





Published by

#### Swami Vivekananda Yoga Prakashana

#19, Eknath Bhavan, Gavipuram Circle, Kempegowda Nagar, Bengaluru - 560019 City Office - Ph: 080-26612669 Telefax: 080-26608645 Prashanti Kutiram Campus - Ph: 080-22639996 E mail: svyasa@svyasa.org Web: www.svyasa.org

# YOGA FOR EYE SIGHT IMPROVEMENT

Yoga in Education for Total Personality Development **Series - 2** 





#### Published by

#### Swami Vivekananda Yoga Prakashana

#19, Eknath Bhavan, Gavipuram Circle, Kempegowda Nagar, Bengaluru - 560019 City Office - Ph: 080-26612669 Telefax: 080-26608645 Prashanti Kutiram Campus - Ph: 080-22639996 E mail: svyasa@svyasa.org Web: www.svyasa.org

# **CONTENTS**

Ch.No.	Title	Page No.
1	Introduction	
2	Body Systems in Improving	
	Physical Stamina	
3	Physiology of Muscle Action	
4	Physical Stamina According to Yoga	ı
5	Yoga Practices for	
	Physical Stamina Development	
1		r

# INTRODUCTION

The great master Swami Vivekananda said that there are four main streams of yoga: Jnana Yoga, Raja Yoga, Bhakti Yoga and Karma Yoga. To use all these streams of yoga to build the personality. We are now going to focus on Eyesight Development or Evesight Improvement. In late 60s the TV came afresh in Bangalore city and everybody was so fascinated, particularly the children glued themselves to TV forgetting all their sports outside. Went on watching 3 hours, 4 hours, 5 hours, 6 hours and movies after movies and as expected it started happening in 5 or 6 years, 1972-73 we started seeing most of these children wearing very thick glasses. We felt too bad. We said can we solve this problem? Many people said that we are not going to allow our children to watch the TV. That is no solution. This is when we started developing yoga module. The specialised techniques that yoga prescribes for eyesight improvement were selected from various yoga techniques. The precautions we have to take, norms that we have to follow were taken care. So we developed this module, integrated yoga module for eyesight improvement. We started giving that in Yoga Camps. One week camp, 15 days camp, one month camp and we started documenting the result whether really it is useful or not. The results were very fascinating. When we have an average of 1000 or 1500 students, we have found that the eyesight can improve by one Diapter for short sight students with a practice of every day half an hour for one month. This integrated yoga module can bring such wonderful results. Practice for half an hour every day for one month, one Diaptor is going to reduce.

When we continued children with -5, -6, -7 children were able to normalise their eyesight. Then we started taking up this. Initially we have short theory and then we go for the practice and what is the whole basis for the eyesight improvement that we are talking? Many people think that the accommodation power of the lens is going to change. No. It is Eye Ball Curvature. In short sight the image is falling too far in front of the Fovea. But why is that distortion taking place in the eye ball? This is because of the differential pull of the rectie muscles of the eye ball.

So when we do yoga in which we handle the eve excercises to see that the muscles co-ordinate cohesively that the eye ball starts becoming normal. How do we know it YOSA PHACTICES FOR EYES INCLUDE PREPERATORY EYE EXERCISES EYE RELAXATION TECHNIQUES **CLE ANSING TECHNIQUES** ■ TRATAKA(JATRU) **■ JYOTHITRATAKA** 

is going to become normal? One of our Opthalimic specialist Dr. Upadhyay in England, measured the eye ball curvature and after 15 days, after one month of vogic practices the eye ball curvature started getting normal. Such results prove that yoga brings in normalisation and it is these techniques that we have used. Trataka is the specialised practice that yoga prescribes. It is one of the six krivas. Krivas are essentially meant for cleansing and to strengthen the nerves which connect the eyes to the brain which handles the different muscles and calming down of the mind, silencing of the mind, slowing down of the breath, does wonders. Therefore in this module we are going to use some Asanas, special breathing practices and mainly the Trataka and the meditation which help the people develop their eyesight.

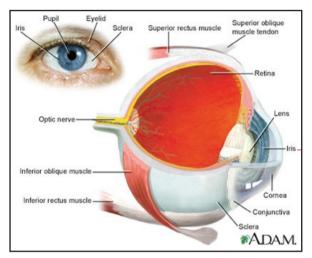
### STRUCTURE AND FUNCTIONS OF EYE

Let us try to understand the structure and functions of the eve so that we can go ahead to understand how Yoga works in improving our eyesight.

We all have two eyes. A resting eye is designed for distant vision. Near work always involve lot of work on the small, little muscles of the eve. Each eye is comparable to a photographic camera. Just like the camera has a diaphragm



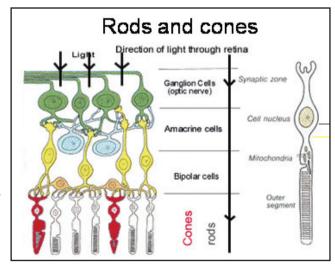
and an aperture, our eye also has a dark highly pigmented diaphragm called Iris. This Iris cuts off all the light from entering into the eye ball and in the centre of the diaphragm is the little transparent hole called the Pupil. The diaphragm is called the Iris, the apercher is called the pupil. Through this pupil only nature allows the light to pass through. What are the functions of a good camera? It should have a very good powerful lens so that it can have a very clear image at its focal point and it should be able to adjust very perfectly to the light conditions and also to the distance of the object from the film of the



Our eve camera. although is comparable to a camera, is not having a shape of a camera. It is a beautiful globule. It is a beautiful spherical ball which has got all the functions of a camera. For example, in this picture,

you can see the iris with its aperture and the diaphragm. Light passes through the aperture which is covered by a very transparent glossy convex sheet called the Cornea. This is highly sensitive structure of the eye. You would have experienced even before any dust particle sits on the eye, you would have blinked. So this Cornea is a highly sensitive but extremely trans-

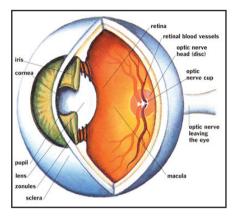
parent convex which layer covers the front of the eye. As the light passes through the Cornea and the Pupil, it passes through the convex lens of the eye which focuses the



