogic discipline could be the real answer to the present day problem of psychosocial stress and stress disorders.

Though the elements of exaggeration can not be ruled out, the potentialities of yogic discipline cannot be denied. The scientific investigations carried out along with the present movement of yoga awareness have yielded convincing data to believe that yoga may prove a potential non-medicinal measure which may contribute to a healthy peaceful and successful human life.

The above account would show that yoga has become a very much living discipline and needs a systematic development as regards to its teaching, research and development. As the arousal of interest in yoga has been a sudden explosion, the activities related to yoga have not followed a systematic structure. A look into the present state of affairs brings about a very confusing picture. Different people opine to develop yoga in different manners. Similarly the expectations from yoga also vary to a great extent. Yoga is being practised in different manners starting from, in the form of physical culture upto the attempts of higher meditation, trans and arousal of Kundalini. In medical application attempts have been made to affiliate yoga with widely

varied disciplines such as physical medicine and rehabilitation, psychosomatics, psychiatry and so on. A common man is really confused with the present picture. There are schools who are trying to prove yoga as a panacea for all kinds of ailments. There are other schools who consider yoga only as a means of mental peace and spiritual development. They are strongly against the use of Yoga as a method of physical culture and as a system of medicine.

#### OPINION SERVEY ON FUTURE DEVELOPMENT

The author of the present work who is involved in the study and research on yoga is also bewildere i on this issue. We personally feel that before a systematic effort is made towards the future development of yoga it is absolutely escential to study and analyse the classical conceptual knowledge on yoga and to understand what was the actual form of practice and aspiration from yoga in ancient times. We must be aware that yoga is an ancient concept which is about two to three thousand years old. The present day movement is primarily aiming at the revival of this ancient science. If this movement does not keep in view the central theme of yoga as conceived in ancient times; it may get misdirected. In view of this fact the author has launched a systematic study on the ancient literature and the traditions of yoga. Simultaneously we have recently conducted an operational study on the scope of future development of yoga by way of opinion analysis. The latter part of this study is summarised below.

An operational research project was launched to elicit the opinion of experts and other people interested in the revival and development of the science of yoga. Such a study may prove of significant guidance in planning future lines for reorganisation and development of yoga as a system of science, medicine or philosophy. A comprehensive questionnaire was developed to record the views of different categories of people.

The main features of the questionnaire were the quaries regarding (1) Yoga was originally conceived as? (2) Yoga should now be developed as?

The questionnaire was circulated among one hundred and fifty one persons througout the country. These personel consisted of administrators

(medical, non-medical), Ayurvedic physicians, Ayurvedic teachers, modern doctors, Yoga experts, philosophers and others interested in yoga. These persons were requested through a circular to record their opinion on the issue raised in the questionnaire and to return the same to us. An opinion analysis was carried out on the basis of the data collected during this opinion survey.

Out of one hundred and fifty one selected persons who were suppiled with the questionnaire only seventy six replied. Thus the response rate was about 50% who did not reply consisted of different categories. Some of these people were probably disintersted while a few of them wanted to reserve their opinion on this issue.

However, the opinion analysis on the nature of the original concept of yoga shows varied opinion, Almost equal number of people opined yoga to have been conceived originally as means of preservation of health, as a means of preservation of spiritual health, as a means of peaceful living and as a means of liberation.

Answering the quarry regarding the form in which Yoga should be developed now the following opinions were received. The largest number of persons were of the view that yoga should be developed as a health science with a greater emphasis on preventive or positive health medicine and psychosomatics. Relatively less number of persons wanted to develop yoga as a system of pure spiritual discipline, curative/medicine, as a pure psychiatric discipline, only as a system of philosophy or as a system of psychology. The least number of persons considered yoga as a subject of historical and academic interest. Opinions ware also elicited on the possible alliedness of yoga with existing disciplines. The majority view was in favour of developing yoga as an independent discipline as a health science of preventive nature. Relatively less number of people wanted to develop it as an independent discipline of spiritual science or philosophy. A large number of persons opined to develop yoga as a branch of Indian medicine. Amongst such disciplines of Indian medicine Svastha Vritta and Kayachikitsa were considered the nearest to yoga. A very small number of people voted for affiliating yoga with basic

principles of Ayurveda. Similarly less number of persons considered yoga to be developed as a branch of physical education, physical medicine and rehabilitation or as a branch of psychiatry (Tables 1-6).

As mentioned earlier increasing interest has been shown in the development of yoga in recent years. The personel showing interest in yoga basically belong to varied disciplines and accordingly their approach to the problem is varied. Yoga which is primarily an ancient Hindu Science of spiritual development, has been viewed in recent times as a means of combating strees and strains of modern life. Some scholars are working to develop yoga as a system of curative medicine while others believe that it could only serve as a positive health medicine, Efforts have a'so been made to visualise yoga as a system of phisical education, physical medicine and rehabilitation. However, the traditional schools even now maintain that yoga is primarily a spiritual science and its main object is spiritual development and Moksa.

Such varied facts developing on yoga in modern times reflect two things: No. (1) that yoga has not remained one unified discipline in the hands of a class of specialists but people from varied disciplines have started studying yoga with a biased mind, No. (2) that yoga is such a comprehensive science that it can satisfy the interest of a very wide variety of seekers.

However, in view of the enough growth already taken place and a rapid growth in progress, it appears essential to consider the problem of systematisation of yoga as a science in modern times. Due to the prevailing confusion as mentioned above it has become difficult to shape yoga on rational institutional basis. Present opinion analysis was undertaken to work out the concensus of the concerned thinkers. The present study suggests that yoga should either be developed as an independent discipline or as a branch of Ayurveda.

It would be seen that independent development of ancient disciplines as the solitary institutions has not succeeded much. In the absence of allied disciplines and facilities for interdisciplinary growth most of the primary institutions built as independent centres have either faced a decline or have ended with misguided growth. In such institutions the subject has not been developed 11Y

in proper perspective. Moreover, lot of duplication of facilities have been needed. Therefore the attempts to develop independent yoga centres or yoga institutions as solitary institution does not appear proper. Such institutions remain the fad of some individuals and they are not able to give a broad base to the discipline as a whole.

For a balanced and logical growth of yoga as a scientific discipline it is necessary that yoga should be developed at faculty levels in universities. As rightly opined by large number of experts interviewed under the present project, Yoga should be developed as a branch of Ayurveda at faculty level. start with, it may form a part of Swastha Vytta of Kāyacikitsā. It should be included in the curriculum for undergraduate and postgraduate teaching programme in the paper on preventive medicine (Svasth Vrtta) and curative medicine ( Kāyacikitsā ). The philosophy of yoga may be included in the curriculum of the teaching in the basic principles of Ayurveda. The central council of Indian Medicine has already taken such decisions which look to be a rational and practical approach. At postgraduate or research levels yoga may be studied as an independent speciality. On the basis of opinion analysis in the present study and in view of the discussions, it is concluded that there is a need of rapid consolidation and systematisation of yoga as a discipline. For proper and balanced growth it would be desirable to develop yoga as a branch of Ayurveda. Emphasis must be given for developing yoga as a health science and more and more studies may be conducted to varify the therapeutic claims of yoga to further the scope of developing yoga as system of medicine.

TABLE I
Showing the percentage of experts replying the questionnaire

Category of Experts	No. of Approached	Percentage Replied
Administrators ( Medical )	15	53.33
Administrators (Non-medical)	. 11	18.18

Category of Experts	No. of Approached	Percentage Replied
Ayurvedic physicians	08	50.00
Ayurvedic teachers	54	57.40
Modern doctors	12	41.66
Yoga experts	22	36.36
Philosophers	10	70.00
Others interested in Yoga	19	<b>57.9</b> 0
Total	151	50.30

Table 2. Showing the opinion of experts regarding the original concept of Yoga\*

Category of Experts	Question number with			percenta	percentage reply in Yes		
	1	2	3	4	5	6	
Administrators ( Medical )	87.50	100.00	87 50	100.00	75.00	62.50	
Administrators (Non-medical)	00.00	50.00	50.00	50.00	00.00	50.00	
Ayurvedic Physicians	50.00	50,00	25.00	50.00	50.00	75.00	
Ayurvedic Teachers	80.50	80.60	67.74	67.74	83.87	74.20	
Modern Doctors	80.00	80.00	60.00	100.00	80,00	80.00	
Yoga Experts	62.50	<b>7</b> 5.00	<b>62.50</b>	62.50	50.00	75.00	
Philosophers	<b>85</b> .70	85.70	85.70	100.00	72.42	100.00	
Others interested in yoga	81.81	72.72	81.81	63 <b>.63</b>	81.81	51.54	
Total percentage	76-30	78.94	69.73	73.67	73.67	72,36	

Yoga was originally conceived as:		
1. Means ef preservation of health	•••	Yes/No
2. Means of preservation of mental health	•••	Yes/No
3. Means of preservation of physical health	•••	Yes/No
4. Means of preservation of spiritual health	•••	Yes No
5. Means of peaceful living	•••	Yes No
6. Means of liberation (Moksa)		Ves/No

Showing the Opinion as how Yoga should be Developed now in percent Category of Experts QUESTION NUMBERS\* Table 3.

	ŀ	١	,	,		١,		,		
	-	7	·	4	A	റ മ	Ö	0	•	×
Administrators (Medical) 62.51	62.51	62.50	50.00	37.50	25.00	62.50	37.50	37.50	25.00	25.00
Administrators (Non-medical)	50.00			00.00	00.00		00.00	50.00	00.00	00.00
Ayurvedic Physicians	75.00	100	50.00	50.00	50.00	50.00	50.00	25.00	50.00	75.00
Ayurvedic Teachers	61.29	80.00	77.41	51.60	25.80	77.41	80.60	38.70	38.70	25.80
Modern Doctors	60.00	90.09	100	00.09	20.00	80.00	100	00.09	80.00	60.00
Yoga Experts	62.50	75.00	87.50	75.00	37,50	75.00	87.50	62.50	75.00	12.50
Philosophers	85.71	100	85.71	85.71	00.00	57.14	100	71.42	71.42	71.42
Others interested in Yoga	63.63	90.90	81.81	72.72	45.45	81.81	72.72	45.45	36.86	18.18
Total percentage	64.47	80.26	75.00	57.89	40.79	71.05	75.00	46.05	46.05	7.531
* QUESTIONS: Yoga should now be developed as a	ld now	be devel	oped as	: 8						
1. Spiritual discipline	liscipline	;	:	:	:	YesiNo				
2. Health Science	ience	:	ŧ	:	:	YesiNo				
3. Preventive or positive health medicine	e or posi	itive hea	Ith medi	icine	:	YesiNo				
4. Curative Medicine	Medicin	:	:	:	:	YeslNo				
(a) As a System of medicine only for mental problems	System	of medic	ine only	for ment	al proble	ms	YeslNo	oZ.		
(b) As a System of medicine both for mental and physical problems	System	of medic	ine both	n for men	tal and pl	nysical p	roblems	:	YesiNo	Ó
(c) As a System of medinine for psychosomatic problems	System	of medi	nine for	psychoso	matic pro	blems	:	:	YeslNo	0
6. As a System of philosophy	m of ph	ilosophy		:	:	:	:	:	YesiNo	0
7. As a System of psychology	sd jo ma	ycholog	_	:	•	:	:	:	YesiNo	•
8. As a Subject of historical and academic interest	ect of hi	storical	and acac	demic inte	rest	:	:	:	YesINo	0

Table 4.

Showing the opinion as to the Object of Development of Yoga as an Independent Discipline.

Category of Experts			Question N	umber	
- · · · · · · · · · · · · · · · · · · ·	XX	1		2	3
			A	$\overline{\mathbf{B}}$	
Administrators ( Medical )	75.00	50.00	100.00	85.50	50.00
Administrators (non-medica	1) 50.00	<b>5</b> 0.00	<b>5</b> 0.00	50.00	100.00
Ayurvedic physicians	75.00	75 <b>.</b> 00	75.00	50.00	50.00
Ayurvedic teachers	77.41	61.29	90.30	74.19	38.70
Modern Doctors	80.00	60.00	80.00	60.00	60.00
Yoga Experts	100.00	87.50	75.00	75.00	62.50
Philosophers	71.42	57:14	71.42	71.42	57.14
Others interested in Yoga	45.45	45 45	54.54	54.54	36.36
Total	73.68	60.52	80.26	68.42	47.36
Yoga should be develop	ped.				
XX As an independent disc	ipline	••••	• • •	Yesil	No
If yes with what object.					
(1) Spiritual Science	•••	•••	•••	Yesl	No
(2) Health Science (A)	Prventive	•••	•••	Yes	
	Curative	•••	•••	Yesi	
(3) As a system of philo		•••	•••	Yesi	

Table 5.

Showing the Opinion Regarding Development of Yoga as a Branch of Indlan Medicine IF SO IT should be kept with

Category of Experts		Question N	Numbers (X	X )
	X	1	2	3
Administrators (Medical)	75.00	37.50	75.00	62,50
Administrators (Non-medica	1) 00.00	00.00	00.00	00.00
Ayurvedic Physicians	100.00	50.00	50.00	100.00
Ayurvedic Teachers	86.12	6.45	38.70	61 29
Modern Dectors	60.00	20.00	20.00	20.00
Yoga Experts	25.00	25.00	12.50	<b>25.00</b>
Philosophers	57.14	57.14	57.14	57.14
Others interested in Yoga	72.72	27.27	54.54	63.63
Total	69.73	22.36	42.16	55.36

X As a branch of Indian Medicine.

XX If so it should be kept with	XX	lf so	it	should	be	kept	with.
---------------------------------	----	-------	----	--------	----	------	-------

(1) Basic Principles of Ayurveda	•••	•••	YesiNo
(2) Kāyacikitṣā of Indian Medicine	•••	•••	YesiNo
(3) Swastha Vrtta of Indian Medicine			VesiNo

Table 6.

Opinion Regarding Development of Yoga as a Branch of (1) Physical Education, (2) Physical Medicine and Rehabilitation and (3) Psychiatry

Category of Experts	Question Number X		
	1	2	3
Administrators ( Medical )	75.00	<b>75.</b> 00	<b>25.</b> 00
Administrators (Non-medical)	00.00	00.00	00.00
Ayurvedic Physicians	25.00	00.00	00.00
Ayurvedic Teachers	41.93	51.61	3 <b>8.</b> 70
Modern Doctors	60.00	20.00	40.00
Yoga Experts	37 50	<b>62.</b> 50	37.50
Philosophers	71.42	57.14	71.42
Others interested in Yoga	72.72	63.63	54 54
Total	51.31	51.31	39.47

Values are in Percentage of experts supporting the questions.

# RECENT TRENDS OF RESEARCH ON YOGA

Thus the above account of the current interest in the study and practice of yoga indicates a substantial stand towards the utilisation of the science of yoga as a system of Medicine. Therefore, most of the current studies on yoga appears to have been planned and excuted around the physiological basis of different yoga practices and their therapeutic potentials.

Most of the physiological studies on yoga have been conducted on the physiological, endocrine, metabolic and neurophysiological responses to their practices in normal human beings. Besides, a number of psychosocial and occupational investigations have also been conducted on the practitioners of certain yoga practices to examine to what extent these practices improve the mental and physical health and work efficiency of an individual practising yoga. The scientific reports appearing in various journals indicate that yogic practices certain Asanas, Prānāyāma and Meditation produce remarkable changes in the body.

#### Meditative Practices.

Different forms of meditation are claimed to improve mental concentration and to relieve emotional conflicts. Udupa et at. (1975) have studied the biochemical effects of Vipasana meditation in normal persons. Vipasana is a Buddhist system of meditation practised by Buddhists to improve mental health and power of concentration and also to attain mental peace. The authors studied the pattern of biochemical changes in the volunteers practising meditation in a Vipasana meditation camp organised at the Buddhist Vihar, Varanasi Cantt. in the month of December, 1973 and January, 1974. Two separate camps were organised; one, with English medium consisting of volunteers mainly from western white population and the other with Hindi medium in which all the volunteers were Indians. Availability of both western and Indian subjects provided an opportunity to make comparative studies on the effect of meditation in these two groups of the population.

As is evident from tables 7-9 significant increase was noted in the acetylcholine, cholinesterase, histaminase and catecholamine levels in blood on 11th day of the course as compared to the initial values in almost all the subjects in both the camps.

On the other hand the plasma cortisol, urinary corticoids and nitrogen were found descreased. On analysis of the results of the two camp it was observed that the above mentioned changes were more pronounced in volunteers of camp I (westerners) as compared to camp II (Indians). More-over in Indian subjects the urinary nitrogen was not significantly decreased whereas it was found notably lowerd in westerners.

As pointed out earlier *Vipasana* is a Buddhist system of meditation claiming increased awareness of the mind. During meditation the meditator tries to concentrate his mind on some particular object and is supposed to be more active mentally. Though physically he looks calm and quiet, mentally (Neuropsychologically) he becomes more active. This is evident from the observations made in the present study. The lowered levels of plasma cortisol, urinary nitrogen and corticoids indicate a more peaceful, calm, quiet and balanced

state of the body. On the other hand the increased neurohumoral activity as observed in these studies suggests that the volunteers are neurophysiologically more alert and are in a state of increased creative activity.

The significant difference as observed in the subjects of the two camps appear to be due to varied state of the health and habits of the concerned volunteers before entering the camps. The western subjects were probably more depressed possibly due to addiction of drugs. As some of them gave the history of drug addiction. Therefore the volunteers in this camp showed more pronounced changes. Most of them had been on a good protein diet prior to meditation. The restricted vegetarian diet during the course of meditation with decreased physical activity may be responsible for a significantly lowered rate of urinary nitrogen excretion in these volunteers as compared to the Indian subjects.

Thus the above mentioned meditation appears to reduce the quantum of stress resulting in lowered metabolic changes in the body. It also enables an individual to concentrate his mind on any particular chosen object of life with improved awareness as is evident from the biochemical changes described above.

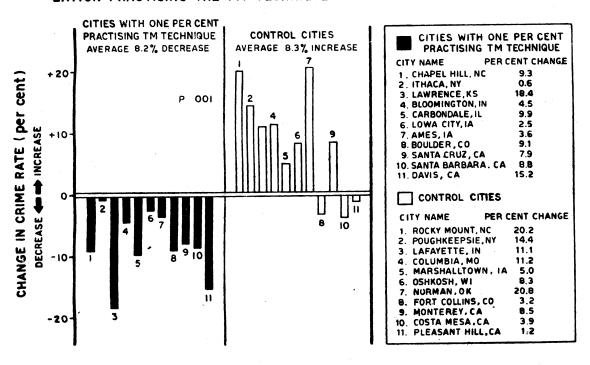
#### Transcendental Meditation:

According to the recent studies on the role of Transcendental Meditation innovated by Sri Mahesh Yogi the practice of meditation brings about major change in the total personality make up, it reduces the level of anxiety and disability, improves adjustment and mental functions. The practitioners become increasingly fit as regard to their mental and physical health and their working efficiency considerably increases. Besides, the practitioners have been reported to develop varying degrees of resistances against stress and strain of modern life and as such they are less prone to different kinds of ailments specially the psychosomatic diseases. Thus as claimed by the workers in this field the practitioner of meditation is not only mentally and physically fit and positively healthy but is an improved individual better suited to the society.

It has been claimed that a substantial qualitative change in city life is possible if about one percent of a particular population starts successfully practising Yoga. This social influence also described as 'Maharshi Effect' has brought to

## IMPROVED QUALITY OF CITY LIFE: REDUCED CRIME RATE

CHANGE IN CRIME RATE 1972-73: CITIES WITH ONE PER CENT OF THE POPULATION PRACTISING THE TM TECHNIQUE COMPARED TO CONTROL CITIES



TEXT FIG. 1: Showing the validity of 'Maharsi Effect' which indicates the significant scope of improvement in city life where 1.0 percent of the population regularly practice Transcendental Meditation. This enlightened one percent population is claimed to raise the level of Sattva Guna in the society as a whole.

light a new concept of human welfare and social reform (Text Fig. 1). How ever these claims need further examination.

#### Studies on Yogic Asanas

In addition to the role of meditation in the uplift of human health and personality and its social reflections, these practices have been shown to possess encouraging preventive and therapeutic potentials against a variety of diseases. similar to meditative practices a number of yogic postures i. e. Asanas and Prānāyāmas have been demonstrated to produce psychobiological changes in the body which afford positive health and resistance against stress and disease. The continued practice of these Hathayogic practices produce a number of vital changes. One of the recent studies have shown that the practice of different Asanas produce several endocrine and metabolic changes. Probably such changes might be responsible for several other beneficial effects on human body and might be the basis for the claims that practice of Yoga can rejuvenate the body, can prevent premature aging and can maintain eternal youth.

A sustained evidence of increased production and break down of adreno-cortical hormones in the volunteers undergoing Yoga practices is the most significant observation. This enhanced adrenocortical activity may make these subjects competent to resist stress and probably in such subjects stress may not produce instantanious endocrine and metabolic changes which may usually be associated with certain undesirable effects. The physiological studies done on these subjects have also shown significant evidence of development of resistance against physical stress. Inspite of increased adrenocortical activity no inscreased break down of proteins has been noted, which indicates compatibility of the enhanced adrenocortical activity in these subjects. The significant metabolic changes seen in these subjects were reduction in serum cholesterol, reduction in fasting blood sugar and restoration of serum proteins. These metabolic changes may be secondary to the endocrine changes or may be the direct effects of yogic exercises.

In this context it may be pointed out that there are distinctions between simple physical exercises and practice of yoga. The physical exercises consist of "unstable" vigorous muscular actions. There is disproportionate loss of energy

with minimum rehabilitative effect on physiological systems and only the skeletal muscles are effected. In contrast yogic practices are synchronous postures requiring minimum energy consumption and maximum rehabilitative effect on physiological organs and systems. This leads to an enhancement of physiological efficiency without undue muscular developments alone.

Basic difference between a vigorous physical exercise and a yogic exercise therefore appears to be the involvement of energy production (rehabilitation) and energy utilization mechanisms. In a physical exercise the muscles undergo a rapid and vigour exercise consuming a much more amount of energy than what the muscle can recover in that much of time whereas in a yogic exercise there is a very much syncronized break down and recovery of energy which ultimately enhances the physiological efficiency of the muscle tissue without its unwanted hypertrophy.

Physical exercise...Energy used recovery...muscle fatigue
Yogic exercise...Energy used=recovery...enhancement of
physical efficiency.

These practices appear to have been devised in such a way that they specifically rehabilitate the vital physiological organs and endocrine glands. This is evident from significantly improved physiological, endocrine and metabolic sequences seen in these subjects. Simultaneously these practices induce a neurohumoral balance and improved psychic functions.

All these changes are probably induced basically by improving the microcirculation in vital organs and endocrine glands thus leading to their improved functional efficiency and in turn improved metabolic sequences. This is in contrast to the physical exercises where a similar phenomenon occurs in skeletal muscles but most of the vital organs and endocrine glands are not suitably influenced.

A notably decreased incidence of psychological and physiological complaints scored in Cornell Medical Index (CMI) indicates an increased feeling of general well being. This may be due to an overall improvement in general health due to appropriate physiological, endocrine and metabolic changes

occuring in these subjects. A decreased neurohumoral responsiveness and decreased Neuroticism may also be responsible for curtailing the incidence of complaints as is also supported by EEG studies on these subjects.

Similarly the improved and mental make-up of the practitioners of yoga may make them less liable to mental fatigue as is evident from mental fatiguability index (Udupa et al., 1973). These subjects also develop a sort of resistance against physical stress which is evident from relative stability of mental fatiguability index during stress. The improved performance and memory quotients recorded in practitioners of yoga may again be secondary to the basic neurophysiological changes described earlier. Thus the practice of yoga appears to make an individual mentally more competent as reported by Gode et al. (1974), Singh (1973), Udupa and Singh (1972), Udupa et al. (1972), Singh (1973) and Udupa et al. (1973) See tables 10-12.

