

CHAPTER III

METHODOLOGY

This chapter summarizes how the research had been carried out. In this chapter selection of subjects, selection of variables, experimental design, pilot study, criterion measures, reliability of instrument, training program, training schedule, collection of data and statistical technique have explained.

3.1 SELECTION OF SUBJECTS

For the present investigation of random group experimental study 45 Women aged between 35 – 45 years were selected at random as the subjects who are suffering from diabetes II irrespective of their occupation from Chennai. The scholar considered the above mentioned age, because middle aged people get more prone to type II diabetes due to their body nature, psychological stress in family surroundings and working environment. It is well known fact that diabetes is a leading cause, which can lead to serious diseases affecting the heart and blood vessels, eyes, kidneys, nerves and lower limb amputation for both men and women. Including the above diabetic women have additional risk of trauma to the child and mother, socio-economic determinants, reproductive complications, maternal and child-health, gestational diabetes, stigma and discrimination? So women subjects were selected for this study. They were asked to undergo medical checkup and were found to be diabetes, which would necessarily have to undergo training. The subjects were divided into three groups, each 15 namely experimental groups I, II and control group III. The control group has not given any training but in active rest.

Only the experimental groups I and II underwent training in Traditional Yoga and Tibetan Yoga Practices respectively. The experimental groups practiced the above, weekly six days for a period of twelve weeks. Group I underwent traditional yoga practices (n = 15) and Group-II underwent Tibetan yoga practices (n = 15) and Group III acted as control group (n = 15). The data were collected by the candidate with the help of trained yoga therapist. The requirements of the experimental procedures, testing as well as exercise schedules were explained to them so as to avoid any ambiguity of the effort required on their part and prior to the administration of the study, the investigator got the individual consent from each subject.

3.2 SELECTION OF VARIABLES

The investigator reviewed the available scientific literature pertaining to asanas and other practices from books, journal, periodicals, magazines, research articles, yoga related research centers and available sources from our University library. Resorting from the review of literature and discussions with the experts and considering the feasibility criteria of the study and the relevance of the variables of the present study.

3.2.1 INDEPENDENT VARIABLES

Diabetes is one of the metabolic and psychosomatic disorders linked with lack of physical activity and psychological wellbeing which leads to wide ranges of complications. Both Traditional yoga practices and Tibetan yoga practices improves metabolic activity and psychological wellbeing in natural way without any side effects to treat diabetes.

- Group I - Traditional Yoga
- Group II - Tibetan Yoga
- Group III - Control Group

3.2.2 DEPENDENT VARIABLES

The physiological variable like Body Mass Index (BMI) increases the risk of diabetes and stimulation of the pulse rate and blood pressure will affect diabetic patients. Blood Sugar Fasting, HbA1c are important bio chemical parameters in diagnosing diabetes. Total Cholesterol is associated with the builds up fatty deposits in artery walls that increase the risk for heart ailments which is one of the side effects of diabetes. The psychological variables like Anxiety, Work & Social Adjustment Satisfaction with Life act as a main role in general well-being and day today activities in routine life. For the same Physiological, Bio-chemical and Psychological variables are considered for this study.

➤ **Physiological Variables**

- i) Body Mass Index (BMI)
- ii) Blood Pressure (BP).
- iii) Pulse Rate

➤ **Bio-Chemical Variables**

- i) Fasting Blood Sugar
- ii) HbA1c
- iii) Total Cholesterol

➤ **Psychological Variables**

- i) Anxiety
- ii) Work & Social Adjustment
- iii) Satisfaction with Life

3.3 EXPERIMENTAL DESIGN

The study was formulated as a true random group design, consisting of a pre-test and post-test. The two methods of yogic training given to experimental group I & II and control group III is not given any kind of yogic practices but in active rest. Initially pretest was conducted. After the experimental period of twelve weeks, post test scores were obtained from all the three groups. The differences between initial and final scores on Physiological, Bio-Chemical and Psychological variables considered as the effect of varied packages of yogic treatment on subjects. The mean differences were tested for significance using Analysis of Co-variance (ANCOVA).

The multiple mean comparisons used to prove the significant differences between the adjusted means of experimental group I & II with control group III. The significant differences were tested by scheffe's post-hoc test.

3.4 PILOT STUDY

Pilot study is the miniature version of the research work. It is essential to fix the intensity, volume and response of the subjects. It is needed to construct training schedule. It is important to check procedure, materials and work.

The pilot study was conducted with five women diabetes patients and their difficulties were noted and rectified. The calculated intra-class correlation of the pilot there was significant improvement in physiological variables Body Mass Index (BMI), Blood Pressure and Pulse Rate. Biochemical variables are Fasting Blood Sugar, HbA1c and Total Cholesterol. Psychological variables are Anxiety, Work & Social Adjustment and Satisfaction with Life.

3.5 CRITERION MEASURES

TABLE - VIII
CRITERION MEASURES

Variables		Test / Instruments	Unit of Measurements
Physiological Variables	Body Mass Index	Stadiometer & Weighing Scale	kg/ m × m
	Blood Pressure	Digital Blood Pressure & Pulse Monitor	mmHg
	Pulse Rate	Digital Blood Pressure & Pulse Monitor	Pulse/Minute
Biochemical Variables	Fasting Blood Sugar	Lab Test	mg/dl
	HbA1c	Lab Test	Numeric Values
	Total Cholesterol	Lab Test	mg/dl
Psychological Variables	Anxiety	“Taylor’s Manifest Anxiety Scale” Questionnaire	Numeric Values
	Work & Social Adjustment	“Serenity Programme, Work & Social Adjustment Scale” Questionnaire	Numeric Values
	Satisfaction with Life	“Diener, Fetzner Inst. Satisfaction with Life Scale ” Questionnaire	Numeric Values

3.6 RELIABILITY OF DATA

The reliability of data was ensured by using standard instruments and by establishing tester competency reliability of the test.

3.7 RELIABILITY OF INSTRUMENTS

The following questionnaire, scale, tests and instruments were used for recording the Physiological, Bio-Chemical and Psychological variables such as BMI, BP, Pulse Rate, Fasting Blood Sugar, HbA1c, Anxiety, Work & Social Adjustment and Satisfaction with Life were found reliable.

1. Weighing Scale and Stadiometer
2. Digital Blood Pressure and Pulse Monitor
3. Lab Test
4. “Taylor’s Manifest Anxiety Scale” Questionnaire
5. “Serenity Programme, Work and Social Adjustment Scale” Questionnaire
6. “Diener, Fetzner Inst. Satisfaction with Life Scale ” Questionnaire

3.8 TESTER’S RELIABILITY

Reliability was established by the test-retest processes. Subjects from all the groups were tested on selected variables. The repeated measurement of individuals on the same test is done to determine reliability.

- BMI - Manual Measurement and Calculation
- Blood Pressure - Blood Pressure and Pulse Monitor
- Pulse Rate - Blood Pressure and Pulse Monitor
- Fasting Blood Sugar - Blood Test
- HbA1c - Blood Test
- Total Cholesterol - Blood Test

- Anxiety - Taylor's Manifest Anxiety Scale
- Work and Social Adjustment - Serenity Programme, Work and Social Adjustment Scale
- Satisfaction with Life - Diener, Fetzner Inst. Satisfaction with Life Scale

3.9 SUBJECTS RELIABILITY

The test and retest also conducted for the subject reliabilities. The same subjects were used, under similar condition by same tester. The co-efficient of reliability were significant at 0.05 levels, for the above test under investigation.

3.10 ORIENTATION TO THE SUBJECTS

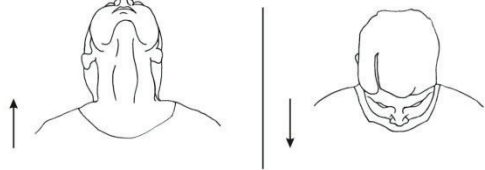
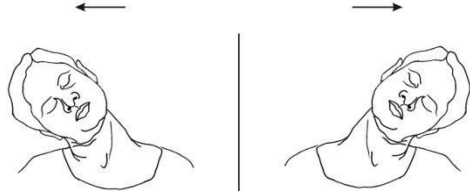
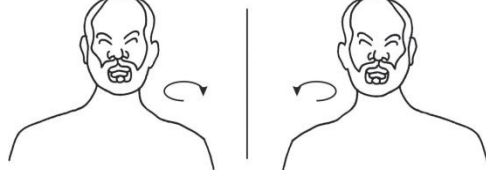
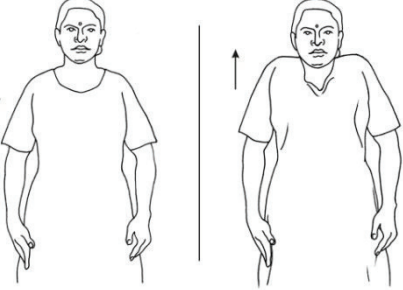
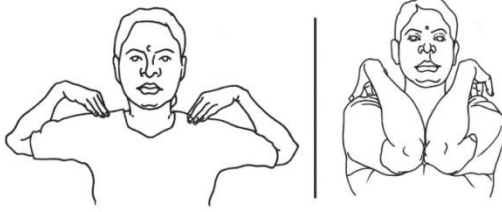
Before the collection of the data, the subjects were oriented according to the purpose of the study. The investigator had explained the tests and measures to the subjects and about the procedure adopted by them for assessing the variables. Questionnaires were used to measure the Anxiety, Work & Social Adjustment and Satisfaction with Life.