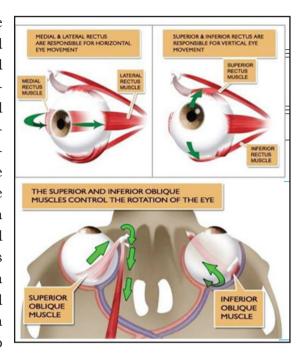
light rays on to the back of the eye ball. These light rays that pass through the Cornea, will get refracted there, then they get finely adjusted at the convex lens and the light passes through to the back of the eye where the photo sensitive layer of the eye exists called the Retina. Just like in a convex lens which you would have seen in your physics experiments in your school days, there is a focal point where very clear image of the object in front is focused through the convex lens. Similarly the natural eye has a capacity to adjust the shape of the convex lens so that the light rays fall exactly at the focal point so that the Retina is getting the sharp image of the object that we see. This Retina has got photo sensitive sensors, photo sensors. What are these photo sensors? They are called Rods and Cones which can sense the light rays. They are called Rods and Cones which convert the light energy through chemical energy into the electrical energy and pass it on through the relay nerves to our optic nerves. So all these fibers from millions of these Rods and Cones carry this information to our eye ball where the Retina carries the image and converts it from light energy to electrical energy. The information is carried on to our brain through the optic nerves. The light rays are now transferred as electrical activity to the actual cortex of the brain called the Occipital Cortex. This Occipital cortex is there behind our head, the last portion of the big chunk of the brain. The Occipital Cortex starts interpreting doing lots of interconnections, interpretations and intermingling of information checking with past experience, post experience, lots of nerve connections, do lots of computerization and finally the image is transferred on to our mind. It is the mind that does the perception and finds the meaning of the image that has

#### been seen.

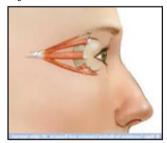
Say for example, you are seeing a beautiful tree. All the colour clear images are to be transferred on to the specific spot in the Retina. If the tree is not in front of your eyes, if it is to the side, then you cannot get very clear picture. Suppose your friend walks into the room, you suddenly turn



your eye balls to see who it is. Although you have big area that is covered by the big area of the Retina, the image has to fall on a specific point in the Retina called the Fovea or the Macula of the Retina where there are large number of Rods and Cones. To do that nature has provided us with an ability to move the eve ball in various directions with good number of muscles attached to the eye ball. So wherever we want any movement in the body, if we want to move the hand also, we need the muscles there. Just like a muscle moves the hand up, the external muscles of the eye ball moves the eye ball in different directions. So we want to move the eye ball upwards, downwards, to the left, to the right. Therefore to move the eye ball we have very thin strip of muscles which are attached to the eye ball all around and these muscles when they contract, move the eye ball. So if you want to move the eye ball upward, you have a set of muscles and the upper portion called the Superior rectus Which pulls the eye ball in the upward direction. Pulling the eye ball in the downward direction is possible by moving the lower set of the muscles to right and moving the eye ball to the left is possible through lateral set of muscles. Various rotatory moveare possible ments through a sling of the oblique muscles. On the whole, eye ball has got six muscles that have to work in a highly coordinated way. When object on to your right has to



be seen, you want to move the left ball to the right and the right eye ball to the right. So coordination is brought about by information that is carried from the brain along the nerves. These nerves gives the correct information to the correct set of coordinating muscles. This is how we are able to get a very sharp image focused on to the Fovea of the retina. Here the clear image is interpreted or converted into electrical activity. There is also another very important activity that goes



on in the eye with all the work that we do. Say when you are looking at a very distant object all the eye muscles are relaxed. As soon as you want to reach or look at a T.V. or a computer screen, there is a lot of adjustment that eye has

to do Shrinking or construction of the pupil, thickening of the lens and drawing in of the eye balls all these



three put together is called the accommodation reflex. This goes on very naturally. So try and understand how complex, how beautifully the nature has provided this mechanism to do whatever we want and to get a beautiful picture, the colour and the beauty of the world and appreciate it.



# PROBLEMS OF EYE WHERE YOGA CAN HELP

Understanding the Anatomy, Physiology and the problems of the eye according to understood by Modern Medical Science will help us to understand how yoga can help us in improving our eyesight. So let us see what are all the problems of the eye where Yoga can be of great help. These are all the conditions where Yoga has been tried and large number of people have been benefited by doing Yoga for these problems. One of the commonest problems faced today with the modern life style is the computer related eye problems and eye strain. Eye strain because of continuous near work for long hours, either reading a small printed book or computer work or watching a TV or watching a CD, playing computer games all these lead to continuous near work. Present day life style has lead us to do so much of near work that almost we have forgotten how to do a relaxed distant vision. For example, you see some computer professionals when they are walking on the street they are looking and seriously thinking of something and looking as if their eyes are fixed for near vision. We have forgotten to open our eyes, look at the distant objects, enjoy the trees and birds, flowers by looking at the sky, looking at the nice clouds and the beautiful stars and moon because of so much of habit of near work. We have understood how near work has a need for the eyes to do intense activity. Near work means accommodation. Near work means constriction of the pupulary muscles. Tightening of the muscles of the lens to thicken the lens so that we would focus in the right direction and moving the eye ball in the inner direction. So that the inner muscles of the eye all the time are constricted. So there will be lot of work on thin muscles of the eye inside the eye ball. In modern life style one is engaged in near work continuously for eight hours, ten hours, twelve hours sometimes, 18 hours. Even after the active work is over in 8 hours in a day, one comes back and watches TV which may go on for another 2 or 3 hours. So continuously if the muscles are contracted, which we are not aware of, the muscles say, sorry I cannot do any more work, I want to relax. This is exactly what is the experience of eye strain. It is something like you are going on keeping your hand muscles i.e. bisect muscles which are visible, tight for 18 hours in a day. What will happen? Your muscles will say sorry, I am tired, I am exhausted, please relax off. I am feeling pain. This is the cause of eye pain and eye strain and this goes on to pour down lot of tears in the eyes which may further go on to many other more deeper structural disturbances in the eyes. So eye strain, eye pain are all very common problems and are considered as computer related eye problems. When the eye strain is going on and on like this, muscles are tight. Not only muscles are held tight, it leads to poor immune system in the eyes also. So repeated stye is commonly associated with eye strain. You know what is a stie? At the margin of the upper or lower eye lid there will be a small swelling, a small boil, Very painful. It becomes red and swollen. Then a pus comes out after 4 or 5 days. Repeated styes is another very common association of eye strain. This is all about only the local over work of the

eve muscles and the eve balls. But imagine eves are not only an independent camera which is sitting outside of you. It is placed inside our system, so it is reflecting the activity of the entire system. If the mind is over active, over strained, over agitated, stimulated and excited then that can be reflected in the tightness of the neck and the shoulders can also reflect as tightness of the external and internal eye muscles. This will add on general worry, general tension, general anxiety, general stress at the mind level plus the local work of the eye, both add on to the tightening of the muscles, exertion of the muscles, weakening of the muscles over a long period of time. This is the cause of many of the further complications that we see that are associated with early aging changes or problems that are related to the eye. Errors of refraction is another very common condition where we use Yoga for helping people to reduce therefractive error of the eyes.