#### Studies on Prāņāyāma

The observations made on the effects of different combinations of Asanas have been reported elsewhere (Udupa and Singh, 1972, Udupa et al., 1972 and Udupa et al., 1973). The physiological effects of Prānāyāma in normal persons have also been studied. It is believed that Prāṇāyāma a type of yogic practice produces may systemic psychophysical effects in the body besides its specific effects on the respiratory function. The Ujjayī and Bhastrikā are the two major types of Prāṇāyāma. Though physically they are very much distinct, their effects are similar. Usually they are practised in combination to obtain synergistic effect. Udupa et al. have studied six apparently healthy young male volunteers practising a six months course of such Prāṇāyāma. After basal assessments these volunteers underwent the regular practice of Prānāyāma: Ujjai, Bhastrikā daily for six months. They practised Ujjai Prānāyāma for 7 minutes followed by Bhastrikā for 10 minutes in the morning with a rest of 5 minutes between the two types of Prāṇāyāma. All the volunteers were vegetarians and were allowed to remain on usual house-hold diet without any additional diet or dietary restrictions. At the end of every third month the undermentioned physiological factors viz., (1) body weight, (2) abdominal

girth, (3) chest girth, (4) rate of respiration, (5) breath-holding time, (6) vital capacity, (7) Pulse rate, and (8) blood pressure were assessed. Simultaneously the volunteers were also subjected to a series of biochemical investigations viz., fasting blood sugar, total serum lipids, total serum proteins, plasma cortisol, urinary 17-hydroxycorticosteroids, urinary 17-ketosteroids, and urinary catecholamines as VMA following standard methods (Udupa at al., 1972). The gross observations on this group of practitioners did not show loss of body weight. Moreover, most of the volunteers showed an increase in the body weight towards the end of the course. The most striking changes were recorded in respiratory functions in terms of significantly increased breath-holding time, though the vital capacity was not found much altered. They also showed a trend of restoration of blood pressure and decrease in pulse rate. The biochemical studies on the endocrine and metabolic functions in these volunteers showed a significant increase in plasma cortisol, urinary 17-hydroxycorticosteroids and urinary 17-ketosteroids. The urinary catecholamines measured as VMA did not show significant alterations.-They showed a minor decrease in fasting blood sugar and a significant decrease in total serum lipids. The total serum proteins were increased (Udupa et al., 1972). These observations indicate a stability of respiratory functions developing under the influence of the practice of Prāṇāyāma. The remarkable body weight changes as seen with the practice of yogic Asanas (Udupa et al., 1972) have not been observed in practitioners of Prāṇāyāma (Udupa et al., 1975).

Though on the basis of the present preliminary studies no definite conclusions can be drawn, these investigations give a lead for further studies. Thus  $Pr\bar{a}n\bar{a}yama$  appears to be a specialized respiratory exercise capable of inducing a series of systemic beneficial effects besides causing significant improvement of respiratory functions (Tables 13, 14). Further studies will be needed to establish these effects.

## Relaxation Response and Biofeed Back

Besides the above mentioned psychobiological studies on the physiological effects of classical yoga practices like Asana, Prānāyāma, Dhyān etc., in recent

years attempts have been made to develop other psychobiological techniques of non-yogic origin to be used as measures for the management of anxiety and stress. Among such developments the important ones are the relaxation response described by Ben-son and others and the Biofeed back procedures which appear to have been used more and more in recent years. Though primarily such techniques are based on the principles of Yoga but their approach is different and with the interference of mechanical tools and the absence of the philosophical background of yoga, the increasing use of such techniques appears rapidly replacing the practice of classical yoga for the purpose of medical and health care.

#### Therapeutic Studies

So far as the study of yoga practices for their therapeutic potentials are concerned the reports so far available do not appear conclusive. At the out set it may be pointed out that even now there is a controversy whether yoga can be used as a method of curative treatment of a disease or not. Many workers believe that yoga can atmost be used as a positive health measure and it should not be accepted to be useful in the curative treatment of different diseases. On the other hand a large number of yoga institutions and individual yoga practitioners advocate different yoga practices for the treatment of a variety of established diseases. Though greater claims have been made as regard to the utility of such practices in psychosomatic diseases, but it appears that yoga is being used as a method of treatment of almost every disease belonging to every system of the body of any known etiology.

At this juncture it may be pointed out that yoga is being used for the treatment of different diseases on emperical basis arbitrarily without any definite basis. Different practitioners appear to use different sets of practices for the treatment of the same illness without any convincing theory governing the mode of action Another aspect of the present state of affairs in this field is that there is no standard published data confirming the role of yoga practices in the treatment of specific diseases except ew reports on the role of the some yogic practices in the treatment of Hypertension and certain other

ailments (Patel, 1973; Udupa, 1978; Benson, 1974; and Wallace and Benson, 1972). However, these studies also appear to be of preliminary nature and are not definitely conclusive. Though a large number of yoga practitioners and yoga institutions advocate yoga practice as treatment for different diseases and claim good results but so far not many clinical studies of real scientific nature with controlled double blind trials appear to have been published in the literature. Thus on the basis of the information available so far on this aspect of the problem, it is difficult to predict the therapeutic potential of yoga and the scope of yoga as a system of curative medicine in the near future. As a matter of fact there is a real need of launching scientifically planed controlled clinical trials to study the role of each and every yoga practice and their combinations in different specific diseases where ever these may appear useful in view of their physiological effects. It is possible that some yogic practices may prove useful in the treatment of certain specific diseases and thus some practices may be developed as adjunct to the already known medical treatment.

Observations	Befo	Before the course	ırse	A	After the course	urse	Com	Comparison
	Mean	Mean S. D. S. E.	S.E.	Mean	Mean S. D. S. E.	S. E.	+	t p
1. RBC Ach, ug/ml	0.133	0.133 ± 0.113 ± 0.034	±0.034	0.569	± 0.164	$0.569 \pm 0.164 \pm 0.049$	6.114	6.114 20.001
2. RBC Ch. E. PU/ml	82.180	82.180 ±11.220 ±3.380	$\pm 3.380$	120.100	$\pm 5.650$	$120.100 \pm 5.650 \pm 2.000$	9.393	9.393 20.001
3. Histaminase PU/ml	144.400	144.400 ±17.960 ±5.420	±5.420	213.100	$\pm 50.01$	213.100 ±50.01 ±15.100		4.705 \( \alpha \).001
4. Catecholamine Ug/ml	25.800	$\pm$ 8.820 $\pm$ 1.150	$\pm 1.150$	31.400	$31.400 \pm 3.89$	± 1.170		40.001
5. Plasma cortisol ug%	12.800	$12.800 \pm 7.500 \pm 2.370$	$\pm 2.370$	11.400	$11.400 \pm 6.00$	± 1.890		1.081 20.400
6. Urinary 17-OHCS								
mg/g creat.	13.100	13.100 ± 9.770 ±2.820	$\pm 2.820$	7.270	$7.270 \pm 2.23$	$\pm$ 0.780 1.883	1.883	20.200
7. Urinary 17-KS mg/g								¦
creat.	4.050	$4.050 \pm 2.13 \pm 0.670$	±0.670	6.170	$\pm$ 2.16	$6.170 \pm 2.16 \pm 0.680 \ 3.193 \ \angle 0.020$	3.193	20.050
8. Urinary VMA mg/g								
creat	1,760	$1.760 \pm 1.020 \pm 0.340$	$\pm 0.340$	1.640	0 <b>.</b> 00 ∓	$1.640 \pm 0.90 \pm 0.800 2.682 \angle 0.005$	2.682	70.005
9. Urinary N <sub>2</sub> mg/g creat.		14.100 ± 9.040 ±3.310	±3.310	7.700	$7.700 \pm 4.00$	Н	1,200 3,118 2,0.02	7 0.05

Reproduced from Udupa et al. (1975)

nges in Indian Volunteers Practising Vipasana Meditation	
Vipasana	
Practising	
Volunteers	
in Indian	
Changes in	
Showing the Biochemical Changes	
Showing the	
Table 8.	

	0		ָ נ					
S.N. Ob	Observations	Bef	Before the course	ourse	After the course	course	Comp	Comparison
		Mean	S. D.	S. E	Mean S. L	S. D. S. E.	t	Ф
1. RBC Ach. ug	h. ug/ml	0.301	$0.301 \pm 0.29$	± 0.10	<b>0.349</b> ± 0.12	± 0.041	4.629	70.01
2. RBC ChE PU/ml	E PU/ml	112.250	0.6 ∓	$\pm 2.22$	$161.190 \pm 7.15$	± 2.530	2.667	₹0.05
3. Histaminase	nase PU/ml							
plasma		72.000	$72.000 \pm 14.95$	± <b>4.</b> 98	$107.050 \pm 40.80$	± 13.60	2.933	70.07
4. Catechol	4. Catecholamines ug/ml							
plasma		21.900	$\pm$ 2.17	<b>±0.76</b>	$18.360 \pm 2.99$	1.060	2.910	20.05
5. Plasma c	5. Plasma cortisol ug/gm%	9.120	± 2.41	₩0.85	$8.500 \pm 3.46$	$\pm 1.220$	0.796	∠0.30
6. Urinary 17-OHCS	17-OHCS							
mg/g. creat	reat	7.270	± 2.62	±0.99	$5.880 \pm 3.29$	± 1.240	1.206	2 0.30
7. Urinary	7. Urinary 17-KS mg/g.							
creat.	i I	3.420	$3.420 \pm 0.85$	$\pm 0.28$	$4.930 \pm 1.97$	$\pm 0.650$	1.961	20.10
8. Urinary	8. Urinary VMA mg/g.							
creat.		1.620	$1.620 \pm 0.81$	$\pm 0.27$	$2.140 \pm 0.89$	$\pm$ 0.290	2.108	2.108 20.10
9. Urinary	9. Urinary N <sub>2</sub> mg/g. creat	5.580	$5.580 \pm 3.17$	±1.00	$7.550 \pm 4.05$	$\pm 1.280$	1.868	2 0.10

Reproduced from Udupa et al. (1975)

Showing comparative Biochemical Changes after Vipasana Meditation in the two groups. Values are in Percentage change ±S. D. / S. E. Table 9.

S. N	Observations	Cam	Camp—1 (Westerners)	erners)	Cam	Camp—2 (Indians)	nns)
		Mean	S. D.	S. E.	Mean	S. D.	S. E.
  -	RBC. Ach	₩285.38	$\pm 362.40$	±109.26	± 184.21	±157.00	±55.51
5.	RBC ChE	$\pm$ 58.09	$\pm 36.73$	$\pm$ 11.074	± 43.91	± 7.13	$\pm$ 2.52
33	Histaminase	± 49.06	$\pm 36.53$	± 11.014	± 48.80	± 51.49	±17.16
4.	Catecholamines	$\pm$ 23.26	± 22.05	± 6.648	- 15.59	± 14.64	± 5.17
5.	Plasma Cortisol	- 2.901	± 74.18	± 23.46	- 8.02	± 21.67	<b>39.7</b> ∓
9.	Urinary 17-OHCS	- 27.77	± 33.14	± 11.71	- 26.62	$\pm 23.46$	± 8.87
7.	Urinary 17—KS	$\pm 56.31$	₩ 60.17	± 19.02	± 55.42	± 84.83	±28.27
ထ	Urinary VMA	$\pm$ 16.31	$\pm$ 60.20	$\pm 20.06$	± 55.42	± 62.72	$\pm 20.00$
6	Uriuary N2	- 39.06	$\pm$ 30.12	₹ 9.08	₹ 48.60	± 50.80	=16.07
		Reproduced	from Udupa	Reproduced from Udupa et al. (1975)			
	- Decreased				+ Increased.	ті	

Table 10. Showing the physiological changes in volunteers undergoing a six months course of comprehensive practice of Asanas

S. No.	Observations	In	itial	3rd 1	month	6	th month
1.	Body weight in 1bs.	12	3.0	1	19.3	1	18.72
	•	± 1	2.96	±	7.03	#	13.1
2.	Abdominal girth in cm.	7	3.8		72.9		<b>72.</b> 3
	8	±	5.93	<b>±</b>	6.01	±	3.76
3.	Chest expansion in cm.		3.40		4.33		4.73
	•	土	1.29	±	1.37	. ±	1.48
4.	Respiration rate/minute	. 1	6.8		16.6		13.4
		<b>±</b>	4.12	<b>±</b>	3.45	<b>±</b>	3.42
5.	Vital capacity in cc.		<b>3</b> 729		4372		4615
	, , , , , , , , , , , , , , , , , , ,	±	232	· ±	<b>3</b> 36	±	349
6.	Breath holding time in sec.	7	4.77		99.3		101.2
			18.94	±	38.4	<b>±</b>	23.8

Reproduced after Udupa et al. (1972)

Table 11. Showing the biochemical changes in volunteers undergoing a six months course on comprehensive practice of Asanas

Ş. No	o. Observations	Initial	3rd month	6th month
1.	Fasting blood sugar in mg%	74.6	64.17	63.07
		$\pm$ 6.26	± 8.42	$\pm 10.86$
2,	Serum cholesterol in mg%	149.7	113.6	133.65
	The state of the second	± 31.24 5.76	± 19.99 5.54	± 30.13 6.09
3	Total serum protein in mg#	$\pm 0.33$	$\pm 0.51$	± 10.36
4.	Urinary 17-OH Corticoste-	3.65	5.80	10.30
	roids in mg/24 hrs.	± 2.02	± 3.01	= 4.10
5.	Urinary 17-Ketosteroids in	11.46	5.87	7.30
	mg per 24 hrs.	± 8.33	± 4.04	± 2.30
6.	Urinary Catecholamines	$\begin{array}{r} 3.14 \\ \pm 2.12 \end{array}$	$\begin{array}{c} 3.33 \\ \pm 2.38 \end{array}$	4.37 ± 1.63
7.	(VMA) in mg/24 hrs. Plasma Acetylcholine in ug%	181.7	101.1	58.7
/-	1 Idditio 1 1000 / 1000	= 149.3	$\pm$ 34.1	± 18.05

Reproduced after Udupa et al. (1972).

Table 12.: Showing certain psychological changes induced by a 6 months course of comprehensive practice of Asanas.

S. No	o. Observations	Inital Mean $\pm$ S.D.	3rd month Mean ± S.D.	6th month Mean ± S.D.
1.	Performance quotient	93.15	102.00	108.2
	( P. Q. )	$\pm 12.50$	$\pm$ 16.40	$\pm$ 14.70
2.	Memory quotient	89.75	97.30	100.8
	( M. Q.)	<b>± 9.15</b>	$\pm$ 13.20	± 9.60
3.	Neuroticism Index (M. P. I. Scores)			
	N	19.50	11.40	9.82
		± 9.95	± 10.70	± 8.40
	E	27.10	28.40	26.54
		± 5.60	± 6.80	± 8.4
	Q	2.66	1.00	2.58
		± 5.33	± 2.19	± 5.57
4.	Mental Fatigue Rate	•		
	Time taken	3.52 ± 0.68	3.31 ± 0.90	3·03 ± 0.41
	Mistake score	5.54	1.33	3.64
		± 4.69	± 1.73	± 3.30
	Fatigue Index	1.59	0.40	1.20
<b>.</b>	Health Index (CMI)			
	Physiological ,	125	83	64
	complaints	•		
	Psychological complaints	67	31	30

Reproduced after Udupa et al. (1973).

Table 13.: Physical and physiological changes during the course of the practice of  $Pr\bar{a}n\bar{a}y\bar{a}ma$ .

S·N.	Observations ± S. D	Inital	3rd month	6th month
1.	Body weight in 1 bs.	119.80	117.80	121.80
	,	$\pm 16.30$	± 14.70	$\pm$ 13.60
2.	Rate of respiration/min	14.60	14.20	18.20
	• •	± 2.30	$\pm$ 2.90	$\pm$ 3.50
3.	Breath-holding time. sec.	91.60	117.80	125.00
	3	± 25.80	$\pm 33.00$	$\pm$ 82.60
4.	Vital capacity. ml.	4617.40	<b>4538.8</b> 0	4631.00
	• •	$\pm 520.60$	$\pm 403.20$	$\pm 344.60$
5.	Pulse rate/min.	65.20	<b>65.4</b> 0	61.00
	•	<b>±</b> 6.90	$\pm$ 2.90	$\pm$ 4.80
6.	Systolic B. P., mm. Hg.	104.60	106-00	110.00
	•	± 3.60	± 7.30	± 600
2.	Diastolic B. P. mm. Hg.	<b>87.8</b> 0	89.00	90.00
		$\pm$ 1.80	± 1.00	± 0.00

After Udupa et al., 1975.

Table 14: Biochemical changes in volunteers practising Prānāyāma.

SN	o. Mean Observations ± S. D.		Inital	3r	d month	(	oth month
1.	Fasting blood sugar mg%		68.30	<u></u>	62.54		63.34
		±	3.56	+	3.56	±	3 <b>.56</b>
2.	Total serum lipid, mg%		<b>38</b> 0. <b>00</b>		256.00		134.00
		±	87.20	±	42.20	±	39.80
3.	Total urinary nitrogen,		15.50		12.30		16.66
	mg/24 hr	±	5.05	±	4.60	±	4.04
4.	Plasma cortisol, ug/100 ml.		18.00		24.36		<b>25.50</b>
	_	<b>±</b>	7.07	±	10.00	±	1.39
<b>5</b> .	Urinary 17-OHCS, mg/24 hr.		5.76		7.26		7.90
	· · · · · · · · · · · · · · · · · · ·	±	1.04	±	0.70		
6.	Urinary 17-Keto-steroids.		4.85		5.54		6.37
	mg/24 hr.	<b>±</b>	1.11	±	1.08	士	1.47
7.	Urinary VMA in mg/24 hr.		3. <b>6</b> 6		3.66		4.40
		±	1.22	±	1.93	<b>±</b>	1.407

After Udupa et al. 1975,

## CONCEPT OF INDIVIDUAL AND COSMIC CONSCIOUSNESS AS RELEVANT TO THE CONCEPT OF YORA

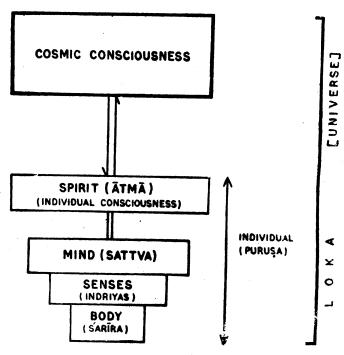


FIG. 5: Diagrammatic depiction of the concept of Purusa and the Loka as well as the individual and Cosmic Consciousness.

Yoga is primarily a process of harmony between the Four constituents of individual living being (Body, Senses, Mind, Spirit) among themselves. Such a harmony improves the life and opens the scope of higher consciousness and the union of the individual consciousness with the Cosmic.

#### ELEMENTS OF YOGA IN AYURVEDA

Yoga and Ayurveda are the unique sciences of antiquity. Both were developed and practised in similar circumstances with similar objectives in the same land.<sup>1</sup>

Ayurveda (Āyu = Life + Veda = Knowledge or Science), a comprehensive science of life was developed to ensure Arogya i. e. healthy life in all its dimensions which was considered essential for achieving the four instincts of life-Dharma, Artha, Kāma and Mokṣa around which the entire Hindu thought swings. Yoga was a part and parcel of Āyurveda as it subserved the same objectives. However, the primary object of yoga was not the achievement of the entirety of human instinct; it was essentially developed to achieve Mokṣa-Yogo makṣa pravartakḥ. Thus Āyurveda is the life science specifically concerned with psychospiritual development of an individual.

It may be pointed out that Yoga and Ayurveda both are based on similar concept of human existence. According to basic Hindu thought, life is the combination of Sattva (mind) + Atmā (spirit) + Śarīra (body + Indriyas

२. धर्मार्थकामनोक्षाणामारोग्यं मूलमुत्तमम् । (च० सू● १।१४ )

३. योगो मोक्षप्रवर्तकः । ( च० गा० १।१३७ )

(senses). Ayurveda deals with this total psycho-spiritual somatic entity and (fig-5) stands for the relief of all the three categories of miseries viz. Adhyāt-mika, Adhidaivika and Adhibhautika and in turn ensures Arogya which affords Dharmārtha Kāma-mokṣa, while Yoga cares specifically for the psycho-spiritual aspects of life, and in turn facilitates Mokṣa. Arogya with full achievement of life instincts does not appear to be its objective. Ayurveda describes three fundamental categories of the cause of ill health viz. (1) Asātmyendriyārtha Samyoga, (2) Prajnāparādha, (3) Parināma. The body and the mind both have been considered as the seat of disease.

Yoga and Ayurveda are allied disciplines. Both have advocated Auşadhi, Mantra, Japa, Samādhi etc. as the means of achieving their objectives. Besides spiritual paths, yoga also teaches the use of drugs for Citta-Suddhi. Similarly, besides Auşadhi, Anna, Vihāra (drug, diets etc.), Ayurveda also teaches the practice of Yoga. Thus there is a similarity in the approach of these two human sciences, though the emphasis varies.

In Hindu traditions the purity of Sarira, Manas and the Vāṇī has been considered important as the basis of human welfare. Many authorities believe that one and the same author, by different names, wrote three different texts for comprehending knowledge for the total welfare of mankind, viz.;

१. शरीरेन्द्रियसत्वात्मसंयोगो घारि जीवितम् । नित्यगञ्जानुबन्धञ्च पय्यौयैरायुरुच्यते ॥ (च० सू० १।४२ ) सत्वमात्मा शरीरं च त्रयमेतित्रिदण्डवत् । लोकस्तिष्ठिति संयोगात्तत्र सर्वं प्रतिष्ठितम् ॥ (च० सू० १।४६ )

२. कालबुद्धिन्द्रियार्थानां योगो मिथ्या न चाति च । द्वयाश्रयाणां व्याधीनां त्रिविद्यो हेतुसंग्रहः ॥ (च ० सू ० १।५४ )

३. शरीरसत्वसंज्ञं च व्याधीनामाश्रयो मतः। तथा सुखानां, योगस्तु सुखानां कारणं समः॥ (च ० सू० १।५५)

४. जन्मीषधिमंत्रतपः समाधिजाः सिद्धयः । (यो॰ सू॰ ४।१) त्रिविधमौषधमिति-दैवन्यपाश्रयं, युक्तिन्यपाश्रयं, सत्वावजयश्च ॥ (च॰ सू० ११।५४)

५ योगारम्भे सततमनिर्वेदः। ( च॰ शा॰ ४।१२ )

- 1. Yoga-Sūtras of Patanjali for Citta-Suddhi (purification of mind).
- 2. Mahābhāṣya of Patanjali for Vāṇī-Suddhi ( purification of speech ).
- 3. Caraka Samhitā of Caraka (Patanjali) for Śarīra Śuddhi (the purification of body).

Thus Yoga and Ayurveda are allied disciplines.1

Caraka Samhitā, one of the foremost Āyurvedic classics, deals with the highest category of Yoga. It describes very vividly the concept of *Prajnā* and the features of a *Yogastha-puruṣa* i. e. *Sthita prajna* almost in a similar manner as the concept of *Rtambharā prajanā* described is Yoga-Sūtras of Patanjali and that of the *Yogastha-puruṣa* in the Bhagvadgttā.<sup>2</sup>

Though Caraka also gives the detailed account of the Vahiranga practice like Yama, Niyama etc. in the context of Sadvṛtta and Ācāra (Caraka Ci. 1:3) etc. he specifically describes the state of higher achievements of yoga-practice including the ultimate realisation i. e. Satyā Buddhi and the achievement of Siddhis or Aisvaryas.

