

# Yoga Modules for Institutions of Higher Learning



**KAIVALYADHAMA**  
YOGA FOR THE WORLD

**PRESENTATION OF THE MODULE TO H. E. SHRI. S. M. KRISHNA,  
GOVERNOR OF MAHARASHTRA**

Also present was **Smt. Dr. Joyce Shankaran**, Addl.Chief Secretary,  
Higher & Technical Education,



# Yoga Modules for Institutions of Higher Learning

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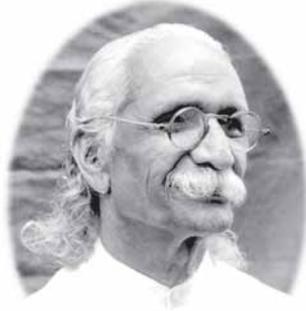
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*"In our Indian effort to scientifically investigate the field of Yoga, science is looking not only at the heart of the human being but also at its mind and spirit and is trying to develop a perfectly integrated personality, not only for an individual but for the whole of mankind"*

*- Swami Kavalayananda  
Founder Kaivalyadhama*

## PREFACE

A student who finishes school and has just entered in to college actually gets in to a different role. He finds that a greater level of freedom is being granted to him and so also his role in the decision making process has increased. This transition has its positive effects, such as personality building, greater motivation, increase in self esteem and self confidence levels and ability to set up goals for himself. On the other side he also faces the challenges of competition, expectations, peer group pressure and behavioral changes. In a study carried out on Stress amongst students<sup>1</sup> it was found that stressed students are less likely to practice healthy behaviors and are more prone to practice bad habits. Students under greater stress also exhibit lower levels of self esteem and reduce perceptions of their health status. In another study<sup>2</sup> it was revealed that the students are experiencing role overload, role stagnation and self role distance.

In the Education policy 1986, Yoga has been recommended as an integral part of the education system. Positive effects of Yoga have been proved through various researches<sup>3</sup> which have been carried out. In a study on medical students<sup>4</sup> it was revealed that the Yoga group showed improvement in various parameters such as better sense of well being, feeling of relaxation, improved concentration, self confidence, improved efficiency, good interpersonal relationship, increased attentiveness, lowered irritability levels and an optimistic outlook in life.

There have been independent efforts to inculcate Yoga in the institutions of higher learning, however a systematized and a combined effort was missing. While we discussed this option with the academicians, administrators, managements of the colleges, a prominent view was, that, there is a need for a

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1. Stress at College : Effects on health, habbit, Health Status and self esteem:College Students Journal, June 2000 by Suzanne S. Hudd, Jeniifer Dumlaio, Diane Erdmann-Sager, Danier Murray et. al..
  2. Examining role stress among technical students in India :Social Psychology of Education, Volume 10, Number 1, March 2007, Page 77-91
  3. Annex - 4
  4. Stress due to exams in medical students- role of yoga; Indian J Physiol Pharmacol 1999 Apr; 43 (2) : 218-24.



standard module of Yoga which can be followed in the institutes of higher learning (+ 12th grade). Absence of a standard Yoga module combined with fact that there are multiple methodologies or schools of thoughts adds to confusion.

Considering this view, Kaivalyadhama initiated a process to standardize the Yoga module. It was imperative to get all the Yoga institutes in Maharashtra together and form a consensus on this. It was also important that we receive active support from the Department of Higher & Technical Education, Government of Maharashtra<sup>5</sup>.

In August we wrote to the Department of Higher & Technical Education which agreed to support this effort by participating as the Joint Organizer in the symposium which was meant to finalize the draft of the module.

We called two meetings wherein various prominent institutes of Yoga in Maharashtra were invited. The meetings were held on 20th Sept & 15th Oct 2007. The module was drafted in these two meeting. Institutes which participated were

- 1) Yoga Vidya Dham, Nasik
- 2) Yoga Vidya Niketan, Vashi
- 3) Maharishi Vinod Yoga Research Institute, Pune
- 4) Rammani Iyengar Yoga Institute, Pune
- 5) Ghantali Mitra Mandal, Thane
- 6) Brihan Maharashtra Yoga Parishad, Amravati
- 7) Hanuman Vyayam Prasarak Mandal, Amravati

Yogacharya Shri. B. K. S. Iyengar in his letter<sup>6</sup> gave us his valuable suggestions and also nominated his representative to participate in the process.

As the next step we organized a symposium on the 17th November 2007 to put forth the draft module amongst the academicians for their suggestions. Their views and suggestions are important so as to increase the probability in implementation of the module. The symposium was attended by participants from across the state together with the representatives of the Yoga institutes.

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5. Letter of the Department of Higher & Technical Education, Government of Maharashtra Annex - 1

6. Annex - 2



## **Yoga Modules for Institutions of Higher Learning**

After taking in to consideration the views and suggestions expressed in this symposium, the draft was finalized. This final module was presented before H. E. Shri. S. M. Krishna the Governor of Maharashtra on the 4th of December 2007 wherein we requested him to recommend it to the Vice Chancellors of the universities in Maharashtra, so that positive steps can be taken to introduce it at the college level.

It is with immense pride with which we say that it is for the first time in India that such a combined effort has been initiated and successfully completed, at the sate level.

We hope that this module will make it easier for the educational institutions to adopt Yoga practices for their students. We are open to any suggestions which come along the way to further strengthen this module.

**- Subodh Tiwari**



## ACKNOWLEDGEMENT

We thank Ms. Rajvi Mehta from Ramamani Iyengar Yoga Institute; Yogacharya Vishwas Mandalik of Yoga Vidya Dham, Nasik; Padmashree Sadashiv Nimbalkar of Yoga Vidya Niketan, Vashi; Dr. Samprasad Vinod from Maharshi Vinod Yoga Research Foundation, Pune; Yogacharya Shrikrishna Vyavahare from Ghantali Mitra Mandal, Thane; Dr. B. S. Damle from Yoga Vidya Dham, Pune; Dr. Charusheela Javade from Aurangabad; & Shri Vinay Deshmukh, Secretary, Brihan Maharashtra Yoga Parishad, Pune for their contributions in the pre symposium meetings.

All the staff members of the institute of Kaivalyadhama for their continuous help, suggestions and support and for making the organization of the symposium successful.

Shri M. M. Gore & Shri G. S. Sahay, Coordinators of the symposium to have prepared, planned and executed things meticulously.

The department of Higher & Technical Education to have extended support to this process of strengthening Yoga education. The Ministry of HRD, Government of India, to have shown their confidence in the institute and supported it for more than five decades.

Shri Abhay Narayan Tripathi, Secretary, Maharashtra Public Service Commission to have shared his wealth of knowledge during the inauguration of symposium and Justice D. R. Dhanuka, former Justice of the High Court, Mumbai for his guidance.

Our thanks to Miss. Pinky, Miss. Renu and Mr. Sandeep for demonstrating practices and being photographed. Mr. Nitin Tanpure for the printing work and personal involvement in works of the institute.

Swami Maheshananda our Chairman, Shri. O. P. Tiwari, Hon. Secretary for their continuous guidance, blessings and confidence in us.



# INTRODUCTION

## Present Scenario

In spite of the increased awareness of people towards health, the young generation is wanting in health related fitness and essential personality traits. They find it increasingly difficult to face the challenges arising out of increasing competitions, Pierre pressure and the material world.

Various research findings have proved the efficacy of yogic practices in building healthy mind and body, as well as, the amiable culture in students.

Various Yoga Institutes and yoga teachers are doing their best to promote yoga among students but in their own way and with diverse methods of teaching. This has substantially created a hindrance in the selection and learning of yoga practices.

## Principles adopted while drafting Yoga Modules

1. Group of authentic yoga practices are identified on the basis of consensus and accepted to be sufficient enough to promote and maintain the health of an individual.
2. Standard Techniques are adopted with reference to the Tradition and Research findings (if any).
3. Nomenclature is approved unanimously.
4. The recommended duration of one yoga class is 45 minutes. Total duration of the course is 45 days.
5. Theoretical lectures for better understanding of the pupil should be a part of the module.
6. Method of teaching is approved unanimously by all the Yoga institutes.
7. The sequence of Asana's could be decided in accordance with the tradition of the school.
8. The practices in the module are suggested broadly, if the whole cannot be done, practices out of the module can be chosen to be practiced for oneself.



## Aims and Objectives

1. To help students in Training, Toning and Tuning of Psycho – physiological functions and to promote and maintain their health and physical fitness.
2. To improve their physical and mental abilities such as cardiovascular efficiency, flexibility, stamina, memory, concentration, perception, clarity in thinking and the confidence level.
3. To help them to develop special personality traits like positive attitude, self reliance, tolerance, courage, determination and social values.
4. To enable them to cope up the stress effectively and to reduce their stress related problems.
5. To help cultivate appropriate qualities and skills, both social and academic.

## Yoga Training Modules and Basis of Classification

Training modules are divided into three groups e.g. **Yoga Module – 1, 2 and 3**

- **Yoga Module 1** will be available to Beginners in yoga.
- **Yoga Module 2** will be available to the students who wish to continue the practice of Yoga.
- **Yoga Module 3** will be available to advanced students who have undergone Yogic practices for considerable period of time and want to develop themselves also on spiritual lines.

These modules have been prepared keeping in view its end users. It should not be misunderstood that Yogic practices end here.

However those who want to learn even more advanced practices, are suggested to approach appropriate and accredited Yoga Institutes or reputed and expert Yoga teacher.

## Suggestions before selecting appropriate Module

**Module 1** is for beginners i.e. who have never ever practiced Yoga before and wish to learn the practice. For new students it is never late. They can begin yoga Practice safely and beneficially for the maintenance of their health with Module-1.