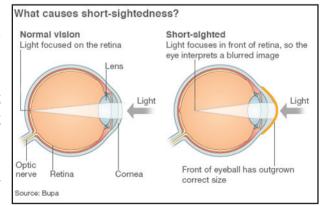


# YOGA FOR REFRACTIVE ERRORS

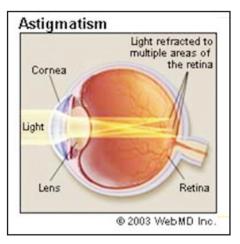
Looking at the problems of the eye, where Yoga has been found to be effectively used, let us try to understand what are the errors of Refraction, Myopia or Short Sight, Hyperopia or Long Sight, Astigmatism or Irregular Curvature, Pressbíopia the ageing changes where people need to use reading glasses are all problems of Refraction. This is due to the inability or difficulty of focusing of the image that has to fall right on the sharp point called the Fovea or Macula in the Retina. The short sight or Myopia is a condition where the eye ball of the person is too long and therefore the, the sharp image which has to be at the focal point of the lens is falling too far in front of the Fovea. The eye ball, has become too deep now. Thus the image is falling too far in front. By the time the image reaches the Fovea, it is blurred. The person moves the object very near. Thus the image gets pushed further back. He will be able to

see better. This is called Short Sight.

What is Long Sight? In long sight it is the reverse. The image is falling too far



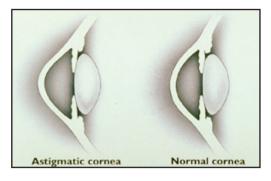
behind the Retina. The eve ball shape had to be long. After all the possible adjustments of the lens, good and sharp image which is at the focal point is falling too far behind. Therefore the image becomes blurred. What does the person with long sight do? He keeps the picture too far behind. The image comes



further in. It is called as Long Sight. These two conditions are very common and Astigmatism usually goes with Myopia or long sight. In this, there is an irregularity of the surface of the Cornea. If the Cornea is smooth in one plain and it is irregular in another plane. The image is not sharp and therefore one has to make corrections which has to be done by using different types of lenses. In addition to this, hereditary tendency which makes the eve ball remain in a particular shape, just like a long nose or a tall personality the shape of the eye ball also is a hereditary tendency which leads to short sight or long sight.

But there is another factor which is very common and that is what we are seeing in the present day life style that is the effect of strain on the eyes. Too much strain on the eyes can make the errors of Refraction become worst. So if you already have a hereditary tendency, the excess eye strain, excessive near work plus the mental tension which cause a general stress and strain aggravates the errors of Refraction and therefore by the

age of 20, 30yrs the power goes on increasing. So far example, a person starts using glass for the first time in his 20, 25yrs that means it is purely due to eye strain. If the person starts needing a glass right from the age of 5 or 6vrs that means there is a hereditary tendency. Hereditarily longish or thinnish eye ball but it gets aggravated as the age advances. there are three stages. When they are 5, 6, 7 Yrs old, they start using glasses. Then in adolescence it gets aggravated again as the eye work increases in their early 20s, It further increases. So these are the areas where Yoga can be of great help. In fact the very first book Better Eyesight without Glasses was written by a sufferer who was having short sight. He was using quite a thick glasses, may be of 3 or 4 and as he was growing, doctors used to tell him look, you are getting this power and it is going to get worse, but you use the glass very regularly the power will not get worse. Therefore this sincere youngster Mr. Bales started using the glass is very regularly but the power went on increasing. Then he started searching. Although I am correcting the error which is basically correcting the shape of my eye ball, why should it go on increasing? Therefore he started doing lot of reading. When he read the whole thing and when he experienced the same thing, he realized that with eye strain, the error goes on increasing. More near work more strain. Less sleep, more tension, mental worries, all these (either local or general as we understood earlier) can aggravate the errors of refraction. Therefore what did he do? He said, OK, over work of the eye is the problem which is making my power get worst, then what is the answer? Just wearing the glasses cannot be an answer. Therefore what he said was OK, let me give lot of rest for my eyes. Does that mean he should not read at all? Does that mean he should not do computer work? No. He said OK several times in a day I will blink and wink and do lots and lots of palming of the eyes. Give deep rest to the eyes. Make sure that I get good sleep. In case I don't get sleep also I will see that I don't strain my eyes and I keep my eves completely closed with a band and



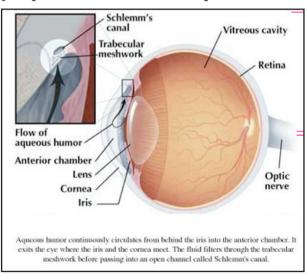
a cold pack and all that So he started practicing more and more of eye rest throughout the day and he noticed that the power started reducing. This made him experiment it on several other of his friends. Then as a result he wrote this very first book where he started talking about Eye Exercises and Eye Rest for better Eye Sight without Glasses. Further to this there are large number of researchers and at this institution also we took up a group of people with eye problems like short sight, long sight, atigmatism, pressbiopia and we were able to demonstrate a significant reduction in the power of the eyes as they went on practicing this, trataka and palming and all the other instructions that we are going to discuss in this module for better eye sight without glasses. Therefore let us practice this and make sure that we stop the progression of the problem and reduce the progression of the problem.

I remember a girl who came to me around the age of 12 years and she did this practice very very regularly and within about six months, she was able to reduce the power of her glass by -2 power. To a large number of people we have been teaching this. So anywhere from .5 to .2 diapers improvement particularly in short sight children is observed in all these cases.

### EYE PROBLEMS - YOGIC SOLUTIONS

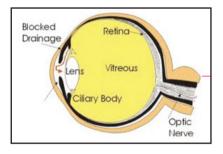
In earlier Chapter, we focused on Yoga for Refractive Errors. We devote this Chapter for other eye problems where Yoga can be of great help. Glaucoma is a very common condition where people may lose their eyes if not detected. This is one condition where there is no complaint, until the person starts feeling blurring of the vision. What is Glaucoma? Glaucoma is increased pressure of fluid in the anterior chamber of the eye that is in front of the lens. To maintain the shape of the eve ball, nature has provided fluid in the anterior chamber and poaterior chamber. The anterior chamber contains a fluid called aqueous humor and this vitreous humor or vitreous humor fluid is to be continuously kept in circulation. The aqueous humor

drains through a passage at the angle of celiary body where there is a mesh like material and is drained out through the blood vessels. If this gets disturbed the pressure inside this anteriorchamber



goes on increasing. This reflects on the back chamber also and that can press on the Retina and create blurring of the vision and loss of vision. There are two types of Glaucoma. Open Angle Glaucoma and Closed Angle Glaucoma. Closed Angle Glaucoma is a medical emergency. So immediate surgery has to be done. It is a rare condition. But the common one which we see as Chronic long standing age related problem is usually seen in people with Diabetes, Hypertension, as the age advances and if there is a strong family tendency for Glaucoma.