Caraka emphasises that the *Purusa*, the individual living being, is the miniature form of the *Loka*, the universe, "*Puroso-Ayam Lokasammîta*" (Caraka Sūtra, 5:2). According to Caraka the whole universe (*Loka*) is *Saddhātvā*t-

१. योगेन चित्तस्य पदेन वाचां मलं शरीरस्य तु वैद्यकेन । योपाकरोति तं प्रवरं मुनीनां पतंजिल प्राञ्जलिरानतोऽस्मि । ( योगवार्तिक )

आत्मेन्द्रियमनोऽर्थानां सिन्नकर्षात् प्रवक्तते ।
 सुखदुःखमनारम्भादात्मस्थे मनसि स्थिरे ।। (च० शा० १।१३८)
 निवर्तते तदुभयं विशत्वं चोपजायते ।
 सश्चरीस्य योगज्ञास्तं योगमृषयो विदुः ।। (च० शा० १।१३६)
 वशी तत् कुरुते कर्मं यत् कृत्वा फलमश्नुते ।
 वशी चेतः समाधत्ते वशी सर्वनिरस्यति ।। (च० शा० १।७८)
 योगे मोक्षे च सर्वासां वेदनानामवर्तनम् ।
 मोक्षे निवृत्तिनिःशेषा योगो मोक्षप्रवर्तकः ।। (च० शा० १।१३७)
 मोक्षो रखस्तमोऽभावात् बलवत्कर्मसंस्थात् ।
 वियोगः सर्वस्थोगौरपूनभँव उच्यते ।। (च० शा० १।१४२)

maka (constituted by six Dhātus viz., Prthvī, Jala, Teja, Vāyu, Akāša and the Avyakta Brahma). The same six Dhātus constitute the Purusa i. e. the living individual being.<sup>1</sup>

The realisation, that the entire universe and the individual are one and the same, is called, "Satya-Buddhi'-'Sarvalokamātmanyātmām ca sarvaloke, samanupasyatā satyābuddhirut padyata iti' (Caraka Sarīra, 5:7).2 The concept of Satyā-Buddhi is a very fundamental thesis propounded by Caraka which appears to be a more vividly defined and comprehensive entity than Rtambharā prajnā of Patanjali. Patanjali's concept of Rtambharā prajnā is completely incorporated in Caraka's concept of Satyā-Buddhi.<sup>2</sup>

१. पुरुषोऽयं लोकसिम्मतः, इत्युवाच भगवान् पुनर्वसुरात्रेयः, यावन्तो हि लोके (मूर्तिमन्तो) भाव-विशेषास्तावन्तः पुरुषे, यावन्तः पुरुषे तावन्तो लोके । (च॰ शा॰ ५।३) षड्धातवः समुदिताः पुरुष इति शब्दं लमन्ते, तद्यथा—पृथिन्यापस्तेजो वायुराकाशं ब्रह्म चान्यक्त-मिति, एत एव च षड्वातवः समुदिताः पुरुष इति शब्दं लभन्ते । (च० शा० ५।४)

२. सर्वलोकमारमन्यात्मानं च सर्वलोके सममनुपश्यतः सत्याबुद्धिःसमुत्पद्यते । सर्वलोकं ह्यात्मिनि पश्यतो भवत्यात्मैव सुखदुःखयोः कर्ता नान्य इति । कर्मात्मकत्वाच्च हेत्वादिभिर्युक्तः सर्वलोकोऽहमिति-विदित्वा ज्ञानं पूर्वमृत्याप्यतेऽपवर्गायिति । तत्र संयोगापेक्षी लोकशब्दः । षड्धातुसमुदायो हि सामान्यतः सर्वलोकः ॥ ( च॰ शा॰ ५।७ )

शुद्धसस्वस्य या शुद्धा सत्या बुद्धिः प्रवर्तते।
यया भिनत्यतिबलं महामोहमयं तमः।। (च० शा० ५११६)
सर्वभावस्वभावको यया भवित निःस्पृहः।
योगं यया साधयते सांख्यः सम्पद्यते यया।। (च० शा० ५११७)
यया नोपैत्यहंकारं नोपास्ते कारणं यया।
यया नालम्बते किचित्सर्वं सन्यस्यते यया।।
याति बह्म यया नित्यमजरं शान्तमन्ययम्।
विद्या सिद्धिमंतिमें धा प्रज्ञा ज्ञानं च सा मता।।
लोके विततमात्मानं लोकं चात्मिन पश्यतः।
परावरदृशः शान्तिज्ञीनमूला न नश्यति।।
पश्यतः सर्वभावान् हि सर्वावस्थासु सर्वदा।
बह्मभूतस्य संयोगों न शुद्धस्योपपद्यते।। (च० शा० ५११६-२१)

Thus Satyā-Buddhi is the state of realisation of the ultimate reality. It eliminates all miseries and leads to Moksa. Caraka says that Svatā (selfhood) or Mamatā is the cause of all miseries. The moment Satyā-Buddhi emerges, the Atman transcends Svatā (Mamatā) i. e. self, and all Wordly miseries end. Caraka further says, "Pravītti dukham nivītti sukham iti" (Caraka Šārīra 5:8). Pravītti is the cause of all miseries and Nivītti is the source of real happiness. The Pravītti is initiated by Karma (action). The Satyābuddhi transcends all Karmas and affords Nivītti. This Nivītti is considered to be the superb achievement. Caraka says, "Nivīttirapavargastatparam tat prašāntam tadakṣaram tad Brahma Sa Mokṣaḥ" (Caraka Śārīra 5:20). The same has been consiered synonymous to the ultimate realisation and Mokṣa. Thus Caraka describes the highest quality of a yogic achievement, Satyā-Buddhi, and he also teaches the humanity a path for such an achievement. His ethical teachings as a means of reaching higher consciousness are very comprehensively described in different contexts in his Samhitā (Caraka Śārīra 1:142-145, Sa. 5:21).

Besides the unique descriptions of the above mentioned higher consciousness, Caraka also describes the 'Aiśvaryas or Siddhis, attainable by a Yogi in the same manner as described by Patanjali in Yoga Sūtras, The Aiśvaryas described by Caraka<sup>4</sup> are:

- 1. Ability to introduce ones spirit in others body.
- 2. Knowledge of all knowable things.
- 3. Ability to do whatever one wishes to do.

१. सर्वकारणवद् दुःखमस्वं चानित्यमेव च। न चात्मकृतकं तद्धि तत्र चोत्पद्यते स्वता।। (च॰ झां॰ १।१५१) यावन्नोत्पद्यते सत्याबुद्धिनैतंदहं यया। नैतन्ममेति विज्ञाय ज्ञः सर्वमितवर्तते।। (च॰ शा॰ १।१५३)

२. निबृत्तिरपवर्गः तत् परं प्रशान्तं तत्तद्क्षरं तद्बद्धाः स मोक्षः । ( च । शा । १११ )

३. विषापं विरजः शान्तं परमक्षरमञ्ययम्। अमृतं ब्रह्म निवणिं पर्यायैः शान्तिरुच्यते ॥ (च॰ शा॰ १।२३)

४. आवेशश्चेतसो ज्ञानमर्थानां छन्दतः किया। दृष्टिः श्रोत्रं स्मृतिः कान्तिरिष्टतश्चाप्यदर्शनम् ॥ ( च० शा० १।१४० )

- 4. Devine vision.
- 5. Devine sense of hearing.
- 6. Devine memory.
- 7. Devine complexion.
- 8. Ability to appear or disappear.

These are very much similar to the Siddhis described by Patanjali in his Yoga Sūtras. These can be achieved by following the path of Yoga. It may be pointed out that according to Suṣruta Samhitā another equally important Ayurvedic classic these Aisvaryas can also be achieved by specialised use of the divine drug Soma.<sup>1</sup>

Yoga and Ayurveda are allied sciences. Ayurveda envisages the total welfare of man while Yoga specifically ensures his psycho spiritual development. Caraka describes the highest form of Yoga aiming at higher consciousness and realisation of the ultimate reality of oneness of the 'self' and the 'whole' i. e. Satyā-Buddhi.

The above description presents a consolidated account of the elements of Yoga as seen in Caraka Samhitā one of the principal Ayurvedic classics. This reveals that Ayurveda conceives the purest form of Yoga and considers it primarily as the means of Tattva Jnāna, liberation and mental peace. However, certain statements would also reflect the implication of the knowledge of the science of Yoga to the biological sciences including the problems of health and disease. Some such statements are reproduced below.

The Karmaja diseases (deeds done by a man in the present or any prior existence) are not curable through medicine. These can be cured by Prāyaścitta Japa, Homa and Upahāra etc. by reducing the Karmas of part of life.<sup>2</sup> (S. U.

अंशुमन्तं सौवर्णे पात्रेंऽभिषुणुयात् चन्द्रमसं राजते;
 ताबुपगुज्याष्टगुणमैश्वर्यमवाप्येज्ञानं देवमनुप्रविशति ।। ((स्० चि० २६।१३)

२. नश्यन्ति त्विक्रयाभिस्ते क्रियाभिः कर्म संक्षये । शास्यन्ति दोषसम्भूता दोषसंक्षयहेतुभिः ॥ (सु० उ० ४०।१६४)

40:164). Hiccup should be treated through the practice of Prānāyāma¹'Prānāyāmodvejana Trāsanām (S. U. 50:16).

Austere penances and vows, self control, truthfulness, charities and religious practices as well as the eight qualities i. e. Aiśvaryas are either wholly or partially present in the Grahas according to the degree of their respective power (S. U. 60: 21). These Grahas may be cured by only Sauca, Snāna (bath), Brahmacarya etc. and chanting Gāyatri Mantra (S. U. 60: 31).

Protective rites should be performed for the safety of the wounded patient from the influences of malignant star and spirits with the major and the minor duties i. e. Yamas and Niyamas enjoined to be practised on his behalf (S. Ci, 1:133).4

At the time of use of Soma one should then wash and rines his mouth with water in the manner of Acamana. Then having controlled his mind and speech with the vows of Yama and Niyama he should stay in the protected inner chamber surrounded by his friends. (S. Chi. 29: 10).

Himsā Asteya, misbehaviour with women, conspiracy, harsh sound, falsehood, irrelevant talk, to harm some one, jealous, to take wealth of others, non-believe in God, these ten points should not be borne by the body, mind and speech. (A. H. Su, 2/21-22).

१. प्राणायामोद्वेजनत्रासनानि ..... ।। ( सु० उ० ५०।१६ )

२. तपांसि त्रीवाणि तथैव दानव्रतानि धर्मो नियमाश्च सस्यम्। गुणास्तथाऽष्टाविप तेषु नित्या व्यस्ताः समस्ताश्च यथा प्रभावम् ॥ (सु० उ० ६०।२१)

३. तेषां शान्त्यर्थमन्बिच्छन् वैद्यस्तु सुसमाहितः । जपैः सनियमैहोमैरारभेत चिकित्सितुम् ॥ (सु० ७० ६०।३०)

४. निशाचरेम्यो रक्ष्यस्तु नित्यमेव क्षतातुरः । रक्षाविधानैरूदृष्टीयंमैः सनियमैस्तया ॥ (सु० चि० १।१३३)

४. तत् उपस्पृश्य शेषमप्स्वसाद्य यमनियमाभ्यात्मामानम् । संयोज्य वाग्यतोऽभ्यन्तरतः सुहृद्धिरूपास्यमानो विहरेत् ।। (सु० चि० २६।१० )

६ हिसास्तेयान्यथाकामं पैशुन्यं परुषानृते ॥ (अ० ह० सू० २।२१) सम्भिन्नालापं व्यापादमिमध्यां दृष्विपर्ययम् । पापं कर्मेति दशधा कायवाड्मानसैस्त्यजेत् ॥ (अ० ह० सू० २।२२)

Food of all, specially of kings should be observed strictly because Yoga and Ksema is by the king. Dharma, Artha, Kāma, Moksa; these are connected with Yoga and Ksema (Availability of non-available thing is Yoga) (A. H. S. 7/2).

Sauca (cleaning of the body), faith in God etc. having these qualities the person is called Rājas Prakṛti. (A. H. S. 3: 104).

Those who knew the subject without the means advocated *Tapa* or unmethodically performing Yoga they may die sure (A. H. S. 5:37).

For treating Coma ( $M\overline{u}rch\overline{a}$ ) one should wet the face with cold water, upto removal of fatigue, use fan then  $Pr\overline{a}n\overline{a}y\overline{a}ma$  (by pressing nose and mouth and withholding of breath) then rubbing of back-side and abdomen should be performed. (A. H. Kalp. 5:13).

When by any means neck is pressed and eyes going inside then use *Vamana* (vomiting), *utakāsana* (coughing), sneezing (Chikkā) and Prāṇāyāma should be performed (A. H. Uttar. 26:19).

अन्नपानं विषाद्रक्षेद्विकेषेण महीपतेः।
 योगक्षेमी तदायत्ती धर्माद्या यन्निवन्धनाः॥ अ० ह० सू० ७।२ )

२. शीचास्तिक्यादिभिश्चैवं मुणेर्णमयीवंदेत् ।। (अ० ह० शा● ३।१०४)

३. यः पांसुनेव कीर्णाङ्गो योऽङ्गे धातं न वेत्ति वा । अन्तरेण तपस्तीवं योगं वा विधिपूर्वंकम् ।। जानात्यतीन्द्रियं यश्च तेषां मरणमादिशेत् ।। (अ० हु० झा० ५।३७)

४. मूर्च्छाविकारं दृष्ट्वास्य सिचेच्छीताम्बुना । व्यजेदाक्लमनाशाच्च प्राणायामं च कारयेत् ॥ ( अ० ह० क० ४।१३ )

श्. गलपीडाऽवसन्नेक्ष्ण वसनोत्कासनक्षवाः ।
 प्राणायामोऽयवा कार्यः क्रिया च क्षतनेत्रवत् ।। ( अ० ह० उ० २६।१६ )

# BASIC PRINCIPLES OF AYURVEDA AS ALLIED TO THE SCIENCE OF YOGA

The theory of Pancamahābhūta, Tridosa and Saptadhātus form basic principles of Ayurveda. All living beings are created by the combination of five basic elements and the soul. Caraka conceives each individual i. e. the Purusa as well as the total creation i. e. the loka¹ to be Saddhātwātmaka constitution i. e. consisting of the Pancamahābhūtas plus the Abhyakta Brahma. The space (ākasa), air (vāyu), fire (Agni), water (Jala) and earth are the five basic eternal substances called Pancamahābhūtas.² The Hindu physics conceives that the Pancamahābhūtas are the ultimate essential physical constituents from which the physical world is derived. The various types of substances existing in the universe are created by intermixing of the five pancamahābhūtas with each other in a special and specific manner called pancamahābhūtas (Fig. 6).

These five *Mahābhūtas* which are responsible for creation of the entire material world are not identical with space, air, fire, water and earth in the common sense. It is often argued that these parcamahābhūtas should not be

सत्वमात्मा शरीरं च त्रयमेतित्त्रदण्डवत् ।
 लोकस्तिष्ठित संयोगात्तत्र सर्वं प्रतिष्ठितम् ॥ ( च ● सू० १।४६ )

२. महाभूतानि खंवायुरग्निरापः क्षितिस्तथा । शब्दः स्पर्शेश्च रूपंच रसो गन्धश्च तद्दगुणाः ॥ ( च० शा० १।२७ )

३. एकैकाधिकयुक्तानि खादीनामिन्द्रियाणि तु। पञ्चकर्मानुमेयानि येभ्यो बुद्धिः प्रवर्तते ॥ ( च० शा० १।२४ )

## FORMATION AND CONSTITUTION OF BHUTA PARAMANUS

"अनाव क्रम: — भूतारे: इंब्युत्तमानं वार्यते, राज्यनमानं भूतादिद्रपृष्टाति, तत आकार्यं वायते, ततः अपमान् राष्ट्रतन्मान्नत् स्वर्शननमानं वायते, स्वर्शननमानं राज्यतन्मानमान्।
एवं राष्ट्रतन्मानन्त् भाक्तासहायकात् स्वर्शतन्मानन् वायवायते, ततः अपमान् स्वर्शननमानन् क्यतन्मानं वायते,
क्यतन्मालं स्वर्शननमान्।
स्वर्णनन्मान् वायते and so on. अवं
क्यः संस्वरूच स्वरंगे कृष्णपादेवकः: । वरं स्वृति, सम्बद्धवः
भाषा (अविस्त्रकरम्)"

(EXTRACTED BY SER B N SEAL IN HIS POSITIVE OF ANCIENT HINDUS, P 36)

#### LEGEND

- BHŪTÃDI
- F AKASA OR SABDA TANMATRA
- D VĀYU OR SPARŞA TANMĀTRA
- O TEJAS OR RŪPA TANMĀTRA
- AP OR RASA TANMA RA
- O PRITHVI OR GANDHA TANMĀTRA R=RAJAS

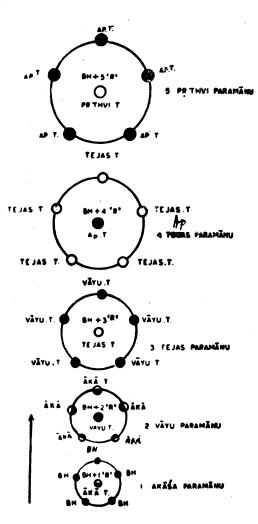


FIG. 6: Diagrammatic representation of the Hindu Concept of Concept of formation and constitution of Bhūta Paramāņus as relevant to ithe Ayurvedic concept of Panca-Panci Karaņa.

considered as elements in the sense of modern physics because they are already the mixture of many other elements. Each gross *bhūta* is composed of *bhūta* paramāņus and thus a gross *bhūta* is already a pañcamahābhautic structure. Suśruta¹ clearly described that these *bhūtas* are intermixed with one another with predominance of one of them manifesting into the specific characteristic of the same. The *bhūtas* may be of two kinds:

(1) Gross bhūtas—which are perceiveable by the senses and are pancamahābhautic in composition, (2) Paramānbhūtas—which are elemental structure, are not perceivable by the senses and are not divisiable. According to modern physics more than hundred elements have been discovered by now. The concept of elements should not be confused with the pancamahābhūtas described in Hindu physics. The Hindu approach of describing an element is based on the percievability of a matter through one of the senses. Under this approach, so long we believe in the existence of five pancaindriyas there can not be more than five matters. However minute they may be, at the level of perception they can be of only these five types. So Āyurveda puts forward the theory that the bhūtas can be of five categories which can be specifically perceived by the five senses. Thus the pancamahābhūta theory of Āyurveda is the most unique and original approach to the material creation and it has all scope to incorporate the modern development in the elemental physics.

### TRIDOȘA THEORY

As mentioned above the pancamahābhūta theory is already developed in applied terms because they have been considered to be five because the *Indriyas* are only also five. The theory of *Tridoṣa* is a further biological application of the concept of pancamahābhūtas. Depending upon the rate of the predominance of Vayu, Teja and Jala, the pancamahābhūtas and pancamahābhautic structures have been categorised in three categories of living body constituents viz-Vāta,

१. अन्योऽन्यानुप्रविष्टानि सर्वाण्येतानि निर्दिशेत् ।
स्वे स्वे द्रव्ये तु सर्वेषां व्यक्तं लक्षणमिष्यते ।। (सु॰ शा॰ १।२८)

Pitta and Kapha.¹ Thus Vāta, Pitta and Kapha are pañcamahābhautic structures with predominance of one are the other of the five the bhūtas. For instance, Vāta is characterised by predominance of Vāyu and Ākāša bhūtas. Pitta consists of the predominance of Agni while the Kapha consists of the predominance of Jala and Pṛthvī.² These three pañcamahābhautic doṣas constitute the living body, they are considered doṣas because they have a tendency to get vitiated and to vitiate each other. They are also considered as dhātus because they uphold the body.³ Thus the living body is a pañcamahābhautic structure derived by the transformation of these pañcamahābhūtas into biologically effective matters like tridoṣa and dhātus. So long as the pañcamahābhautic composition of these doṣas and dhātus remain in equilibrium a man remains healthy. The disbalance of the same factors is the cause of ill health and accordingly the aim of Āyurveda is to maintain the proper equilibrium of these constituent in order to preserve health in a healthy person and to cure a disease in a diseased person.⁴

Thus the three dosas are the primary essential constituents of the living body. Before going into the detailed descriptions of the nature of these three dosas, for the sake of gross understanding it may be stated that the entire physical volume in a living organism predominently constitutes the Kapha system of the body. Similarly the entire chemical processes including the actions and reactions of hormones and enzymes represent the Pitta system. All kinds of movements and activities in the living organism are attributed to the Vāta system. A balanced functioning of these three compartments of a living being presents with health. A disequillibrium and dishormony of these three constituents is the cause of illness. Susruta includes Rakta also as one of the dosas and considers the integrity of Vāta, Pitta, Kapha and Rakta as the basis of life.

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१. दोषाः पुनस्त्रयो वातिपत्तक्लेष्माणः ॥ ( च॰ वि॰ १।५ )
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२. वाय्वाकाशधातुभ्यां वायुः । आग्नेयपित्तम् । अम्भः पृथिवीभ्यां श्लेष्माः । ( अ० सं० सू० २० )

३. घारणाद्धातवः ॥ ( अ० सं० सू० २० )

४. समदोषः समाग्निश्च समधातुमलिकयः । प्रसन्नात्मेन्द्रियमनाः स्वस्थ इत्यिभिधीयते ।। ( सु० सु० १४।४८ )

५. रोगस्तु दोववैषम्यं दोषसाम्यमरोगता । (अ० ह० सू० १)

६. तदेभिरेव शोणितचतुर्थैः संभवस्थितिप्रलयेष्वप्यविरहितं शरीरं भवति । ( सु॰ सू० २१।३ )

#### THE VATA SYSTEMS

Vāta is considered the most important constituent of the Tridoṣa. According to Suśruta, Vāyu is self originated and all pervasive. Śārangdhara considers Vāta as that force which keeps the Kapha, Pitta, all the seven dhātus and the malas in motion.¹ On the basis of the descriptions on Vāta available in the Ayurvedic texts, Vāta may be considered as a biophysical force or a material entity or a combination of such entities. Biologically Vāta is incorporeal, unstable and subtle and is responsible for the entire movement of the body. According to Vāgbhaṭṭa Vāta is supposed to sustain the body and is considered responsible to provide energy and operate the respiration. It is also held responsible for intestinal functions. Vāta is considered responsible for all mental and physical movement during life.²

The physical properties of  $V\bar{a}ta$  are dry, cold, subtle, light, unstable and rough as described by Caraka.<sup>3</sup> Susruta also describes  $V\bar{a}ta$  as dry, light, cold and rough.<sup>4</sup> Vāgbhaṭṭa adds mobility and minuteness in its physical properties.<sup>5</sup>

The main function of  $V\bar{a}ta$  is to import motion to the body i. e. Praspandanam, conduction of impulses from sense organs i. e. Udvahanam separation of the essence of the digested food i. e. Viveka and the retention and evacuation of the urine and the semen i. e. Dhāraṇam. Besides these specific bodily functions  $V\bar{a}yu$  is supposed to sustain the entire machinery of the body- $V\bar{a}yuh$  yantra tantra Dharah (Caraka), it also controls the mind and is responsible for the

पत्तं पंगु कफः पगु पंगवो मलधातवः ।
 वायुना यत्र नीयन्ते तत्र गच्छन्ति मेघवत् ।। ( क्रार्क्कं ० पू० ५।४३ )

२. इन्द्रियाणां मनोनाथः मनोनाधस्तु मारूतः ।

३. रूक्षः शीतो लघुःसूक्ष्मश्चलोऽथ विशवः खरः ॥ ( च० सू० १।५६ )

४. अव्यक्ती व्यक्तकर्मा च रूक्षः शीतो लघुःखरः । (सु॰ नि॰ १।७)

४. तत्र रूक्षो लघुः शीतः खरः सूक्ष्मध्रलोऽनिलः ॥ (अ० सं∙ सू० १)

६. तत्र प्रस्पन्दनोद्वहनपूरणिववेकधारणजक्षणो वायुः पश्चधा प्रविभक्तः शरीरं धारयति ।

<sup>(</sup>सु॰ सू॰ १४।४)

functioning of the five sense organs. All the basic emotions like worry, anxiety, fear, grief, anger etc. are also governed by Vāta.

Depending upon the specific functions and site of activity  $V\bar{a}ta$  may be of five kinds namely (1)  $Pr\bar{a}na$ , (2)  $Ud\bar{a}na$ , (3)  $Sam\bar{a}na$ , (4)  $Vy\bar{a}na$ , (5)  $Ap\bar{a}na$ . The  $Pr\bar{a}na$   $V\bar{a}yu$  is located in the head, neck, tongue, nose and in the chest. It is responsible to control the functions of the mind and to operate the respiratory functions during life. The  $Ud\bar{a}na$   $V\bar{a}yu$  is located in umblical region, in the chest and neck. It is responsible to control enthusiasm and for vocal functions during life. The  $Sam\bar{a}na$   $V\bar{a}yu$  is located in the stomach and duodenum and is responsible for digestion and absorption of food and it also controls the movements, of remaining other dosas.  $Vy\bar{a}na$   $V\bar{a}yu$  is spread all over the body and controls the circulatory system and generates movements in the entire body. The  $Ap\bar{a}na$   $V\bar{a}yu$  is mainly located in the duodenum, rectum and urinary bladder and it controls the retention and passage of urine, semen and menstrual blood flow etc.