According to the Ethical Guidelines of the Indian Council of Medical Research, New Delhi, consent of the subject had been obtained before conducting tests.

3.11 TRAINING PROCEDURE

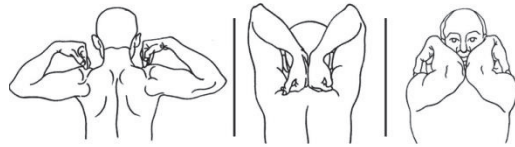
3.11.1 LOOSENING WORKOUTS

TABLE - IX
LOOSENING WORKOUTS

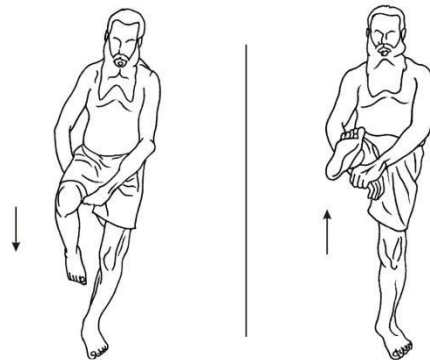
<p>NECK FORWARD - BACKWARD</p> <p>In standing position stretch the neck upward and downward direction, with awareness on breath.</p>	
<p>NECK LEFT - RIGHT</p> <p>In standing position stretch the neck sideward and left and right directions, with awareness on breath.</p>	
<p>NECK ROTATION</p> <p>In standing position rotate the neck clockwise and anticlockwise directions, with awareness on breath.</p>	
<p>SHOULDER (UP – DOWN)</p> <p>In standing position, both hands touching the body, raise the shoulder up and come to normal position, with awareness on breath.</p>	
<p>SHOULDER (OPEN – CLOSE)</p> <p>In standing position raise the both hands to sideward to the shoulder level palm facing up, bend the elbow, fingers touch the shoulders, move inward both elbows touch and come to normal position, with awareness on breath.</p>	

SHOULDER (ROTATION)

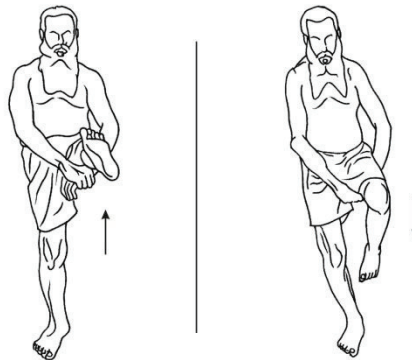
In standing position raise the both hands to sideward to the shoulder level palm facing up, bend the elbow, fingers touch the shoulders, move inward both elbows, raise the elbows in upward direction, come to normal position, with awareness on breath.

**KNEE UP – DOWN (RIGHT LEG)**

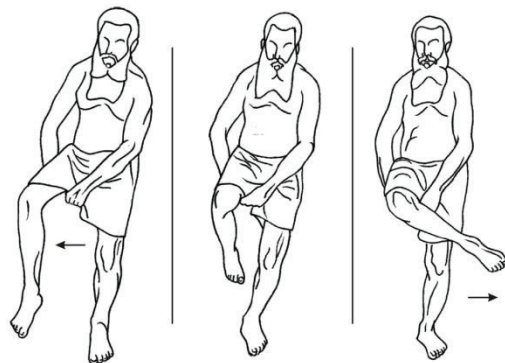
In standing position raise the right leg, bend the knee, move the knee upward and downward direction with awareness on breath.

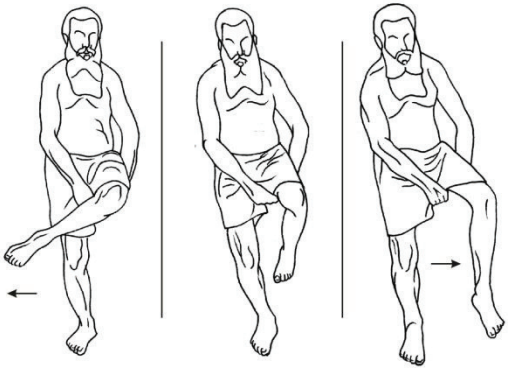
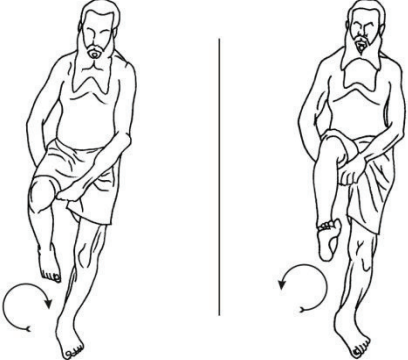
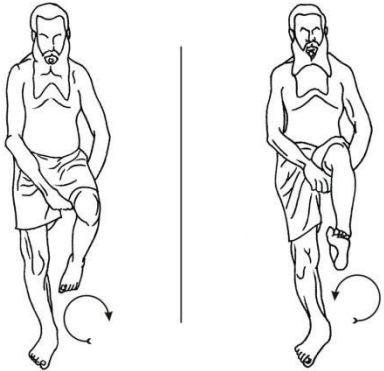
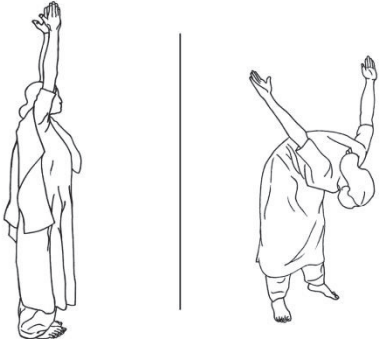
**KNEE UP - DOWN (LEFT LEG)**

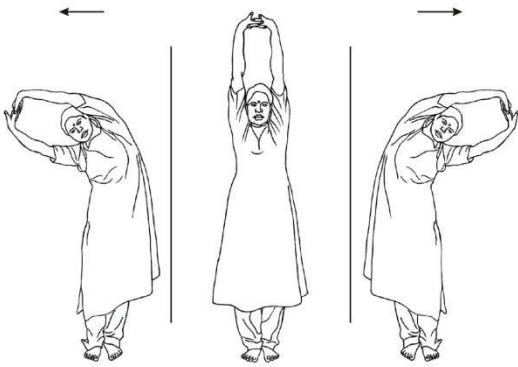
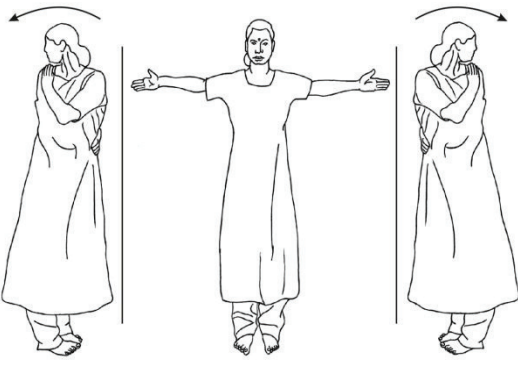
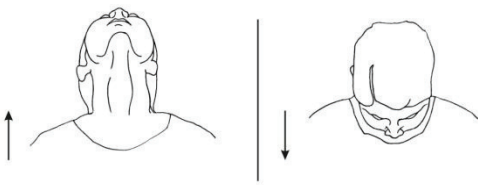
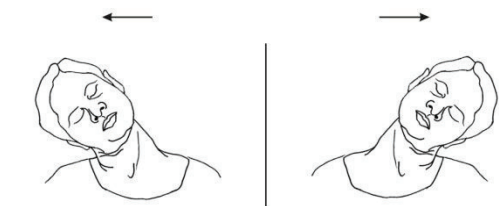
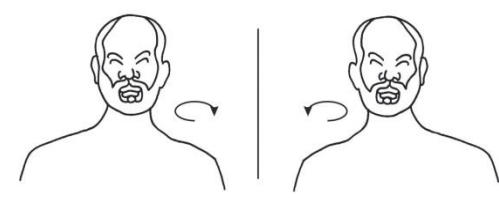
In standing position raise the left leg, bend the knee, move the knee upward direction and downward direction with awareness on breath.

**RIGHT KNEE (LEFT-RIGHT MOVEMENT)**

In standing position raise the right leg, bend the knee, move the knee sideward directions left and right with awareness on breath.