Can Yoga help these people with Glaucoma? Yes. Trataka is extremely useful in opening up this angle. To open up this angle and allow the fluid to flow better, we need to pull the diaphragm, the iris and shrink the



pupil. When we do the Trataka with Jyoti Trataka particularly or Bhroomadhya Trataka or Nasagra Trataka, then this pupil constricts. The constriction of pupil is one of the usual treatment that is used in the form of Eye Drops in the treatment of Glaucoma, so that when the pupil is pulled in, the diaphragm is pushed. Therefore the angle on the outer side opens up and therefore the pressure inside can reduce. So Jyoti Trataka, lot of rest and also the over all Integrated Approach of Yoga Therapy will help to see that it helps the ageing process gets delayed or the High Blood Pressure gets reduced, Diabetes comes under control. The root cause of all these problems can be handled through Yoga Therapy. When we use the concept of Integrated Approach of Yoga Therapy where we understand that eye is not an isolated organ in the whole system. Our body, mind are all one single unit. When the mind is going through a very stressful period, the eye problems can be a major issue. Therefore when we do Yoga Therapy, it is not enough if you just do local eye practice. Therefore let us see how Yoga practices help.

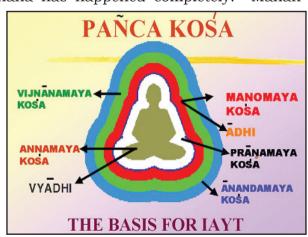
One is basically the relaxation, Deep relaxation of the eyes which is achieved through deep relaxation at the mind body compelx, Shavasana relaxation techniques, breathing techniques etc., which is also very important. When we teach Yogic Practices to our children with the short sight, we include Pranayama, Shavasana, QRT, DRT etc., which we are seeing in the practices. In addition to that, we also use general stamina building practices in which the eye also becomes a part of the whole practice which is the general relaxation, general stamina building. But locally, with the eye we have understood what is very important is lots and lots of local relaxation to the internal eye muscles as well as external eye muscles. Therefore doing palming, winking, blinking etc.; is very important component. During Trataka practice, the focusing on the lamp or the finger tip etc. has to be done intensely, sharp focusing without blinking the eyes even the tears may come out of the eyes. You should hold the focusing or dharana as it is said in technical language for quite a duration of time allowing the tears to come out. How is that going to help the eyes? If the eye is already over strained; how again overstraining the eyes till the tears come while doing Trataka be helpful? In Trataka we develop voluntary, mastery over the involuntary reflexes of the eye by persistant stimulation followed by deep rest. We want to focus, we want to intensely strain the eye but consciously, wantingly, voluntarily and after that give very deep rest. A stimulation, activation, focusing and intense rest for the muscles. For example say if you want to relax the fingers, what I would say? Hold the hand on the other hand Relax your fingers, relax your fingers. To some extent the tightness of the fingers will reduce. But if I ask you to make a fist, tighten your fingers and then relax continue that process of relaxation consciously into deeper and deeper and deeper rest, then the hands can relax much deeper. This is the principle of stimulation followed by deeper and deeper and deeper rest about which you will understand as you practice which makes the eye muscles stronger. Eye muscle stamina improves. The sharpening of the ability of the eye as well as to hold on to near work for longer duration can increase. Stamina building effect can come which in Sanskrit is called titeeksha.



# EYESIGHT IMPROVEMENT AND THE TOTAL INSIGHT

When you talk about eyesight, it is not merely the improvement in the functioning of this eye, but also it should develop a eyesight, a sight into the real wisdom tradition of our country. What is that insight? That insight is to recognize our Self, that insight is to understand that we have that infinite Anandamaya Kosa as our causal state. It is from that Anandamaya Kosa that we all are born, coming through the Vijnanamaya Kosa, Manomaya Kosa, Pranamaya Kosa and the Annamaya Kosa. Therefore when we are talking about the eyesight improvement, we work in tune with this total insight of the wisdom base. We know that Anandamaya Kosa is a state of complete silence. Chitta vritti nirodhaha has happened completely. Manah-

prashamana has happened almost to the core. The mind is in the state of Avyakta and in this state we have almost infinite bliss, infinite knowledge, infinite power. Coming out of the



Anandamaya Kosa to Vijnanamaya Kosa, Manomaya Kosa, Pranamaya Kosa and Annamaya Kosa brings about the constriction. We are becoming smaller and smaller and constrict ourselves to the physical body and the eyes. We start getting the crunch of that Duryodhana in the Manomaya Kosa, the Aadhi which percolates down and Causes imbalance even in the eyes. The stress and the imbalance which percolate from Aadhi i.e. Manomaya Kosa comes down to the Pranamaya Kosa bringing imbalances in the prana leading to haphazardness of the breath, jerky breath and imbalance in breathing which in turn can cause different physical ailments and even eyesight problems are no exception. We use the techniques to deal with the eyes at the physical level. At the same time we bring in the wisdom base to give a total personality. As we improve our eye sight we will develop that insight to move towards that highest heights of Yoga. To move from animal level to become normal, great, super and divine human beings. That is the objective of this eyesight improvement program as a part of the personality development program. The techniques that we use here, on one side makes eyes focus, bringing great stimulation and brings relaxation through the palming. A Trataka, a palming, a Trataka, a palming. That forms the basis for the eyesight improvement program. We have the preparatory practices, then Jatru Trataka in which Oordwamukha, Adhomukha Tratka, Nasagra Trataka, Bhroomadhya Trataka, Vama jatru trataka, Dakshnina jatru trataka are there. All these things will harness the power of the eye muscles to improve our eyes. But then for correction we use the Jyoti Trataka. Jyoti Trataka is to focus the eyes on the flame. The flame can be of an oil wick or it can be of a candle and sit at five feet distance keeping the jyoti at the level of the eyes. You start staring at it, no winking, no blinking and look deep into the flame. Invariably the people with high eye power, short sight they start seeing multiple flames.