#### THE PITTA SYSTEM

As mentioned earlier all the chemical and metabolic activities including endocrine functions constantly operating during life represent the *Pitta system* of the body. *Pitta* as a material has been considered homologous to blood and

१. प्राणोदानसमानाख्यव्यानापानैः स पंचधा । ( च० चि० २८।५ )

२. स्थानं प्राणस्य मर्धोरःकण्ठजिह्वास्यनासिकाः । ण्ठीवनक्षवथूद्गारश्वासाहारादि कर्म च ॥ ( च० चि० २८।६ )

३. उदानस्य पुनः स्थानं नाभ्युरः कष्ठ एव च । वाक्प्रवृत्तिः प्रयत्नोजोवलवर्णादि कर्मं च ।। ( च० चि० २८।७ )

४. स्वेददोषाम्बुवाहीनि स्रोतांसि समधिष्ठतः । अन्तरग्नेश्च पार्श्वस्थः समानोऽग्निबलप्रदः ॥ ( च० चि० २८।८ )

४. देहं व्याप्नोति सर्वं तु व्यानः शीघ्रगतिर्नृणाम् । गतित्रसारणाक्षेपनिमेषादिकियः सदा ॥ ( च० चि० २८।६ )

६. वृषणौ वस्तिमेढ़ंच नाभ्यूरू वंक्षणौ गुदम्। अपानस्थानमन्त्रस्थः शुक्रमूत्रशकृन्ति च॥ (च० चि० २८।१०)

is considered its by product by Caraka and Vāgbhaṭṭa. Suśruta includes Rakta as the fourth Dosa while Caraka and Vagbhatta do not include Rakta as humour because it is represented in principles by Pitta. Physically Pitta is described as blue and yellow in colour, liquid, light, viscous, acrid and sour in taste, unpleasant in smell, hot and sharpa.1 Pitta in general is responsible to impart colour and complexion, to promote digestion and vision, to produce heat, appetite and thirst.2 Pitta is also responsible for the intellectual functions. Depending upon specific functions and site of Pitta it can be of five varieties<sup>3</sup> namely (1) Pācaka, (2) Ranjaka, (3) Sādhaka, (4) Alocaka, (5) Bhrājaka. The Pācaka Pitta is supposed to be located in gastrointestinal tract in the area between the stomach and duodenum. The Pācaka Pitta contributes to the digestion of food. The Ranjaka Pitta is located in the liver and spleen according to Susruta. Vagbhatta mentions stomach as its site. The Ranjaka Pitta is responsible to impart colour to the Rasa. As such it contributes to haemopoesis. The Sādhaka Pitta is located in the Hrdaya and it also known as Sādhakāgni. 8 The Sādhaka Pitta is responsible for intellectual functions and emotions. 9

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१. पित्तं तीक्ष्णं द्रवं पूर्ति नीलं पीतं तथैव च ।
उष्णं कटुरसं चैव विदग्धं चाम्लमेव च ॥ ( सु० सू० २१।११ )
पित्तं सस्नेहतीक्षणोष्णं लघु विस्नं सरं द्रवम् । ( अ० हृ० सू० १।११ )
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२. दर्शनं पक्तिरूष्मा च क्षुतृष्णा देहमार्दवम् ।
प्रभा प्रसादो मेधा च पित्तकर्माविकारजम् ॥ ( च० सू० १८।५० )
रागपित्त तेजोमेघोष्मकृत्पित्तं पंचधा प्रविभक्तमग्निकर्मणाऽनुग्रहं करोति ॥ ( सु० सू० १४।५ )

३. पित्तं पंचात्मकम् ॥ ( अ० हृ• सू० १२ ) पंचकं रंजकसाधकालोचकभ्राजकत्वभेदैः पित्तम् ( अ• सं• सू० २० )

४. तच्चादृष्टहेतुकेन विशेषेण पक्वामाशयमध्यस्थं पित्तं चतुर्विधमन्नपानं पचित विवेचयित च दोषरसमूत्रपुरीपाणि, तत्रस्थमेव चात्मशक्तया शेषाणां पित्त नानां शरीरस्य चाग्निकर्मणाऽनुग्रहं करोति, तस्मिनपित्ते पाचकोऽग्निरिति संज्ञा, । ( सू० सू० २१।१० )

४. यत् यक्टब्लीहोः पित्तं तस्मिन् रंजकोऽग्निरिति संज्ञा, । ( सु॰ सू० २१।१० )

६ अमाणयस्यं तु रसस्य रंजनाद्वंजकम् ।। ( अ॰ सं॰ सु॰ २० )

७. साधकं हृदयगतं पित्तं । ( अ० हृ० मू० १२।१३ )

पन् पित्तं हृदयं संस्थितं तस्मिन् साधकोऽग्निरिति संज्ञा ।। ( सु॰ सू॰ २१।१० )

६. वृद्धिमधाभिमानाद्यैरिभिप्रेतार्थसाधनात् ।। ( अ० ह० सू० १२।१३ )

The Alocaka Pitta is located in the eyes and its main functions is to help in the visual perception of the external object. The Bhrājaka Pitta is located in the skin of the entire body and imparts colour and complexion to the living body.

#### THE KAPHA SYSTEMS

The Kapha system represents the entire solid mass of the living body. It predominently consists of the biological fluids and the solid structures of the body. Kapha is the potential source of strength and resistance against disease i. e. Bala.<sup>3</sup> Physically Kapha is supposed to be white in colour, heavy, viscous, slimy, sweet in taste soft in touch and stable.<sup>4</sup> It is also described to be olious cold, white, smooth and compact. Kapha has been described to be the binder of various structures of the body specially joints. It maintains unctuousness, stability and sturdyness of the body during life. The entire bulk of the body, its compactness, physical strength and resistance against disease are afforded by the Kapha system of the body. Susruta also attributes the healing processes, tissue building and lubrication of joints as the functions of Kapha.<sup>5</sup> The mental qualities like forbearance fortitude, greedlessness and intelligence are also attributed to Kapha by Caraka.

Vāgbhatta describes five varieties of Kapha namely (1) Kledaka, (2) Avalambaka, (3) Bodhaka, (4) Tarpaka, (5) Ślesaka. The Kledaka Kapha is located in

( स्० स्० १४।६ )

दृकस्यमालोचकं। (अ० हु० सू० १२।१३-२)
यदृष्टयां पित्तं तिस्मन्नालोचकोऽग्निरिति संज्ञा। स रूपग्रहणाधिकृतः। (सु० सु० २१।१०)
२. त्वकस्यं भ्राजकं भ्राजनात्वचः। (अ० ह० सू० १२।१४)
यस् त्विच पित्तं तिस्मन् भ्राजकोऽग्निरिति संज्ञा। (सु० सू० २१।१०)
३. प्राकृतस्तु बलं क्लेष्मा विकृतो मल उच्यते।
स चैवौजः स्मृतः काये स च पाप्मोपदिक्यते।। (च० सू० १७।११७)
४. गुरुशीतमृदुस्निग्धमधुरस्थिरपिच्छिलाः।
क्लेष्मणः प्रश्वमं यान्ति विपरीतगुणैर्गुणाः।। (च० सू० १।६१)
४. सन्धिसंक्लेषणस्नेहनरोपणपूरणवलस्यैयंक्चछलेष्मा पंचधा प्रविभक्त उदककमंणाऽनुग्रहं करोति।।

६. अवलम्बक-निवेदक-बीधक-तर्पक-श्लेषकत्वभेदैः श्लेष्मा ॥ ( अ० सं० सू० २० )

the stomach and is responsible for liquification of food materials. The Avalambaka Kapha is located in the sacral region and in the heart and is responsible for providing support and nourishment to these sites. The Bodhaka Kapha is located at the root of the tongue and pharynx and is responsible for the perception of taste. The Tarpaka Kapha is present in the head and its important functions are to oleate and nourish the sensory apparatus. It helps the brain and the five senses to perform their respective functions. The Ślesaka Kapha is located in the bony joints of the body. It is highly viscous and oily in nature and it helps in the lubrication and smooth functioning of the joints.

## DOŞA PRAKRTI

As mentioned above adequate equilibrium of the three dosas is essential for health and there disequilibrium is the basis of disease. However, there can be a genetically determined relative variation of the ratio of these Dosas within a physiological limit. Such a genetically determined physiological variation may not be able to produce a disease but it definitely reflects into the genetically determined psychosomatic makeup of a particular individual. This psychosomatic makeup related to Dosic variations is called Dosa Prakṛti. On the basis of finer details seven types of Dosa Prakṛtis have been described.

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    यस्त्वामाशयसंस्थितः । क्लेदकः सोऽन्नसंघात् क्लेदनात् ॥ (अ० ह० स० १२।१६ )
    ऊरस्थः स त्रिकस्य स्ववीवंत ।
        हृदयस्यान्नवीर्याच्च तत्स्थ एवाम्बुकर्मणा ।
        कफ्धाम्नां च शेषाणां यत्करोत्यवलम्बनम् ।
        अतोऽवलम्बकः श्लेष्मा ॥ (अ० ह० स० १२।१५ )
    रस बोधनात् । बोधको रसनास्थायी ॥ (अ० ह० स० १२ )
        रसनस्थः सम्यग्रसबोधनाद् बोधकः ॥ (अ० सं० स० )
        शिरस्थः स्नेहसन्तर्पणाधिकृतत्वाद् इन्द्रियाणामात्मवीर्थ्यणानुग्रहं करोति । (सु० स० २१।१४ )
        शिरस्थः स्नेहसन्तर्पणात् । तर्पकः । (अ० ह० स० १२।१७ )
        सिन्धस्थस्तु श्लेष्मा सर्वसन्धिसंश्लेपात् सर्वसन्ध्यनुग्रहं करोति ॥ (सु० स० २१।१४ )
        पर्वस्थोऽक्षित्र सन्धिश्लेपणात् श्लेपक इति ॥ (अ० सं० स० २० )
        शुक्रशोणितसंयोगे यो भवेद्योपः उत्कटः ।
        प्रकृतिर्जायते तेन तस्या मे लक्षणं श्रुण् ॥ (सु० शा० ४।६२ )
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three by the predominance of the three Dosas, three mixed types and the seventh being the Sama Dosa Prakțti. These different Prakțtis are characterise by the physical, physiological, and psychological features representative of the respective Dosa. For gross understanding, the Vātaja Prakțti with the mesomorphy and somatotonia and the Kaphaja Prakțti with the endomorphy and viscerotonia as described by Sheldon (1944). It is postulated that the persons of different dosa prakțtis are susceptible to idifferent categories of diseases and need different approaches in the care of their health and disease.

#### SAPTA DHATUS

Ayurveda describes seven types of primary Dhātus which are related to the physiology of basic nutritional and structural factors responsible to support or to nourish the body. The Dhātus are responsible to support the body and the mind both and to promote growth as mentioned earlier the Tridosas in the state of their normalcy are also kept in the category of Dhātu because they one also supporters of the body. The Rasādi Saptadhātus are not only the supporters but are also the nourishers of the body. In gross terms the Seven Dhātus described in Ayurveda are referred to the seven primary tissues of the body. These seven Dhātus are considered the outcome of nutrition and they are constantly produced destroyed and reformed. The Seven Dhātus are-(1) Rasa (plasma), (1) Rakta (blood), (3) Māmsa (muscle tissue), (4) Meda (Edipose tissue), (5) Asthi (Bone tissue), (6) Majjā (marrow), and (7) Śukra (Reproductive elements),

Each of the Sapta dhātus may be of two types: (1) Sthāi dhātu i. e. stable (2) Asthāi dhātu i. e. unstable. The Asthāī dhātus are temporarily formed and, are the precursors of the respective Sthāi dhātu. The  $\bar{A}h\bar{a}ra$  Rasa i. e. the digested food nourishes all the seven  $Dh\bar{a}tus$  through necessary transformation.

१. सप्तप्रकृतयो भवन्ति-दोषैः पृथग् द्विशैः समस्तैश्च ।। ( सु० शा० ४।६१ )

२. शरीरं धारयन्त्येते धात्वाहाराश्च सर्वदा ॥ ( अ॰ सं॰ सू॰ १ )

रसामृड्मांसमेदोऽस्थिमज्जशुकाणि धातवः । (अ० ह० स० १।१२-२)
 रसाद्रक्तं ततो मांस मासान्मेदः प्रजायते ।
 मेदसोऽस्थि ततो मज्जाः मज्जः शुकं तु जायते ।। (सु० सू० १०१०)

It is postulated that each *Dhātu* has its specific *Agni* i. e. metabolic fire which take part in the appropriate processing of the respective *Dhātus* after which they circulate to the particular *Sthāidhātu* through their own specific channels or *Srotāmsi*. The *Sthāidhātus* are the permanent tissues and they constitute the structural entity of the body by providing essential tissues. The *Saptadhātus* are considered as *Duṣyas* because they have a tendency to get vitiated by the *Tridoṣas* and other morbid factors leading to ill health.

In addition to the Saptadhātus some Ayurvedic classics also describe certain Upa-dhātus. These Upa-dhātus are produced as byproducts of the stable Dhātus and are responsible to support the various structures and organs of the body. In contrast to Saptadhātus the Upa-dhātus are not related to the physiology of nourishment and as such they are not subject to any kind of metabolic transformation as a process of tissue nourishment. The Upa-dhātus described in the texts are-(1) Stanya or breast milk, (2) Rajah or menstrual blood, (3) Kandaras or tendons, (4) Siras or blood vessels and nerves, (5) Vasā or fat, (6) Twacā or skin, (7) Snāyu or nervous tissue and ligaments.

#### THE CONCEPT OF MALAS

Ayurveda presents an unique concept that the *Malas* i. e. the excretory products of the body should also be considered as essential constituents of living body and they also perform some useful functions to support the body. As such the *Malas* to some extent also play the role of  $Dh\bar{a}tus$  i. e. as the supporters of the body. The term *Mala* refers to the polluting agents or impurities and also as the waste products. When the *Malas* are in the state of normalcy and do not produce a disease or ill health. They are considered as *Mala Dhātus*. After digestion the digested food is separated into the *Prasād Bhāga* which is called *Rasa* and the *Kiţţa Bhāga* i. e. the waste.<sup>2</sup> This *Kiţţa* 

१. रसात् स्तन्यं ततो रक्तमसृजः कण्डराः सिराः । मांसाद्वसा त्वचः षट्च मेदसः स्नायुसंभवः ॥ (चक्रपाणि चि॰ १५।१७)

२. किट्टमन्नस्य विष्मूत्रं रसस्य तु कफोऽसृजः । पित्तं मांसस्य खमला, मलः स्वेदस्तु मेदसः ॥ स्यात्किट्टं केशलोमध्नोमज्जःस्नेहोऽक्षिविट् त्वचाम् । प्रसादिकट्टे धातूनां पाकादेवं विधच्छेतः । परस्परोपसंस्तब्धा धात्स्नेहपरम्परा ॥ ( च० चि० १५।१८, १६ )

includes the variety of polluting agents produced in the body. Such as Sakrt or faeces, Sveda or sweat, Mūtra or urine and even the abnormal forms of Tridoṣa and Saptadhātu.¹ Caraka describes several types of Malas namely Puriṣa, Viṭsneha (faecal fat), Mūtra, Sveda, Vāyu (flatus), Pitta (bile), Khamala Lomakūpamala, Keša, Loma, Smasru and Nakha etc.

## THE CONCEPT OF OJAS

The term Ojas has been used in Ayurveda for the factor which prevents decay and degeneration of the body and provides strength and support against a disease.<sup>2</sup> It is considered the essence of all Dhātus and simulates Śleṣmā in its gross qualities and functions. Cakrapāṇidatta has described two type of Ojas (1) Para, (2) Apara. According to Caraka the quantity of Slaiṣmic Ojas is Ardhānjali³ i. e. half an Anjali and the quantity of Para ojas is Aṣṭa Vindu i. e. eight drops. The Para Ojas is located in the Hṛdaya⁴ while the Apara ojas is is located in the Ten Dhamanis originating from the Hṛdaya. According to Caraka the Ślaiṣmic ojas is white, slightly redish or yellow like ghee, it is sweet in taste like honey and has a particular smell.<sup>5</sup> According to Suśruta the Ojas is watery, viscous, clear white and cold. It is soft, slimy and is the essence of all Dhātus and is responsible for promoting the stability of the body.<sup>6</sup> It is permeated in the entire body and its loss from the body leads to decay and

१. मलामूत्राशकृत्स्वेदादयोऽपि च। (अ० सं० सू० १।१३)

२. तत्र रसादीनां शुक्रान्तानां धातूनां यत्परं तेजस्तत् खल्वोजस्तदेव बलमित्युच्यते ।। ( सु॰ सू० १५।२४ ) ओजोवृद्धौ हि देहस्य तुष्टिपुष्टिबलोदयः ॥ ( अ॰ हृ० सू० १२।४१ )

३. मस्तिष्कस्याधीजिलः, शुक्रस्य तावदेव प्रमाणं, तावदेव क्लैष्मिकस्योजस इति । ( चक्रवाणि शा० ७।१५)

४. तत् परस्योजसः स्थानं तत्र चैतन्यसंग्रहः ।। ( च० सू० ३०।७ )

४. गुरु शीतं मृदु श्लक्ष्णं बहुलं मधुरं स्थिरम् । प्रसन्नं पिच्छिलं स्निग्धमोजोदशगुणं स्मृतम् ॥ ( च० चि० २४।३१ )

६. ओजः सौमात्मकं स्निग्धं शुक्लं शीतं स्थिरं सरम् । विविक्तं मृदुं मृत्सनं च प्राणायतनमुक्तमम् ।। ( सु● सु० १५।२६ )

degeneration of the body. Caraka believes that the Daša mahā mūla dhamanis¹ are the channels of transport of Ojas to the entire body. The Ojas in general besides providing biological strength to the body, is responsible for natural resistance against diseases i. e. Vyādhi Kṣamitva or Immunity.²

#### THE CONCEPT OF AGNI

Ayurveda postulates a very comprehensive concept of Agni which incorporates all activities and factors responsible for digestion and metabolism in the living organism as known today. Agni which in common language means fire, in technical terms in Ayurveda refers to the entire phenomenon of digestion and metabolism in the body at all levels. This is why Caraka says that the strength, health, longevity and all living processes during life are dependent on Agni so much so that the absence of Agni has been considered as absence of life. "Sānte agnau, Mryate Yukte Ciram Jivatyanāmayah (Ca. Ci. 15)". It converts food in the form of energy necessary for normal functioning of all living processes.

Āyurveda describes Thirteen type of Agni which have been classified (1) Jatharagni or Pācakāgni, (2) Seven Dhātwagnis, (3) Five Bhūtāgnis.<sup>3</sup>

The  $Jathar\bar{a}gni$  is located between the  $\bar{A}m\bar{a}saya$  and  $Pakv\bar{a}saya$  i. e. stomach and duodenum. It is responsible for digestion of ingested food. It burns and breaks all the Pancabhautic food materials to makes them suitable for utilisation by the respective  $Dh\bar{a}tus$ . After the action of  $Jathar\bar{a}gni$  the digested food is separated into its  $Pras\bar{a}da\ bh\bar{a}ga$  i. e. essence part and the  $Kitta\ bh\bar{a}ga^4$  i. e. the waste product of the digested food. According to  $V\bar{a}gbhatta$ 

तेन मूलेन महता महामूला मता दश ।
 ओजीवहाः शरीरेऽस्मिन् विधम्यन्ते समन्ततः ॥ ( च० सू० ३०।५ )

२. प्राकृतस्तु बलं श्लेब्मा विकृतो मल उच्यते । स चैवीजः स्मृतः काये स च पाप्मोपदिश्यते ।। (च० सू० १७।११७)

३. भौतिकधात्वन्नपवतृणां कर्म भाषितम्।। (च० चि० १४।३८)

४. सप्तिनिर्देहधातारो घातवो द्विविद्यं पुनः । यथास्वमग्निभिः पाकं यान्ति किट्टप्रसादवत् ॥ ( च० चि० १५।१५ )

the functions and physical properties of Agni are identical to Pitta.<sup>1</sup> Pitta is also located between the Pakvāsaya and Āmāsaya, is Pancabhautic and is responsible for digestion and separation of food. Jatharāgni is considered the chief of all the Agnis<sup>2</sup> and governs the activity of seven Dhātvagnis and five Bhūtāgnis.

The Dhātwagnis are of seven kinds respective to each of the sapta dhātus. The Dhātwagni is primarily responsible for production of Rasa Dhātu from the digested materials available in the Anna Rasa. Each of the Seven Dhātwagnis is responsible to bring about the transformation of appropriate nutrient materials, each kind of Agni being responsible for the synthesis of nuturition corresponding to one specific Sthāi Dhātu. The Jatharāgni governs the Dhātwagni and in turn governs the growth and decay of different tissues. The Dhātwagni appears to refer to the intermediary metabolism.

Āyurveda conceives five kinds of *Bhūtagni*. As is already known all the *Dhātus* are *Pancamahābhautika*. Likewise all the nutrients are also *Pancabhautika* in composition. For each *Bhūta*, Āyurveda describes a specific *Agni* which is responsible for the finer metabolism of the individual *Bhūta* present in the *Āhāra* and *Sthāi Dhātu*.

#### CONCEPT OF MIND

The above account refers to the various components of physical body which is considered the abode of life process. The next important dimension of living being is the *Manas* or the mind. *Manas*, *Sattva* and *Citta* have been used as synonyms in Caraka Samhitā. In Western Philosophy the world mind stands for mental state and functions. The word *Manas* is not used in Indian Philosophy as that identical to mind of Western Philosophy. According to

१. पित्तं पंचात्मकं तत्र पक्वामाश्ययमध्यगम् ।
 पंचभूतात्मकत्वेऽपि यत्तैजसगुणोदयात् ।। १० ।।
 त्यक्तद्रवत्वं पाकादि कर्मणाऽनलशाब्दितम् ।
 पचत्यन्नं विभजते सारिकट्टो पृथक् तथा ।। ११ ।। ( अ० हृ० सू० १२।१०-११ )

२. अन्नस्य पक्ता सर्वेषां पक्तृणामधियोः मतः । तन्मूलास्ते हि तद्बृद्धिक्षयबृद्धिक्षयात्मकाः ॥ ( च० चि० १४।३६ )

Caraka the presence of cognition as well as the absence of cognition is an indication of the mind. In the presence of senses with sense object and soul the man does not perceive a thing in the absence of mind that is to say that senses are unable to grasp the object in the absence of Manas. Thus the role of some organ of attention is essential for the causation of cognition. This inner organ is the Manas. According to Sāmkhya System of philosophy mind is the organ of sensation as well as of action. According to Susruta also the mind participate in sensory and motor functions.2 Caraka and Vagbhatta both describe Manas as Atindriya3 i. e. transcending the senses. According to Cakrapāņī Manas is Atīndriya because it is not the cause of knowledge of external objects by other sense organs. The Manas has also been regarded as an Antarindriya i. e. internal organ through which one can experience pleasure and pain Caraka considers Manas as Atindriya because (1) the Manas is not the cause of knowledge of external objects like the other senses, (2) the Manas is the Adhisthayaka or controller of all the senses and (3) the sense objects are grasped by the Manas but the Manas is not grasped by the senses. Vagbhatta is also of similar views. According to Caraka the Manas is Jada<sup>4</sup> or innaminate and active and it works only in the presence of  $Atm\bar{a}$ . Hence the  $Atm\bar{a}$  has been considered the Karta<sup>5</sup> i. e. the subject and the mind moves only by the activity of Atmā. The Vedānta also support this view. Manas has been considered a pancamahābhoutika entity. Caraka attributes two essential qualities of Manas, (1) Anutva or Atomic, and (2) Ekatva or Unity.6 Thus according to Caraka the mind is one and atomic. This is why the mind comes into contact

लक्षणं मनसो ज्ञानस्याभावो भाव एव च ।
 सित ह्यात्मेन्द्रियार्थानां सिन्निकर्षे न वर्तते ।।
 वैवृत्यान्मनसो ज्ञानं सान्निष्यात्तच्च वर्तते ।। ( च ॰ शा० १।१८ )

२. तत्र पूर्वाणि पंच बुद्धीन्द्रियाणि, इतराणि पंच कर्मेन्द्रियाणि उभयात्मकं मनः ॥ (सु॰ शा॰ १।६)

३. अतीन्द्रियं पुनर्मनः सत्वसंज्ञकं, 'चेत' इत्याहुरेके । ( च ॰ सू ॰ ८।४ )

४. अचेतनत्वाच्च मनः क्रियावदिप नोच्यते ॥ ( च॰ शा॰ १।७६ )

५. चेतनावान् यतश्चात्मा ततः कर्त्ता निरुच्यते ।। ( च॰ शा॰ १।७६ )

६. अणुत्वमथ चैकत्वं द्वी गुणी मनसः स्मृती ।। ( च॰ शा॰ १।१६ )

with one sense only at a time. However, the mind may appear diverse due to the diversity of the object of the thought.

The literature shows controversial views about the seat of the mind. According to Caraka the seat of mind is the *Hrdaya* while Bhela considers the *Mastişka* as the seat of mind. The Buldhist and Naiyaikas also consider the *Hrdaya* as the seat of mind while the Sāmkhya considers the gross body as the place of mind. Yoga philosophy considers brain as its seat.

Sattva, Raja and Tama are the three dimensions of the qualities of the mind. Caraka considers Raja and Tama as Mānas Doṣas. The multiplicity of the external and internal world is nothing but the modes of mind. Caraka considers Cintyam, Vicāryam, Uhyam, Dhyeyam and Samkalam as the objects of Manas. These are grasped by the mind without the help of senses. According to Caraka the function of mind is to direct and to control the senses and to control oneself and according to Sāmkhya and Vedānta the function of mind is formation and dissolution of thought. The Manas as considered on above dimensions, with the interaction of variety of environmental factors give rise to its disorders namely Kāma, Krodha, Lobha, Moha, Irṣyā, Māna, Mada, Soka, Cittodvega, Bhaya and Harşa etc.<sup>2</sup>

# THE CONCEPT OF ATMAN

The third and the most important dimension of a living being is the  $\bar{A}tm\bar{a}$ . Caraka like other Hindu philosophers bilieves that the *Puruṣa* the individual living being as well as the *Loka* or the universe both are  $Saddh\bar{a}$ -tvātmaka entities consisting of the pancamabhūtas and the Avyakta Brahma i. e. the  $\bar{A}tm\bar{a}$ ,  $Atm\bar{a}$  is the conscious element of the living being and is considered to be the pure element and is the seer and the  $Kart\bar{a}$ .