**Module 2** is for those who have practiced Yoga earlier and wish to restart. However, they are also advised to practice Module-1 before proceeding to Module 2

**Module 3** is for advanced practitioners.

This program is for an average normal person to promote and maintain his/her health and day to day physical fitness.

Practices can be divided into seven simple progressive learning steps for each day.

Any teacher, undergone at least six weeks (or 100 Hours) Yoga Training from a reputed Yoga Institutes, will be eligible to teach Yoga **Module-1**. For **Module-2** and **Module-3**, the Teacher should have completed at-least one year diploma course.

#### **Module I :**

##### **Asana**

1. Side bending chakrasana
2. Tadasana
3. Vrikshasana
4. Utkatasana
5. Utthita Trikonasana
6. Virabhadrasana II
7. Utthita Parshvakonasana
8. Adho Mukha Shvanasana
9. Uttanasana
10. Gomukhasana
11. Vajrasana
12. Baddha Konasana
13. Parvatasana
14. Adho Mukha Virasana
15. Simhasana
16. Bharadvajasana
17. Urdhva Mukha Shvanasana
18. Makarasana
19. Niralambasana



20. Bhujangasana
21. Ardhashalabhasana
22. Dhanurasana
23. Ushtrasana
24. Brahma Mudra
25. Dandasana
26. Vakrasana
27. Uttanapadasana
28. Paschimottanasana
29. Salamba Sarvangasana
30. Halasana
31. Viparita karani
32. Shavasana

### **Pranayama**

33. Ujjayi
34. Anuloma-Viloma
35. Bhramari

## **Module II**

### **Asana**

1. Side bending chakrasana
2. Konasana
3. Tadasana
4. Vrikshasana
5. Utkatasana
6. Utthita Trikonasana
7. Virabhadrasana II
8. Utthita Parshvakonasana
9. Ardha Chandrasana
10. Adho Mukha Shvanasana
11. Uttanasana/ Padahastanasana
12. Surya Namaskar cycle
13. Gomukhasana
14. Vajrasana
15. Virasana
16. Baddha Konasana



17. Padmasana
18. Parvatasana
19. Simhasana
20. Bharadvajasana
21. Uttanpadasana
22. Urdhva Prasarita Padasana (also known as Ardha Halasana)
23. Urdhva Mukha Shvanasana
24. Makarasana
25. Niralambasana
26. Bhujangasana
27. Ardhashalabhasana
28. Shalabhasana
29. Dhanurasana
30. Ushtrasana
31. Viparita Dandasana
32. Brahma Mudra
33. Dandasana
34. Vakrasana
35. Janu Shirshasana
36. Paschimottanasana
37. Salamba Sarvangasana
38. Setu Bandha Sarvangasana
39. Halasana
40. Viparita karani
41. Shavasana

### **Pranayama**

42. Ujjayi with Jalandhara bandha
43. Anuloma-Viloma with jalandhara bandha
44. Bhramari

### **Module III**

1. Side bending chakrasana
2. Konasana
3. Tadasana
4. Vrikshasana
5. Utkatasana



6. Utthita Trikonasana
7. Virabhadrasana II
8. Utthita Parshvakonasana
9. Ardha Chandrasana
10. Adho Mukha Shvanasana
11. Uttanasana
12. Surya Namaskar cycle
13. Gomukhasana
14. Vajrasana
15. Virasana
16. Baddha Konasana
17. Padmasana
18. Matsyasana
19. Parvatasana
20. Adho Mukha Virasana
21. Simhasana
22. Bharadvajasana
23. Vakrasana
24. Ardha Matsyendrasana
25. Uttanpadasana
26. Urdhva Prasrita Padasana (also known as Ardha Halasana)
27. Urdhva Mukha Shvanasana
28. Makarasana
29. Niralambasana
30. Bhujangasana
31. Ardhashalabhasana
32. Shalabhasana
33. Dhanurasana
34. Ushtrasana
35. Viparita Dandasana
36. Brahma Mudra
37. Dandasana
38. Janu Shirshasana
39. Paschimottanasana
40. Salamba Sarvangasana
41. Setu Bandha Sarvangasana



42. Halasana
43. Viparita karani
44. Shavasana

### **Kriya**

45. Tratak
46. Kapalabhati

### **Pranayama**

47. Ujjayi with Jalandhara bandha
48. Anuloma-Viloma with jalandhara bandha
49. Surya Bhedan
50. Bhastrika
51. Bhramari

## **General Hints for Taking up Yoga Practices**

### **Cautions and Limitations**

1. Constipated people should not go for Paschimottanasana and Yoga Mudra.
2. Bhujangasana, Shalabhasana and Dhanurasana should be avoided by those having enlarged spleen or tender abdominal viscera.
3. People suffering from weak eye capillaries, running ears and weak heart should avoid inverted postures.
4. After severe illness, the yogic exercises should be undertaken only after medical consultation.

### **Elapse of time between food and yogic exercises.**

Heavy Meal - Practice after 4 Hours.

Moderate food (Solid/Liquid) - Practice after 1 Hour

A cup of tea - Practice after ½ an Hour

Food can be taken after 30 minutes of yogic practices.

### **Place:**

Any well ventilated place should be used.

Do not allow your body to be exposed to a strong drought.



**Seat:**

A carpet moderately soft and large enough to accommodate the length and breadth of an individual.

**Sequence and Time:**

- Sequence presented in this module should be followed
- Pranayama should be practiced in comfortable sitting position but important characteristics of meditative posture must be followed.
- Practice once / twice in a day i.e morning and / or evening.

**Instructions for the Practice of Asanas**

- Asanas work with the deeper muscles of the body and therefore utmost care must be taken while practicing it.
- Practice according to your own body limitations.
- Never try to compete with your fellow practitioner.
- Do not attempt to attain final position right in the beginning, especially when your body is not ready for the same.
- Maintenance of the final posture in asana according to one's own limitations and in a relaxed way is more important, necessary and beneficial.
- Body starts listening to your command only after gradual Training in a few days.
- During maintenance of Asana there should be no tremor or any type of discomfort.
- Do not alter the breathing voluntarily during asana. Body will adjust the breathing as per the posture.
- The practitioner has to follow each instruction sincerely and practice them with optimum attention.
- By continuing the practice uninterruptedly for 45 days, one will be positively able to experience the effect of yoga practice, at the level of mind-body complex.



- Yogic practices involve de-conditioning and re-conditioning processes and therefore, initially, one may feel little fatigued after the practice but within a few days' body and mind get conditioned and after the practice a feeling of well being and happiness will be experienced through out the day.

### Instructions for the Practice of Pranayama

- Pranayama is special Hathayogic practice in which we are working with our respiration and in which we try to manipulate, control and prolong the respiration.
- This is related with the most important and delicate system of the body i.e. Respiratory system and Cardiovascular system. Therefore we should never experiment with Pranayama.
- Hathapradipika declares that Control over respiration results into control over mind (Hathapradipika, Lesson II, Verse No. 2).
- Hatha Texts caution "Just as a wild animal like tiger, lion or an elephant is tamed gradually, similarly the respiration should be controlled gradually" (Hathapradipika, Lesson II, Verse No. 23)
- Traditionally pranayama has three phases. They are known as  
**Puraka (P)** - Controlled Inhalation  
**Kumbhaka (K)** - Controlled Retention  
**Rechaka (R)** - Controlled Exhalation.
- The ideal ratio according to tradition is 1 (P) : 4 (K) : 2 (R)
- Time unit is traditionally known as Matra.
- The ideal Matra for **P : K : R** is  
20 : 80 : 40 (for highest / best type)  
16 : 64 : 32 (for mediocre type)  
12 : 48 : 24 (for lowest type)
- However, While practicing Pranayama, do not make haste in resorting to any of the above mentioned ideal ratio.
- Kumbhaka must not be resorted to unless one has undergone sufficient practice of 1 : 2 ratio.



- Kumbhaka should be practiced with the application of Three Bandhas known as Moola Bandha, Jalandhara Bandha and Uddiyana Bandha.
- For the maintenance of the health it is not necessary to practice Kumbhaka. According to scientific investigation in our laboratory, the practice of Pranayama without Kumbhaka is the practice of Pranayamas with 'safety valve opened.'
- The Sadhaka who wants to advance on the Spiritual Path should practice Kumbhaka under the able guidance of a competent Yoga Teacher.

\* \* \* \* \*

# Description and Illustrations of the Asanas

## Side bending Chakrasana

### Source

In order to provide lateral bending to the spine, Swami Kuvalayanandaji has invented it. Traditionally Chakrasana is a backward bending Asana.



### Technique in Brief

Stand upright, toes together, hands by the sides of the body. Raise right hand up to the shoulder level, palm facing downward. Turn the direction of palm and raise the hand towards sky and let the arm touch the ear. Stretch the hand a little and start bending other side. Maintain and come back.

### Do's and Don'ts

While bending on one side, keep the other side relaxed.

### Benefits

Makes the spine flexible and prevents displacement of the disc.

## Konasana

### Source

Not known but tradition is old.

### Technique in Brief

Stand upright with about two feet distance between legs. Start bending laterally towards the left side taking the left hand towards the left knee and simultaneously raise the right hand bending it further towards left touching the left ankle. Look upward. Similarly practice it with the other side too.



### Do's and Don'ts

Gradually increase the practice to touch the ankle. Hands and shoulder should be in one line.