I remember one of the persons who had -5, after the first session he came and told, Sir I am seeing five different flames. So what is to be done? Which flame I should concentrate? He was asking. Another person was more bewildering he had -12, he said I cannot see that flame vividly. It is all like a blob and when he started improving, he started seeing 12 flames, 10 flames, 8 flames, 6 flames. And the first step is to bring them together by so adjusting your eyes so squinting so turning your eyes together to bring the multiple flames into a single flame. That will start reducing your eye power. Jyoti Trataka thereby starts correcting. Once you are able to bring the whole thing into a single flame, then you start looking deep into that flame and observe the intensification of the flame. At the bottom you have the wick then at the tip of the wick you have a red fire dot and then comes a flame which is almost darkish in colour. Then the big flame will have the highest intensity here and it comes in to the tip. The whole flame structure you are able to see clearly as you start improving and looking at this. As your eye power enhancement takes place, then you are able to see that for 30 seconds, one minute, two minutes. Then when you grow further one minute, Jyoti Trataka staring at it one minute first stage palming, two minutes second stage palming in which you press and release, press and release, stimulaterelax, stimulate-relax in which you give deep rest to the eyes and in the third you look at for 3 mins continuously staring at it without winking and blinking and get all the details, the vivid details of not only the flame but the wick and the blue flame and the things and aura around the flame and close your eyes and do the third stage of palming in which you not only press but use the Bhramari to develop a resonance and harmonize the entire face and the eyes. As you start relaxing the eyes your mind relaxes, breathing slows down, prana slows down as the mind starts fatheming the peace and the silence and the serenity. The stress is vanished. The imbalances come down and the reduced imbalance will start bringing down the imbalance for the eyes and that calming of the mind, that silencing of the mind is the balance factor for the stress and there by, the mind starts getting cleansed and as you go deeper and deeper, you will be able to grow higher removing all the imbalance. The muck and the dirt inside in our deep sub-conscious and you will overcome stresses and grow to great heights. Finally getting glimpses of that Anandamaya Kosa, getting insight into your causal state of Anandamaya Kosa is the one that brings all the bliss. Therefore not only the eyes overcome defects of short sight, long sight, astigmatism, squint initial stages of cataract but also it brings insight to go to our state of Anandamaya Kosa and to manifest that Anandamaya Kosa in our day to day life. Eyes become beautiful, become sensitive, become sharp on one side and on the other side you will find your mind becoming calm, silent, thus giving dual advantages of this program of Eyesight improvement connected to total personality development through the Integrated Yoga Module. We hope you will all use this and improve your eyesight and see that you grow higher and higher.

# YOGA PRACTICES FOR EYE SIGHT IMPROMENT

#### 7.1. PREPARATORY EYE EXERCISES

- Up and Down
- Right and left
- Diagonal (Right up-Left down, Left up -right down)
- Rotation- clockwise and anticlockwise)

#### 7.2. ASANA

- Padahastasana
- Ardha Cakrasana

### 7.3. EYE RELAXATION TECHNIQUE

- Palming—3 stages of palming,
- Hand cup Palming -hold
- Press and release palming -5 times
- Palming with bhramari- 3 rounds

## 7.4. CLEANSING TECHNIQUES (KRIYÄS)

- Eye cup Washing -1,
- Massaging, tear sac massaging
- Blinking, Jala Neti
- Washing using the palm;

#### 7.5. PRANAYAMA

- Relax in QRT—abdominal breathing
- Nädi Suddhi
- Bhrämari for Head Relaxation

#### 7.6. TRÄTAKA

- Näsägra, (straight finger) Palming 1
- Urdhvamukha Palming 1
- Adhomukha- (horizontal finger) Palming 1
- Väma jatru Palming 1
- Daksina Jatru Trätaka Palming 1
- Bhrümadhya Träöaka- (bent index finger) Palming 1

#### 7.7. JYOTI TRÄÖAKA

Jyoti Trätaka 1 eye at a time - Palmina 1 Both eyes trataka - three steps

- Multiple flames- merge them into one flame concen-1. trate on the sharpness of the margins of the flame
- Brightest part of the flame-recognize the gradation in the 2. intensity of the light
- 3. Wick of the candle.
- 4. Blue center of the flame
- Aura of the flame 5.

Antar Dharana trataka – imagine jyothi in the center of the skull focusing the eye ball inside skull

Surya trataka- sunrise and sunset - never look at white light

Moon trataka and star trataka

Dharana on jyothi and meditation Relaxed eyes in action- relax the frown on the forehead; keep a smile on the face always Neck Muscles Relaxation- neck back bending Action in relaxation Interactions in calmness



# 7.1. Preparatory Eye Exercises

Sthiti: Dandasana

Sit in any comfortable meditative posture

#### 1. **Up And Down Or Vertical Movements**

- Open your eyes with a few blinks.
- Gently move your eyeup-down, upballs down, up-down, continue another seven rounds (counting men-





tally). Move your eyeballs smoothly and continuously. Try to avoid jerky movements and keep your head steady. Practice at your own pace. After completion bring the eye balls to the centre and close the eyes. Do simple palming by making a cup of the palms and placing the palms



on the muscles around the eyes. Enjoy the movements of the eyeballs. Keep the face smiling.

#### 2. Right and left or horizontal movement of eyeballs

- Gently open your eyes with a few blinks.
- Gently move your eyeballs right-left, left-right continue seven more rounds. Move your eyeballs smoothly and continuously. Observe and feel the changes going on. Try to avoid jerky movements and keep your head steady. Maintain smile on the face. Relax the facial muscles.







Practice at your own pace.

- After completing ten rounds gently stop the practice and bring the eye balls to the centre close your eyes.
- Rub your palms against each other, form a cup of your palms and cover your eyes.
- Practice simple palming. Do not touch the eyelids with your palms directly. Relax your eye muscles completely. Relax for a while.
- Feel the warmth and darkness in your eyes. Make sure that your eyes are totally in dark.
- After sufficient relaxation, gently drop your hands down.
- Feel the cool sensation around the eyeballs. Relax for a few seconds. Do not open your eyes immediately.

#### Diagonal movement of eyeballs (two directions) 3.

- Open your eyes with a few blinks.
- Gently move your eyeballs to extreme right-up to extreme left-down; left-down to right-up; right-up to left-down; continue another seven rounds. As you move the eye ball smoothly and cotinuously to extreme right-up and extreme left-down positions, try to avoid jerky movements







and keep your head steady. Practice at your own pace.

- After completing ten rounds gently stop the practice bring the eyeballs to the centre and close your eyes.
- Rub your palms against each other, form a cup of your palms and cover your eyes.
- Give press and release palming. As you inhale deeply, press the palms around the eyes. As you exhale completely, release the pressure, continue four more rounds, count mentally. Do not press the eyeballs with your palms directly. Relax your eye muscles completely.
- After completing five rounds, gently drop your hands down.
- Feel the cool sensation around the eyeballs. Relax for a few seconds. Do not open your eyes immediately.
- Diagonal muscles train the recti muscles.