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( च॰ वि॰ ६। X )

१. चिन्त्यं विचार्यमूह्यं च ध्येयं संकप्यमेव च । यत्किचिन्मनसो क्रेयं तत् सर्वं ह्यार्थसंज्ञकम् ॥ ( च० शा० १।२० )

२. तयोविकाराः कामक्रोधलोभमोहेष्यामानमदशोकचित्तोद्वेग स्यहर्षादयः ।।

#### POSITTVE HEALTH ASPECTS OF AYURVEDA

Ayurveda is a broad based science of life developed with twofold objective i. e, to preserve the health of the healthy and to relieve the disease of the ailing. In the present context only the positive health aspect of Ayurveda is being discussed because the remaining aspects of this science are not under the perview of this monograph. As also discussed elsewhere in this monograph. Ayurveda puts greater emphasis on the maintenance of positive health although it comprehends well on the study of the nature of ill health and the curative measures for the treatment of different diseases.<sup>2</sup>

Ayurveda is not merely a system of medicine but is a comprehensive science of life. It presents an unique concept of life and its components. In contrast to the gross physiobiological concept of modern science Ayurveda puts forward a tridimensional concept of the living being. According to Ayurveda and other Hindu scriptures a living being is a composite entity consisting of a physical body, the mind, the spirit and the sense apparatus. Thus it would be seen that the Ayurvedic concept of life is much more comprehensive than even the latest modern concept of psychosomatic medicine as it adds one

१. प्रयोजनं चास्य (आयुर्वेदस्य ) स्वस्थस्य स्वास्थ्यरक्षणमातुरस्य विकारप्रशमनं च । (च० सू० ३०। २६ )

२. हिताहितं सुखं दुःखमायुस्तस्य हिताहितम् । मानं च तच्च यत्रोक्तमायुर्वेदः स उच्यते ॥ ( च॰ सू॰ १।४१ )

३. शरीरेन्द्रियसत्वात्मसंयोगो धारि जीवितम् । नित्यगश्चानुबन्धश्च पर्य्यायैरायुरुच्यते ॥ ( च० सू० १।४२ ) सत्वमात्मा शरीरं च त्रयमेतत्त्रिदण्डवत् । लोकस्तिष्ठति सयोगात्तत्र सर्व प्रतिष्ठितम् ॥ ( च० सू० १।४६ )

more dimension to the psychosomatic concept proposing the concept of the psychosomatic spiritual organization of life. This centuries old Ayurvedic concept of three dimensional life has been recently appreciated by many modern medical men and the latest W. H. O. definition of health largely adopts the Ayurvedic definition of health. Susruta defines health as a state of perfect well being of the mind, spirit and the body (in all its dimensions) and its reverse as ill health. It is stated that the health is a state of normalcy characterized by balanced equilibrium of the three Dosas, the thirteen types of Agnis, seven types of Dhātus and the Malas besides the optimum happiness of the mind (Manas), senses (Indriyas) and the spirit (Atmā).

In view of the above mentioned comprehensive concept of health, Ayurveda propounds an equally comprehensive approach to the preservation of health. Grossly speaking Ayurveda advocates measures like Swasthavrtta, Sadvṛtta, Rasāyana and the practice of Yoga as positive health measures. In the context of Swasthavitta i. e. code of health, the entire activity of an individual starting from early in the morning till retiring to the bed. This gives detailed account of the code of routine life i. e. Dinacaryā. In this reference Ayurveda does not forget to touch with due emphasis even the smallest aspect of routine life. For instance according to the directives given in Swasthavṛtta an individual should get up in the Brahma muhūrta and he should finish his purificatory processes of excretion, tooth cleaning, tongue cleaning, gargles, oiling of the head and ear, massage, application of collyrium, medicated nasal drops, exercise, bath, use of fragrance etc. In relation to above schedule of  $Dincary\bar{a}$  a detailed account of  $Rucary\bar{a}$  has been described which suggests appropriate modification or change in the daily routine of life specially the diet and behaviour to suit different seasons. Thus Swasthavatta presents a comprehensive system of Personal Hygiene. Ayurveda puts forward an equally developed system of Mental Hygiene through Sadvītta i. e. the code of conduct. Sadvitta deals with right conduct related to mind,

समदोषः समाग्निश्च समधातु मलिक्रयः ।
 प्रसन्नात्मेन्द्रियमनाः स्वस्य इत्यिभधीयते ॥ ( सु० सू० १५।४८ )

the character, social, religious and personal life putting appropriate emphasis about the things to be undertaken and not to be undertaken for the happiness and good of not only the individual alone but also of the society as a whole.

A critical study of the Ayurvedic literature on its positive health aspects exhibits a systematic description of various routine measures conducive to positive health. The literature appears to touch even the common points needed for the uplift of health in order to draw the attention of a common man to the healthful way of life.

While going into the details of positive health measures i. e. Swasthavrtta described in Ayurveda one finds that these measures have been discussed in terms of the prescribed regime for the day and night in different season besides many other routine matters of life needed for healthy living as mentioned below.

As per prescribed Swasthavrtta regime one should get up early in the morning and should develop a habit of evacuating the bowel with defaecation and reflex followed by proper cleaning of the anal area and the hands with suitable cleaning materials. One should regularly clean his teeth and the tongue with suitable tooth stick or tooth brush of moderate hardness along with a paste or powder prepared with bitter and astringent drugs. Kavala, Gandūsa and Tāmbūla cheaving are prescribed as routine measures of preventive value for the diseases of the mouth. A regular practice of Pratimarsa Nasya i. e. nasal drops of suitable medicated or non-medicated oil is advocated The text also advocates the smoking of medicated fumes of habitual variety in a particular manner as a preventive measure against certain diseases. Such measures could be a beneficial substitute for tobacco smoking which is now known to be harmful. Even in the current times appropriate harmless smoking devices may be introduced as per Ayurvedic descriptions for the use of addicted smokers. In the context of the care of the eyes Ayurveda advocates a number of preparations for local application in the eyes among which the regular application of Saubirānjana i. e. a collyrium consisting of antimony sulphide, is recommended. Such applications have been claimed to prevent the common disease of the eye. Optimum emphasis

appears to have been given to the regular application of simple or medicated oils on the body specially on the head in the ears and at the feet every day in all seasons; the type of oils may vary according to the season.

Additional emphasis appears to have been put on the practice of regular exercise i. e. Vyāyāma which is supposed to upkeep the Agni affording good appetite. Agni is the foundation of adequate digestion and metabolism. According to Ayurveda exercise i. e. Vyayāma means a wider application of physical and mental manipulation. One should undertake regular bath, cleaning and dressing of hairs, wearing of clean and good clothings and use of fragrance for healthy and happy living and to distinguish one's own personality in a cultured society.

The diet or Ahāra has been considered an important item in Swasthavītta regime. Ayurveda considers the living body as the product of food and accordingly the diet has been included under the three Upastambhas<sup>2</sup> i. e. the foundations of healthful living. Ayurveda describes that one should consume regularly a diet consisting of rice, barley, honey, milk, Mudga, meat, Ghīta, salt, Amalaka and rainwater according to his own digestive capacity i. e. Agnibala. Different diets for different seasons have also been advocated. Sweet, cold, liquid and unctuous diet has been considered beneficial for summer season. Sour salty and unctuous diet along with boiled water is considered good for rainy season. Unctuous, sour and salty diet in sufficient quantity is recommended for winter. It has been postulated that composition of such diet prevents the accumulation of Dosa namely Vāta, pitta and Kapha in respective seasons and thus helps in the preservation of health. Diet being an important agency for preservation of health as included under three Upastambhas, appears to have been given additional importance in Ayurveda. Ayurueda not only describes a large mumher of edible materials along with their properties in view of the Pancamahābhūta and the Tridosa theories of

१. शारीरचेष्टा या चेष्टा स्थैयीर्था बलर्वाधनी । देहज्यायामसंख्याता मात्रया तां समाचरेत् ।। ( च० सू० ७।३१ )

२. त्रय उषस्तम्भा इति-आहारः स्वप्नो ब्रह्मचर्यमिति ॥ ( च० सू० ११।३५ )

Ayurveda but also describes a variety of tasty and wholesome preparations prescribing them in consideration of the fundamental principles to their minutest implications. Besides, Ayurveda inforces a sound dietary discipline by way of describing the Astavidha Viśeṣāyatana (Caraka) and Dvādaśa Asana Vicāra (Suśruta). The dietary considerations in health and disease are so much developed in Ayurveda that the diet and diet therapy i. e. the Ahāra and Pathya form a full science in themselves.

Ayurveda also touches a number of social aspects of the science of health. There seems to be divergent opinion on the age of marriage. Different texts describe different age limits—But the consensus appears to suggest that the ideal age of marriage should be between the age of sixteen and twenty years for females and twenty to twenty five years in case of males. The Ayurvedic contexts also conceives the merits and demerits of the marriage in an alien class and consanguineous relations and the ancient writers on Ayurvedic medicine have viewed this concept in relevance to the possibility of hereditary diseases of recessive type in future generations.

These texts describe a detailed code of menstrual care i. e. Rtumatīcaryā where it is suggested that during the period of menstruation a woman should not indulge in sour and salty dietary consumptions in order to prevent increased congestion in the system during the menstrual period. Specific rules of personal hygiene have also been advocated for menstruating woman.

Similarly a detailed account of the care of the pregnant i. e. Garbhinicaryā appears to have been described with special emphasis on the diet which in case of a pregnant should consist of milk, ghee and certain drugs prescribed for pregnant women in order to maintain her own health as well as to help the adequate growth of the foetus.

It may be pointed out that besides the above mentioned physical factors advocated for the care of positive health a number of religious, spiritual and planetary ideas have been putforth as the background of health science; though such ideas do not appear in accordance with the known facts of today. However, it would be interesting to examine the scientific basis of such unique ideas in

the field of medicine. Besides Swasthavitta, one finds an elaborate account of Sadvitta and Ācāra in various Ayurvedic texts which consist of the ethical conducts which inculcate the discipline related to mind, character, social, religious, spiritual and personal life so as to accord with happiness not only of the individual alone but of the society as a whole. As also pointed out above this aspect of the literature in Āyurveda touches even the common points at every walk of life enforcing a genuine code of conduct conducive to the mental and social health which in turn effects better physical health too. The Sadvitta and Ācāra described in Āyurveda embrace the central theme of the Yamas and Niyamas and other psychosocial factors described in Yogic literature. It is suggested that Sadvitta and Ācāra should be included in the schedule of health education at public level in modern times in order to improve physical, mental, spiritual and social health of man which may contribute to the uplift of the quality of life at large and world peace.

Thus Ayurveda puts forward a comprehensive science of positive health which includes measures conducive to the physical, mental, spiritual and social health. In relevance to the welfare of the society as a whole. Such measures need propogation in todays society using mass media procedures of health education.

## USE OF RASAYANA FOR POSITIVE HEALTH

The Rasāyana therapy is one of the major methods of the preservation of health described in Ayurvedic system of medicine. It may not be out of place to high light the current problems to which the Rasāyana therapy is applicable.

After birth, growth and sanility ultimately leading to death are the inevitable processes. Aging begins before birth and continues throughout life

१. दीर्घमायुः स्मृति मेघामारोग्यं तहणं वयः ।
प्रभावर्णस्वरौदार्यं देहेन्द्रियवलं परम् ॥
वाक्सिद्धि प्रणति कान्ति लभते ना रसायनात् ।
लाभोपायो हि शस्तानां रसादीनां रसायनम् ॥ ( च० चि० १।७, ८ )

at different rates in different races for different individuals and for different tissues of the body. It involves two apparently opposite processes that simultaneously come in operation, growth or evolution and atrophy or involution. The first is more evident for the first twenty years. The two processes are fairly well balanced until the fourth or fifth decades following which the process of involution or atrophy predominates. Old age is best regarded as the stage of life in which the signs of wearing out of the body appears.

Boyhood and old age are the two extremes of life but none of the two has ever been liked by man. Man finds the real pleasure of life full of activity and vigour during the period of youth. He hates old age and dreads death. Healthful longevity has ever been the cherished wish of man. This is evident from a hymn of Atharva Veda 'Jiwem Śaradaḥ Śatam Pasyem Śaradaḥ Śatam' denoting a longing for 100 years of life with functioning senses of vision and hearing.

For maintenance of positive health man must possess resistence against disease which is caused mainly due to stress, physical and mental comprising of infection, and prolonged maladjustment with the society and environment leading to metabolic and other psychosomatic disorders.

The three faculties of the brain are said to be intelligence, preservences and memory. A fourth quality of expression may also be added. For a perfect psychosomatic built, development of the mental faculties is an essential requisite.

The present condition of human health around the globe is far from satisfactory. Whilst the developing countries are facing acute problems of physical health owing to undernutrition and infection, the affluent people of the west are living in an environment of anxiety and tension.

No doubt modern medicine has practically solved the problem of infection (though many a times resistant pathogenic organisms still stand as a challenge) yet many metabolic and psychosomatic disorders e. g. diabetes mellitus, hepatic insufficiency, ischaemic heart disease, thyrotoxicosis, hypertension, peptic

ulcer and ulcerative colitis etc. making life miserable look for other measures for treatment and control.

As an answer to solve the problems of healthful longevity, including mental development and resistence against disease stands Rasāyana Tantra, the 7th clinical discipline of Aṣṭānga or eightfold Āyurveda. Different classics have defined Rasāyana Tantra in different ways but with the same central idea. Suśruta's description is precise. He defines it as the measure which prolongs longevity, develops positive health and mental faculties and imparts resistance and immunity against disease. The aim of Rasāyana is fourfold viz.; (1) longevity, (2) maintenance of positive health, (3) improvement of the three mental faculties of intelligence, preserverance and memory and lastly, (4) resistance against disease.

Rasāyana therapy is one of the eight major branches of Āyurveda,<sup>2</sup> It appears to have been practised as an independent clinical discipline primarily as a positive health medicine. With the passage of time this important branch of knowledge has ceased to be in practice in its appropriate form. Comprehensive efforts are needed to revive this useful discipline for the welfare of the humanity at large.

Rasāyana is the means of obtaining the best qualities of Dhātus, 'Lābhopāyo hi Śastānām Rasādinām Rasāyanām' (Caraka). Literally the term Rasāyana refers to the means of obtaining the optimum nourishment to the Dhātus, 'Rasādi Dhātunām'.

Thus the Rasāyana is the specialised type of treatment influencing the fundamental aspects of the organism viz., Dhātus, Agnis, and the Srotāmsi, leading an overall improvement in the organism which affords prevention of against, resistence against disease, bodily strength and improvement in mental

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१ रमायनतन्त्रम् नामं वयः स्थापनमायुर्गेधावलकरं रोगापहरणं समर्थेश्व ।। ( सु० सू० १।१५ )
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२. इत राज्वायुर्वेदमस्टाङ्गमुपाङ्गमथर्ववेद \*\*\*\*\*\* । ( सु० सु० १।६ )
तत्त्रया - शन्यं, शालाक्यं, कायचिकित्सा, भूतविद्या, कौमारभृत्यम्, अगदतंत्रम्, रयायनतंत्रम्,
वार्ताकरणतंत्रमिति ।। ( सु० सु० १।७ )

faculties. Though Rasāyana therapy in general has a relevance to both the healthy (Kāmya Rasāyana) and the ailing (Naimittika Rasāyana); the emphasis on these two aspects is found varying. However, in the present day society in our country where the curative medicine has still the priority over the positive health programmes, the Naimittika Rasāyanas are of greater value.

A survey of the ancient literature traces the concept of Rasāyana therapy as back as the Vedic ages. Though there is no systemic description of Rasāyana Tantra in Vedas, one finds the existence of similar thoughts in the Vedic literature. There are descriptions of divine Rasāyana agents like Somas in Atharva Veda. Besides, extensive references are available regarding the superiority of certain other common Rasāyana drugs like Pippali, Jivanti, Punarnavā etc. Similar to the Caraka's concept of Acāra Rasāyana one finds extensive description of the beneficial effects (Rasāyana effects) of Sadvītta. Similarly a a concept similar to Ajasrika Rasāyana also appears in the Vedic literature.

Rasāyana therapy may be used purely as a means of improving the health and vigour in healthy persons (Kāmya Rasāyana), or it may be used as adjunct to the specific medical treatment of a particular disease (Naimittika Rasāyana). of course the Naimittika Rasāyana is not the specific treatment of a particular disease but it is a Rasāyana specially suitable for a person suffering from a particular disease.

The use of Kāmya Rasāyana is the use of Rasāyana measures in normal persons primarily for improvement of mental and physical health. All Rasāyana drugs are supposed to improve the mental faculties in addition to their beneficial effects on the body. However, the Medhya Rasāyanas have specific effect on mental performance. It has been postulated by Singh and Sinha (1974) that the Medhya drugs of Ayurveda may prove a potential source of psychotropic drugs which may form an essential part of therapy in stress disorders in addition to their primary effects on the Medhā as conceived in Ayurveda.

१. योगा ह्यायुःप्रकर्षार्था जरारोगनिवर्हणाः । मनःशरीरणुद्धानां सिद्धचन्ति प्रयतात्मनाम् । ( च० चि० १-४।३७ )

Naimittika Rasāyana is the use of a Rasāyana drug for the treatment of a particular disease state. As mentioned earlier such drugs relieve a diseases as well as induce general Rasāyana effects.

Šārangdhara, a later author of the Āyurvedic classic after his name Šārangdhara Samhitā defines *Rasāyana* as the treatment which wards senility and prevents onset of disease.<sup>1</sup> As has been said before the aim of *Rasāyana* therapy according to Suśruta<sup>2</sup> is four-fold viz;

- 1. Vayah Sthāpana i. e. attainment of healthful longevity.
- 2. Ayuh Balakara i. e. having anabolic properties.
- 3. Medhā Balakara i. e. improvement of mental faculties.
- 4. Rogāpaharaņa i. e. gaining immunity and destruction of an existing disease.

According to Caraka all these qualities of positive physical and mental health are attained by gaining the ideal seven  $Dh\bar{a}tus$ .

१. रसायनं तज्ज्ञेयं यज्जराव्याधि नाशनम् ॥ ( शा० पू० ४।१३ )

२. रसायनतन्त्रं नाम वयःस्थापनमायुर्मेधाबलकरं रोगापहरणं समर्थन्त । ( सु० सु० १।१५ )

३. लाभोपायो हि णस्तानां रसादीनां रसायनम् । ( च० चि० १।८ )

#### DISCUSSION

The object of the present monograph is to present a critical study on the alliedness of Ayurveda and Yoga and their possible scope as positive health sciences. At the outset it must be emphasised that Yoga and Ayurveda both are equally ancient traditions which developed and flourished in ancient India. Both being relevant to the study of man and his basic problems, they are primarily the science of man in its various dimensions. Though there is some degree of overlapping on the scope and application of these two systems of life sciences, the ultimate aim of both these desciplines is the total human welfare.

Ayurveda is relatively a wider discipline with greater applicability to the problems of health and disease. It is a fundamental as well as an applied science designed to preserve health and to cure ill health. The ultimate aim is to safeguard Arogya which has been considered the basis of achieving the four primary instincts of life namely-Dharma, Artha, Kāma, Mokṣa. Thus Ayurveda is not only a health science or system of medicine but is a science of life as a whole.

Yoga is essentially a branch of Ayurveda. Its objective is not to provide health to achieve all the four instincts of life as mentioned above as in case of Ayurveda. Its main emphasis appears to be an achievement of *Mokṣa* and this is why some authorities consider Yoga as *Mokṣa Śastra*. *Mokṣa* is a very comprehensive concept in Hindu traditions and it is not purely an otherworldly affair. It definitely refers to the possibilities of the state of *Jīvana-Mukta* and transformed state of consciousness of man. Though such achievements are

primarily spiritual and mental in nature, the critical study of the contents of the Yoga Sastra would indicate that Yoga also considers the welfare of health as a whole including physical health because the spiritual developments will necessarily need a healthy body to practice the spiritual sciences.

Thus Yoga and Ayurveda are very much allied, and Yoga can be considered as a branch of Ayurveda. The separate study of Yoga from Ayurveda probably started simply to put necessary emphasis on mental, intellectual and spiritual aspects of life. Probably development of Yoga as an independent branch gave an opportunity to establish its significance. Its separate study appears to have been started after the classical writing on Yoga Sutras by Patanjali followed by certain subsequent texts. It is true that if Yoga would not have separated from Ayurveda it would not have been able to establish its significance and it would have been overshadowed by the physical problems of medicine and health science as contained in Ayurveda. However, it never means that Yoga is different than Ayurveda. Both are closely allied and complementary to each other.

There is a strong school of scholars who believe that Yoga and Ayurveda were developed by one and the same source. Many authorities believe that the same author produced three separate classics namely Ayurveda in the form of Caraka Samhitā, Yoga Śāstra in the form of the Yoga Sūtras of Patanjali and the science of expression in the form of Vyākaraņa Mahābhāṣya for the rectification and care of the body, mind and speech respectively with the object of achieving a total welfare of humanity.

Thus Yoga and Ayurveda are closely allied ancient disciplines of human interest. These two great disciplines should now be developed and synthesised in the light of modern science according to the needs of present day society. These ancient sciences appear to have great potentials of helping the humanity at large as regards to the current problems of health and psychosocial crisis in the modern world. The contents of various chapters compiled in this monograph would clearly show that Yoga and Ayurveda have many unique features which are hitherto unknown and they can greatly enrich the current system of health care delivery and medicare besides their role in the uplift of the social, mental

and spiritual status of humanity at large. These sciences being the product of our land may be the most suited to our people. This statement has relevance to the present day crisis.

The changing concepts of life and modernity, urbanization and industrial development in the modern world have entirely changed the concept of medicine and its approach in recent years. The medical profession is faced with the rapid growth of newer disorders whose cause lies in the society and modern way of life itself. The prevention and management of various kinds of psychosomatic and stress disorders have proved a challange before the present day medical profession. The revival of interest in traditional indigenous systems of medicine, Yoga and nature-cure is the by-product of the failure of modern medicine on these frontiers. From the contents of the present monograph one can perceive that there is a sufficient potential in Ayurveda and Yoga to enrich the health care and medical management in the present time.

A study of the conceptual tradition of Yoga indicates that Yoga is the central theme of Indian Philosophy. The contents of the science of Yoga appear to have been extensively dealt with in early Upanişads with further systematization in Yoga Sutras of Patanjali which presented for the first time the most critical account of the science of Yoga in a systematic manner. It is this classical text which forms the foundation of the science of Yoga even today. The Bhagvad Gitā appears to have attempted the application of the science of Yoga in the social and personal life of a common man. Thus these three classical sources along with their several commentaries and interpretations continue to be the source material for classical Yoga. A follow up study of the thought on Yoga would show that from time to time the enlightened thinkers have attempted to give their own interpretations to the original thoughts of Yoga. During subsequent period the schools of Buddha and Jainism greatly influenced the Indian thoughts in general including Yoga. In modern times certain contemporary thinkers in the field of Indian philosophy have brought revolutionary ideas in this field. The applied thought on Yoga Hindu approach to life presented by Swams Vivekananda, Sri Aurovindo and

Mahātmā Gāndhī have brought the fundamentals of Indian Philosophy and Yoga much nearer to the reality of man, life and society.

The classical concept that an individual is the Saddhātwātmaka entity consisting of the five physical elements and the Avyakta Brahma which is the reflection of the cosmic reality has been recently given more understandable interpretations. Earlier interpretators of classical Indian philosophy have considered Brahman as a transcendental reality. This Brahma which is of transcendental nature communicates its reflection in each individual being and the communium between the conscious elements of the individual living being with the cosmic consciousness i. e. Brahma has been considered as Yoga in classical terms. Several modern thinkers including the famous modern philosopher Spinozoa has questioned the transcendental nature of the Brahma. It has been suggested that the Universe consists of three basic realities namely—(1) The Self, (2) The Non-Self, (3) The Universe. As a matter of fact it is not true that this world is illusion. There is no other real world. The total Universeitself is the Brahma as also accepted by the classical statement. Sarvain Khalu Idam Brahma'. At maximum we can consider the local surroundings and the attachment tendencies of an individual as illusion or Māyā. The whole world is not Māyā. It is true and the same is Brahma. If it is so, the harmony between the individual with the universe is Yoga. This refers to nothing but a broadbased social harmony of realistic nature. This is why the enlightened persons like Swāmī Vivekānanda and Mahātmā Gāndhī and quite a few others attempted to detach themselves from their local attachments and attempted to merge with the society at large. This is the background of the Anāsakti Yoga of Mahātmā Gāndhī. The Bhagvad Gītā also appears to teach the same theme through the philosophy of Niskāma Karma Yoga.