<p>LEFT KNEE (LEFT-RIGHT MOVEMENT)</p> <p>In standing position raise the left leg, bend the knee, move the knee sideward directions with awareness on breath.</p>	
<p>KNEE ROTATION (RIGHT LEG)</p> <p>In standing position raise the right leg, bend the knee, rotate the knee clockwise direction and anticlockwise direction with awareness on breath.</p>	
<p>KNEE ROTATION (LEFT LEG)</p> <p>In standing position raise the left leg, bend the knee, rotate the knee clockwise direction and anticlockwise direction with awareness on breath.</p>	
<p>HIP (FORWARD – BACKWARD)</p> <p>In standing position raise both the hands upward direction and bend forward from the hip and raise hands backward direction, with awareness on breath.</p>	

<p>HIP (RIGHT – LEFT)</p> <p>In standing position raise both the hands upward direction, interlock fingers and bend sideward from hip to left and right directions, with awareness on breath.</p>	
<p>HIP TWIST</p> <p>In standing position raise both the hands in sideward direction to the shoulders level, twist the body from hip to left and right directions, left hand touch the right shoulder and right hand backward touch the hip with awareness on breath. Wise versa to the other side.</p>	
<p>NECK (FORWARD – BACKWARD)</p> <p>In standing position stretch the neck upward and downward direction, with awareness on breath.</p>	
<p>NECK (LEFT – RIGHT)</p> <p>In standing position stretch the neck sideward and left and right directions, with awareness on breath.</p>	
<p>NECK ROTATION</p> <p>In standing position rotate the neck clockwise and anticlockwise directions, with awareness on breath.</p>	

3.12 TRAINING PROCEDURE OF TRADITIONAL YOGA

3.12.1 SURYA NAMASKAR



Figure 11. Surya Namaskar

3.12.2 A SURYA NAMASKAR POSITION, ASANA AND BREATHING

TABLE – X (A)

SURYA NAMASKAR POSITION, ASANA AND BREATHING

POSITION	ASANA	BREATHING
0	PRANAM ASANA	NORMAL
1	ARDHACHAKRASANA	INHALE
2	PADHAHASTHASANA	EXHALE
3	ASHWASANCHALASANA	INHALE
4	DHANDASANA	EXHALE
5	SHASANGASANA	INHALE & EXHALE
6	ASTANGASANA	HOLD
7	BHUJANGASANA	INHALE
8	PARVATHASANA	EXHALE
9	SHASANGASANA	INHALE & EXHALE
10	ASHWASANCHALASANA	INHALE
11	PADHAHASTHASANA	EXHALE
12	ARDHACHAKRASANA	INHALE

3.12.2 ASANA

3.12.2.1 VRIKSHASANA (TREE POSE)

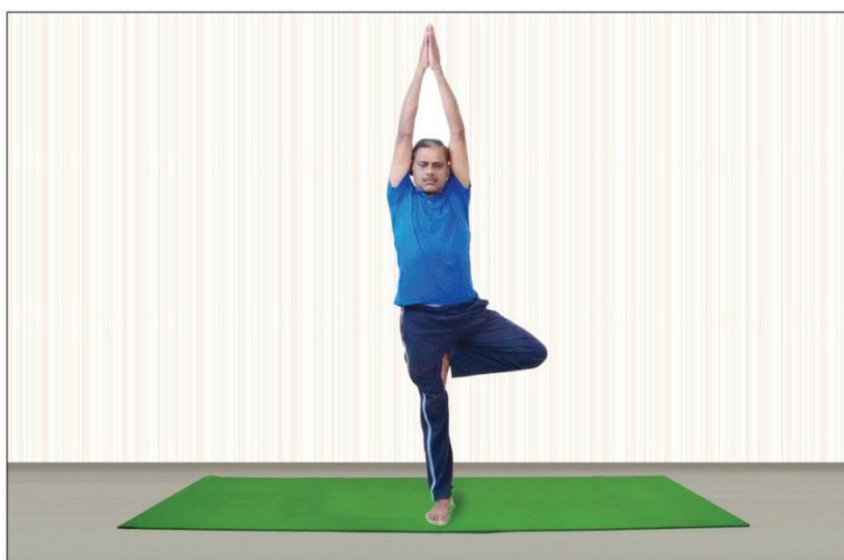


Figure 12. Vrikshasana

Vriksha means tree. In final position it looks like a tree.

Pre Position: Standing Position.

Procedure

- Stand upright with the feet together. Focus the gaze on a fixed point in front of the body at eye level.
- Bend the right leg, grasp the ankle and place the sole of the foot on the inside of the left thigh.
- The heel should be close to the perineum and the right knee should point out to the side.
- Hold the ankle until the body is balanced.
- Stretch both arms above the head from the sides and join the palms in prayer position.
- Focus the gaze on a fixed point in front of the body at eye level.
- Release the pose completely and change sides.

Breathing

- Inhale while raising the arm. Exhale while bringing the arms down.
- Breathe normally throughout the practice.

Awareness

- Physical - on a fixed point at eye level.
- Spiritual - on ajna or anahata chakra.

3.12.2.2 P ADAHASTASANA (HAND TO FOOT POSE)

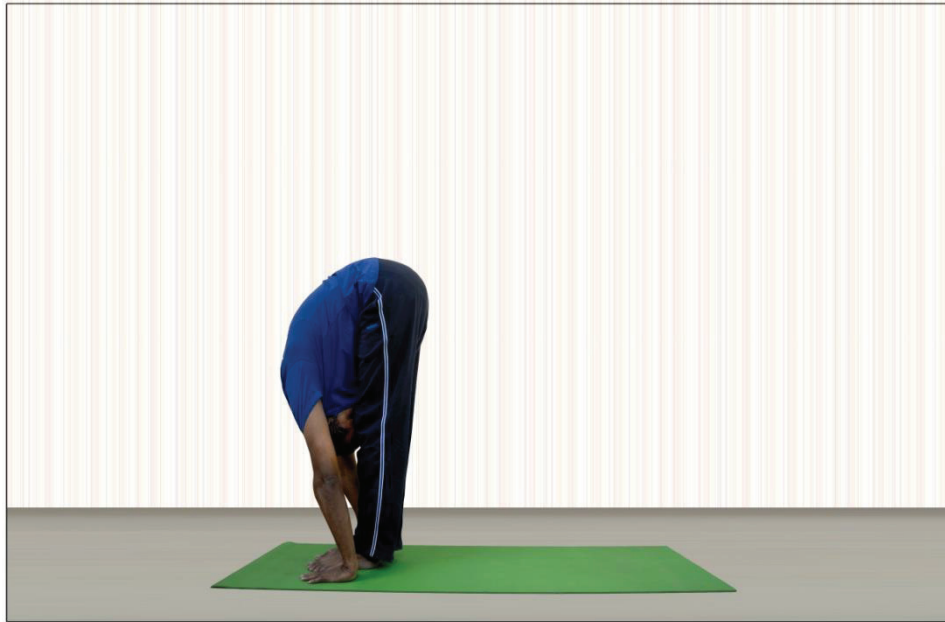


Figure 13. Padahasthasana

Pada means foot, hastha means hands. In the final position, feet and hands are closer.

Pre Position: Standing Position.

Procedure

- Stand with the spine erect, feet together and hands beside the body. Relax the body.
- This is the starting position.
- Distribute the weight of the body evenly on both feet.
- Slowly bend forward, first bending the head, taking the chin towards the chest, then bending the upper trunk, relaxing the shoulders forward and letting the arms go limp.
- Bend the mid-trunk and finally the lower trunk.

- While bending forward, imagine that the body has no bones or muscles. Do not strain or force the body.
- Bend forward until the fingers or palms of the hands touch the floor on either side of the feet.
- Try to touch the knees with the forehead. Do not strain.
- Keep the knees straight. Relax the back of the neck and try to bring the forehead to the knees.
- In the final position the body is bent forward with the knees straight and the forehead touching the knees.
- Hold the position, relaxing the whole back.
- Slowly return to the starting position in the reverse order.

Breathing

- Inhale in the starting position.
- Exhale while bending forward.
- Breathe slowly and deeply in the final position.
- Inhale while returning to the starting position.

Awareness

- Physical - on the movement, relaxation of the back muscles or the breath.
- Spiritual - on swadhisthana chakra.

3.12.2.3 PARIVRTTA TRIKONASANA (TRIANGLE POSE)



Figure 14. Parivrtta Trikonasana

Trikona means triangle. In the final position, the body will be completely twisted and looks like a triangle

Pre Position: Standing Position.

Procedure

- Stand erect with the feet about a meter apart.
- Turn the right foot to the right side.
- Stretch the arms sideways and raise them to shoulder level so that they are in one straight line.
- Bend to the right, taking care not to bring the body forward.
- Place the right hand on the right foot, keeping the two arms in line with each other. Turn the left palm forward.

- Look up at the left hand in the final position.
- Return to the upright position with the arms in a straight line.
- Repeat on the opposite side.
- This completes one round.

Breathing

- Inhale while raising the arms. Exhale while bending.
- Inhale while raising the body to the vertical position.