## Tadasana

### Source

'Kiran' commentary on Yoga Sutra by Srikrishna Vallabhacharya (P245)

### Brief technique

Stand upright with toes together, hands by the side of the body. Raise both the hands up to shoulder level, maintaining the distance of hands; raise both hands up towards sky. Slowly raise the heels and stand on toes and then stretch the hand upward along with the whole body. Slowly come back.

### Do's and Don'ts

Being a balancing Asana, do it slowly. In the beginning legs can be kept apart.

### Benefit

Helps improve height, makes spine flexible. Works effectively against stress.



## Vrikshasana

### Source

Gheranda Samhita II:36.

### Technique in Brief

Stand upright with toes together, hands by the side of the body. Fold one leg at knee and place the heel against the thigh of the other leg. Fold both hands and adopt Namaskara Mudra. Come back.

### Do's and Don'ts

Practice it from both the legs one by one. This is a balancing pose, therefore do it slowly. Initially do not close eyes, else you lose your balance.

### Benefits

This improves body-mind co-ordination and general balancing mechanism of the body.





## Utkatasana

### Source

Gheranda Samhita II : 27

### Technique in Brief

Stand upright with legs comfortably apart, raise the hands in front up to shoulder level, raise the heels and balance the whole body on toes. Maintaining the position, slowly bring buttocks near the heels sitting half way. Slowly come back in reverse order maintaining the balance.



### Do's and Don'ts

Do not lose balance.

Do not touch the hips to the heels.

### Benefits

Thighs and Calf muscles are made stronger. It removes constipation.

## Utthita Trikonasana

### Source

Light On Yoga – BKS Iyengar (Plate-4)

### Technique in Brief

Part your legs in standing. Then turn the right foot sideways 90° to the right, turn the left foot slightly to the right. Keep both the knees tight and bend to the right side from the waist. Place your right palm on the ground behind right foot. Stretch the spine opening the chest twist up spreading your arms. Look at the left arm. Maintain the position for half a minute to a minute. Then do the same posture with the other way round.



### Do's and Don'ts

Do not loosen your knees.

Don't bend your spine.

### Benefits

- Tone up the leg muscles
- Removes stiffness of legs and hips.
- Corrects minor deformity in the legs.
- Relieves backache and neck sprains.
- Strengthens ankle and develops the chest.

## Virabhadrasana II

### Source

Light On Yoga – BKS Iyengar  
(Plate - 15)

### Technique in Brief

Stand straight. Spread the legs sideways near about 4 feet. Raise both the arms sideways. Turn the right foot in 90° to the right side and left foot slightly to right keeping the left leg straight. Exhale and bend the right knee till the right thigh is parallel to the ground. Turn the face to the right and gaze at the right palm. Maintain the position for 20 to 30 seconds. In the same way, do with the other side.



### Do's and Don'ts

- Stretch the hamstring muscles and tighten the knee joints.
- Do not extend bent knee beyond the ankle.

### Benefits

- Strengthens leg muscles.
- Relieves cramps in calf and thigh muscles.
- Improves elasticity of legs and back muscles .
- Tones the abdominal organs.

## Utthita Parshvakonasana

### Source

Light On Yoga – BKS Iyengar  
(Plate - 8)





### Technique in Brief

Stand straight spreading your legs around 4 feet. Raise the arms in shoulder line. Turn the right foot sideways in 90° to the right side and left slightly to the right. Bend the right knee until right thigh is parallel to the ground. Place the right palm on the ground by the side of the right foot. Fix your right knee in the right armpit. Stretch the left arm out over the left ear. Keep the head up. Do the same with the other side.

### Do's and Don'ts

Tighten the loins and stretch the hamstrings. The chest, hips and the legs should be in the line.

Do not bend your spine forward and do not loose the intercostals muscles.

### Benefits

Tones up ankles, knees and thighs.

Corrects defects in calves and thighs.

Develops the chest and reduces fats around the waist and hips.

Relieves sciatic and arthritic pains.

Good for constipation.

## Ardha Chandrasana

### Source

Light On Yoga – BKS Iyengar  
(Plate - 19)

### Technique in Brief

Do Utthita Trikonasana following the technique described earlier. After

attaining Trikonasana on the right side, exhale and place the right palm about a foot away from the right foot by bending the right knee and bring left foot near the right. Raise the left leg toes pointing up. Stretch the right hand and the right leg. Left palm over the left hip and stretch up. Turn the chest to the left and balance.

### Do's and Don'ts

Open the chest completely. Keep your both knees straight.

Do not loose your shoulders. Don't lose the balance.



### Benefits

Tones the leg muscles  
Removes stiffness of legs and hips.  
Corrects minor deformity in the legs.  
Relieves backache and neck sprains.  
Strengthens ankle and develops the chest.

## Adhomukha Shvanasana

### Source

Light On Yoga – BKS Iyengar (Plate - 75, 76)

### Technique in Brief

Lie down on the stomach, palms by the side of the chest, elbows pointed up and legs together. Raise the trunk with exhalation. Straighten the arms, move the head inwards. Place the crown of the head on the ground. Rest your heels and soles on the ground.

### Do's and Don'ts

Keep your elbows straight.  
Do not bend your knees.

### Benefits

Removes fatigue.  
Good for runners.  
Relieves pain and stiffness in the heels.  
Strengthens ankles and makes the legs shapely.  
Removes stiffness of shoulder blades, abdominal muscles.  
Increases chest cavity as diaphragm is lifted up.  
So, heart beat is slowed down.





## Uttanasana

### Source

Light On Yoga – BKS Iyengar (Plate - 48)  
In other tradition this is also known as padahastasana

### Technique in Brief

Stand upright with the legs together. Raise the hands up to the shoulder level. Start bending forward from the waist till the palms of both hands are placed on the ground by the side of the respective feet. Let the head touch the knee.

### Do's and Don'ts

Do not bend legs at knees while bending forward.

### Benefits

It makes the spine flexible and relieves pain in the waist.



## Suryanamaskar

### Source

Not known but tradition is old.

### Technique in Brief

Suryanamaskar is to be practiced in 12 counts with Mantra Chanting (12 Names of the Sun). These steps are like yogic postures but not yoga asanas. This is the synchronization of various postures immediately one after the other with breathing control. It includes 7 postures (Pranamasana, Hasta-Uttanasana, Hasta-Padasana, Ashwa-Sanchalanasana, Parvatasana, Ashtanga-Namanasana and Bhujangasana) which are to be repeated in sequence and then in reverse order.

### Benefits

Increases blood circulation.  
Tones up all the muscles.  
Improves flexibility of the spine.

## Gomukhasana / Baddha Gomukhasana

### Source

Brihad Yoga Sopana  
(Verse No. 19)

### Technique in Brief

Adopt Gomukhasana.

Fold right hand at elbow and taking it towards back, place backside of the palm in almost

middle of the spine. Fold the left hand at elbow and from upside take it towards back and catch the fore finger of the right hand with the fore finger of the left hand. Do it from other side also.



### Do's and Don'ts

If unable to catch the fingers, keep the hand towards back.

### Benefits

It is very effective for scoliosis and kyphosis.

## Vajrasana

### Source

Gheranda Samhita – II / 12

### Brief Technique

Take long sitting position. Fold right leg at knee and place it below the buttock, Toes pointing inward. Similarly fold left leg and arrange accordingly. Hands resting on the respective knees.



### Do's and Don'ts

Heels will remain outside whereas toes pointing inward. Do not sit on the heels.

### Benefits

Strengthens thighs and calf muscles. Sitting in Vajrasana after meals promotes better digestion.



## Virasana

### Source

Light On Yoga – BKS Iyengar (Plate - 89)

### Technique in Brief

Sit in Vajrasana. Spread your feet about 18 inches keeping the knees together. Rest the buttocks on the ground in between the feet. Adopt Jnana Mudra on the knees.



### Do's and Don'ts

Keep the toes pointing back touching the floor.  
Do not bend forward from the spine.

### Benefits

Cures rheumatic pain in the knees and Gout.  
Good for flat feet.  
Tones up calves and thigh muscles.

## Baddha Konasana

### Source

Light On Yoga – BKS Iyengar (Plate - 102)

### Technique in Brief

Sit on the ground. Stretch the legs in front bending the knees. Bring the feet closer to the trunk. Bring the soles and heels together near the perineum. Catch hold of your toes, then widen the thighs, lower the knees to the ground. Stretch the spine. Bend forward from the lower spine keeping the elbows on the respective thighs to press them down. Rest the head, then the nose and lastly the chin on the ground with normal breathing.

### Do's and Don'ts

Stretch the spine and open the chest.  
Do not bend forward from the upper spine.



## Benefits

Good for urinary disorders.

Stimulates blood circulation in pelvis, abdomen and the back.

Kidneys, prostate and urinary bladder become healthy.

Relieves static pain and prevents hernia, relieves pain and heaviness in the testicles.

Good for irregular menstruation, helps the ovaries to function properly.

Good for pregnant women without bending forward.

## Padmasana

### Source

Hathapradipika I / 45

### Technique in Brief

Take a long sitting position, fold right leg at knee and

with the help of hands by catching the right ankle

and right sole place it firmly on left thigh Similarly

fold left leg at knee place the foot on the right thigh.

Hands in Jnana Mudra on respective knees and eyes closed



### Do's and Don'ts

This is a meditative posture hence spine must be erect. Before practicing

Padmasana it is advisable to practice Ardhapadmasana

### Benefits

Pelvic blood supply is promoted affecting beneficially the organs of that area.

Promotes better concentration due to triangular base.

## Matsyasana

### Source

Gheranda Samhita II/21

### Technique in Brief

Sit in Padmasana. With the help of elbows lie on your back. Bend your head

backward and place middle part of the head on the ground. Catch hold of toes

and pull them a little in order to place the elbows on the ground. Come back in

reverse order. If padmasana is not possible practice it with extended legs and

place the palms on the groin.