As also emphasised earlier the basic concepts of Yoga are also incorporated with Ayurveda. Yoga and Ayurveda both are allied disciplines developed and practised in the same land during the same period. The Art and Science of both these disciplines developed in Ancient India and attained to great heights, even before two thousand five hundred years ago. For many millenia now Yoga and Ayurveda have been studied and

practised by millions of people in India and elsewhere with several objectives in view viz., to obtain health and longevity of life, to acquire mental poise and peace, to integrate human personality, to realise the bliss of the supreme. Over the recent centuries the traditions of Yoga and Ayurveda like many other aspects of Indian thought and culture, suffered a decline and got confined to small groups, more on the intellectual basis rather than on a practical approach. Along with the National movement for freedom from British rule, the movements to revive Indian traditions specially Indian traditional medicine also started. So far as Yoga is concerned the arousal of interest in this ancient discipline is of a more recent origin. After the Second World War a new current of interest in Yoga has emanated from the West, where the people have been subjected to unusual stresses and strain due to their materialy affluent, but spiritually unbalanced ways of living. This renewed interest in Yoga is now global in its scope, with high expectations from all concerned, but low levels of comprehension of the intricacies of the complex and rich tradition of Yoga. The time is now ripe to evaluate critically the potential of Yoga for the modern world and to give proper directions to the study and practice, research and development of Yoga in this age of science and technology.

As pointed out above Yoga and Ayurveda are not only allied disciplines but are complimentary to each other. It is most appropriate to consider Yoga as a branch of Ayurveda. Ayurveda is the complete science of life and is supposed to safeguard Arogya i.e. health in all its dimensions. The main objective of Arogya as conceived in Indian traditions is to achieve the four principal instincts of life viz., Dharma, Artha, Kāma, Mokṣa. In contrast Yoga as understood in the early Upaniṣadic thought, is a discipline of more limited objectives and is specifically concerned with the achievement of Mokṣa. It does not essentially aim to achieve the total Arogya for the attainment of all the four instincts of life. Although in subsequent developments it appears that more and more attempts have been made to make Yoga applicable to the problems of health.

Ayurveda and Yoga both are based on the same fundamental principles and appear to make allied approach. Both believe in the Saddhātwātmaka nature of the creation and in the four dimentional entity of living being namely-Body, Senses, Mind and Soul. The harmonious functioning of all these four components of the individual living being is also considered an aspect of Yoga. Ayurveda specially the Caraka-Samhitā describes the state of higher achievements of Yoga practice including the ultimate realisation under the term Satyābuddhi. Caraka emphasises that the Purusa i. e. the individurl living being is the miniature form of the Loka i. e. the universe-Puroso Ayam Loka Sammita' (C. S. 5:2). According to Caraka the Loka is Saddhātwātmaka i. e. constituted of five Mahābhūtas and the sixth the Abyakta-Brahma. The same Six Dhātus constitute the Purusa. The realisation that the entire universe and the individual are one and the same is called Satyā-Buddhi. Thus Satyā Buddhi is the state of realisation of the ultimate reality. It eliminates all miseries and leads to Moksa Caraka says that Svatā (selfhood) or Mamatā is the cause of all miseries. The moment Svatā is eliminated, the great knowledge, the Satvā-Buddhi emerges which is accompanied with elimination of all miseries and presents with real happiness. Thus the Caraka's concept of the realisation of ultimate truth as depicted by the concept of Satyā-Buddhi represents the same central theme of Yoga as is seen in the core discipline of Yoga traditions. Thus Yoga and Ayurveda are allied sciences. Ayurveda envisages the total welfare of man, while Yoga specifically ensures his psycho-spiritual development. Caraka describes the highest form of Yoga aiming at higher consciousness and the realisation of the ultimate reality of oneness of 'self' and the 'whole', i. e. the Satyā-Buddhi.

Though Yoga was initially not conceived as a health science but the recent studies have revealed its potentials as an answer to the growing incidence of anxiety, tension and psychosomatic diseases. On the other hand Ayurveda is a broad based science of life developed with two-fold objectives namely—(1) to preserve the health of healthy and (2) to relieve the disease of the ailing. Ayurveda puts a great emphasis on the maintenance of positive health but at the same time comprehends well on the study of the nature of ill health and the curative measures for the treatment of different diseases.

Yoga may subserve the former objective of Ayurveda i.e. preservation of positive health and as also discussed at length in this monograph elsewhere Yoga may form an aspect of the positive health aspect of Ayurveda. By joining Yoga with the Swasthavrtta, Sadvrtta, and Acāra and other positive health considerations of Ayurveda, it is possible to develop a new comprehensive positive health system of medicine of indigenous origin with sound footings.

Another point of discussion in the present context is scope of systematic future development of Yoga as a discipline. Before we really indulge in the discussion on this issue it may be pointed out that the current trends of the study and interest in yoga appears to swing around the object to evaluate the physiological effects of various yogic practices to establish its scientific basis so that such practices may be applied to tackle certain problems on mental and physical health. Another aspect of the current interest in this field is to evaluate the therapeutic utility of different practices and to use them as a method of treatment of different diseases specially those of psychosomatic origin. Thus there is a trend to use Yoga as a system of medicine specially its positive health aspect. The current interest in Yoga may be categorised under the following heads.

- (1) Practice of Yoga as an anti-stress and anti-anxiety measure.
- (2) Practice of Yoga as a measure to prevent stress disorders and psychosomatic diseases.
- (3) Practice of Yoga as a method of treatment of certain psychosomatic diseases.
- (4) Practice of Yoga and some yogic practices as physical culture.
- (5) Practice of Yoga as a system of physical medicine.
- (6) Less commonly Yoga is practised as a means of spiritual progress.

Inspite of a distinct movement on Yoga on the above lines currently yoga has not taken the shape of an unified discipline. As the arousal of interest in Yoga has been a sudden explosion the activities related to yoga have not fallowed a systematic structure. As a matter of fact the personnel showing interest in yoga primarily belong to varied discipline and accordingly their approach to the problem is varied. Yoga which is primarily an ancient Hindu

science of combating stress and strains of modern life. Some scholars are working to develop yoga as a system of curative medicine, while others believe that it could only serve as a positive health medicine, efforts have also been made to visualise Yoga as a system of physical education, physical medicine and rehabilitation. However, the traditional schools even now maintain that Yoga is primarily a spiritual science, its main object is spiritual development and Moksa. Such varied views developing on Yoga in modern time reflect two things (1) that Yoga has not remained one unified discipline in the hands of the class of specialists but people from varied disciplines have started studying Yoga with a biased mind, (2) that Yoga is such a comprehensive science that it can satisfy the interest of a very vide variety of seekers. However, in view of the enough growth already taken place and rapid growth in progress it appears essential to consider the problem of systematisation of Yoga as a discipline An opinion analysis undertaken in the present study suggests that Yoga should either be developed as an independent discipline or as a branch of Ayurveda.

It would be seen that independent development of ancient disciplines on the solitary institutions has not succeeded much. In the absence of allied disciplines and facilities for interdisciplinary growth most of the primary institutions built as independent centres have either faced a decline or have ended with misguided growth. In such institutions the subject has not been developed in proper perspective. Moreover, lot of duplication of facilities have been needed. Therefore the attempts to develop independent yoga centres or yoga institutions as solitary institutions does not appear logical. Such institutions remain the fad of some individuals and they are not able to give a shape to the discipline as a whole. For balanced and logical growth of Yoga as a scientific discipline it is necessary that Yoga should be developed at faculty levels in universities. As rightly opined by large number of experts interviewed under the present project, Yoga should be developed as a branch of Ayurveda at faculty level. To start with, it may form a part of Swasthavrtta or Kāyacikitsā. It should be included in the curriculum of undergraduate and postgraduate teaching programme in the paper on preventive medicine (Swasthavitta) and curative medicine (Kāyacikitsā). The philosophy of Yoga may be included in the curriculum of the teaching in the Basic Principles of Ayurveda. The Central Council of Indian Medicine (CCIM) has already taken such decisions which look to be a rational and practical approach. At postgraduate or research levels yoga may be studied as an independent speciality.

On the basis of opinion analysis in the present study and in view of the above discussions, it is concluded that there is a need of rapid consolidation and systematisation of Yoga as a discipline. For proper and balanced growth it would be desirable to develop Yoga as a branch of Ayurveda. Studies on Yoga may be added in the curriculum of undergraduate teaching in Ayurveda in papers on Swasthavitta, Kāyacikitsā and Basic Principles At postgraduate level Yoga may be developed as an independent speciality. Emphasis must be given for developing Yoga as a health science and more and more studies may be conducted to verify the therapeutic claims of Yoga to further the scope of developing Yoga as a system of Medicine.

## BIBLIOGRAPHY

- 1. Abhedanand, Swami (1971): How to be a yogi, Fourteenth Edition, Ramkrishna Vedanta Matha, Calcutta.
- 2. Adyar, T. P. H. (1938). It lias living traditions. The Theosophical Publishing House, Adyar, Madras.
- 3. Aiyer, K. Narayan Swami (1974): Laghu Yoga-Vasisth: The Theosophical Society Adyar, Madras.
- 4. Alain Danielou (1954): Yoga, the method of re-integration, Third Impression, Christopher, Jhonson, London.
- 5. Ananda Acharya (1971): Yoga of Conquest, Visheshwaranand Institute, Hoshiarpur.
- 6. Ananda Acharya (1971): Lectures on Yoga, Visheshwaranand Institute, Hoshiarpur.
- 7. Anand, B. K.; Chinna, G. S. and Singh, B. (1961): Studies on Sri Ramanand Yogi during his stay in an air tight box; Ind. J. Med. Res., 49: 8-89.
- 8. Anand, B. K. and Chinna, G. S. (1961): Investigation on yogis claiming to stop their heart beats; Ind. J. Med. Res. 49, 1, Jan. pp 82-94.
- 9. Anandanand, S. and Varandani, N. (1975): Therapeutic Effects of Yoga in Bronchial asthma: Proc. Seminar on Yoga Science and Man; C. C. R. I. M. H., New Delhi. pp 157-171.
- 10. Anantharaman, T. R. (1984): Transformations-Metallurgical and Mental; The Yoga Review, Vol. IV, No. 1 & 2. pp. 1-25.
- 11. Ananthanarayanan, T. V. (1983): Management of Low Back Pain; Biochemical analysis of Asanas and Pranayam; M. S. Thesis Biomedical Engg., I. I. T. Madras.

- 12. Andreven Lysebeth (1968): Yoga self taught, George allen and Unwin Ltd., London.
- 13. Anil Kumar, K.; Gnanakumari, K.; Girija Kumari, D.; Sahay, B. K.; Murthy, K. J. R. (1985): Immediate effect of Pranayam in airways obstruction: Lung India, Vol. III, No. 2, pp. 77-81.
- 14. Anima Sengupta (1977): Essays on Samkhya and other systems of Indian Philosophy, M. R. Son, Allahabad.
- 15. Annie Besant (1976): An Introduction to Yoga. The theosophical publishing house, Adyar, Madras.
- 16. Annie Besant (1978): Mahabharata, Fourth Printing. The Theosophical Publishing House Adyar, Madras,
- 17. Annie Besant (1960): Daily Meditations, Fourth Edition. The Theosophical House, Adyar, Madras.
- 18. Anthony Elenjimittam (1974): The Yoga philosophy of Patnajali, Better yourself Books 28-B Chatham Lines, Allahabad.
- 19. Arberry, A. J. (1963): Sufism, Sixth Impression, George Allen & Unwin Ltd., Ruskin House, London.
- 20. Arogya. A Journal of Health Science. The Academy of General Education Manipal.
- 21. Arthur Koestler (1971): The Yogi and the Commisar, Jonathan Cape, Thirty Bedford Square, London.
- 22. Arthur Avalon (1919): The Serpent power, Luzae & Co., 46 Great Russell Street, W. C. London.
- 23. Arthur (1960): Principles of Tantra, 3rd Edition, Ganesh & Co., Pvt. Ltd. Madras.
- 24. Arundaley, G. S. (1974): Kundalini, Fourth reprint. The Theosophical Publishing House, Adyar, Madras.
- 25. Asrani, U. A. (1977): Yoga unveiled. Motilal Banarasi Das, Jawahar Nagar, Delhi.

- 26. Atreya, B. L. (1954): Yoga Vasistha and Modern thought, Indian Book Shop, Benares.
- 27. Atyer, K. Narayan Swami (1974): Lagu Yoga Vasistha. The Theosophical Society, Adyar, Madras.
- 28. Aurobindo Hymns to the mystic Fire (1952): Second Edition Sri Aurobindo Ashram Pandichery.
- 29. Aurobindo (1973): The Synthesis of Yoga, 5th impression, Sri Aurobindo Ashram Pandichery.
- 30. Aurobindo (1972): Yoga and its object, 11th impression. Sri Aurobindo Ashram Pandichery.
- 31, Aurobindo (1969): Letters on Yoga, Shri Aurobindo Ashram, Pandichery.
- 32. Aurobindo (1972): The Upnisads, Shri Aurobindo Ashram, Pandichery.
- 33. Aurobindo (1973): Essays on the Gita, 9th impression, Shri Aurobindo Ashram, Pandichery.
- 34. Aurobindo (1977): The Life Divine, Tenth Edition, Shri Aurobindo Asharam, Pandichery, Vols, I & II.
- 35. Aurobindo (1975): The Foundation of Indian Culture, Sixth edition, Shri Aurobindo Ashram, Pandichery.
- 36. Bajpai, B. P. (1978): Secret Doctrine of Gita, Shri Prananath Mission, New Delhi.
- 37. Bamborugh, J. B. (1952): The Little World of man, Longmans Green & Co., London.
- 38. Banerjee, Dr. S. C.: Indian Society in Mahabharata, Bharat Manisha, D. 28/17, Pandey Haveli, Varanasi.
- 39. Barry Blackwell, Saul Bloomfield, Peter Gartside, et al. (1976): Transcendental Meditation in Hypertension. The Lancet, 31.
- 40. Basu, Shobha Rani (1974): Modern Indian Mysticism, Vol. III. Bharata Sadhana Publication, Bhelupura, Varanasi.

- 41. Bengali Baba (1977): Patanjali Yoga Sutra, Vyas Bhasya, 2nd revised Edition, Motilal Banarasi Das, Jawahar Nagar, Delhi.
- 42. Behanan, T. H. (1937): Yoga-A-Scientific Evaluation. Mc Millan Co, New York.
- 43. Benjamin, W. Wolmam (1977): Hanibook of Parapsychology, Von Nostran Reinhold Company, New York, 1977.
- 44. Benson. H. (1969): Yoga for drug abuse. N. Engl. J. Med. Vol. 281, pp. 1133.
- 45. Benson, H.: Decreased blood pressure in borderline hypertension subjects who practiced meditation. Journal of Chronic disease, 27: 163, 1974.
- 46. Bernard, Theos (1971): Hatha Yoga, Rider & Co., London.
- 47. Bhattacharya, Haridas (1958): The cultural heritage of India, second edition, Swami Nityanand. The Ramkrishna Mission Institute of Culture III Russa Road, Calcutta-26, Vol. I, II, III, IV.
- 48. Bhatnagar, O. P. and Ananthraman, V. (1976): Effect of Yoga training on Neuromuscular Excitability and muscular relaxation. Neurology India, 16: 230-232.
- 49. Bhatnagar, O. P, Ganguly, A. K. and Ananthraman, V. (1978): Influence of Yoga training on thermoregulation. I. J. M. M. R. 67: 844-877.
- 50. Bhusan, V. (1977): Mind the Supreme Master, Atma Ram and Sons, Delhi.
- 51. Bhavan's Journal, Bhartiya Vidya Bhavan, K. M. Munshi Marg, Bombay.
- 52. Blavatsky, H. P. (1938): The Secret Doctrine. Fourth Edition. The Theosophical, Society Adyar Madras, Vol. 1-6.
- 53. Bloomfield, H. H.; Cmai, M. P. and Jaffe, D. T. (1975): Tm-Discovering inner Engergy and overcoming stress. Delacorte Press, NY (Eight Print).
- 54. Bose, A. C. (1954): The call of the Vedas. Bhartiya Vidya Bhavan, Bombay

- 55. Brahmamitra Awasthi (1985): Yoga Bija, Swami Keshvanand Yoga Institute, Delhi, p. 33.
- 56. Brahmachari, Dhirendra (1968): Yoga for Life and Living: Edited by Brahmachari, D. Central Research Institute for Yoga, New Delhi.
- 57. Brena, S. F. (1975): Yoga and Medicine. The Julian Press, Inc N. Y. pp. 153.
- 58. By the Yoga Sadhakas (1977): Yoga and Therapy. The Yoga Institute, Santacruz, Bombay.
- 59. Charaka, Charaka Samhita: The Chowkhambha Sanskrit Series Office, Varanasi, Sutrasthana, 1, 5, 7, 8, 9, 11, 17, 28, 30.
- 60. Charaka, Charaka Samhita: The Chowkhambha Sanskrit Series Office, Varanasi, Vimansthan, Chap. 1-6.
- 61. Charaka, Charaka Samhita: The Chowkhambha Sanskrit Series Office, Varanasi, Sarira Sthana, Chap. 1, 2, 5.
- 62. Charaka, Charaka Samhita: The Chowkhambha Sanskrit Series Office, Varanasi, Cikitsa Sthana, Cahp. 1, 15, 24, 28.
- 63. Chakrapanidatta. The Charaka Samhita. Satyabhamabai Pandurang, Bombay. Sharira Sthana, Chap. 7.
- 64. Chakrapanidatta. The Charaka Samhita, Satyabhamabai, Pandurang Bombay, Cikitsa Sthana, 15.
- 65. Chakravarti, Chintaharm (1963): Tantras. Studies on their religion and literature, First Edition, Punthi Pustaka, Calcutta.
- 66. Chandra Patel (1975): Croydon Survey, 12 month follow-up of Yoga and Biofeed back in the management of hypertension. The Lancet II.
- 67. Chatterjee, T. D. (1961): A Hand book of Sri Aurobindo Yoga, First Edition, Published by S. Chatterjee, Howrah, 1961. 22 Baje Shibpur Road, P. O. Shibpur.
- 65. Chatterjee, Mohini, M (1973): Viveka Cudamani-by Sri Shankaracharya, Fourth Reprint. The Theosophical Publishing House, Adyar, Madras.

- 69. Chaudhari, Haridas (1975): Integral Yoga, Third impression, George Allen and Unwin Ltd., Ruskin House Museum Street, London, 1975.
- 70. Chaudhari, Haridas (1973): Sri Aurobindo. The Prophet of Life divine, 2nd Edition. Sri Aurobindo, Ashram, Pandichery.
- 71. Christopher, B. Hills (1959): The Power of Doctrine, Philosophical Library, New York.
- 72. Christopher, B. Hills (1972): Studies in scientific Yoga, Selected papers of the world conference on scientific yoga, Darshana International Moradabad.
- 73. Concentration and Meditation (1935): Compiled and published by the Buddhist Lodge, London, 37, South Eaton Place.
- 74. Coster, Geraldine (1934): Yoga and Western Psychology, Oxford University, Humphrey, Milford, London.
- 75. Dambal, H. G. and R. K. Asundi (1981): Vedic Yoga through the ages; its scope, depth and utility-A traditional view. The Yoga Review, Vol. 1, No. pp. 51-60.
- 76. Das, Dr. Bhagvan (1939): Sanatan Dharma. The Theosophical publishing house, Adyar, Madras.
- 77. Dasgupta, S. N. (1974): Yoga Philosophy, Motilal Banarasi Das, Delhi.
- 78. Dasgupta, S. N. (1974): Yoga Philosophy in relation to other systems of Indian thought, Motilal Banarasi Das, Jawahar Nagar, Delhi.
- 79. Datey, K. K. et al. (1969): Management of hypertension by Savasana. Angiology, 20: 325.
- 80. Date, V. H. (1974): The Yoga of the Saints, Second Edition, Munshiram Manohar Lal Publisher, Pvt. Ltd., New Delhi.
- 81. Deborah Rozman (1977): Meditating with children: A work book of new age educational methods using Meditation. University of the trees press.
- 82. Denniston, D. and Mc Williams, P. (1975): T. M. Book: Versemonger Press 5806, Elizabeth Allenpark Michigan, U. S. A.

- 83. Desai, B. P. and Bhole, M. V. (1981): Gastro responses to Vastra Dhouti as influenced by Four weeks yogic treatment in Asthmatics, Y. M., Vol. XX3. pp. 41-50.
- 84. Desai Morarji (1978): A view of Gita, 2nd Ed. S. Chand & Co., Ltd. New Delhi.
- 85. Dhirendra Brahmachari (1970): Yogasana Vijnana. The Science of Yoga, Asia Publishing House, New Delhi.
- 86. Dhopeshwarkar, A. D. (1978): Meditation a la Krishnamurti, Chetana, Bombay.
- 87. Didi, Dolli & Prem ma Anand (1977): The mystic experience Bhagvan Sri Rajneesh, First &d. Motilal Banarasi Das, Delhi.
- 88. Didi, Dolli (1978): The way of Tao Bhagva Sri Rajneesh, Ist Ed., Motilal Banarasi Das, Delhi.
- 89. Divakar, M. V.; Bhat and Mulla, A. (1980): Effect of Yoga therapy in Diabetes and Obesity, J. D. A. I. 18:75.
- 90. Dixit, K. K. (1968): The Yoga bindu of Acara Haribhadrasuri, Ist Ed Lalbhai Dalpatbhai Bhartiya Sanskrit Vidya Mandir, Ahmedabad.
- 91. Dr. W. Y. Evans-Wentz (1958): Tibetan Yoga and Secret Doctrines. Second Edition Oxford University Press, London, New York, Toranto.
- 92. Dostalek, C.; Lepicovaska, V. (1982): Hatha yoga a method for prevention of cardiovascular research. Act. Nerv. Sup. Suppl. 3, Pt. 2: 444-452.
- 93. Douglas, N. K. (1971): Tantra Yoga. Ist Ed. Munshi Ram Manohar Lal, New Delhi.
- 94. Dunene, Desmond (1961): The Manual of Yoga, 4th Ed. W. Foulsham & Co., Ltd., London.
- 95. Dynemics of Yoga, Bihar School of Yoga, Monghyr.
- 96. Earnest, E. Wood (1954): Practical Yoga, Ancient and Modern, 3rd reprint. Rider & Co. Stratford Place, London.
  20Y

- 97. Earnest Wood (1956): Yoga Dictionary, Philosophical Library, New York.
- 98. Earnest Wood (1954): Great systems of Yoga, D. B. Taraporevala Sons & Co., Pvt. Ltd. 210.
- 99. Farrow, Jhon, T. and Orme-Jhonson, David, W. (1977): Scientific Research on Transcendental Meditation, Fair Field, Towa, Maharshi. International University.
- 100. Felix Guyot (1976): Yoga: Universal publication, Delhi-6.
- 101. Feuerstein, G.; Miller, J. (1971): A Reappraisal of Yoga, Ist Ed. Rider & Co., London.
- 102. Feys, Jan. (1977): The Yogi and the Mystic Ist Ed Firmaklin Pvt. Ltd., Calcutta, 1977.
- 103. Filliozat, S. (1964): The classical Doctrine of Indian Medicine, Ist Ed., Munshiram Manohar Lal, Nai Sarak, Delhi-6.
- 104. Gandhi, M. K. (1962): In search of the supreme, Ist Ed. Navjivan Publishing House, Ahmedabad-14, Vol. I-III.
- 105. Gandhi, M. K. (1969): Self Restraint V. Self Indulgence, Navjivan Publishing House, Ahmedabad. 14
- 106. Gandhi, M. K. (1958): My religion. Navjivan Publishing House, Ahmedabad-14.
- 107. Gandhi, M. K.: Non-violence, Weapon of the Brave Orient paper books, New Delhi.
- 108. Gardey, R. K. (1973): Biodynamics of Shadang Yoga, D. B. Taraporevala Sons & Co., Pvt. Ltd., Bombay.
- 109. Gasper, M.; Koelmna, S. J. (1970): Patanjali Yoga. Papal Atheneum, Poona.
- 110. Gautam, Chaman Lal (1975): Shiv Samhita, 2nd Ed. Samskrit Sansthan, Bareilly.