Awareness

- Physical - on coordination of movement, balance and the stretch on the side of the trunk in the final position.
- Spiritual - on manipura chakra.

3.12.2.4 VAKRASANA (TWISTED POSE)

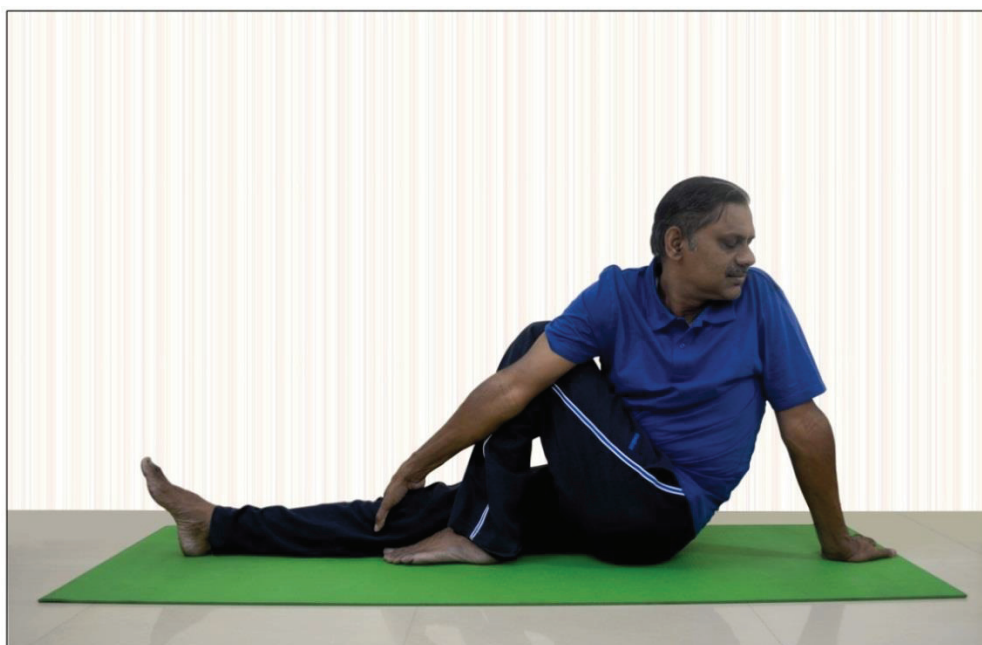


Figure 15. Vakrasana

Vakra means twist. In the final position, the body will be completely twisted in opposite direction.

Pre Position: Sitting Position.

Procedure

- Sit on the carpet, stretch the legs straight.
- Fold the right leg.
- Keeps the right leg's heel touching the left leg's knee.
- Take the right hand to back of the waist twisting your trunk, spread in palms and place it on the carpet.
- Bring the left hand close to right knee and hold the right leg's ankle or big toe with the left hand.
- Twist the head and shoulder to right side and look straight to the right shoulder's side (i.e. back side).
- Stay in the pose and breath normally.
- Turn the head to the front, release hands holding the right leg's ankle or big toe, stretch the legs, keep the palm on the carpet in a relaxed manner and take rest.
- Now follow the same procedure to the left side.

Breathing

- Inhale in the forward position.
- Exhale while twisting the trunk.
- Breathe deeply and slowly without strain in the final position.

- Inhale while returning to the starting position.

Awareness

- Physical - on keeping the spine straight and on the movement of the abdomen created by the breath in the final position.
- Spiritual - on manipura chakra.

3.12.2.5 ARDHAMATSYENDRASANA (HALF SPINAL TWIST)

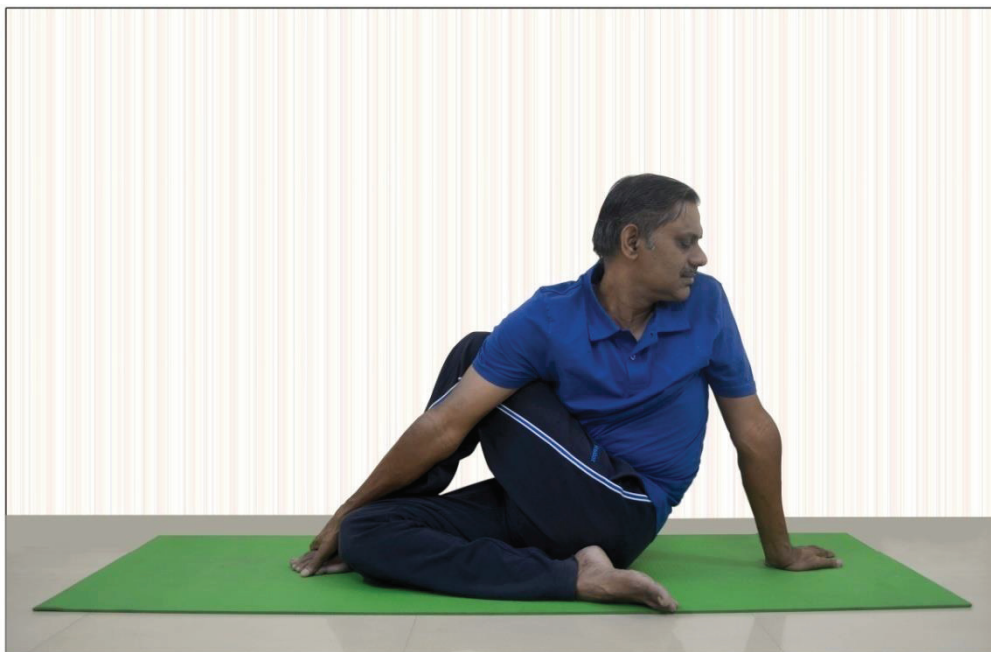


Figure 16. Ardhamatsyendrasana

Half Spinal Twist pose is one of the best and most important asanas in Hatha Yoga. It has a huge amount of benefits which cover all the body systems. Full Spinal Twist position was the favourite meditation pose of the Sage Matsyendranath so this pose is named after him. However, as it is a little difficult to practice a simplified form Half Spinal Twist came about.

Pre Position: Sitting Position.

Procedure

- Sit with the legs stretched out in front of the body.
- Bend the right leg and place the right foot flat on the floor on the outside of the left knee.
- The toes of the right foot should face forward.
- Bend the left leg and bring the foot around to the right buttock. The outside edge of the foot should be in contact with the floor.
- Pass the left arm through the space between the chest and the right knee, and place it against the outside of the right leg- Hold the right foot or ankle with the left hand, so that the right knee is close to the left arm pit.
- Sit up as straight as possible.
- Raise the right arm in front of the body and gaze at the fingertips.
- Slowly twist to the right, simultaneously moving the arm, trunk and head.
- Use the left arm as a lever against the right leg to twist the trunk as far as possible without using the back muscles.
- Follow the tips of the fingers of the right hand with the gaze and look over the right shoulder.
- Do not strain the back. The chest is open and the spine is erect. One side of the abdomen is compressed and the other side is stretched. The left leg and knee remains on the floor.
- Bend the right elbow and place the arm around the back of the waist. The back of the right hand should wrap around the left side of the waist or rest it on the floor.

- Alternatively, it can be placed as high as possible between the shoulder blades with the fingers pointing up. This arm position enforces the straightness of the spine.
- In this position there is a strong twist on the spine and abdomen. The right arm is pressed against the left knee and the left arm is wrapped behind the back, leading to an increased twist on the body.
- Release the hands and place them beside the body. Straighten the right leg and return to sitting position.
- Reverse the movements to come out of the posture and repeat on the other side.

Breathing

- Inhale in the forward position.
- Exhale while twisting the trunk.
- Breathe deeply and slowly without strain in the final position.
- Inhale while returning to the starting position.

Awareness

- Physical - on keeping the spine straight and on the movement of the abdomen created by the breath in the final position.
- Spiritual - on ajna chakra.