### Do's and Don'ts

Do not bend your head backward with jerk.



### Benefits

This is a complementary asana of Sarvangasana. It increases the benefits of Sarvangasana.

## Parvatasana

### Source

Srikrishna Vallabhacharya (p.249), KKY(MS) pp 5

### Technique in brief

Sit in Padmasana, raise both hands parallel straight towards sky. Join the palms and stretch hands upward as if whole body is being lifted up. Come back.



### Do's and Don'ts

Do not overstretch. Those who cannot perform Padmasana, can practice this asana in Vajrasana also.

### Benefits

It provides a natural traction to the spinal column. It prevents spondylitic conditions of spinal joints.

## Simhasana

### Source

Hathapradipika – 1/51,52

### Technique in brief

Sit in Vajrasana, lift your buttock and place the legs crosswise like a scissor and sit on it. Place both hands on respective knees and spread the fingers. Take out the tongue as much as possible with exhalation from the mouth and gaze at tip of the nose; come back



### Do's and Don'ts

Keep hands straight and take out the tongue as much as possible.

## Benefits

Highly beneficial against tonsillitis.

## Bharadvajasana

### Source

Light On Yoga – BKS Iyengar  
(Plate - 299)

### Technique in Brief

Flex the knees, sitting on the ground. Move the legs back and bring both feet to the left side beside the heel. Rest the buttocks on the ground. Turn the trunk around 45° to the right. Straighten the left arm and place the left hand outside of the right thigh near the right knee. Insert the left hand underneath the left knee. The palm touching to the floor. Turn the right arm from the shoulder behind the back. (Bend the elbow and with the left hand, clasp the right upper arm above the right elbow). Turn the neck to the right and gaze at the right shoulder.



### Do's and Don'ts

Open the chest maximum and try to bring your shoulder blades close to each other.

Do not lean back or in front.

Do not lose the balance.

It should be done from other side also.

### Benefits

Makes the back supple.

Good for arthritis.

Works on dorsal and lumbar region of the spine.

## Vakrasana

### Source

Simplified form of Matsyendrasana.

### Technique in Brief

Take a long sitting position. Hands by the side of the body, palms on the ground.





Fold right leg at the knee and place the sole on the ground by the side of left knee. Folded knee should point upward. Take right hand backward and place the palm on the ground at a distance of around 10 inches in the line of spine. Take left hand towards the right side of the right knee and place the palm on the ground. Pushing the right knee towards the left side, twist your head towards the backside. Come back in the reverse order. Do it from other side too.

### Do's and Don'ts

The leg which is folded, the same hand is to be placed backside.

### Benefits

Removes constipation, flatulence. Reduces rigidity of spine.

## Ardha Matsyendrasana

### Source

Simplified form of Matsyendrasana, tradition is old.

### Technique in Brief

Take long sitting position, fold right leg at knee and place the heel near the left hip. Fold the left leg and place the sole by the right side of the right knee. Now, turning the body towards left side, cross the right hand against left knee and catch hold of the toes. Now take the left hand towards back and place it on the waist while twisting the body towards left as much as possible. Come back in the reverse sequence. Repeat with the other leg.



### Do's and Don'ts

Practice 'Vakrasana' regularly before resorting to this practice. Do not lean forward while twisting. In the beginning of the practice, one can catch the ankle.

### Benefits

Makes the spine flexible. It is useful in relieving constipation and dyspepsia.

## Uttanapadasana

### Source

Unknown, but tradition is old

### Technique in Brief

Lie supine with legs together, hands by the side of the body, palms placed on ground.



Raise slowly both the legs up to 60° angle and slowly come back.

### Do's and Don'ts

It causes pressure and contraction at the lower abdomen; hence practice carefully. Do not bend legs at knees while raising them upward.

### Benefits

Beneficial in constipation, indigestion, nervous weakness. It strengthens the abdominal muscles.

## Ardha Halasana

### Source

Source is unknown but tradition is old.

### Technique in Brief

As in Uttanapadasana (1) raise both legs and reach up to 90° without bending at knees and also stopping and maintaining at 45° and 60° angles. Slowly come back.



### Do's and Don'ts

Reach up to 90° but do not cross your own body limitation. Should be practiced before Viparitarani, Sarvangasana and Halasana.

### Benefits

This facilitates Viparitarani etc. Improves digestion and removes constipation.



## Urdhva Mukha Shvanasana

### Source

Light On Yoga – BKS Iyengar  
(Plate - 74)



### Technique in Brief

Lie down on the stomach. Part your feet about a foot. Stretch your toes back, palms by the sides of the waist. Raise the head and trunk with inhalation. Stretch the arms completely. Push the head and trunk as far back as possible. Keep the legs straight at the knees. Stretch the spine, thighs and calves and contract the buttocks. Push the chest forward and shoulders back.

### Do's and Don'ts

Keep your body weight on the palms and top of the toes.  
Do not bend the knees.  
Do not touch the knees and thighs on the ground.

### Benefits

Good for stiff back.  
Good for lumbago, sciatica, slipped or prolapsed discs.  
Lungs become elastic, so improves breathing capacity.  
Increases blood circulation in the pelvic region.

## Makarasana

### Source

Gheranda Samhita II/40



### Technique in brief

Take prone lying position. Keep legs at a comfortable distance with heels inside and toes pointing outward. Fold both hands at elbows, and place right hand on the left shoulder and the left hand on the right shoulder. Place the head in the triangle of elbows.

### Do's and Don'ts

Both elbows can be kept slightly apart (as shown in illustration) if found difficult to put one above the other.

### Benefits

Traditionally it is a relaxative posture.

Beneficial in asthma.

## Niralambasana

### Source

Hatharatnavali II / 60

### Technique in Brief

Take prone lying position; raise head and chest a little, fold the hands at elbows and place the elbows on the ground in the line of the shoulders. Make the shape of a lotus with the help of both palms and let the face rest on the palms. Maintain the position comfortably. Come back.



### Do's and Don'ts

Raise the head and chest as per the height of your arms. Let the head go back as much as it can be maintained comfortably.

### Benefits

Makes the spine flexible. Beneficial in spinal disorders.

## Bhujangasana

### Source

Gheranda Samhita II:42

### Technique in brief

Traditionally the asana is practised in following way.

Take prone lying position. Fold hands at elbows, place palms by the side of chest, fingers not crossing the shoulder line. Raise the head, chest and abdomen up to navel, look upward. Come back slowly.



### Do's and Don'ts

Put minimum weight on hands. Divide your weight on chest and arms. However, in the beginning weight be put on hands.

### Benefits

This effects the spine deeply and makes it flexible. Effective against asthma and dyspepsia.



## Ardha-Shalabhasana

### Source

This is a simpler form of Shalabhasana.

### Technique in brief

Take prone lying position. Place chin on the ground, fists closed. Raise one leg without bending at knee. Come back and do it with the other leg also.



### Do's and Don'ts

Do not tilt pelvis while raising legs.

### Benefits

Strengthens the muscles of lower abdomen. Removes Visceroptosis.

## Shalabhasana

### Source

Gheranda Samhita – II /39.

### Technique in brief

Traditionally the asana is practised in following way. Take prone lying position with chin on the ground and fists closed. Raise both the legs together slowly. Come back.

### Do's and Don'ts

In the beginning, closed fists can be placed under the thighs to facilitate raising of the legs (See Illus-2). Don't bend legs at knees.

### Benefits

Strengthens the muscle of lower abdomen. Beneficial in digestion and removes constipation.



## Dhanurasana

### Source

Gheranda Samhita II / 18

### Technique in brief

Take prone lying position, slowly bend legs at knee and catch hold of ankles from respective hands. Slowly try to straighten the legs as if they want to get released from hands. Raise the head and chest in order to assume the shape of a bow.

Come back slowly in reverse order.



### Do's and Don'ts

Try to imitate the shape of a bow.

Initially knees can be kept apart.

### Benefits

Makes the spine and back muscles flexible.

Removes constipation, digestive disorders.

## Ushtrasana

### Source

Gherand Samhita II /41

### Technique in Brief

Traditionally it is practiced in prone position but conventionally practiced in the manner shown here. Stand on Knees with sole upward, toes pointing backward on the ground. Taking the hands towards the back and giving the spine a backward bending place the palms with straight hands on respective soles. Keep the head relaxed. Come back in the reverse order.



### Do's and Don'ts

Place palms on soles carefully. Hands should remain straight. Move the abdominal and waist part forward so as to stretch the spine backward completely.



## Benefits

It makes the spine flexible. Strengthens the spinal muscles and corrects the respiration.

## Brahma Mudra

### Source

Not known but tradition is old. Four faces of Brahma – the creator is being imitated in this practice.

### Technique in Brief

Sit in Padmasana or any comfortable position with spine erect. Look in front with neck straight. Slowly without moving shoulder turn the face towards the right and try to bring the chin near the right shoulder. Maintaining for some time bring the face in

front. Similarly turn the face towards left. After this slowly take the head backward. Again after for some time make the head straight. Now slowly take the face downwards and let the chin touch the jugular notch. Slowly come back.



### Do's and Don'ts

Person suffering from cervical spondylitis should avoid forward bending of the head.

### Benefits

It removes neck and back pain and highly effective against stress.

## Dandasana

### Source

Light On Yoga – BKS Iyengar (Plate - 77)

### Technique in Brief:

Sit straight. Stretch the legs in front, toes pointing forward. Place the palms by the side of the hips on the ground, fingers pointing forward. Stretch the hands straight and keep the back erect.