- 111. Geeffrey Hodson (1973): Meditations on the occult life. 4th Ed. The Theosophical Publishing House, Adyar, Madras.
- 112. Gharote, M. L. (1971): Energy expenditure during deep meditative state. Yoga Mimansa, 14 (1 & 2), 57-62.
- 113 Gharotey, M. L. (1982): Yoga therapy and its scope and limitations. The Journal of Research and Education in Indian Medicine, Vol. 1-2, April June, p. 37.
- 114. Gherwal, R S. (1979): Patanjali's Raj Yoga, Asian publishing house services, New Delhi.
- 115. Ghosh, Janashwar (1977): Study of Yoga. Motial Banarasi Das, Jawahar Nagar, Delhi.
- 116 Glory of India. A quarterly on Indology, Motilal Banarasi Das, Jawahar Nagar, Delhi.
- 117 Gode, J. D.; Singh, R. H.; Settiwar, R. M.; Gode, K. D. and Udupa, K. N. (1974): Increased urinary excretion of testosterone following a course of Yoga in normal young volunteers, Ind. J. Med. Sc. Vol. 28, No. 4-5, pp. 212-214, 1974.
- 118. Gopal, K. S. (1983): Influence of yoga in respiratory disease, Diabetes and Cancer, 3rd Regional Conference, A. P. P. I., Banglore, Chapter BMC.
- 119. Gopal. K. S.; Anantharaman, V. et al. (1974) The effect of Yogasana on muscular tone and cardiorespiratory adjustment. Ind. J. Med. Sc. Vol. 28. pp. 438-443.
- 120. Gopal, K. S. and Lakshman, S. (1972): Some observations on Hathayoga. The Bandhas, an anatomical study, Ind. J. Med. Sc. 9.
- 121. Gopal, K. S.; Ananthraman, V.; Balchandran, S. and Nisith, S. D. (1973): The cardio-respiratory adjustments in Pranayam with and without Bandhas in Vajrasana. Ind. J. Med. Sci., 27: 685-692.
- 122. Gopikrishna (1975): The awakening of Kundalini, E. P. Dutton & Co., INC, new York.

- 123. Gopikrishna (1978) t Yoga a vision of its future, Kundalini Research and Publication Trust (Book Dlvision), New Delhi.
- 124. Gopikrishna (1978): Kundalini. The Secret of Yoga, Kundalini Research and Publication Trust, New Delhi.
- 125. Gopikrishna (1978): Secrets of Kundalini in Panchstavi, Kundalini Research and Publication Trust, New Delhi.
- 126. Gopikrism a (1979): Kundalini in Time and Space. Kundalini Research and Publication Trust, New Delhi.
- 127. Gopikrishna (1979): The Real Nature of Mystical Experience; Kundalini Research and Publication Trust, New Delhi.
- 128. Gopikrishna (1978): The Dawn of a new science; Kundalini Research and Publication Trust, New Delhi.
- 129. Gopikrishna (1978): Kundalini. The Biological basis of religion and genius. Kundalini Research and publication trust, New Delhi.
- 130. Goyenka, Sri Harikrishnadas, Maharsi Patanjali Krit Yoga Darshana, 11th Ed. Gita Press, Gorakhpur.
- 131. Grade, R. K. (1975): Yoga therapy (Principles and Practice. D. B. T. Sons & Co., Pvt. Ltd., Bombay.
- 132. Green Elmer, E.; Green Alyce, M. and Waters, E. Dale (1970): Voluntry control of insternal states. Psychological and physiological. Transpersonal psychology, 2:1.
- 133. Gupta, S. P. (1977): Psychopathology in Indian Medicine (Ayurveda), Ist-Ed. Ajai Publishers, Aligarh.
- 134. Harshe, E. R. G. (1970): Satkarmasangrah, Yoga-Mimansa Prakashan, Kaivaladham, Lonavala, Poona.
- 135. Harney, D. (1960): About Yoga, 6th Ed. Thorsons Publishers Ltd. 91st Martins Lane, London.
- 136. Harney, D. (1964): The Study and Practice of Yoga, 7th impression, Thorsons Publishers Ltd. 91st Martins Lane, London.

- 137. Hathayoga and Tantra: Edited by M. Venkata Reddy, Vemana Yoga Research Institute, Market street Secunderabad-3, A. P.
- 138. Honsberger, R.; Wilson, A. F. (1973): The effect of TM upon Bronchial Asthma: Clinical Research, 2: 2.
- 139. Hittleman, Richard E. (1968): Be Young with Yoga, 4th Ed. Thorsons Publishers Ltd., London.
- 140. Huchinson, R. (1970): Yoga Health and Beauty, Ist Ed. Arthyr Barker Ltd., London.
- 141. Huchinson, R. (1974): Yoga a way of Life, Hymlyn, London
- 142. Ikem, Y.; Ishikawa, H.; Goyeche, J. R. M.; Sasaki, Y. (1978): Positive and Negative aspects of the altered states of Consciouness inducted by autogenic training Zen and Yoga, Psychother. Psychosom. 30: 170-178.
- 143. International Yoga Life and Yoga Vacations, Shivanand Yoga Camp, 8th Avenue, Vol. Morin, P. Q. Canada.
- 144. Iyengar, B. K. S. (1965): Light on yoga (Yoga Dipika). George Allen and Unwin Ltd., Ruskin House, Museum Street, London.
- 145. Jaggi, O. P. (1973): Yogic and Tantric Medicine Atma Ram and Son, Delhi.
- 146. Jain Journal. A quarterly on Jainology, Jain Bhavan, Kalkar Street, Calcutta-7. p. 25
- 147. Jain, G. C. (1984): Yoga and Society. The Jain view: The Yoga Review, Vol. IV, No. 3 & 4.
- 148. James Funderburk (1977): Science studies on Yoga, Himalayan International Institute of Yoga Science and Philosophy, U. S. A.
- 149. Jan Erick Sigdell (1984): An alternative to the artificial kidney and an ancient procedure of Kriya-Yoga. Ancient Science of Life, Vol. IV, No, 1, July, p. 6-8.

- 150. Jarmil a motajova, K. Vicenik (1980): Effect of Hatha Yoga on Heart activity in exercising women: Slovak Academy of Sciences, Bratislava, Activ. Nerv. Sup. Praha, No. 2.
- 151. Jayachandran and Anantnarayanan, T. V. (1982): Two cases studies of Asana therapy in the management of mental retardation: National Symposium Yoga Brain and Consciousness, NIMHANS, Banglore, India.
- 152. Jayachandran, P. and Ananthanarayan, T. V. (1982): The effectiveness of Yogasana on the mentally retarded: Presented at the First National Conference of the Indian Academy of Yoga, Bauglore.
- 153. Jesse Roarke (1973): Sri Aurobinio, Sri Aurobindo Ashram, Pandichery.
- 154. John, Mc Kenzie (1971): Hindu Ethics, 2nd Ed. published by Mrs. Nirmal D. Jain for Oriental Books. Reprint Corporation, New Delhi.
- 155. Joshi, K. S. (1967): Yoga and Personality, Ist Ed. Udayana Publications, Allahabad.
- 156. Joshi, N. P. (1982): Role of Yoga in Community Health Programme: M. Phil. Thesis, J. N. U., New Delhi.
- 157. Journal of the Yoga Institute. The Yoga Institute, Santacruz, Bombay, India.
- 158. Journal of the Oriental Institute, University of Baroda, Baroda.
- 159. Journal of Religious Thought, School of Religion, Horward University, 1240, Randolpha Street, N. E. Washington, D. C.
- 160. K. Vicenika; J. Motajova (1982): Study of the Heart Rhythm variability during Hatha-yoga exercises. Activ. Nerv. Sup. (Praha), 24.
- 161. Kalia, A. K.; Laksmitantra; Dharm Aur Darshana. Akhil Bharatiya Sanskrit Parishar Mahatma Gandhi Marg, Hajratganj, Lucknow.
- 162. Kalyan, Yoganka (Aug. 1935). Gita Press, Gorakhpur.
- 163. Karel Nespor, M. D. (1984): The combination of Psychiatric treatment and Yoga: Conference, Yoga and Rehabilitation Bardejovsue. PELE, CCSSR, Oct. 11-13.

- 164. Karmanand Saraswati (1983): Yogic management of common diseases. Bihar School of Yoga, Munger (Bihar).
- 165. Kaviraj, Pt. Sri Gopinath (1972): Tantrika Sahitya. Ist Ed. Hindi Samiti, Lucknow.
- 166. Kenghe, C. T. (1975): Yoga as a Depth Psychology and Parapsychology, Ist Ed. Vol. I. Historical background, Bharata Manisha, Varanasi.
- 167. Kovoor, T. Behanam (1937): Yoga. A Scientific Evaluation, Douer Publication, Inc., New York.
- 168. Kocher, H. C. and Pratap, V. (1971): Neurotic and yogic practices. Yoga Mimansa, Kaivalyadham, Lomavala, 14/1-2.
- 169. Krishnamacharya Yoga Mandiram (1983): Teaching Yogasana to mentally retarded: Vijaya Human Services. A report of the Training Programme, Madras.
- 170. Kundalini. A quarterly Magazine of International spiritual and scientific progress. B-98, Sarvodaya Enclave, New Delhi.
- 171. Kutumbiah, P. (1962): Ancient Indian Medicine, Ist Ed. Orient, Longmans, Bombay.
- 172. Lal, B. K. (1973): Contemporary Indian Philosophy, Ist Ed. Motilal Banarasidas, Delhi.
- 173. Lal Kanwar (1970): Kanya and the Yogic, Arts and letters. 57, Daryaganj, Delhi.
- 174. Life-International Monthly, Anand Ashram, Pandichery.
- 175. Madan Mohan; U. C. Rai, ; V. Balavittal; D. P. Thombre; Swami Gitanand. (1983): Cardiorespiratory changes during Savitri Pranayam and Shavasan. The Yoga Review, Vol. III, No. 1, pp. 25-34.
- 176. Mahidharasarm, Gorakshapadhati (1983); Pub. Khemraj Sri Krishna Das, Bombay.
- 177. Maitra, S. K. (1947): The spirit of Indian Philosophy. Indian Pres Ltd., Allahabad.

- 178. Majthia, Dharm Shiromani Sir Surendra Singh (1969): The great Yogic Sermon, Ist Ed. Allied Publishers London, New Delhi.
- 179. Madhumeha Chikitsa Yoga Dwara. Bihar School of Yoga, Monghyr.
- 180. Mayawati Memorial Edition (1976): The Complete works of Swami Vivekanand, 13 Ed. Advaita Ashram, Calcutta.
- 181. Meenakshi Devi (1974): Yoga for expectant mothers and others, Satya Press, Pandichery.
- 182. Mehta, Rohit (1975): Yoga. The art of Integration, Ist Ed. The Theosophical publishing House, Adyar, Madras.
- 183. Melkote, G. S. (1973): Concise report of work done at Yoga Research Institute, Hyderabad, Presented at First Scientific Seminar, CCRIMH, New Delhi.
- 184. Michael, A. Persinger (1984): Striking EEG Profiles from single Episodes of Glossolalia and Transcendental meditation: Perceptual and Motor skills,
  58, 127-133 (Neuroscience Laboratory Deptt. of Psychology-Laurentain University Sudburg Ontario, Canada, P 3 E 2c 6).
- 185. Michael, M.; Deimonte, Ph. D. (1984): Response to meditation terms of Physiological Behavioural and Self report measures. International Journal of Psychosomatics, 31 (2), 317.
- 186. Mira Gupta (1983): Possibilities of Janana Yoga therapy for psychosomatic diseases: The Yoga Review, Vol. VII, Vo. 1.
- 187. Mishra, S. P. and Singh, R. H. (1979): An opinion analysis on future development of Yoga. Jour. Res. Ind. Med. Yoga & Homeo. Vol. 14, No. 1, pp. 138-144, Mar. 1979.
- 188. Mishra, S. P. and Singh, R. H. (1984): Effect of certain yogic Asanas on the pelvic congestion and its anatomy. Ancient Science of Life. Vol. IV. No. 2, pp. 127-128,
- 189. Mohammad, U.; Kannan, V. et al. (1980): Glucose tolerance and insulin therapy after Yoga in Diabetes mellitus. J. D. A. I., 1:54.

- 190. Mouni Sadhu (1959): Concentration, Ruskin House. George alleon and Unwin Ltd., Museum Street, London.
- 191. Mukerji, A. P. (1922): The Doctrine and Practice of Yoga, Yogi Publication Society, Chicago.
- 192. Muktibodhamand Saraswati (1984): Swara Yoga: Bihar School of Yoga, Munger.
- 193. Munshi, K. M.; Divakar, R. R. (1964): Yogic powers God Realisation (V. M. Bhatta), Bhartiya Vidya Bhavan, Bombay.
- 194. Munshi, K. M.; Divakar, R. R. (1964): The culture of India (as Invisaged by Sri Aurobindo, Bhartiya Vidya Bhavan, Bombay.
- 195. Munshi, K. M.; Divakar, R. R. (1969): God experience (Swami Ram Das), Bhartiya Vidya Bhavan, Bombay.
- 196. Murthy, K. R.; Sahay, B. K. et al. (1983): Effect of Yoga in ventilatory functions in Normal Healthy Volunteers. Lung India, No. 5. 189-92.
- 197. Murthy, K. R.; Sahay, B. K. et al. (1984): Effect of Pranayama (Rechaka, Purapa, Kumbhaka) on Bronchial Asthma-an open study. Lung India, II, No. 2.
- 198. Nagendra, H. R. and Nagarathna, R. (1984): Initial studies for Yoga therapy for the mentally retarded: Vivekanand YOCTAS Report No. VKYOCTAS/BNG/O 14/84.
- 199. Nagendra, H. R.; R. Nagarathna (1983): Application of integrated approach of Yoga; A Review. The Yoga Review, Vol. III, No. 4.
- 200. Nagendra, H. R. (1984): The Basis for an integrated approch in Yoga Therapy. The Yoga Review, Vol. IV, No. 3 & 4.
- 201. Narayana Prasad (1968): Life in Sri Aurobindo Ashram, 2nd edition, Sri Aurobindo Ashram, Pandichery.
- 202. Navar, H. S.; R. M. Mathur and R. Sampatkumar (1975): Effect of Yogic exercise on human physical efficiency. Ind. J. Med. Res. 63: 1369-1376.

- 203. Nespor Kavel, M. D. (1985): Relaxation Training in therapy; Committee for the use of Yoga in rehabilitation, Prague, June, 26.
- 204. Nitya Prem ma (1977): Bhagvan Sri Rajneesh, Yoga the Alpha and Omega, Ist Ed. Rajneesh Foundation, Poona.
- 205. P. S. Raju, ; K. Anilkummar; S. S. Reddy et al. (1986): Effect of Yoga on exercise tolerance in normal healthy volunteers. Ind. J. Physiol. Pharmac. Vol. 30, No. 2.
- 206. Pandita, M. P. (1968): Kundalini Yoga, 3rd Ed. Ganesh and Co., Madras, 17.
- 207. Pandita, M. P. (1969): Easence of Upanishads, Sri Aurobindo Ashram, Pandichery.
- 208. Pandita, M. P. (1972): Kundalini in Yoga. Sri Aurobindo Ashram, Pandichery.
- 209. Pandita, M. P. (1975): All Life is yoga, Sri Aurobindo Ashram, Pandichery.
- 210. Pandita, M. P. (1974): meditations, Sri Aurobindo Ashram, Pandichery.
- 211. Pandita Shiva Sharma (1975): Yoga against spinal pain, George, G. Harrap. & Co., Ltd., London.
- 212. Paramhansa, Yogananda (1946): Autography of a Yogi. The philosophical Library, INC, 15 East, 40th Street, New York.
- 213. Paramhans Yoganand (1951): Autobiography of a yogi, Self Realisation Fellowship Las Angles.
- 214. Pasek, T. (1975): Relaxation, Concentration, Investigation according to the Yoga model in Poland, Collected papers on Yoga, Kaivalyadham, Lonavala.
- 215. Patel, C. H.: Yoga and Biofeed back in the management of hypertension. Lancet, 2: 1053, 1973.
- 216. Patel, C. (1962): On Yoga and Hypertension; Lancet-1.
- 217. Patel, C. (1953): Yogic Management of Hypertension; Lancet-2.

- 218. Patel, C. and W. R. S. North (1975): Randomised controlled trial of Yoga and biofeed back in management of hypertension: The Lancet, Vol. 2.
- 219. Pathak, P. V. (1931): The Heyapaksha of Yoga or a constructive synthesis of Psychological material in Indian Philosophy. The New order book Co., Ellis Bridge, Ahmedabad.
- 220. Pathak, J. D.; Mehrotra, P. P. et al. (1978): A plea for Pranayama for elderly. Ind. J. Physiol. Pharmac, Vol. 22.
- 221. Paul, Sir Dukes, K. B. E. (1960): The Yoga of Health, Youth and Joy (A treatise on Hatha Yoga adapted to the West), Cassell, London.
- 222. Prem Srikrishna. The Yoga of the Kathopanisad. The Ananda Pub lishing House, Allahabad.
- 223. Radhakrishnann, S. (1949): The Bhagvadgita, 2nd Ed. George Allen and Unwin Ltd. London.
- 224. Radhakrishnana, S. (1960): The Brahma Sutra. The philosophy of spiritual life, Ist Ed. George Allen and Unwin Ltd., London
- 225. Radhakrishnana, S. (1984): The Hindu view of Life, Seventh Edition, George Allen and Unwin Ltd., Ruskin House, 40 Museum Street, W. C., New York.
- 226. Radhakrishnan, S. (1954): The Principal Upnishadas. George Allen & Unwin. London.
- 227. Rai, P. S. (1984): Eight Lessons on Yoga and Yoga for health, Sudha Publications Banglore, India.
- 228. Raja, C. Kunhan, Dhammapada The Theosophical publishing House Adyar, Madras.
- 229. Rajalaxmi (1980): (1) Effect of Bramari and Bhastrika on the brain functioning and physiological activities. (2) Yoga therapy in Diabetes, Bronchial Asthma and hypertension: Mimeograph of the Indian Inst itute of Yoga and Allied Sciences.

- 230. Rajgopalachari, C. (1)59): Hinduism Doctrine and way of life, Bhartiya Vidya Bhavan, Bombay.
- 231. Rajneesh, Sri Bhagwan (168): Philosophy of nonvoilence, Motilal Banarasi Das, Delhi.
- 232. Rajneesh, Sri Bhagwan (1977): Path of self realization, Motilal Banarasidas, Delhi.
- 233. Rajyoga, Yoga Publishing House, 32 Papappa Garden, Bangalore-51.
- 234. Ramchandran, G. N. (1981): Yoga and Education: The Yoga Review, Vol. 1, No. 142. pp. 27-50.
- 235. Ramamurthi, B. (1983): Mental Health and Yoga. The Yoga Review, Vol. III, No. 1. pp. 1-7.
- 236. Reddy, M. Venkata (1986): Svasa (Asthma) References in Hatha yogic texts. The Yoga Review Vol. VI, No. 3 & 4. pp. 7-16.
- 237. Regan (1969): The effect of Sarvangasana and Halasana on the Basal Metabolic rate: Postgraduate Thesis, Jiwaji University.
- 238. Rele, V. C.: In the mysterious Kundalini: Pub. Taraporewala Sons & Co., Bombay.
- 239. Rele, V. C. (1972): Yogic Asanas for Health and Vigour, 10th Ed., D. B. Taraporevala Sons & Co., Pvt. Ltd., 210, Dadabhai Naroji Road, Bombay.
- 240. Religious Traditions, Six monthly journal, Maureen Mc Merney Australian Broadcasting Commission, Leslie, Maitland, New York.
- 241. Richard, L.; Hettleman (1966): Yoga for physical fitness. A Thomas & Co. Preston.
- 242. Rishabhchand (1974): Integral yoga of Sri Aurobindo, 3rd Impression Sri Aurobindo Ashram, Pandichery.
- 243. Roldan, E.; Z. Bohdaneky, C.; Dostalek, P.; Lansky; J. Los.; M. Indra; V. Lepicovspa; T. Radil (1981): Computor analysis of EEC during some Hathyogic exercises: Activ. Nerv. Sup. (Praha), 23, No. 1.

- 244. Sachdeva, I. P. (1978): Yoga and Depth. Psychology, Motilal Banarasidas, Delhi.
- 245. Sahay, B. K.; P. Sitaram Raju et al. (1986): Glucose and Insulin levels in obese non-diabetics; JAPI Vol. 34, No. 6.
- 246 Sahay, B. K.; B. Sadasivuda. Ramanand Yogi (1982): Biochemical parameters in normal volunteers before and after yogic practices; Ind. J. Med. Res., 76: 144-148, Dec.
- 247. Sahay, G. S. and Mrs. Desai, A. B (1984): Ayurvedic estimation of food recommended, Prohibited for a Yoga Practitioner as per G. H. S. & H. P.: International conference on Yoga and Research Lonavala.
- 248. Sahay, B. K.; Ramanand Yogi; P. S. Raju et al.: The effect of Yoga in Diabetes: Diabetes in developing countries chapter. 70.
- 249. Salagar, D. C.; Y. S. Bisen, and M. J. Jinturbar (1975): Effect of Padmasana; A Yogic exercise on muscular efficiency. Ind. J. Med. Res., 63:768-792.
- 250. Sampurnand Dr. (1965): Yoga Darshan, Ist Sanskaran, Hindi Samati, Lucknow.
- 251. Santha Joseph; K. Sridharan et al. (1981): Study of some physiological and biochemical parameters in subjects undergoing yoga training. Ind. J. Med. Res. 74: 120-24.
- 252. Sarangdhara, Saranadhara Samhita. The Baidyanath Ayurveda Bhavan Pvt. Ltd., Purvakhand, Chap. 5.
- 253. Satprem (1975): Sri Aurobindo on the Adventure of consciousness, 4th Indian Ed. Sri Aurobindo Ashram, Pandichery.
- 254. Scharfetter, Chr. (1970): Meditation-conceptual field, shifting of "Findings" application in psychotherapy. Psychother. Med. Psychol., 29, P. 78-951 Orig. in German.
- 255. Selvamurthy, W. H. S,; Nayar, N. T.; Joseph and S. Joseph (1983): Physiological effects of Yogic practices. NIMHANS (1), 71-80.

- 256. Shafi, M. (1973) Adaptive and therapeutic aspects of Meditation. Int. J. of Psychonalytic therapy. 2. p. 364-382.
- 257. Shanker Rao, P. (1968): Oxygen consumption during Yoga type of breathing at altitudes of 520 mtrs. and 3800 mtrs. ind. J. Med. Res.
- 258. Sharma, R. N. (1984): Indian Psychology, Res. J. Phil. Soc. Vol. 1, No. 2, Kedarnath Ramnath, Meerut City.
- 259. Sharma, P. V. (1972): Indian Medicine in the classical age, Ist Ed. The Chowkhambha Sanskrit Series office, Varanasi.
- 260. Sharma, Mahidhar, Gorksa Padhati, Khemraj Srikrishnadas, 7th Khetwan, Bombay.
- 261. Sharma, S. C. (1965): Ethical Philosophies of India, Ist Ed. George Allen 4, Unwin Ltd., Ruskin House Museum Street, London.
- 262. Sharma, Thakur Prasad (1960): Yoga Vasisth Maharamayana Sri Gyan Sagar Yantralaya.
- 263. Shastri, A. Mahadeva (1947): The Bhagvadgita with the commentry of Sankaracharya, 4th Ed., V. Ramaswami Sastrulu & Sons. Madras.
- 264. Shastri, M. N. Dutta (1967): Agni-Puranam, 2nd Ed. Chowkhambha Sanskrit Series Office, Varanasi, Vol. I.
- 265. Shastri, P. S. Subrahmanyam (1956): Lectures of Patanjalis Mahabhasya, Trichurapalli.
- 266. Shastri, Pandita, A. Mahadeo (1948): The Yoga Upanisads with the commentry of Sri Upanisad Brahma Yogin, Second Ed. The Adyar Library and Research Centre, Adyar, Madras, 1968.
- 267. Shembekar, A. G. & Katey, S. K. (1980): Yogic exercise in the management of Diabetes mellitus; J. D. A. I., 20; 167.
- 268. Shringy, R. K. (1984): Transformation of consciousness in Yoga: The Yoga Review, Vol. IV, No. 3 & 4.
- 269. Shringy, R. K. (1978): Yoga of Effortless action, Jyoti publication, Varanasi.