3.12.2.6 YOGAMUDRA (FORWARD BEND)

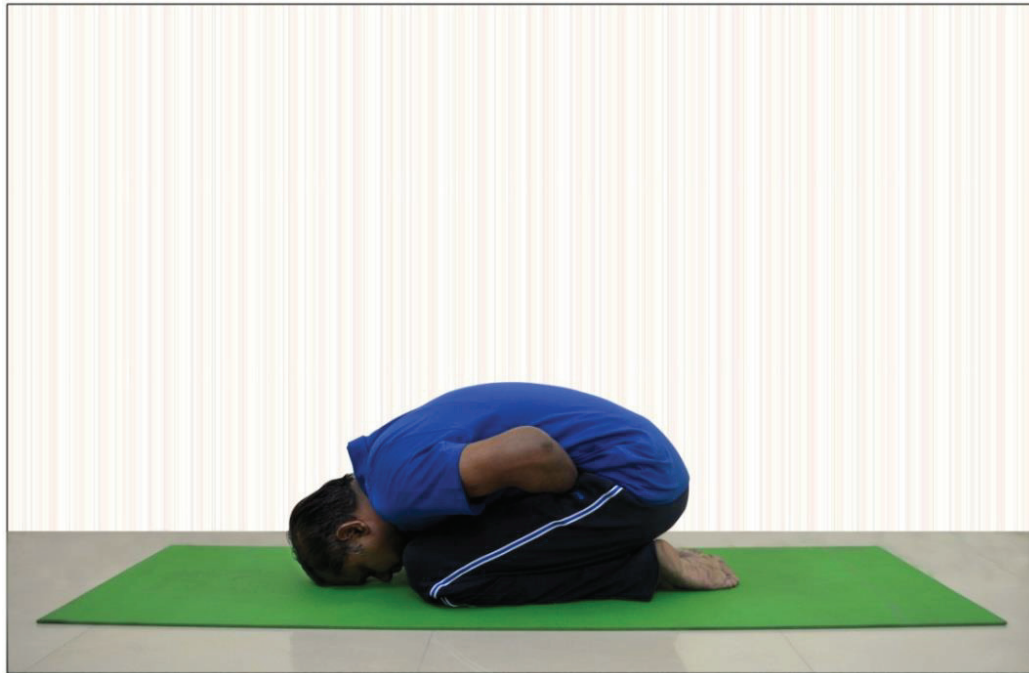


Figure 17. Yogamudra

Before doing asanas, meditation, exercises one should be with clear stomach. Yoga mudra helps to do that. The person who will practice the Yoga Mudra regularly can get a flexible backbone.

Pre Position: Vajrasana Position.

Procedure

- Sit in Vajrasana and close the eyes.
- Relax the body for some time, breathing normally. Here first both the palms are placed at the navel. Then, while bending forward, keep the elbows erect and stuck to the chest ribs.
- Inhale deeply.
- While exhaling, bend forward, keeping the spine straight.

- Bring the forehead to the floor or as close as possible.
- Relax the whole body in the final position, breathing slowly and deeply. Be aware of the pressure of the heels on the abdomen.
- Stay in the final position as comfortable.
- Do not strain the back, ankles, knees or thighs by forcing the body into the posture.
- Slowly return to the starting position.
- Keep the hands on the knees and take up Vajrasana Position.

Breathing

- Inhale slowly and deeply in the starting position.
- Exhale while bending forward.
- Breathe deeply and slowly in the final position.
- Inhale while returning to the starting pose.

Awareness

- Physical - on the back, abdomen or breathing process.
- Spiritual - on manipura chakra.

3.12.2.7 BHUJANGASANA (COBRA POSE)

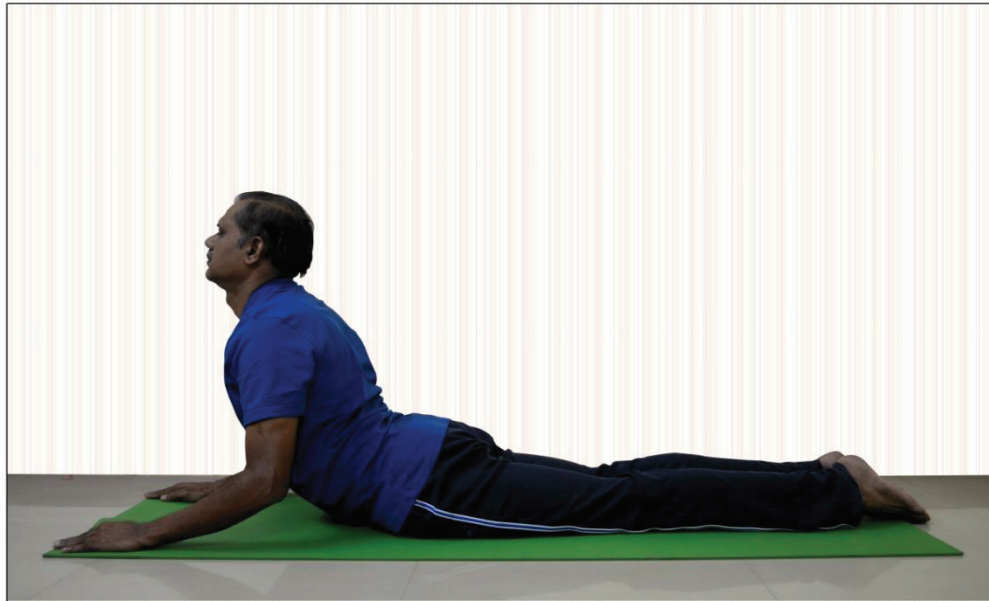


Figure 18. Bhujangasana

The shape of the spinal column is similar to that of a cobra raising its head.

Pre Position: Prone Position.

Procedure

- Lie flat on the stomach with the legs straight, feet together and the soles of the feet uppermost.
- Place the palms of the hands flat on the floor, below and slightly to the side of the shoulders.
- The fingers should be together and pointing forward.
- The arms should be positioned so that the elbows point backward and are close to the sides of the body.
- Rest the forehead on the floor and close the eyes.

- Relax the whole body, especially the lower back.
- Slowly raise the head, neck and shoulders. Straightening the elbows, raise the trunk as high as possible. Use the back muscles more than the arm muscles.
- Be aware of using the back muscles first while starting to raise the trunk. Then use the arm muscles to raise the trunk further and arch the back. Gently tilt the head backward, so that the chin points forward and the back of the neck is compressed.
- In the final position, the pubic bone remains in contact with the floor and the navel is raised a maximum of 3 cm.
- If the navel is raised too high, the bend tends to be in the knees and not in the back.
- The arms may or may not be straight; this will depend on the flexibility of the back.
- Hold the final position. In the final position keep the chest forward and keep the spine in arch.
- To return to the starting position, slowly bring the head forward, release the upper back by bending the arms, lower the navel, chest, shoulders and finally the fore head to the floor. Relax the lower back muscles.

Breathing

- Inhale while raising the torso.
- Breathe normally in the final position.
- Exhale while lowering the torso.

Awareness

- Physical - on synchronizing the breath with the movement and the smooth, systematic arching movement of the back.
- Spiritual - on swadhisthana chakra.

3.12.2.8 SHALABASANA (LOCUST POSE)



Figure 19. Shalabasana

Shalabh means locust as the position of the body in the asana appears to be like that of a locust.

Pre Position: Prone Position.

Procedure

- Lie flat on the stomach with the legs and feet together and the soles of the feet uppermost.

- The arms may be placed either under the body or by the sides, with the palms downward or the hands clenched.
- Stretch the chin slightly forward and rest it on the floor throughout the practice.
- Close the eyes and relax the body.
- This is the starting position.
- Slowly raise the legs as high as possible, keeping them straight and together.
- The elevation of the legs is produced by applying pressure with the arms against the floor and contracting the lower back muscles.
- Hold the final position for as long as is comfortable without strain. Keeping the raised legs straight in the knees, stretch the toes towards the backside. At this point the legs may tremble, but this trembling can be stopped if the raised legs are slightly lowered
- Slowly lower the legs to the floor.
- Return to the starting position and relax the body with the head turned to one side.
- Allow the respiration and heartbeat to return to normal.

Breathing

- Inhale deeply in the starting position.
- Retain the breath inside while raising the legs.
- Exhale while lowering the legs.
- Breathe deeply and slowly in the final position.

- Beginners may find it helpful to inhale while raising the legs.
- Advanced practitioners may exhale after returning to the starting position.

Awareness

- Physical - on synchronizing the breath with the movement or on the lower back, abdomen and heart.
- Spiritual - on vishuddhi chakra.

3.12.2.9 DHANURASANA (BOW POSE)

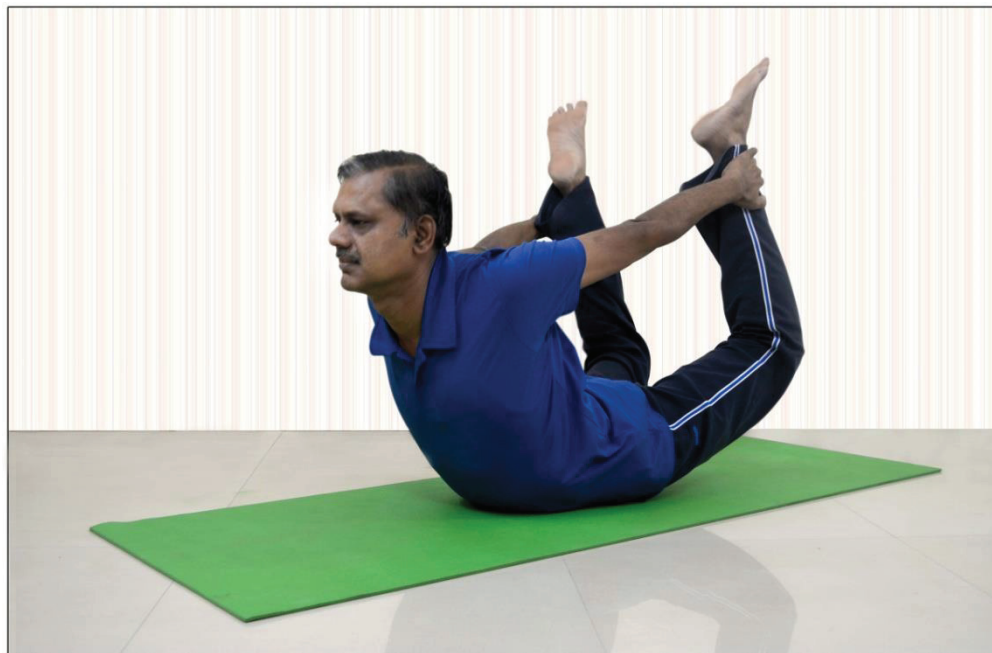


Figure 20. Dhanurasana

The body takes the shape of Bow and therefore it is called Dhanur (Bow in Sanskrit) asana. As the bow is strained during the archery, the whole body is stretched during this asana posture.