### Do's and Don'ts

- Keep your knees straight.
- Contract the abdominal muscles.
- Open the chest maximum.
- Do not bend forward.
- Do not bend your elbows.

### Benefits

- Good for those who are having bloating sensation in the abdomen due to gases.
- Reduces fats around the waist.
- Tones the kidneys.
- Good to stretch hamstrings.

## Janu Sirsasana

### Source

Light On Yoga – BKS Iyengar  
(Plate - 129)

### Technique in Brief

Sit straight, stretching the legs in front. Bend the left knee. Keep left heel against the perineum, left sole inside the right thigh. Stretch the spine. Catch hold of your right great toe with both the arms. Extend the hands further and finally catch the wrist of one hand with the other as shown in illustration. Bend forward from the lower spine with exhalation. Try to touch the chin or chest to the knee. Do the same with the other side.





### **Do's and Don'ts**

Open the chest maximum.

Stretch your arms.

Do not bend the knee.

Do not bend forward from the upper spine.

### **Benefits**

Strengthens abdominal muscles.

Removes possibility of Sciatica.

Relieves constipation, dyspepsia as well.

Tones up liver and spleen.

Very good for digestion.

Tones and activates kidneys.

Good for prostate enlargement.

## **Pashchimottanasana**

### **Source**

Hathapradipika I :28

### **Technique in Brief**

Take a long sitting position , Loosen back muscles and bend forward. Catch hold of the toes and place the forehead between the knees. Come back slowly.

### **Do's and Don'ts**

Never fold the legs at knee.

### **Benefits**

Strengthens abdominal muscles.

Removes possibility of Sciatica.

Relieves constipation, dyspepsia as well.



## Salamba Sarvangasana

### Source

Light on yoga- B. K. S. Iyengar. (Plate - 235)  
May be considered an advanced variety of Sarvangasana. Very old tradition.

### Technique in Brief

Take supine position. Slowly push the buttock and the back with hands in order to bring the legs, back and shoulders in one line. Continue the support of hands at the back. Finally, the chin should be placed at the jugular notch. Stretch the arms and clasp the fingers behind the shoulders. Come back. Balance your weight on hands and shoulders.



### Do's and Don'ts

Try to maintain the balance.  
Back and legs should be kept steady.

### Benefits

Back and the neck is strengthened. Arm muscles are toned.

## Setubandha Sarvangasana

### Source

Light On Yoga – BKS Iyengar  
(Plate - 259)  
It is also called Uttana Mayurasana

### Technique in Brief

Do Salamba Sarvangasana. Rest the palms on the back, rest the spine up, bend the knees and rest the legs to the floor. Stretch out the legs and keep them together.

### Do's and Don'ts

Keep the knees straight and toes on the ground.  
Do not part your elbows too much.





## Benefits

Same as Sarvangasana.

Improves backward bending flexibility of the spine.

Gives stretch to all the front muscles.

## Halasana

### Source

Unknown but tradition is old.

### Technique in Brief

Adopt initial position as in

Uttanapadasana (1) raise both legs up to  $90^\circ$ . Pressing hands on the ground,

raise your buttocks and take legs towards the head. Continue stretching legs backward till toes touch the ground behind head. Make a finger lock of hands and place it on the head. Slowly come back.



### Do's and Don'ts

Don't give jerk, don't bend your legs at knees. Do not force your legs to touch the ground. Balance your weight on hands and shoulders.

### Benefits

Problem of dyspepsia and constipation is removed. Practice of Bhujangasana should follow Halasana to get the best results.

## Viparitakarani

### Source

Gheranda Samhita III: 31

### Technique in Brief

Take supine position. Raise both the legs together slowly, reaching at  $90^\circ$ , maintain a while. Take legs towards head by pressing the hands on the ground, lift the buttocks. Balance and lift your hands to support the buttocks. Keep the legs straight. While coming back, take legs little towards head, place hands on ground and slowly place buttock on the ground.



### Do's and Don'ts

Practice Uttanapadasana and Ardhalasana / Urdhva Prasrita Padasana sufficiently before taking up the practice of Viparitarani. Don't give jerk while raising the legs and buttocks up or while coming back. Avoid undue pressure on the palms.

### Benefits

Useful in Visceroptosis, Dyspepsia.  
Promotes better blood circulation in the head.

## Shavasana

### Source

Hathapradipika I/32

### Brief Technique

Lie supine. Legs at comfortable distance, hands straight at a distance of around six inches from the body, palms upward, fingers little flexed, eyes closed.



### Do's and Don'ts

No tension in any part of the body.  
Concentrate on breathing. Let the breathing be abdominal.

### Benefits

This is relaxative asana. It is beneficial in hypertension and heart diseases, neurosis and insomnia.

## Description of Kriyas

### Kapalabhati

### Source

Hathapradipika II:236

### Technique in Brief

Sit straight. Take deep breath. Exhale forcefully such that the lower abdomen is contracted to expel out the air. Air will enter the body through passive inhalation. This is one stroke of Kapalabhati. Begin with 20 to 30 strokes at a time at a rate of 1 or 2 strokes per second. Gradually increase the strokes 120 and performs 3 such rounds.



### **Do's and Don'ts**

Do active exhalation and passive inhalation.

Do not move your chest while exhalation.

Ugly contortion of the face should also be avoided.

### **Benefits:**

Improves heart and lungs capacity. Therefore, good for bronchial asthma.

Improves blood circulation throughout the body.

Tones up the abdominal muscles.

Removes lethargy.

## **Tratak**

### **Source**

Hathapradipika II:32

### **Technique in brief**

In tratak one has to sit atleast one meter apart and gaze at the static flame continuously for the times until there are tears in the eyes. Don't blink the eyes.

Gently close the eyes the after tears appears.

### **Do's and Don'ts**

Do not give much effort and strain to eyes.

Do not practice infront of bright sunlight it can damage ratena

Do not do over practiced more then 3 minutes.



## Description of the Pranayama

### Ujjayi

#### Source

Hathapradipika II / 51,52

#### Technique in brief

Inhale as per the technique of Pranayama through both the nostrils producing a continuous sound like that of sobbing sound of a child



which can be produced as a result of mild contraction of glottis.

Exhale through the left nostril by closing the right nostril as shown in illustration In practising with Kumbhaka, one must apply, at least Jalandhara Bandha after closing the nostril (see illustration).

#### Do's and Don'ts

Sound should be smooth and uninterrupted.

### Anuloma Viloma

#### Source

Hathapradipika II / 7-10

#### Technique in brief

Close the right nostril. Inhale through the left nostril. After Inhalation close the left nostril as per technique and release the right nostril and exhale through it.



Similarly inhale through right nostril and exhale through the left. This makes one round of Anuloma Viloma.

#### Do's and Don'ts

Follow general hints for Pranayama.



## Surya Bhedan

### Source

Hathapradipika II / 49

### Technique in brief

Inhale as per the technique of Pranayama through the right nostrils and Exhale through the left nostrils.

### Do's and Don'ts

In Surya Bhedan Pranayama, Inhalation is always through right nostrils only followed by Exhalation through left nostrils only.

### Benefits

With the benefits like other Pranayama, should be preferably practised during winter season.

## Bhastrika

### Source

Hathapradipika II / 67

### Technique in brief:

According to tradition, first go for 20 strokes of forceful Kapalabhati, and then immediately after that, one round of Suryabhedan Pranayama with kumbhaka. This becomes one round of Bhastrika Pranayama.

### Do's and Don'ts

Sit straight and open the chest for proper strokes.  
Do not go beyond your capacity.

### Benefits

Improves heart and lungs capacity, so good for bronchial asthma.  
Improves blood circulation throughout the body.  
Tones up the abdominal muscles. Removes lethargy.



## Bhramari

### Source

Hathapradipika II:68

### Technique in brief

In this Pranayama , sound of a wasp is produced during inhalation and exhalation both. This is produced by imitating an uninterrupted continuous snoring sound. Inhalation and Exhalation both are to be done through both the nostril.

### Do's and Don'ts

Follow general hints for Pranayama

\* \* \* \* \*



## Guidelines for the implementation of Yoga modules

1. Yoga could be taught by Yoga Instructors who could be appointed part time/full time in the college/institutions. Alternatively it could be taught by a faculty of the college itself who has been trained as a resource person in Yoga from a reputed and recognized institute.
2. For successful implementation of yoga, yoga modules may be introduced in the colleges as a capsule.
3. Reputed yoga institutes can run refreshers courses in yoga for the teachers who will be teaching yoga in the institutes of higher learning. Refreshes course for teachers should include Yoga as part of their course.
4. Yoga training may be imparted to the students outside the college. For this, reputed yoga institutes within the vicinity may be involved like a franchise. Registered District Yoga Associations have been established in almost all the districts of Maharashtra which may be approached for the same.
5. Yoga classes should be started in the college/institution and students should be involved in promoting its activities like other sections/activities/department.
6. Yoga camps for duration of a week or fifteen days could be organized on larger scale for students. This will motivate them to adopt it for a longer period.

### 7. **Periodic Talks**

We also suggest periodic Talks on Important Yoga concepts such as –

- Mitahara or Yogic diet or concept of balanced diet.
- Concept of Yamas and Niyamas
- Concept of Citta prasadana
- Introduction to anatomy and physiology so as to understand the technique and its effect on the body.
- Difference between asanas and exercises.
- Concept of Prayatna-shaithilya, abhyasa, Drashta etc.

\* \* \* \* \*



## Annex - 1

महाराष्ट्र शासन

तात्काळ

क्रमांक : आरएसआय-२००७/(२५४/०७)/विशि-१

उच्च व तंत्रशिक्षण विभाग

मंत्रालय विस्तार भवन, मुंबई-४०००३२.