## Diagonal movement in the opposite direction

- Open your eyes with a few blinks.
- Gently move your eyeballs left-up to right-down; rightdown to left-up, ; left-up to right-down; continue another seven rounds as you move the eyeballs smoothly and continuously to extreme left up and extreme right-down. Try







to avoid jerky movements and keep your head steady. No tension inside. Feel changes going on inside(observe moments) Face smiling. Relax. Practice at your own pace.

- After completing ten rounds gently stop the practice bring the eye balls to the centre and close your eyes.
- Rub your palms against each other, form a cup of your palms and cover your eyes.
- Give press and release palming.
- After completing five rounds, gently drop your hands down.
- Feel the cool sensation around the eyeballs. Relax for a few seconds. Do not open your eyes immediately.

#### 5. Rotational movement of the eyeballs (clockwise and anti-clockwise)

#### Clockwise movement

- Now, let us proceed to rotational movement of the eyeballs.
- Open your eyes with a few blinks.
- Gently move our eyeballs to the left-up, right-down; leftup-right-down; left-up-right-down; continue another sev-

en rounds count mentally. Move your eveballs smoothly and continuously according to your own pace in clockwise. Try to avoid jerky, sudden movements and keep the head steady.

- After completing ten rounds gently stop practice bring the eye balls to the centre and close your eyes.
- Rub your palms against each other, form a cup of your palms and cover your eyes.
- Here give constant pressure palming. Press constantly around the eyeballs with your palms. Inhale deeply and exhale completely. Do not press on the eyeballs. Relax your eye muscles completely.
- After completing five rounds of deep slow breathing, gently drop your hands down.
- Feel the cool sensation around the eyeballs. Relax for a few seconds. Do not open your eyes immediately.

#### Anti-clockwise movement

- Now, proceed to anti-clockwise rotation of the eyeballs.
- Open your eyes with a few blinks.
- Gently move your eyeballs in anti-clockwise direction - right-up-left-down; right-up, left-down; right-up-leftdown; continue to move your eyeball smoothly and continuously at your own pace in anti-clockwise. Try to avoid jerky sudden movements and keep your head steady.
- After completing ten rounds gently stop practice bring the eye balls to the centre and close your eyes.
- Rub your palms against each other, form a cup of your palms and cover your eyes.
- Give constant pressure palming.

#### 7.2. ASANAS

# 1. PÁDA HASTÁSANA

### Sthiti: Táãásana

#### **PRACTICE**

- Stand erect with legs together.
- Start bending forward and down. Allow head to slowly come down. Feel the changes in the head. Increased pressure in the eyes. Maintain the posture with normal breathing.
- Slowly start rising up feeling all the changes. Feel the changes in the eye. Decreased pressure in the eyes. Enjoy the deep relaxation in the eyes. Feel the relaxation

throughout the body.

Relax in Táãásana.

#### *Note*

- Never bend the knees.
- Keep the neck up until the forward bending at the hip and the waist is completed and then drop the neck freely down to touch the chin to knees.



## 2 ARDHA CAKRÁSANA Sthiti: Táãásana

#### **PRACTICE**

- Support the back at the waist by the palms, fingers pointing forwards.
- Inhale and bend backwards from the lumbar region. Drop the head backwnd the changesards, stretching the muscles of the neck. Maintain for a minute with normal breathing. Relax the neck muscles. Allow the head to hang freely. Feel blood flow to the eye region and the changes in the eye region. Enjoy this with a smile on the face.



- Return to Sthiti through the same steps.
- Relax in Táãásana.

### **Benefits**

Makes the Spine flexible, stimulates the spinal nerves, promotes circulation of blood into head. Strengthens the neck muscles. Expands chest and shoulders. Improves breathing.

#### Limitations

Persons with, problems of vertigo have to avoid this posture. Repeat the practice of Padahastasana followed by Ardha cakrasana for a total of three times.

#### 7.3. EYE RELAXATION TECHNIOUE

#### 1. Palming Three stages

### 1.1 Simple palming:

Rub the palms against each other and keep the palms around the eyes in such a way that the mountings of the palms are around the eye without touching the eye ball. Give mental suggestions to relax the Eye muscles.



### 1.2. Press and release palming:

Rub the palms against each other, place the palms around the eyes. While inhaling press the palms around the eye and while exhaling release the pressure without releasing the contact.



### 1.3. Palming with bhramari:

Rub the palms against each other, place the palms around the eyes. While inhaling press the palms around the eye, while exhaling produce humming bee sound. Feel the vibrations around the eye. Relax the eye and all muscles around the eye deeply.



### 7.4. CLEANSING TECHNIQUES (KRIYAS)

#### 1. Eye cup washing:

Take an eye cup, fill it with water. Close the eyes, holding it with right hand, bring it near the right eye. Keep the right eyeball in water, then open the eye. Repeat closing and opening the eve at least 7 times. Hold the eye cup with left hand bend to right and allow all the water to fall down over the right eye ball.



Similarly repeat on the left side also.

This practice washes the eyes. Removes allergies. Extremely useful in eyesight improvement.

After completion on both sides, gentle massage on the muscles above and below the eye ball so that any water remaining will fall down. This is called Tear Sac Massaging.

## 2. Washing using the palms:

Take water in right palm, keep the right eye ball in this water, open and close the eye number of times.

Repeat the same with left side also.

#### 7.5. PRANAYAMA

### 1. NAADISIIDHI

#### Sthiti: Dandasana

#### **PRACTICE**

- Sit in any meditative posture.
- Adopt Násika Mudrá.
- Close the right nostril with the right thumb and exhale completely through the (left) nostril. Then inhale deeply through the same left nostril.
- Close the left nostril with your ring and little finger of the Násiká Mudrá, release the right nostril. Now exhale slowly and completely through the right nostril.
- Inhale deeply through the same (right) nostril. Then close the right nostril and exhale through the left nostril. This is one round of Nádiùuddhi práïáyáma.
- As you breath in cool air is entering in and as you breath out warm air is going out. With
  - each breath feel the eye muscles getting relaxed. Relax the whole body. Slow down the breath.
- Repeat nine rounds.
- Feel the automatic stoppage of breath.