Pre Position: Prone Position.

Procedure

- Lie flat on the stomach with the legs and feet together and the arms and hands beside the body.
- Bend the knees and bring the heels close to the buttocks.
- Clasp the hands around the ankles.
- Place the chin on the floor.
- This is the starting position.
- Tense the leg muscles and push the feet away from the body. Arch the back, lifting the thighs, chest and head together.
- Keep the arms straight.
- In the final position the head is tilted back and the abdomen supports the entire body on the floor. The only muscular contraction is in the legs; the back and arms remain relaxed.
- Hold the final position for as long as is comfortable and then, slowly relaxing the leg muscles lower the legs, chest and head to the starting position.
- Release the pose and relax in the prone position until the respiration returns to normal.
- This is one round.

Breathing

- Inhale deeply in the starting position.
- Retain the breath while raising the body.

- Practice slow, deep normal breathing so that the body rocks gently in unison with the breath.
- Exhale while returning to the prone position

Awareness

- Physical - on the abdominal region, the back, or the rhythmic expansion and contraction of the abdomen to the slow, deep breathing.
- Spiritual - on vishuddhi, anahata or manipura chakra.

3.12.2.10 NAUKASANA (BOAT POSE)

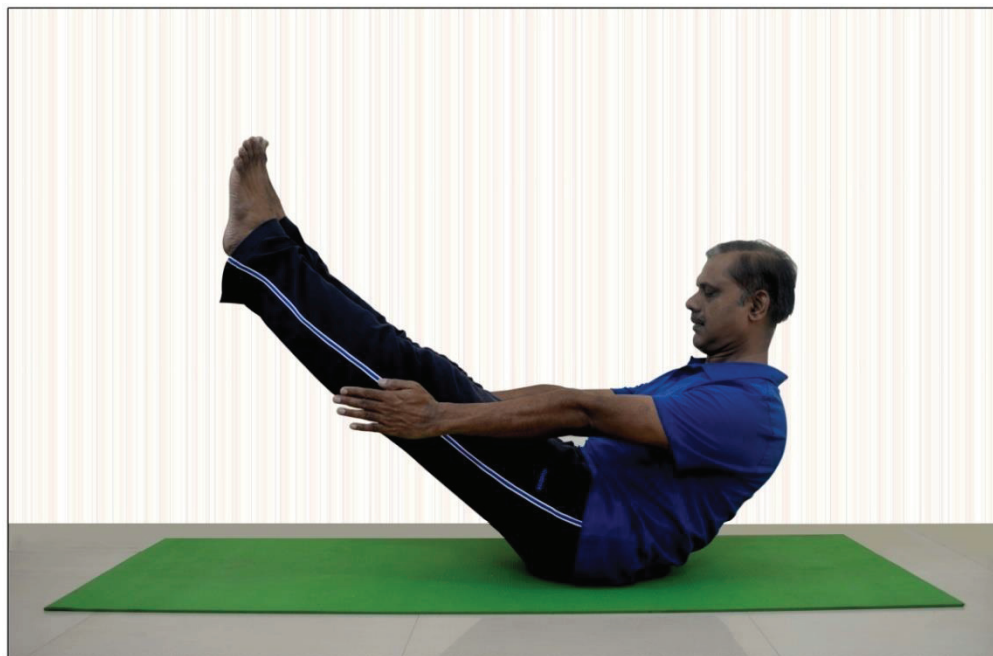


Figure 21. Naukasana

In this asana the shape of the body looks like a yacht and hence it is called Noukasana (Yacht in Sanskrit). In noukasana muscles of abdomen and stomach are contracted.

Pre Position: Supine Position.

Procedure

- Lie in the base position, palms down.
- Keep the eyes open throughout.
- Breathe in deeply. Hold the breath and then raise the legs, arms, shoulders, head and trunk off the ground.
- Balance the body on the buttocks and keep the spine straight.
- The arms should be held at the same level and in line with the toes with palms facing each other
- In this position it is always difficult to maintain the balance of the body but with practice one can achieve the steady posture .don't bend the legs in knees.
- Look towards the toes.
- Remain in the final position.
- Breathe out and return to the supine position.
- Be careful not to injure the back of the head while returning to the floor.
- Relax the whole body.
- Relax in shavasana after finishing the round, gently pushing out the abdomen with inhalation to relax the stomach muscles.

Breathing

- Inhale before raising the body.
- Exhale the breath while raising body.

- Inhale while bringing body down.
- Breathe deeply and slowly in the final position.

Awareness

- On the breath, movement, mental counting and tensing of the body (especially the abdominal muscles) in the final position.

3.12.2.11 USHTRASANA (CAMEL POSE)



Figure 22. Ushtrasana

Ushtra means means camel. As the position of the body in the asana appears to be like camel.

Pre position: Sitting Position

Procedure

- Sit in vajrasana.

- Stand on the knees with the arms at the sides.
- The knees and feet should be together but may be separated if this is more comfortable.
- Lean backward, slowly reaching for the right heel with the right hand and then the left heel with the left hand. If not keep the hands on middle of the thigh instead of heel.
- Do not strain.
- Push the abdomen forward, trying to keep the thighs vertical and bend the head and spine backward as far as possible.
- Try to relax the whole body, especially the back muscles, into the stretch.
- The weight of the body should be evenly supported by the legs and arms.
- The arms should anchor the shoulders to maintain the arch of the back.
- Remain in the final position for as long as is comfortable.
- Return to the starting position by slowly releasing the hands from the heels / thigh.

Breathing

- Normal in the final position.
- Do not try to breathe deeply because the chest is already stretched.

Awareness

- Physical - on the abdomen, throat, spine or natural breathing.
- Spiritual - on swadhisthana or vishuddhi chakra.

3.12.2.12 PASCHIMOTTANASANA (FORWARD BEND)

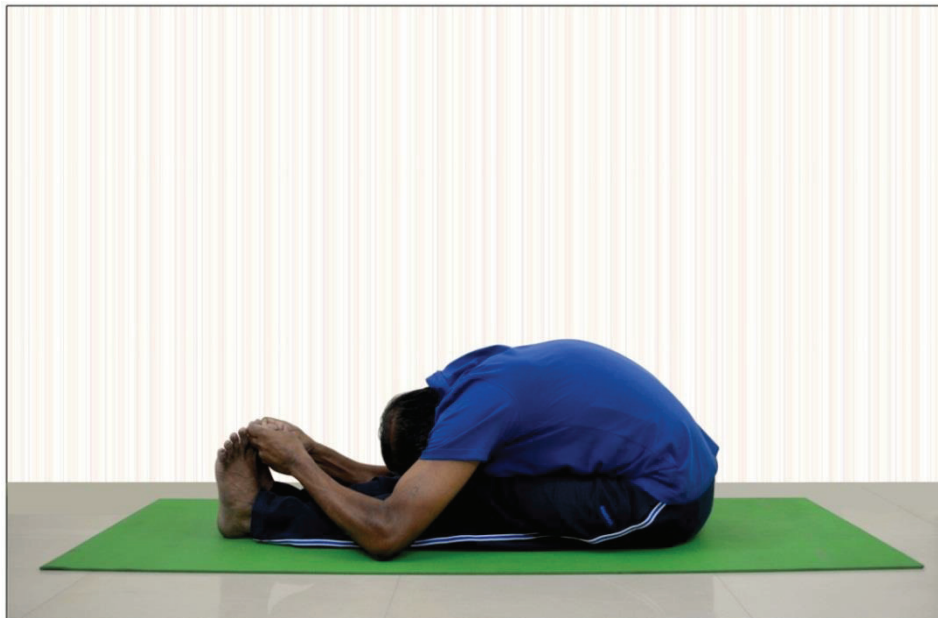


Figure 23. Paschimottanasana

The front side of the body is called east side, while the back side is called the west side. In this Asana complete back side, i.e., the west side, right from the heels to the forehead, gets stretched and therefore, it is called 'Paschimottanasana'.

Pre Position: Sitting Position.