दिनांक : १६ ऑगस्ट, २००७.

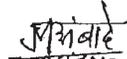
प्रति  
संचालक  
उच्च शिक्षण  
महाराष्ट्र राज्य  
पुणे.

**विषय : Drafting Yoga Programme for  
Institute of Higher learning यासाठी उच्च  
शिक्षण विभागाबरोबर एक परिसंवाद संयुक्तरित्या  
आयोजित करणेबाबत..**

कैवल्यधाम श्रीमान माधव योग मंदिर समिती,  
लोणावळा.

उपरोक्त विषयाचे सचिव, कैवल्यधाम श्रीमान माधव योग मंदिर समिती, लोणावळा यांचे  
क्रमांक:के/एडीएम/वायजे/२५९, दिनांक १९ जून, २००७ चे पत्र व सहपत्र सोबत जोडले आहे.

२. उपरोक्त विषयाच्या अनुषंगाने दिनांक १५ सप्टेंबर, २००७ व दिनांक १६ सप्टेंबर, २००७ रोजी  
कैवल्यधाम, लोणावळा येथे होणा-या परिसंवादासाठी उच्च शिक्षण विभागाचे प्रतिनिधी म्हणून आपली  
नियुक्ती करण्यात येत आहे. या परिसंवादासाठी Joint Organiser म्हणून आवश्यक ती कार्यवाही करावी  
ही विनंती.

  
१६/०८/०७  
(ज.म.अंबादे)

कार्यासन अधिकारी, महाराष्ट्र शासन

प्रत: सचिव, कैवल्यधाम श्रीमान माधव योग मंदिर समिती, लोणावळा यांचेकडे त्यांच्या पत्र क्र.के/एडीएम/वायजे/  
२५९, दिनांक १९ जून, २००७ च्या संदर्भात माहिती व उचित कार्यवाहीसाठी अग्रेषित.

**Kaivalyadhama, Lonavla**

Date: 30/8/07  
Inward No.: 237  
Initial: H



## Annex - 2

### Ramāmañi Iyengar Memorial Yoga Institute

1107-51, SHEVAPURGA, PUNE-411 016, INDIA GRAND "YOGADRIKA" PHONE : 2856131

Ref NO- 309/2007

20-9-2007

My Dear Shri. Subodh Tiwari,

Thanks a lot for your letter of September 14<sup>th</sup> 2007, which I got last evening.

I was not aware of this meeting. When a student of mine informed me through the e-mail, which she went through. So I suggested to her to represent our Institute.

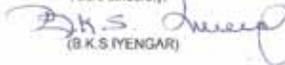
I would have gladly come, but unfortunately, I cannot make it.

My children wanted to have some religious function, which begins on the 17<sup>th</sup> evening, and goes upto the 23<sup>rd</sup> of November, beginning with the entire rendering of "Yajurveda" and Four thousand "Prabhadham" known as Tamil Veda which takes five days to complete. Also on 23<sup>rd</sup> children have arranged, "Sita Kalyanam" in a temple, as the 23<sup>rd</sup> of November is my birthday according to the Indian calendar where in I will be entering the gates of 50 ending 59. Therefore, the problem has come to me that I cannot forego my children's wishes. Therefore, all of you will have to excuse me for my inability to attend the function.

Hope everything goes well, and my only suggestion is that one has to keep in mind what the students can perceive in the field of yoga, so that they develop perceived knowledge first and then be guided how to conceive the perceptive knowledge so that from this perspective and conceptive knowledge, where intelligence gets triggered to aim at higher levels of yoga as they grow in age and maturity of wisdom. One has to keep a free mind giving suggestions, which are least inquisitive and easily graspable so that they are ignited in that subject to learn further. As far as my idea goes, we have to teach the two important aspects of yoga, namely asana and pranayama imbuing the other aspects of yoga. In these two aspects while conveying the art through practical, philosophical knowledge, it should be graspable to one and all as the students have a very tender body and tender intelligence. So keeping this in mind, one has to formulate the syllabus which would fit into rural semi-urban semi-urban and urban areas. One should not say that asana are physical yoga, that is where we are failing. As we are all made up of five layers, from earth, water, fire, air and ether. The first two begins with gross elements, and the last two begin with subtle elements and the unifier of these two begins where the fire element is in between. Asana and pranayama is mainly to ignite Light where Tejas Tatva begins. So I consider these two aspects as Jyana Marga while Yama and Niyama forms Karma Marga merge and the latter three aspects cover "Bhakti Marga". So we have to think on "Jyana Marga of Astanga Yoga" so that children develop good Karma and by the union of these two, they reach the Highest Path of Surrendering oneself to God. This one we have to keep it in suspense, for the time being, only thoughts of light on it, but to concentrate on asana and pranayama as Jyana Marga. I wish you all success.

I am sending this copy to Rajvi Mehra for her study.

Yours sincerely,

  
(B.K.S. IYENGAR)

## PHOTOGRAPHS OF THE SYMPOSIUM HELD ON THE 17 NOV 2007





Annex - 3

Re-Presentation of the Article

# SCIENTIFIC SURVEY OF YOGIC POSES

Originally written by

**Swami Kuvalayanandaji**  
(Published in the book ASANAS)



## Health of The Human Body

- Health of the Human Body depends on healthy functioning of the Systems of the body.
- Though each system is differently identified yet each system is responsible and also contributing towards the efficient functioning of the other system.
- Human body is supposed to be the republic of the CELLS who are enjoying their own life yet they also are responsible for the health of the Human Body.

### Cells and Human Body

- There are many TRILLION Cells in the Human Body:
  - 1 Cells constitute –Tissues e.g. Muscular Tissues etc.
  - 2 Various Tissues contribute towards formation of Organ.
  - 3 Various Organs constitute System.
  - 4 Various Systems constitute Human Body.

### Cells and Health

- Health depends on Healthy functioning of the systems in our Body.
- Proper function of the system means proper function of the Organs that Constitute the System
- In order to maintain the health of the Organ, Tissues must maintain their Health.
- Healthy Tissues means Healthy Cells.
- Health of the Cells depend upon **Nourishing Elements** supplied to and received by it.

### Nourishing Element and Health of Cells

- Nourishing Elements required for the Health of the Cells are :-
  - 1 Proteins, Fats, Sugar and salt
  - 2 OxygenFor **Nourishing Elements** Proteins, Fats, Sugar and salt, **Digestive System** is directly involved.  
For **Nourishing Element** Oxygen the **Respiratory System** is directly involved.  
The Circulatory System complements both to carry those Nourishing Elements to each Cells.



Secretions of various Endocrine Glands are also responsible for efficient functioning of the Systems.

## SURVEY OF YOGIC POSES

**Yogic Poses** or **Asanas** are divided mainly in two groups:

- A. **Cultural Poses** : - It produces physiological balance in the different systems working in the body. Also they are intended to take particular care of spinal column. Asanas like Shirshasana, Sarvangasana, Halasana etc. come under this category.
- B. **Meditative Poses** : - The aim of Meditative Poses is to offer comfortable posture for Pranayama etc. the higher yogic practices. Asanas like Padmasana, Siddhasana or Svastikasana provide this comfortable posture.

### Cultural poses

**Cultural poses** are claimed to produce important effect such as **Ensuring best organic vigor to the whole body** :-

Let us first of all try to understand health of body depends on what?

The health of the body depends on healthy tissues. If tissues can be kept in Good Health, Human Body can exhibit best organic vigor. Following conditions are said to be very important for maintaining health of Tissues:-

1. **Constant supply of proper nourishment and proper internal secretions of endocrine glands.**
2. **Effective removal of waste products**

We shall try to understand these conditions one by one with reference to Yogic Poses .

### Proper Nourishment

- **Constant supply of Proper Nourishment** :  
Elements that contribute towards nourishment of tissues consist of  
**A) Proteins B) Fats C) Sugars D) Salts E) Oxygen.**  
All these are carried to the different Tissues by the Blood.

**A, B, C, and D** are derived from the Food and Drink that one takes. But the quality and quantity of Food alone does not ensure proper supply also. Proper supply depends upon –

- Power of Digestion and Absorption of Digestive System



- Proper Circulatory System that works as carrier with the help of Blood for supplying these nourishment to the different Tissues.

## DIGESTIVE SYSTEM AND ASANAS

- Principal Organ responsible for Digestion are
  - a. Stomach
  - b. Small Intestines
  - c. Pancreas
  - d. Liver
- All these organs are situated in the Abdominal Cavity. They are supported by PELVIS from below and VERY STRONG MUSCLES from all other sides.

## Natural Care of Digestive System

- A - Nature has made ample provision to give gentle massage to all these organs all 24 hours to maintain their health. One can observe this by attending to abdominal movements during Normal Respiration.
- B - **With every exhalation** front abdominal muscles are contracted and all the digestive organs are pushed inward and upward and **with every inhalation**, the diaphragm presses the abdominal viscera downward and forward and in this way give them a gentle massage.
- C - **Abdominal Muscles** are massaged around 14 to 18 times per minute automatically. This keeps the digestive organs healthy naturally.

## DISTURBED NATURAL MESSAGE

- A. Automatic massage can be kept effective if we maintain strong and elastic abdominal muscles. If they are weak, they can not give massage properly to digestive organs and this results into **indigestion**.
- B. People suffering from **dyspepsia** have too rigid or too weak abdominal muscles.
- C. Weak Abdominal Muscles lead to weak digestion resulting into weak **Absorption** also. This in turn affects the quality of nourishment supplied to the Tissues of various Organs. This in turn weakens the health of those organs.