#### Note

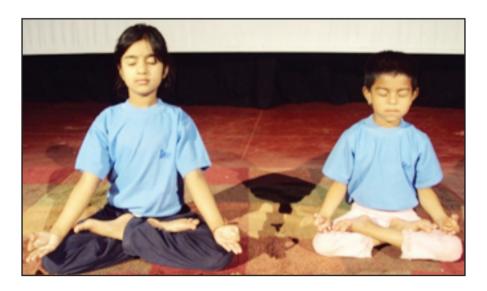
- This practice helps to maintain balance between Nádis.
- If you feel headache, heaviness of the head, giddiness, uneasiness etc. it means you are exerting much pressure on the lungs.
- The first symptoms of correct practice is the feeling of freshness, energy and lightness of the body and mind.

## 3. BHRÁMARÈ

### Sthiti: Dandasana

#### **PRACTICE**

- Come into any meditative asana.
- Assume Cinmudrá.
- Inhale deeply.
- Exhaling, produce a low pitched sound resembling the



Yoga in Education for Total Personality Development SERIES - 2

humming of a female bee.

- Feel the vibrations in the entire head.
- This is one round.
- Repeat nine rounds.

#### Note

- During the practice of Bhrámarè use 'N-kára' and not 'Mkára'.
- Touch the tongue to upper (hard) palate.
- Initially the sound vibration is felt more at the throat region only.
- With long practices try to feel the strong vibrations in the entire head region along with its resonating effect through out the body.
- In the beginning, 5 to 10 rounds of Bhramari is sufficient. Slowly increase to 10 to 15 minutes.
- It can be practiced at any time to relieve mental tension.

### **Benefits**

### Physical:

Creates a soothing effect on the nervous system. Cultures the voice and increases the melody.

#### Therapeutic:

Relieves stress and cerebral tension. Reduces anger, anxiety, insomnia and blood pressure. Good for all psychosomatic problems as it reduces the stresses and tension. Eliminates throat ailments (tonsils, pains etc.) Speeds up healing of tissue and so may be practiced after surgery.

#### Spiritual:

Develop the 3-Dimensional awareness. It aids in expanding the mind towards all pervasive awareness. It induces a meditative state by harmonizing the mind and directing the awareness inwards

#### 7.6. JATRU TRATAKA:

#### Sthiti: Dandasana

#### 1. Urdvamukha-Adhomukha Jatru Trataka:

Making the fist of the right palm stretch out the forefinger. Stretch the hand in front in such a way the forefinger is in horizontal position. Fix the gaze on the tip of the forefinger. Move the right hand up without losing sight of the tip of the forefinger. Continuously stare at the





tip of the finger. Move the finger smoothly. Take it as high as possible. Maintain for few seconds in the extreme end and start bringing it down. Take it down till it reaches the extreme down. Do not move the head. Repeat three times. Do simple palming. No pressure on the eye ball. All muscles nicely relaxing.

#### 2. Vama-Dakshina Jatru Trataka:





Stretch both hands in front

both palms making fists, thumbs raised up. Take the left palm left way as long as possible without losing sight of the tip of the thumb. Maintain for a while more in the extreme end and bring the left hand to the centre. Maintaining the left hand at the centre, move the right hand as above. Do not move the head. Move the eyeball. Repeat the whole thing three times. Do simple palming. Give more and more relaxation. Do Bhramari.

#### 3. Ubhaya Jatru Trataka:

Stretch both the pals in the front. Raise the thumbs up. Start gazing at both the fingers. Start taking the right finger right way and the left finger left way. Maintain to gaze both thumbs simultaneously. If you cannot see both bring them little closer and maintain there. Slowly bring back both hands together without losing simultaneous sight of both thumbs. Do palming. Relax the arms. Slightly bend the head. Support the arms on the chest. Take a deep breath. Press the surrounding eyemuscles. Chant Bhramari. The surround-



ing eye muscles enjoy the wellbeing due to vibrations.

### 4. Nasagra Trataka:

Sit in any comfortable meditative posture. Stretch the right hand in front of vou. Stretch up the first finger folding the remaining fingers. Start gazing at the finger tip. Slowly start bringing the finger tip towards you without losing sight of the tip of the finger. Bring the finger tip to the tip of the nose. Feel the strain in the eye muscles to focus on this. Slowly move the finger away from you without losing sight of the finger tip. Repeat two more times.

Do simple palming.



#### 5. Bhrumadhya Trataka:

Stretch the right arm in front, stretch up the index finger folding the rest of the fingers. Bend the Index finger. Fix the gaze on the tip of the index finger. Without losing the sight of the tip, move the index finger closer to you bringing it to the eye brow center. Feel the strain in the eve muscles to focus on this. Slowly move the finger away from you without losing sight of the finger tip. Repeat two more times. Do simple palming.



## 7.7. JYOTHI TRÁTAKA

### (A) Preparations

- Get candles, candle stand and match box. i)
- Wash your eyes with cool and clean water (with eye cup ii) if available) before starting the practice for good result.
- When you practice in a group, sit around the candle iii) stand, making a circle at sufficient distance from the candle stand (1.5 to 2 meters). The maximum number of participants in a group around could be about ten. Keep the candle at the same level as the eyes.
- iv) Arrange a few chairs for those who are not able to sit on the ground.

#### Instructions:

- Sit in any comfortable meditative posture, if necessary you may sit in a chair.
- Remove your glasses and wristwatches.
- Keep your spine, neck and head in a line. Collapse your shoulders.
- Close the eyes and adopt Namaskára mudra.
- Maintain a smile on your face through out the practice. Calm down your mind. Observe your body & breath.

### JYOTI TRÁTAKA (in Five stages)

### 1. Jyothi Trataka with one eye at a time:

Rub the palms and place them around the eves like palming. Drop the right hand. Gently open the right eye with few blinks and fix the gaze on the carpet in front of you. Slowly take the vision along the carpet towards the candle stand. Observe the shadow of the candle stand. Observe the candle stand, the candle and the flame. If multiple flames are seen, adjust the eye in such a way that you are able to see single flame.





If the flame is seen blurred, focus on the flame, so that the flame will be seen bright. Now fix the gaze on the flame without blinking. After 30secs close the eye and do simple palming. Repeat with the left eye.

#### 2. Effortless Gazing or Focusing at flame

- Let us start Stage-II of Jyoti Trátaka i.e., "Effortless gazing or Focusing".
- Gently open your eyes with a few blinks and look at the floor. Do not look at the flame directly.
- Slowly shift your vision to the base of the candle stand, then move to top of the stand, then to the candle and then slowly look at flame of the candle. Now, start gazing at the whole flame without any effort. Do not blink your eyes. If multiple flames are seen,



adjust the eye in such a way that you are able to see single flame. If the flame is seen blurred, focus on the flame, so that the flame will be seen bright. There may be a few irritating sensations, but use your will power and gaze in a relaxed way. If tears appear, allow it to flow freely. This is a sign of good practice. Let the tears wash out the impurities from the eyes. Learn to ignore the irritation and watering from the eyes. Concentrate on the sharpness of

- the margins of the flame. Recognize the gradation in the intensity of light. Observe the brightest part of the flame.
- Gaze at the flame about 30 seconds.
- Slowly close your eyes, rub your palms against each other for a few seconds, form a cup of your palms and cover your eyeballs.
- Give press and release palming.
- After completing five rounds, gently drop your hands down.
- Feel the cool sensation around the eyeballs. Relax for a few seconds. Do not open your eyes immediately.
- Smile on the face. Relax all the muscles.