Procedure

- Sit on the floor with the legs outstretched, feet together and hands on the knees.
- This is the starting position.
- Relax the whole body.
- Slowly bend forward from the hips, sliding the hands down the legs. Try to grasp the big toes with the fingers and thumbs. If this is impossible, hold the heels, ankles or any part of the legs that can be reached comfortably.

- Move slowly without forcing or jerking.
- Hold the position for a few seconds. Relax the back and leg muscles allowing them to gently stretch.
- Keeping the legs straight and utilizing the arm muscles, not the back muscles, begin to bend the elbows and gently bring the trunk down towards the legs, maintaining a firm grip on the toes, feet or legs.
- Try to touch the knees with the forehead. Do not strain. Since here the abdomen gets completely folded, it becomes necessary to bend only after complete exhalation.
- This is the final position.
- Hold the position for as long as is comfortable and relax.
- Slowly return to the starting position.

Breathing

- Inhale in the starting position.
- Exhale slowly while bending forward.
- Exhale while bringing the trunk further towards the legs with the arms.
- Breathe slowly and deeply in the final position or retain the breath out if holding for a short duration.
- Inhale while returning to the starting position.

Awareness

- Physical - on the abdomen, relaxation of the back muscles.
- Spiritual - on swadhisthana chakra.

3.12.2.13 SARVANGASANA (SHOULDER STAND)

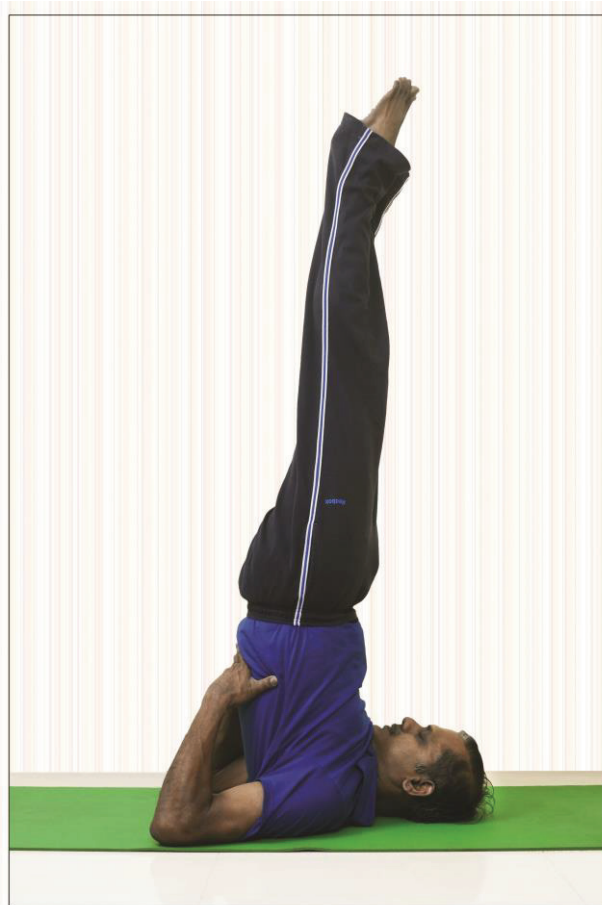


Figure 24. Sarvangasana

Sarvangasana is one of the best and most important asanas in Hatha Yoga. It has a huge amount of benefits which cover all the body systems.

Pre Position: Supine Position

Procedure

- Lie on the back.
- Check that the head and spine are aligned and that the legs are straight with the feet together.
- Place the hands beside the body with the palms facing down.

- Relax the entire body and mind.
- Contract the abdominal muscles and with the support of the arms, slowly raise the legs to the vertical position, keeping them straight.
- When the legs are vertical, press the arms and hands down on the floor. Slowly and smoothly roll the buttocks and spine off the floor, raising the trunk to a vertical position.
- Turn the palms of the hands upward, bend the elbows and place the hands behind the ribcage, slightly away from the spine, to support the back. The elbows should be about shoulder width apart.
- Gently push the chest forward so that it presses firmly against the chin.
- In the final position, the legs are vertical, together and in a straight line with the trunk. The body is supported by the shoulders, nape of the neck and back of the head. The arms provide stability, the chest rests against the chin and the feet are relaxed. The chest is pushed forward and the chin is placed in the throat pit / jugular notch forming a tie which is called 'Jalandhar Bandha'.
- Close the eyes.
- Relax the whole body in the final pose for as long as is comfortable.
- To return to the starting position, bring the legs forward until the feet are above and behind the back of the head.
- Keep the legs straight.
- Slowly release the position of the hands and place the arms on the floor beside the body with the palms down.

- Gradually lower each vertebrae of the spine to the floor, followed by the buttocks, so that the legs resume their initial vertical position.
- Lower the legs to the floor slowly, keeping the knees straight.
- Perform this action without using the arms for support.
- The whole movement should combine balance with control so that the body contacts the floor slowly and gently.
- Relax in shavasana until the respiration and heartbeat return to normal.

Breathing

- Inhale in the starting position.
- Retain the breath inside while assuming the final pose.
- Practice slow, deep abdominal breathing in the final pose when the body is steady.
- Retain the breath inside while lowering the body to the floor.

Awareness

- Physical - on the control of the movement, on the breath or the thyroid gland.
- Spiritual - on vishuddhi chakra.

3.12.2.14 HALASANA (PLOUGH POSE)



Figure 25. Halasana

In this position the body looks like a traditional Indian plough pulled by bulls in the fields. Also by practicing this pose one ploughs the body like one digs the earth, making it loose and free.

Pre Position: Supine Position.

Procedure

- Lie flat on the back with the legs and feet together. Place the arms beside the body with the palms facing down.
- Relax the whole body.
- Raise both legs to the vertical position, keeping them straight and together, using only the abdominal muscles.

- Press down on the arms and lift the buttocks, rolling the back away from the floor. Lower the legs over the head.
- Try to touch the toes to the floor behind the head.
- Do not force the toes to touch the floor.
- The legs remain straight without any bend from knees.
- Relax and hold the final pose for as long as is comfortable.
- Remember there should be no strain. If the knees are bent there is less pressure on the abdomen and less stretch into the legs, particularly the hamstrings. The arms should remain in the same position, flat on the floor supporting the neck. The chin is pressed into the chest in the Jalandhar bandha or chin lock.
- Return to the starting position by lowering the arms with the palms facing down, and then slowly lower the back and buttocks to the floor.
- Raise the legs to the vertical position. Using the abdominal muscles, lower the legs to the starting position, keeping the knees straight.

Breathing

- Inhale while in the lying position.
- Retain the breath inside while assuming the final pose.
- Breathe slowly and deeply in the final pose.
- Retain the breath inside while returning to the starting position.

Awareness

- Physical - on the abdomen, relaxation of the back muscles, the respiration or the thyroid gland.

- Spiritual - on manipura or vishuddhi chakra.

3.12.2.15 MATSYASANA (FISH POSE)

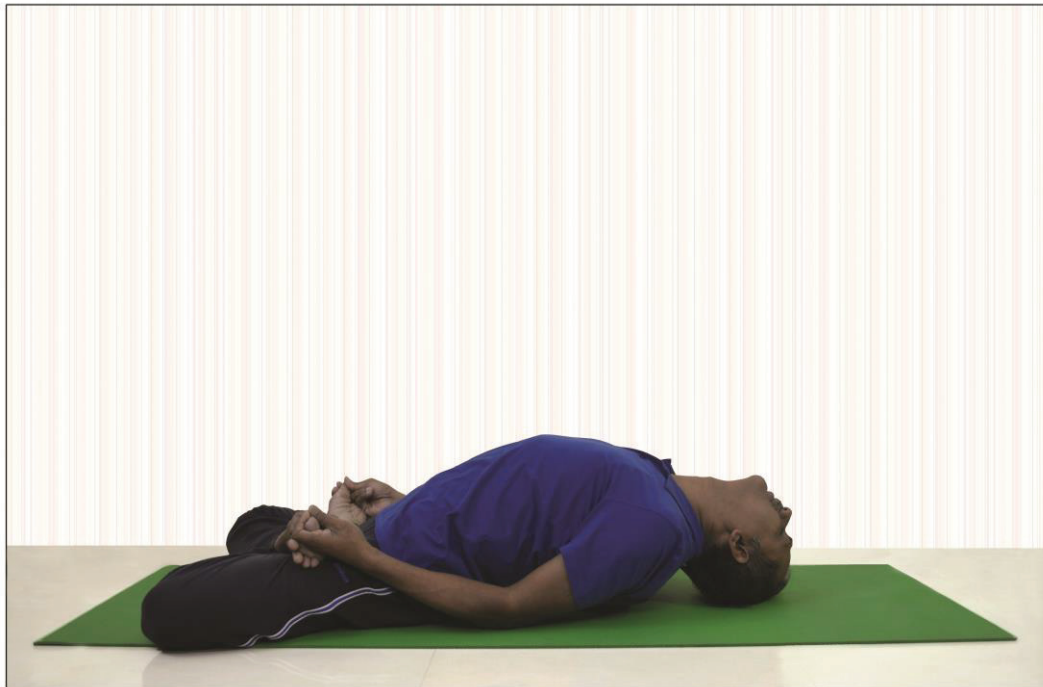


Figure 26. Matsyasana

In this asana posture the shape of the body appears similar to fish in the water. Such a statement is bold as the fact is we don't recognize the posture as fish but one can float on the water without any movement in this asana.