## YOGA AND THE HEALTH OF DIGESTIVE ORGANS

- Maintaining the health of Digestive Organs means – preserving the health and elasticity of the Abdominal Muscles.
- Yogic Poses not only ensure effective automatic massage but also they make special provision for giving forced and vigorous internal massage to the abdominal organs.

## YOGA FOR THE HEALTH OF ABDOMINAL MUSCLES

- It is a scientific fact that strength and elasticity of muscles can be maintained if they are subjected to **stretching and contracting exercises**.

### YOGIC EXERCISES:

- **Stretching** :- Bhujangasana, Shalabhasana and Dhanurasana are fine stretching exercises for the front abdominal organs and serve as contracting exercises for back muscles.
- **Contracting** :- Yoga Mudra, Pashchimatana and Halasana require vigorous contraction of the front abdominal muscles and at the same time serve as stretching exercises for back muscles.
- **Vertical Massage** : - Uddiyana gives vertical massage to the abdominal organs. One can see abdominal viscera slipping up and down behind the front abdominal muscles.
- **Lateral Massage** :- Nauli gives a lateral massage to the abdominal organs. The two contracted recti roll from whole expanse of the abdomen. No other system of Health Culture provides any parallel exercise to this Uddiyana and Nauli

### Stretching Exercises



## Contracting Exercises



Yogamudra asana



Halasana



Paschimottanasana

## Vertical Massage



Uddiyana



Nauli

## Lateral Massage



Uddiyana



Nauli

## YOGA FOR THE HEALTH OF ABDOMINAL MUSCLES

- The healthy abdominal muscles are not important only for promoting natural massage but also it keeps the visceral organ in their places. These organs either loosely hanging in the cavity of abdomen or feebly attached to the back wall. If they are displaced they lead to various disorders and DYSPEPSIA in particular. Yogic Poses not only give the automatic massage to the Abdominal organs but they also hold all the abdominal viscera in their proper places and thus ensure proper digestion and absorption.
- And in this way the supply of nourishment to the tissues is satisfactorily discharged.



### CIRCULATORY SYSTEM AND ASANA

- The other system vitally connected with the supply of nourishment to the tissues is **Circulatory System**. Nutrition is supplied to the different Tissues of the whole body by the blood.
- **Principal Organ** responsible for Circulation is **Heart**. Because it is the Contraction and Relaxation of the Heart that circulates the blood through the whole body. The Heart is made of strongest muscle but it can be made healthier by means of Yogic Exercises.
- **Uddiyana and Nauli raise the diaphragm so high** that it gives good massage to the heart from below.
- **Bhujangasana, Shalabhasana, and Dhanurasana** alternately exert increased pressure on the Heart The same thing is done by **Sarvangasana, Viparitakarani and Halasana**



Bhujangasana



Shalabhasana



Dhanurasana



Uddiyana



Sarvangasana



Viparitakarani



Halasana

## CIRCULATORY SYSTEM, ASANA and VEINS

- Out of all the organs of Blood Circulation **VEINS** are the weakest. They have to collect the **BLOOD** from the whole body and raise it to the Heart against the force of gravity. This puts a heavy strain on the weak structure of Veins and is responsible for the troubles like **VARICOSE VEINS**.
- Yogic seers have found out a very easy way of helping these **Veins**. The yogic Exercises like Sarvangasana, Viparitarani, and Shirshasana - because of its upside down position, the veins are enabled to drain themselves into the heart without the least exertion. This short relief to the veins are so effective that patients suffering from Varicose Veins can overcome their trouble . In this way the whole **CIRCULATORY SYSTEM** satisfactorily carries out its duty of carrying proteins, fats, sugars and salts to all the tissues of the Human Body.



Viparitarani



Sarvangasana



Shirshasana

## CIRCULATORY SYSTEM, ASANA and OXYGEN

- The fifth element of Nourishment is **Oxygen**. This is also carried by the circulatory system. If the Circulatory system is healthy with the help of above mentioned Yogic Exercises, there remains no doubt about the supply of Oxygen to the tissues.
- **OXYGEN** is circulated in the whole body by the **Circulatory System**, but **this element** is supplied to the blood by the **RESPIRATORY SYSTEM**. **Yogic poses** are capable of keeping this Respiratory System in an efficient condition.



## RESPIRATORY SYSTEM AND ASANAS

- Principal organ of the Respiratory System is the LUNGS. The amount of OXYGEN supplied to the body depend upon :-
- **Healthy Lungs .**
- **Strong Respiratory Muscles.**
- **Clear Respiratory passage.**

## RESPIRATORY SYSTEM, ASANAS and LUNGS

- Healthy Lungs – Health of Lungs depend upon degree of their Elasticity and Activity of Air Cells. Then the question arise as to whether the Yogic poses contribute towards the elasticity of the Lung Tissues and better functioning of Air Cells ?
- The answer is ‘Yes’. **Shalabhasana and Mayurasana** have great efficacy in this direction. **Shalabhasana** requires deep inhalation and retention of breath for a few seconds, under a high Pulmonic pressure. A few rounds of Shalabhasana would allow no air cell to remain idle even in ordinary respiration.
- This also goes with **Mayurasana**. The difference in **Shalabhasana and Mayurasana** is that in **Shalabhasana**, internal kumbhaka is absolutely necessary, whereas in **Mayurasana** it is optional. They both are equally capable of keeping the lung tissue fully elastic.



Shalabhasana



Mayurasana

## RESPIRATORY SYSTEM, ASANAS and RESPIRATORY MUSCLES

- Strong Respiratory Muscle – Deep inspiration required in Shalabhasana and deep expiration required in Uddiyana and Nauli build powerful respiratory muscle and fulfill the second condition.



Shalabhasana



Uddiyana

## RESPIRATORY SYSTEM, ASANAS and CLEAR RESPIRATORY PASSAGE

- Clear Respiratory Passage – Respiratory passages are usually obstructed due to several reasons such as tonsils, adenoids, chronic nasal catarrh. But against these forms of obstructions – Asanas are not powerful. However, it can surely deal with Tonsils. Sarvangasana, Viparitararani, Jihva Bandha, Simha Mudra are found to be very effective against this. If we exclude the chronic cases, asanas are capable of keeping the respiratory passage clean.
- In this way, adequate supply of Oxygen is promoted through the practice of Yogic poses.

### Respiratory System and Asanas



Sarvangasana



Viparitararani



Jihvabandha



Simhasana

## ENDOCRINE GLANDS and YOGIC POSES

### PROPER SECRETION OF ENDOCRINE GLANDS

- Health of tissue do not depend only on supply of proper nourishment in the form of proteins, fats etc. but also on internal secretion of Endocrine Glands.
- **Important Endocrine Glands** are:
  1. Thyroid,
  2. Pituitary,
  3. Pineal,
  4. Adrenals
  5. Destes and Ovaries



## ENDOCRINE GLANDS and YOGIC POSES

Deficiency of secretion of any of these glands has been found to lead to serious consequences. Yogasana can take care of proper secretion of these glands.

1. **For Thyroid** –  
Sarvangasana, Viparitararani, Matsyasana, Jihva Bandha, Simhamudra
2. **For Pituitary and Pineal** –  
Shirshasana
3. **For Adrenals** –  
Bhujangasana, Dhanurasana, Uddiyana and Nauli
4. **For Testes and Ovaries** –  
Sarvangasana, Uddiyana and Nauli

### For Thyroid



Sarvangasana



Viparitararani



Matsyasana



Jihvabandha



Simhasana

### For Pituitary and Pineal



Shirshasana

## For Adrenals



Bhujangasana



Dhanurasana



Uddiyana



Nauli

## For Testes and Ovaries



Sarvangasana



Uddiyana

## Removal of Waste Products and Yogic Poses

### Effective Removal of Waste products :

For maintaining the health of tissues, effective removal of waste products are necessary.

Waste Products	-	System Involved
Carbon Di oxide	-	Respiratory system
Bile	-	Digestive system
Faecal Matter	-	Digestive system
Uric Acid	-	Urinary system
Urea	-	Urinary system
Urine	-	Urinary system



- Most of these products are poisonous and if allowed to linger in the body, can lead to serious health problems.
- It can be seen from above chart that if respiratory system, urinary system and digestive system are kept in proper healthy condition the waste products can be effectively removed from the body.
- Yogic poses coupled with Uddiyana and Nauli can keep the **Digestive and Respiratory System** in an efficient condition.
- Asanas can take care of **Urinary System also**.
- The Urinary System consists of –  
**Kidneys, Ureter, Bladder and Urethra.**
  - Kidneys are situated in abdomen and asanas are very fine abdominal exercises. Asanas supplemented with Uddiyana and Nauli, are found to be remarkably competent to preserve the health of kidneys.
  - Healthy kidney is enabled to satisfactorily get rid of urine, uric acid, urea etc.

### Meditative Poses

- The object of meditative poses in Yoga is to offer comfortable posture to the students for the higher yogic practices like – Pranayama, Dharana, Dhyana etc.
- There physiological features are characteristic of Meditative poses :
- Erect spine – no untoward compression of abdominal viscera in order to free the mind from the burden of the body.
- Richer blood supply to the pelvic region toning up the coccygeal and sacral nerves.
- Minimum production of CO<sub>2</sub>.

### CONCLUSION

In this way it can be concluded that –

- \* Yogic Poses are capable of keeping the health of the Human Beings by effectively influencing the different systems of the body and making them healthy in order to enable them to perform their function more efficiently.