### 3. Intensive focusing at the tip of the wick of the flame

- Pass on to Stage-III of Jyoti Trátaka i.e., "Intensive focusing" (Dháraïa).
- Gently open your eyes with a few blinks and look at the floor. Do not look at the flame directly.
- Slowly shift your vision to the base of the candle stand. then move to top of the stand, then to the candle and then slowly look at the flame of the candle. Now, start gazing at the whole flame without any effort.



- Slowly gaze at the tip of the wick of candle, the small black cord. Focus your attention at one point. This is a practice of focusing and concentration. Keep on gazing, use your will power. Let the tears come out and try not to blink your eyes. By practice the gaze becomes steady, making the mind one pointed.
- Gaze at the flame for about 30 seconds.
- Look deep into the flame. No winking or blinking.
- Slowly close your eyes, rub your palms against each other for a few seconds then form a cup of your palms and cover your eyeballs.
- Give press-release palming. Inhaling press the palms around the eyes while exhaling release the pressure without releasing the contact. Do not touch the eyeballs with your palms directly. Relax your eye muscles completely.
- After completing five rounds, gently drop your hands down.
- Feel the cool sensation around the eyeballs. Relax for a few seconds. Do not open your eyes immediately.

### Note for Stage - II & III

- Continuously gaze at the flame, no blinking or winking, smooth and effortless gazing.
- Use your will power and ignore watering or irritation in the eyes.
- Gradually increase the duration of gazing up to 60 seconds over a few weeks of practice.

#### 4. De-focusing

- Let us proceed to Stage-IV of Jyoti Trátaka i.e., "Defocussing".
- Gently open your eves with a few blinks and look at the floor. Do not look at the flame directly.
- Slowly shift your vision to the base of the candle stand then move to the top of the stand, then to the candle and then slowly look at the flame of the candle. First fix your attention at the flame, observe the blue centre of the flame. Then gradually widen



your vision. Observe the Aura of the flame. Slowly defocus your attention from the flame and have a de-focused gaze on the flame. With expansive awareness, collect all the details of the flame such as colour of the flame, shape of the flame, and aura around the flame. Then observe the aura expanding more and more and see the small light particles around the flame. Recognize the subtle change of achieved by de-focusing.

After one minute of de-focusing, gaze or focus on the flame. Slowly close your eyes and retain the image in your mind. Visualize the flame between your evebrows and collect all the details with your eyes closed. When the image disappears go for palming.

This time we combine palming with breathing and Bhramari

First apply constant pressure around your eyes, then inhale and chant Bhramari Mm....; feel the vibrations of Bhramari through out the body; repeat the same. Inhale - chant Mm.... as you exhale, inhale Mm..., inhale Mm... and the last round inhale Mm....: feel the sound resonance in the entire head region specially round the eye region.

#### 5. Silence

- Feel the silence and relax for a while. After sufficient relaxation, gently drop your hands down. Sit quiet for some time and feel the deep comforting effect of the practice. Be aware of the changes taking place inside you. Recognize that the mind has become completely calm, your concentration, will-power and sharpness of eyesight have improved.
- Gently bring your hands behind the back, catch hold of the right wrist with your left palm, make a loose fist with the right hand and feel the pulse of the right hand.
- As you exhale, gently bend down towards the floor and surrender to the All Mighty.
- Come back as you inhale.
- Gently give a feather massage around the eye muscles with three fingers (index, middle and ring fingers).

#### (C) Tips for practitioners

- This is to be practiced in the dark preferably in the evening.
- Remove glasses, wristwatches, and belts and make yourself comfortable in the posture.
- Sit with your head, neck and spine upright. Always open the eyes with a few blinks.
- During eye exercises you must not move your head and must carry on eyeball movement only.
- During Jyoti Trataka, when you open the eyes, don't look at the flame right away. Start looking at the floor and then slowly bring your gaze onto the flame.
- During palming don't let the palms touch or press the eyeballs. (Palms & not the fingers cover the eyes).
- During palming do very slow & deep breathing with awareness.
- Palms are placed in such a way that there is complete darkness to the eyes.
- The facial muscles, eyebrows and eyelids should remain totally relaxed with a beautiful smile on the face.
- Trátaka should be performed after ásanas and práïáyámas.
- Trátaka must be practiced on a steady flame.
- The practitioner should always avoid undue strain to the eyes.

#### **BENEFITS**

### Physical

It keeps away the eyestrain by improving the stamina of eye muscles and by giving deep relaxation to them. It makes the

eves clear, bright and radiant. It cleanses the tear glands and purifies the optical system.

#### **Therapeutic**

Errors of refraction get corrected. It strengthens the ability of the lens to adjust better to distances. It balances the nervous system, relieving nervous tension, anxiety, depression and insomnia.

### **Spiritual**

It helps to develop intense concentration and improves memory. It helps to develop a strong will-power. It is an excellent preparation for meditation.

#### Limitations

Epileptics should avoid gazing of flickering candle flames. They can, however, choose a totally steady object to gaze on. If you are a sensitive person who has insomnia this practice at night make your mind too widely awakened and difficult to go to sleep. Hence you can practice Trátaka one hour before going to bed. In case of tension headache, one may avoid this practice, as it may tend to aggravate the pain.



## Yoga in Education for Total Personality Development **Series**



- 1. Yoga for Physical Stamina
- 2. Yoga for Eye Sight Improvement
- 3. Yoga for Memory Development
- 4. Yoga for IQ Development
- 5. Yoga for Voice Culture
- 6. Yoga for Stress
- 7. Management Yoga for
- 8. Creativity Development
- 9. Yoga for Anger Management
- 10. Yoga for Ego & Greed Management



Published by

Swami Vivekananda Yoga Prakashana

#19, Eknath Bhavan, Gavipuram Circle, Kempegowda Nagar, Bengaluru - 560019 City Office - Ph: 080-26612669 Telefax: 080-26608645 Prashanti Kutiram Campus - Ph: 080-22639996 E mail: svyasa@svyasa.org Web: www.svyasa.org