- 270. Shyam Sunder (1974): The Gita. Sri Aurobindo Ashram, Pandichery.
- 271. Sigdell, J. E. (1979): An ancient method of Kriya-Yoga, A modern alternative to the artificial kidney: The Indian Review Oct. p. 38-44.
- 272. Singh, R. G.; M. Singh et al (1986): Some Biochemical changes in Human volunteers after scheduled Hatha Yogic Practices; The Yoga Review, Vol. VI. No. 3 & 4. pp. 17-20.
- 273. Singh, R. H. et al. (1982): Physiological and therapeutic studies on Yoga. The Yoga Review, Vol. 2. No. 4, pp. 185-209.
- 274. Singh, Thakur Jaideva (1970): Philosophy of Evolution, Western and Indian, Sri Aurobindo Ashram, Pandichery.
- 275. Singh, R. H.; Dwivedi, K. N.; Udupa, K. N.: Biochemical studies on Meditation in Foreign Volunteers (Abst.); 62nd Session, Ind. Sc. Congress, Physiological section, p. 94.
- 276. Singh, R. H. (1974): Comparative physiological and biochemical studies on different types of Yogic Practices. Proc. 61st Ind. So. Cong. Part III, Abstract, pp. 79-80, 1974.
- 277. Singh, R. H. (1973): Studies on physiological endocrine metabolic and neurophysiological response to the practice of Yoga in young normal volunteers. Proc. 60th Ind. Sc. Cong. Part III, Abst. p. 693, 1973.
- 278. Singh, R. H.; Settiwar, R. M. and Udupa, K. N. (1972): Comparative studies on physiological response to a course of Yogic Exercises. Proc. 59th Session of Ind. Sc. Congress, Physiological Session, Part III, 1972.
- 279. Singh, R. H. and Udupa, K. N. (1970): Role of certain yogic practices in the prevention and treatment of gastrointestinal disorders. Jour. Res. Ind. Med. Yoga & Homeo. 11:2, 1976.
- 280. Singh, R. H. and Udupa, K. N. (1977): Psychobiological studies on some Hatha-yogic practices. Quart. Jour. of Surg. Scs., Vol. 13, pp. 290-293, No. 3 & 4, Dec. 1977.

- 281. Singh, R. H.; Shettiwar, R. M. and Udupa, K. N. (1978): A study on the role of Yogic practices in the prevention and treatment of hypertension. Swasth Hind. Special Issue on Hypertension 22/3 & 4,63-65, 1978.
- 282. Singh, R. H.; Shettiwar, R. M. and Udupa, K. N. (1978): Role of some Hathayogic practices in the management of chronic Rheumatic diseases. Proc. IX National Seminar on Rheumatic disease, MML Centre, for Rheumatic diseases, New Delhi (1978); Rheumatism.
- 283. Singh, R. H. (1978): Yoga and Ayurveda with special reference to Yoga of Charaka Samhita. Quart. J. of International Yoga coordination Centre, 2/1:14, 1978.
- 284. Singh, Pancham (1975): The Hathayoga Pradipika; 2nd Ed. Oriental Books reprint Corporation, New Delhi.
- 285. Sinha, A. K. (1983): Philosophy of Health and Medical Sciences, The associated publisher Ambala Cantt. India.
- 286. Sinha, A. K. (1976): Perspectives in Yoga. Bharat Manisha, D. 28/171, Pandey Haveli, Varanasi.
- 287. Sinha. Jadunath (1961): Indian Psychology. Emotion and will. Vol. II, Ist Ed. Sinha Publishing House, 39, S. R. Das Road, Calcutta-26.
- 288. Sita Devi (1976): Yoga Physical Education, 9th Ed. The Yoga Institute, Santacruz, Bombay.
- 289. Smith, M. J. N. (1980): An Illustrated Guide to Asanas and Pranayama: Krishnamacharya Yoga Mandiram, Madras.
- 290. Sri Nivasan, T. M.; T. V. Ananthanarayanam (1983): Asana based exercises for the management of low back pain. The Yoga Review, Vol. III. No. 1. pp. 45-58
- 291. Srichandra Vidyaranava (1979): Daily practice of the Hindu containing the morning and mid day duties. 3rd revised Edition, Oriental Books Reprint Corporation, New Delhi.

- 292. Stace, W. T. (1961): Mysticism and Philosophy. Macmillan and Co. Ltd., London.
- 293. Subramaniam, S. (1979): Yoga-its probable role in maintaining and restoring normal health: Proc. First National Conference on Yoga, Science and Society, Banaras Hindu University publication.
- 294. Surath (1971): Scientific Yoga for the man of today, Ranney Publications, California.
- 295. Sushruta, Sushruta Samhita. The Chowkhambha Sanskrit Series, Varanasi, Sutrasthana, 14, 15, 16, 21.
- 296. Sushruta, Sushruta Samhita. The Chowkhambha Sanskrit Sansthana, Varanasi. Nidan Sthana, Chap. 1.
- 297. Sushruta, Sushruta Samhita. The Chowkhambha Sanskrit Sansthana, Varanasi, Sharira Sthana Chap. 1, 2, 4.
- 298. Sushruta, Sushruta Samhita. The Chowkhambha Sanskrit Sansthan, Varanasi. Chikitsa Sthana, Chap. 1, 24, 29.
- 299. Sushruta, Sushruta Samhita. The Chowkhambha Sanskrit Sansthana, Varanasi, Uttar Tantra, Chap. 40, 50, 60.
- 300. Swami Sarvanand (1959): Prasnoupnisad, 6th Ed, Sri Ram-Krishna Math, Madras.
- 301. Swami Sarvanand (1960): Kenoupnisad, Ram Krishna Math, Madras, 1960.
- 302. Swami Sarvar and (1955): Aitareyoupnisad, Sri Ram Krishna Math, Madras, 1955,
- 303. Swami Shivanand (1955): Tantra Yoga, Nada Yoga and Kriya Yoga, Ist Ed. The Yoga Vedanta, Forest University; Shivanand Nagar, Rishikesh.
- 304. Swami Gambhiranand (1966): Shankaracharya, Eight Upanisads, Advait Ashram, Calcutta.

- 305. Swami Chidabhanand (1967): The Bhagvadgita, 2nd Ed. Tapovan Publishing House, Triputi.
- 306. Swami Digamberji (1950): Hath Pradipika of Svatamaram, Kaivalya-dham, Lonavala, Poona.
- 307. Swami Gitanand (1970): Yogic Psychic Neurology; Satya Press, Pandichery.
- 308. Swami Gitanand: Yoga therapy for psychosomatic disorders; Proc. 2nd World Congress on Yoga, Pandichery.
- 309. Swami Gitanand (1978): Gita Inspirations, Vol. I, Fourth Ed., Anand Ashram, Pandichery.
- 310. Swami Gitanand (1970): Pranayam, The Science of vital control; Satya Press, Pandichery.
- 311. Swami Yogendraji (1972): Yoga, Personal Hygiene, 10th Ed. The Yoga Institute, Santacruz, Bombay, Vol. I, II.
- 312. Swami Yogendraji (1975): Facts about Yoga, Third Reprint. The Yoga Institute, Santacruz, Bombay.
- 313. Swami Yogendraji (1976): Why Yoga. The Yoga Institute, Santacruz, Bombay.
- 314. Swami Satyanand Sarswati (1976): Dynamics of Yoga. 3rd reprint. Bihar School of Yoga, Monghyr.
- 315. Swami Satyanand Sarswati (1983): Meditation from Tantras; Bihar School of Yoga Munghyr (Bihar).
- 316. Swami Satyanand Sarswati (1983): Yoga Nidra from Tantras; Bihar School of Yoga Munghyr (Bihar).
- 317. Swami Shivanand (1970): Practice of Yoga, 4th Edn. A Divine Life Society Publication, Shivanand Nagar, Tehrigarhwal.
- 318. Swami Shivanand (1975): Concentration and Meditation, 5th Ed. A Divine Life Society Publication, Shivanand Nagar, Tehri Garhwal.

- H9 Swam Shivanand (1975): The Science of Pranayama, 10th Ed. The Divine Life Society, Shivanand Nagar, Tehrigarhwal.
- Swami Shivanand (1971): Practical Lessons in Yoga, 5th Ed. The Divine Life Society, Shivanand Nagar, Tehrigarhwal.
- 321. Swami Shivanand (1971): Kundalini Yoga, 6th Ed. The Divine Life Society, Shivanand Nagar, Tehrigarhwal.
- 322 Swami Shivanand (1961): Practice of Yoga, Fourth Ed. Yoga Vedanta Forest Academy Press, Shivanand Nagar, Rishikesh.
- 323. Swami Shivanand (1958): Dhyan Yoga. The Yoga Vedant Forest University, Shivanand Nagar, Rishikesh.
- 324. Swami Shivanand (1961): How to Live 100 years. Yoga Vedanta Forest University, Rishikesh.
- 325. Swami Shivanand (1950): Raj Yoga, 2nd Ed. The Yoga Vedanta Forest University, Rishikesh.
- 326. Swami Shivanand (1974): Mind, its mysteries and control, 8th Ed. Divine Life Society, Shivanand Nagar, Tehrigarhwal.
- 327. Swami Shivanand, Ten Upanishads. The Divine Life Society, Shivanand Nagar, Tehrigarhwal.
- 328. Swami Shivanand, Bliss Divine. The Divine Life Society Shivanand Nagar, Tehrigarhwal.
- 329. Swami Shivanand. Through Power. The Divine Life Society, Shivanand Nagar, Tehrigarhwal.
- 330. Swami Shivanand. All about Hinduism. The Divine Life Society, Shivanand Nagar, Tehrigarhwal.
- 331. Swami Shivanand. Ethical Teachings. The Divine Life Society, Shivanand Nagar, Tehrigarhwal.
- 332. Swami Vivekanand (1974): Karma Yoga 15th Ed. Advait Ashram Mayawati Pithoragarh.

- 333. Swami Vivekanand (1976): Jnana Yoga, 14th Impression, Advait Ashram Mayawati Pithoragarh.
- 334. Swami Vivekanand (1974): Bhakti Yoga, 13th Impression, Advait Ashram, 5 Delhi Entally Road, Calcutta-14.
- 335. Swami Vivekanand Sarswati. The effects of Yoga on hypertension, Bihar School of Yoga, Monghyr.
- 336. Swami Vaidyaranya, Translated from the Sanskrit by Shastri Hari Prasad (1954): Panchadasi A Treatise on Advaita Metaphysics, Shanti Sadan, London.
- 337. Swami Dayanand Saraswati (1970): Translated by Sri Durga Prasad, Satyartha Prakash (Light of Truth), 2nd Edn. Jangyan Prakashan, New Delhi.
- 338, Swami Krishnanand (1973): A short history of religious and Philosophic thought in India. A Divine Life Society, Publication, Shivanand Nagar, Tehrigarhwal.
- 339 Swami Krishanand (1972): The realisation of the Absolute. A Divine Life Society, Shivanand Nagar, Tehrigarhwal.
- 340. Swami Kuvalyanand (1977): Asanas, 6th Impression, Kaivalyadham, Lonavala, Poona.
- 341. Swami Kuvalyanand (1977): Pranayama, 6th Ed. Kaivalyadham, Lonavala, Poona.
- 342. Swami Kuvalayanand and Venekar, S. L. (1971): Yoga therapy. Its Basic Principles and methods: D. G. Ministry of Health Govt. of India, New Delhi.
- 343. Swami Shivanand Sarswati (1946): Kundalini Yoga, 3rd Ed., P. K. Vinyagam & Co. 32, Broadway, Madras.
- 344. Swami Satyanand Sarswati (1974): From shore to shore Yoga, Shivanand Ashram Monghyr, Bihar.
- 345. Swami Yogeshwaranand Sarswati (1951): Blood pressure, Management through Yoga, 2nd Ed. The Bihar School of Yoga, Monghyr.

- 346. Swa ni Purohit (1973): Aphorisms of Yoga, Faber and Faber Ltd. London.
- 347. Swami Prabhavanand (1960): The spiritual heritage of India, Sri Ram Krishna Matha, Madras.
- 348. Swami Vyas Deo ji Maharaj (1964): Sciences of Soul, Yoga Niketan Trust Sarvashram, Rishikesh.
- 349. Swami Nityanand Avdhuta (1963): The Philosophy of Union with supreme, Mahanirvan Matha, Nababdip. Nadia, West Bengal.
- 350. Swami Satyanand Sarswati (1975): Meditations from the Tantras, 2nd Ed. Bihar School of Yoga, Monghyr.
- 351. Swami Rangnathanand (1979): The Science of human energy Resources. Indian Institute of Public Administration. Indraprastha Estate Ring, Road, New Delhi.
- 352. Swami Rangnathananda (1981): Yoga as science of human energy resources. The Yoga Review Vol. 1, No. 1 & 2. p. p. 1-25.
- 353. Swami Satyanand Sarswati, Asana, Pranayama Mudra, Bandha. Bihar School of Yoga, Monghyr.
- 354. Swami Satyanand Sarswati. Dhyan Tantra Ke Aloke mein. Bihar School of Yoga Monghyr.
- 355. Swami Chidanand, Eternal Messages. The Divine Life Society Shivanand Nagar Tehrigarhwal.
- 356. Swami Chidanand. The Path beyond sorrow. The Divine Life Society. Shivanand Nagar, Tehrigarhwal.
- 357. Swami, S Dayanand Sarswati. Yogic Management of Asthma and Diabetes, Bihar School of Yoga, Monghyr.
- 358 Swami Ranganathanand (1978): Science and religion, Advait Ashram, Calcutta.
- 359. T. K. V. Desikacher (1980): Religiousness in Yoga: Lectures on theory and Practice. (Ed.) Marry Louise skeleton and J. R. Carter, University Press, America.

- 360. Taimini, I. K. (1974): The Science of Yoga, 5th Ed. The Theosophical Publishing House, Adyar, Madras.
- 361. Taimini. I. K. (1973): Glimpses into the Psychology of Yoga. The Theosophical Publishing House, Adyar, Madras.
- 362. Taimini, I. K. (1976): The ultimate reality and realisation. The Theosophical Publishing House, Adyar, Madras.
- 363. Taimini, I. K. (1974): The secret of self realization. The Theosophical Publishing House, Adyar, Madras.
- 364. Tattvaloka, Journal of Vedanta, Navasufa Road, 26, V, K. Aiyer Road, Madras.
- 365. Teerth, Sri Raghvendra: Gita Vivritti; Comments on Gitaverse (IX-22)
- 366. Tripathi, K. M; Singh, R. H. (1984): Ashtangika Yoga its symmetrical wholeness and mutual inter-relations with special reference to Yama, Niyama and Samadhi. The Yoga Review, Vol. IV. No. 142, p. p. 27-40.
- 367. Udupa, K. N. and Singh, R. H. (1978): The Science and Philosophy of Indian Medicines Ist Ed. Sri Baidyanath Ayurveda Bhavan, Nagpur.
- 368. Udupa, K. N. (1976): A Manual of Science and Philosophy of Yoga. Journal of Research in Indian Medicine, Yoga and Homeopatky, B. H. U., Varanasi.
- 369. Udupa, K. N. (1978): Disorders of stress and their management by Yoga, Banaras Hindu University Press.
- 370. Udupa, K. N., Singh, R. H. and Shettiwar, R. M. (1971): Studies on Physiological endocrine and metabolic response to the Practice of 'Yoga' in young normal volunteers. Jour. Res. Ind. Med., Vol. 6, No. 3, pp. 345-353, 1971.
- 371. Udupa, K. N.; Singh, R. H. (1972): Scientific Basis of Yoga. Jour, of American Medical Asso. J. A. M. A., 220, 1365.

(

- 372. Udupa, K. N.; Singh, R. H. and Yadava, R. A. (1973): Certain studies on Psychological and Biochemical response to the practice of Hathayoga in Young normal volunteers. Ind. J. Med. Res. Vol. 61, No 2, pp. 237-244, 1973.
- 373. Udupa, K. N.; Singh, R. H. and Settiwar, R. M. (1975): A comparative study on the effect of some individual Yogic Practises in normal persons. Ind. J. Med. Res. Vol. 63/8, pp. 1060-1071, 1975.
- 374. Udupa, K. N.; Singh, R. H.; Settiwar, R. M. and Singh, M. B. (1975): Physiological and Biochemical changes following practice of some yogic and non-yogic exercises. Jour. Res. Ind. Med. Vol. 10, No. 2, pp. 91-93, 1975.
- 375. Udupa, K. N.; Singh, R. H.; Settiwar, R. M. (1975): Physiological and Biochemical studies on the effect of Yogic and certain other exercise. Ind. J. Med. Res. Vol. 63/4, 620-624, 1975.
- 376. Udupa, K. N.; Singh, R. H. and Settiwar, R. M. (1975): Studies on the effect of some yogic breathing exercises (Pranayamas) in normal persons. Ind. J. Med. Res. Vol. 63, No. 8, pp. 1062-1065, 1975.
- 377. Udupa, K. N.; Singh, R. H. and Settiwar, R. M. (1975): Neurohumoral changes following meditation. Jour. Res. Ind. Med., Vol. 10, No. 2, pp. 64-66, 1975.
- 378. Udupa, K. N.; Singh, R. H.; Dwivedi, K. N.; Pandey, H. P. and Rai, V. (1975): Comparative biochemical studies on Meditation. Ind J. Med. Res. Vol. 63/12, pp. 16-70.
- 379. Udupa, K. N.; Singh, R. H. and Settiwar, R. M. (1975): Preliminary therapeutic trials of some yogic practices, Swasth Hind Special issue on Yoga, 1975.
- 380. Udupa, K. N.; Singh, R. H.; Singh, M. B.; Settiwar, R. M. (1978): Further studies on the combined practice of some yogic postures, breathing exercises and relaxation. Jour. Res. Ind. Med, Yoga and Homeo. 13/4: 7-11, 1978.

- 381. Udupa, K. N.; Singh, R. H.; Settiwar, R. M.; Singh, M. B. (1978): Studies on the physiological effects of the Yogic relaxation posture, Shavasana, J. Res. Ind. Med. Yoga and Homeo. 13/1:147, 1978.
- 382. Udupa, K. N; Singh, R. H.; Settiwar, R. M; Singh, M. B. (1978): Studies on the physiological effects of the corrective posture Shirshasana. J. Res. Ind. Med. Yoga and Homeo. 13/1:143, 1980.
- 283. Udupa, K. N. and Singh, R. H. (1979): Yoga in relation to brain pituitary-a irencortical axis. In a special volume on brain-pituitary-adrenocortical axis. Academic Press (London), 1979.
- 384. Upadhyaya, Baldev (1950): Sri Sankaracharya, Ist Ed. Hindustani Academy, U. P. Allahabad.
- 385. V. Anantharaman and Sarada Subrahamanyam (1983): Physiological benefits in Hathyogic training; The Yoga Review, Vol. III. No-1 pp. 9-24.
- 386. Vagbhatta, Ashtanga Sangrah, Chowkhambha Sanskrit Series, Banaras, Sutrasthana, Chap. 1, 3, 5, 20.
- 387. Vagbhatta, Ashtanga Hridaya; Chowkhambha Sanskrit Sansthan, Varanasi, Sutra Sthana, 1, 3, 5, 20.
- 388. Vagbhatta, Ashtanga Hridaya; Chowkhambha Sanskrit Sansthan, Varanasi, Sarira Sthana, Chap. 3, 5.
- 389. Vagbhatta, Ashtanga Hridaya; Chowkhambha Sanskrit Sansthana, Varanasi, Kalpasthan, Chap. 5.
- 390. Vagbhatta. Ashtanga Hridaya; Chowkhambha Sanskrit Sansthan, Varanasi, Uttar Tantra, Chap. 26.
- 391. Vachaspatyam; Chowkhambha Sanskrit Sansthana, Varanasi.
- 392. Vakil, R. J. (1950): Remarkable feet of endurance by a Yogi Priest; The Lancet, Vol. 2, p. 871
- 393. Vasu, Sri Chandra (1943): The Gherand Samhita. The Theosophical Publishing House, Adyar, Madras.

- 394. Vasu, Srichandra (1975): An Introduction to the Yoga Philosophy, 2nd Ed Oriental Books Reprint Corporation, 54, Rani Jhansi Road, New Delhi.
- 395. Venkatesanand (1978): Enlightened Living (Interpretative Translation of the Yoga Sutra of Maharshi Patanjali). Motilal Banarasi Das, Jawahar Nagar, Delhi.
- 396. Venkta Reddy, M. (1985): Ayurvedic aspects in Hathapradipika; The First World Congress on Yoga and Ayurveda, Congress Programme, Republic of San Marino.
- 397. Venkta Reddy, M.: Ayurvedic concepts in Hatha Yoga: Supported by Central Council for Research in Ayurveda and Siddha, New Delhi.
- 398 Venkta Reddy, M. (1986): Hatha Yoga is a holistic system of 21st century, Medical aspects: The International Conference on Traditional Medicine, organised by Govt. of Tamil Nadu, Madras.
- 399. Vimala Karnataka (1986): Mind and its modifications according to Patanjali; The Yoga Review, Vol. VI, No. 3 & 4. pp. 21-25.
- 400. Vinoba Bhave (1956): Atmajnan aur Vijnan: Serva Seva Sangh.
- 401. W. H. O. (1937): Maha Yoga or the Upanishadic Lore: The New light: publishing House, Pudupotah.
- 402. Wallace, R. K. (1970): Physiological effects of transcendental Meditation; Science, Vol. 167, p. 1751, 1954.
  - 403. Wallace, R.; Keith, P. H. D.; Joel Silver, M. D.; Paul, J.; Mills, B. S.; Michael, C.; Dillbeck, PHD and Dale, E.; Wagoner, PHD. (1983): Systolic blood pressure and long term practice of the transcendental meditation and TM-Sidhi Program: Effects of TM on systolic blood pressure; Psychosomatic Medicine, Vol. 45, No. 1, March.
  - 404 Wallace, R. K. (1970): Physiological effects of Transcendental Mditation-A proposed forth major state of consciousness: Ph. D. Thesis, Deptt. of Physiology, University of California, U. S. A., Published in Vol. I, Scientific Research on TM Programme, Collected papers.

- 405. Wallace, R. K. and Benson, H. (1972): The Physiology of Meditation, Scientific American, 226: 84-90.
- 406 Wallace, Slater (1968): Raj Yoga. The Theosophical Publishing House, Adyar Madras, India/London, England.
- 407. Walli, K.: The conception of Ahimsa in Indian thought. Bharat Manisha, Pandey Haveli, Varanasi.
- 408. Walli, K: Theory of Karman in Indian thought, Bharat Manisha, Pandey Haveli, Varanasi.
- 409. Weinman, M. L.; Semchuk, K. M.; Gaehe, G.; Mathew, R. (1982): The effects of stressful life events on EMG-Biofeed back and relaxation training in the treatment of anxiety: Biofeedback and self regulation, 8: 191-205.
- 410. Wenger, M. A et al. (1961): Some studies on established yogis, Circulation, 24: 13-19.
- 411. Werner, Karel (1977): Yoga and Indian Philosophy, Motilal Banarasi Das, Delhi.
- 412. Wilson, H. H. (1946): Rigveda Samhita, 2nd Ed. Bangalore Printing and Publishing Co., Bangalore, city.
- 413. Wilson, A. F.; Honsberger, R. Chiv J. T. and Novey H. S. (1975): Transcendental Meditation and Asthma; Respiration, Vol. 32, p. 74-80.
- 414. Willard, R. Trask (1969): 'Yoga', 2nd Edn. Ballingen Foundation, INC, New York.
- 415. Woods, I. H. (1977): Yoga System of Patanjali, Motilal Banarasi Das, Jawahar Nagar, Delhi.
- 416. Woods, J. H.: The Yoga system of Patanjali: Harvard Oriental Series (Vol. 17); Translated from the original Sanskrit Text.
- 417. Yadava, H. R. (1977): Yoga Course for all. Bhartiya Vidya Bhavan, Bombay.
- 418 Yagyavalkya Brahmachari (1973): Hatha Yoga Pradipika, Ist Ed. Motilal Banarasi Das, Delhi.

- 419. Yesudian, Selvarajan (1963): A Yoga Miscellany. George Allein 4. Unwin Ltd., London, 1963.
- 420. Yesudian, Selvarajan and Haich, Elisabeth (1970): Raj Yoga, George, Allen 4, Unwin Ltd., London.
- 421. Yogaratnakar, Chowkhambha Sanskrit Series Office, Varanasi.
- 422. Yoga Awareness. Quarterly Journal, International Yoga Coordination Centre, Bombay.
- 423. Yoga Visesanka, (1977) Sanmarga. All India, Dharma Sangh, Varanasi.
- 424. Yoga Physical Culture of Secret of Happiness: Yoga Publishing House, 32, Papappa Garden, Tasker Town, Bangalore-51.
- 425. Yogi (1969): Yoga and long life: Third Printing, Yogi Gupta, New York Centre, 70, West 46th St. New York.
- 426. Yogi Ramcharka (1974): Advance course in Yogic Philosophy, and Oriental occultism; Second Asian Reprint. D. B. Taraporewala Sons & Co., Pvt. Ltd., Bombay.
- 427. Yogi Raj Swami Satchidanand (1972): Integral Yoga Hatha; Third Printing Holt Rinehart and Winston, New York.
- 428. Yogendra, Jaideva, Clementraj (1971): Yoga today, Macmillan Co. of Indian Madras.
- 429. Yogacharya Shantikumar (1974): The Science of Yogic breathing (Pranayama), D. B. Taraporevala Sons & Co. Bombay.
- 430. Zahehner, R. C. (1969): The Bhagvad-Gita, Oxford at the Clarendon Press.
- 431. Monro, R. (1988) Scientific Bibliography on yoga. Biomedical Group (U. K.), Cambridge, England.

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