\* \* \* \* \*



## Annex - 4

Some benefits of Yoga that have been revealed by modern research :

### Research on Fitness Factors

#### a) Muscular Fitness

School children require a good level of **muscular fitness** to sit or stand comfortably during teaching learning situation. Moreover, proper muscular fitness level is essential for maintaining a good posture so as to prevent postural defects in future life. However, a survey research on Kendriya Vidyalaya students reveals that about 40.3% students **failed in muscular fitness test** (Gharote & Ganguly, 1975). Further, different controlled experiments (Gharote, 1976; Gharote, Ganguly & Moorthy, 1976; Moorthy, 1982) indicate that Yoga intervention help the school children to improve muscular fitness.

#### b) Flexibility

Body flexibility depends upon the coordinated function of joints and muscles. Literature reveals that aging reduces flexibility, which in turn causes musculo-skeletal problems by disintegrating the functions' of muscles and joints. Such a poor state of flexibility is seen among the urban school children. Our researches indicate that Yoga practices help for significant improvement in flexibility level (Moorthy, 1982; Govindarajulu, Gannadeepam & Bera, 2003).

#### c) Cardiovascular / Cardiac Efficiency

Coordinated functional ability of heart and lungs signifies the cardiovascular efficiency. Many research reports in developed countries indicate that today's school students are more inclined towards obesity which affects their overall cardiovascular functions. Here we can think of Yoga. The research literature revealed that regular practice of Yoga (both short term and long term) are helpful in improving cardiovascular functions of school students (Ganguly, 1981; Ganguly, 1989; Govindarajulu, Gannadeepam & Bera, 2003; Mishra, Tripathi & Bera, 2003).

#### d) Body Composition / Body Fat / Body Density

Body composition is indicative of one's organic functions. For example, excessive body *fat* indicates improper functioning of one's heart and one



becomes hypertensive generally. Kaivalyadhama Laboratory conducted ample of researches in this direction. The findings of our controlled study support that Yoga contributes to reduce excessive body *fat* not only among school students (Bera & Ganguly, 1990) but also in 'obese patients (Bera, *et al.*, 2003; Gharote, 1977) in increasing body density (Bera, Rajapurkar, Ganguly, 1993). A direct controlled study (Bera, 1993) reveals that Yoga training helps to keep the body composition of school students under control.

### **Physical Fitness & Health-related Fitness**

A good level of physical fitness does not signify that the person is healthy. Therefore, AAHPERD (*American Alliance of Health, Physical Education, Recreation and Dance*) has developed the concept of "Health related Fitness." Our researches on school children have revealed that Yoga practices help not only to improve overall physical fitness (Gharote, 1976a, 1976b, 1979, 1987), but also responsible for better level of health related fitness.

### **Research on Psychological Factors**

#### **a) Stress, Anxiety, Neuroticism & Hostility**

Body and mind function together. Once physiological organs start improper function our body experiences stress, which in turn affects our psychological states. Thus, controlling physiological stress may be indicative of controlled psychological stress and vice-versa. One of our findings indicates that practice of Shavasana reduces physiological stress (Bera *et al.*, 1998). However, psychological stress as experienced in terms of anxiety, neuroticism, emotional imbalance and hostility is also reduced significantly with the help of Yoga practices (Bhagal, 1997; Kocher & Pratap, 1971, 1972 & 1973). 9-month yoga programme has been found to be instrumental in enhancing human values (Bhagal, Oak, & Bera, 2002). Although these studies were conducted on college students, Yoga may be equally important for school students in tackling stress in academic situations.

#### **b) Memory, Perception & Mental Fatigue**

Memory and proper perception, without doubt, help for better learning. Some times appearance of mental fatigue, the state of perception and memory is disturbed which affects learning. It is important to note that regular practice of



Yoga increases both *memory* (Kocher, 1976a) and *perception* (Sahu & Gharote, 1985) on one hand and *delays mental fatigue* (Kocher, 1976b) on the other. Thus, Yoga is really conducive for better learning.

### c) Psychomotor Performance, Steadiness, Hand Coordination

For school students, high level of psychomotor performance is essential mostly while writing notes or during interaction in classroom situation. In fact, psychomotor performance depends upon one's state of steadiness (mind and body) and coordination of body parts. This performance ability can be improved by practicing omkara recitation, pranadharana and nadanusandhana, which are known as higher yoga practices (Kocher & Pratap, 1972; Pratap, 1968; Sahu & Bhole, 1983a & 1983b).

## Research on Physiological Factors

### a) Motor Functions, Aerobic Power, Work Capacity & Oxygen Consumption

Healthy body is the temple of healthy mind and spirit - it is generally believed. Healthy body signifies systematic and coordinated functions of all internal organs indicating better motor functions, aerobic power and physical work capacity. Controlled experiments on school students revealed that long term practice of yoga influences one's motor functions (Bera, Jolly, Ganguly, Gharote, 1999) along with aerobic power (Bera, 1993), oxygen consumption and work capacity (Bera, 2004; Govindarajulu, Murugesan, & Bera, 2002).

### b) Vital Capacity & Lung Functions

Research literature in sports informs that higher state of *vital capacity and lungs functioning* are the indicative of top performance. Similarly, for common people, respiratory disorders can be prevented if one secures better level of vital capacity and lungs function. Moreover, as the functions of lungs and heart are interrelated, the abnormal function of lungs and low vital capacity would adversely affect the function of one's heart. This, in fact, indicates that coordinated functions of lungs and heart increase stability of body that in turn brings about stability or tranquility of mind and, therefore, helping for better learning. In case of yoga practice, similar mechanism might be working so that one can improve vital capacity (Bhole, Karambelkar, & Gharote, 1970) and lungs function (Gore & Gharote, 1981a, 1981b) along with psychophysical stability which seems to be conducive for better learning.



## Research on Sports Skills & Performance

The research evidences, available so far, have created an impression that Yoga is useful for improving one's health and fitness and it can be used as an easy technique for controlling stress. However, its implication in the area of sports skill and performance is found significant (Lolage & Sera, 2003; Govindarajulu, Tiroumourougane, & Sera, 2003; Pargaonkar, Joglekar, Dhope, & Sera, 2001).

## Research on Health in association with Biochemical Parameters

### a) Cholesterol

Although HDL-Cholesterol is good for health, excessive level of LDL and VLDL cholesterol affect health not only for adults and old, but also for the children. Many recent studies on urban school population are in agreement that a significant percent of school students are obese who are prone to excessive level of LDL and VLDL. In this case yoga plays very important role in controlling the affective cholesterol (Karambelkar *et al.*, 1981; Moorthy, Ganguly, Gharote, & Karambelkar, 1978). This principle of Yoga may be of immense use for school children who are prone to obesity having excessive level of bad cholesterol.

### b) Urinary Acidity & Blood Urea

Appearance of excessive acidity and blood urea in urine is the indicator of anxiety, tension, me\_toemotional instability and stress. Our investigation reveals that long-term yoga practices are helpful in improving urinary pH by reducing the level of urinary acidity and blood urea (Desai & Gharote, 1986a; Gore, 1976). Thus, in present *competitive academic atmosphere*, our students population suffer mostly from stress, anxiety, tension, which may increase acidity and urea in urine contents that may in turn affect the excretory organs like kidney, urinary bladder etc. Here yoga may be useful for better health of excretory organs.

### c) Plasma fibrinogen, Plasma protein, Gamma globulins.

School children generally participate in games and sports under the curricular subject „Physical Education.“ Thus, possibility of sports injury cannot be ignored. If there is bleeding due to sports injury, *plasma fibrinogen* helps for better coagulation of blood and stops the oozing the blood for better quick recovery. Our research finding (Desai & Gharote, 1986b) is very significant



which indicates Yoga practices improve fibrinogen level in plasma. Moreover, 3 weeks of Yoga practice also claims to improve **plasma protein and gamma globulin** (Desai & Gharote, 1986a). Thus, Yoga keeps the- health of our blood (pure) which in fact keeps our body healthy.

### Research on Learning & Academic Achievement

Above research based evidences support the efficacy of Yoga conducive for creating better teaching-learning atmosphere in schools in improving student's health and fitness.

However, direct controlled experiments conducted in our laboratory indicates usefulness of Yoga better **learning ability** (Bera, Kulkarni, Gore, Bhogal, & Oak) and **academic achievement** (Ganguly, Sera, & Gharote, 2002) especially for school children.

### Research on Special Group of Children

Researches conducted on ninety children with mental retardation of mild, moderate and severe degree were selected from four special schools in Bangalore, India. Forty-five children underwent yogic training for one academic year (5h in every week) with an integrated set of yogic practices, including breathing exercises and pranayama, sithilikarana vyayama (loosening exercises), suryanamaskar, yogasanas and meditation. They were compared before and after yogic training with a control group of 45 mentally retarded children matched for chronological age, sex, IQ, socio-economic status and socio environmental background who were not exposed to yoga training but continued their usual school routine during that period. There was highly significant improvement in the IQ and social adaptation parameters in the yoga group as compared to the control group. This study shows the efficacy of yoga as an effective therapeutic tool in the management of mentally retarded children.

\* \* \* \* \*



## Annex - 5

### List of Reference Books :

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\* \* \* \* \*



*"I hope the Union will promote agencies under its aegis to promote not merely historical and Scientific research but also research in Yoga and the spiritual field on a really scientific basis, science understood in the largest and most comprehensive sense, not in very narrow sense of having a little laboratory, test tubes, flasks, pipettes and burettes but the real Scientific outlook of experiment, the outlook of man seeking knowledge, Scio "to know"*

- **Dr. H. V. Kamat**

*Member of Parliament, in a debate in  
the Parliament on the 31st August 1949*

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