Pre Position: Sitting Posture

Procedure

- Sit in padmasana and relax the whole body.
- Carefully bend backward, supporting the body with the arms and elbows. Lift the chest slightly, take the head back and lower the crown of the head to the floor.
- Hold the big toes and rest the elbows on the floor.

- Adjust the position of the head so that the maximum arch of the back is attained.
- Relax the arms and the whole body, allowing the head, buttocks and legs to support the weight of the body. Close the eyes and breathe slowly and deeply.
- The thighs and knees are completely placed on the ground. As the back is stretched in curve and head on floor, lot of weight is shifted to the head and throat is stretched.
- Return to the starting position, reversing the order of movements. Also while releasing the position; one should avoid jerks and speedy movements.
- The weight over the head should be taken out slowly.

Breathing

- Breathe deeply and slowly in the final position.

Awareness

- Physical - on the abdomen, chest or breath.
- Spiritual - on manipura or anahata chakra.

3.12.2.16 PAWANAMUKTASANA (GAS RELEASING POSE)

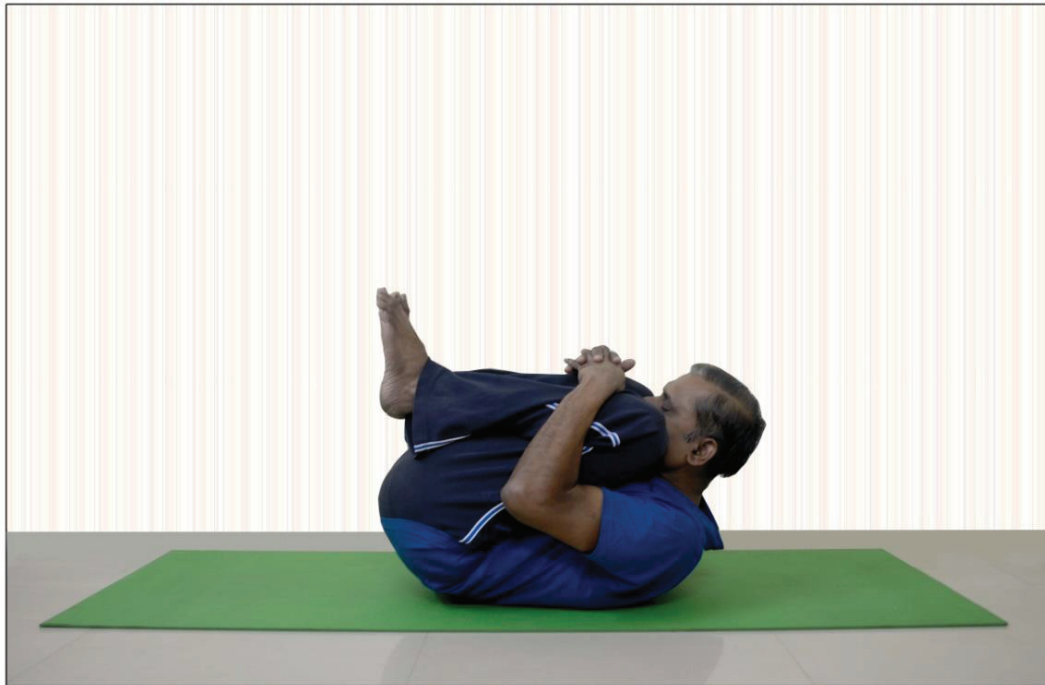


Figure 27. Pawanamuktasana

The knees and thighs are pressed against the chest and belly in this asana. The gas trapped in the large intestine gets released in this Asana. Therefore, it is called 'Pawanamuktasana'.

Pre Position: Supine Position.

Procedure

- Lie in the base position.
- Bend both knees and bring the thighs to the chest.
- Interlock the fingers and clasp the hands on the shin bones just below the knees.
- Inhale deeply.

- Holding the breath, raise the head and shoulders and try to place the nose in the space between the two knees.
- The proper pressure on the concerned organs of the body gives the desired benefits.
- Hold the breath in the raised position for a few seconds, counting mentally.
- Slowly lower the head, shoulders and legs while breathing out.

Breathing

- Inhale slowly and lift the legs and bend in the knee.
- Exhale slowly when knee touch the chest and come back to the original position.

Awareness

- On the breath, mental counting in the final position, pressure on the abdomen and the movement.

3.12.2.17 SHAVASANA (CORPSE POSE)

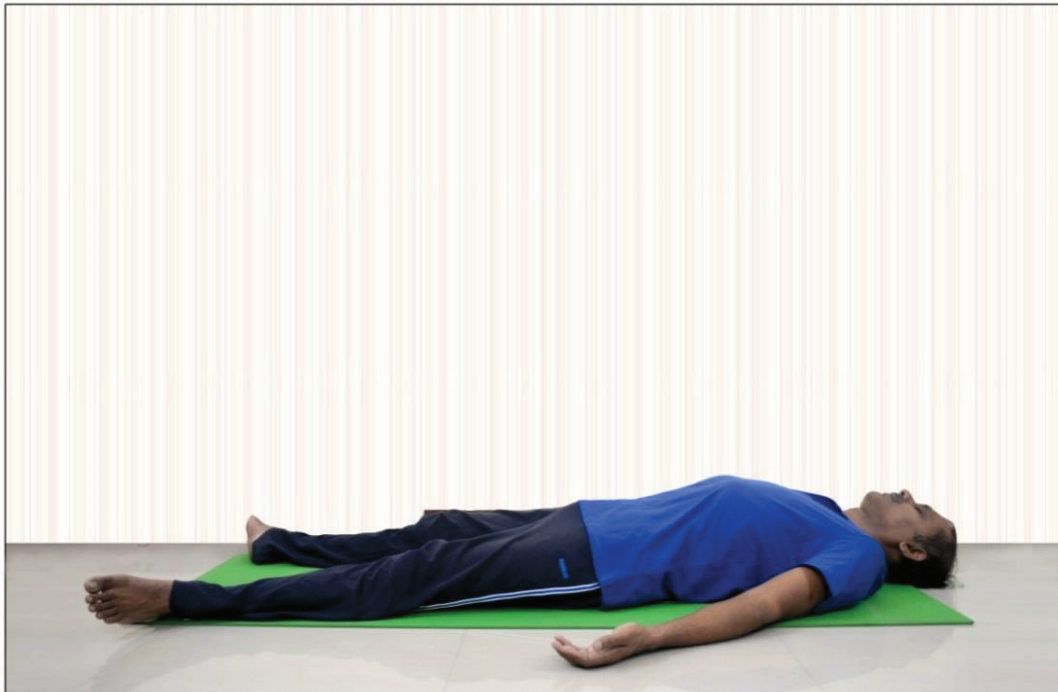


Figure 28. Shavasana

This asana is known as Shavasana or Corpse Pose as it looks like a dead body. This asana is one of the easiest asana to get into but the most difficult to practice. It is one of the best relaxation poses and if practiced correctly and with full efforts, can relax every body part, relaxing not only the body but also the mind.

Pre Position: Supine Position

Procedure

- Lie flat on the back with the arms about 15 cm away from the body, palms facing upward. A thin pillow or folded cloth may be placed behind the head to prevent discomfort.
- Let the fingers curl up slightly.

- Move the feet slightly apart to a comfortable position and close the eyes. this asana is keeping the mind focused on relaxing every body part
- The head and spine should be in a straight line.
- Make sure the head does not fall to one side or the other.
- Relax the whole body and stop all physical movement. The aim of this asana is to reduce this strain and give the muscles the real rest and relaxation that they need.
- After taking the position first attempt to free the mind from thoughts and worries and concentrate on the body. Then concentrate on each body part, relaxing it. After relaxing the whole body turn the mind to the direction of the breath.
- Become aware of the natural breath and allow it to become rhythmic and relaxed.
- Begin to count the breaths from number 27 backwards to zero. Mentally repeat, "I am breathing in 27, I am breathing out 27, I am breathing in 26, I am breathing out 26", and so on, back to zero.
- If the mind wanders and the next number is forgotten, bring it back to the counting and start again at 27. If the mind can be kept on the breath for a few minutes the body will relax.
- First one should prepare one's mind for releasing the asana.
- Make small movements of the fingers and toes, Straighten the neck.
- Bring the arms back next to the sides, Bring the legs together and open the eyes.

Awareness

- Physical - first on relaxing the whole body, then on the breath and counting.
- Spiritual - on ajna chakra.

Breathing

- Normal

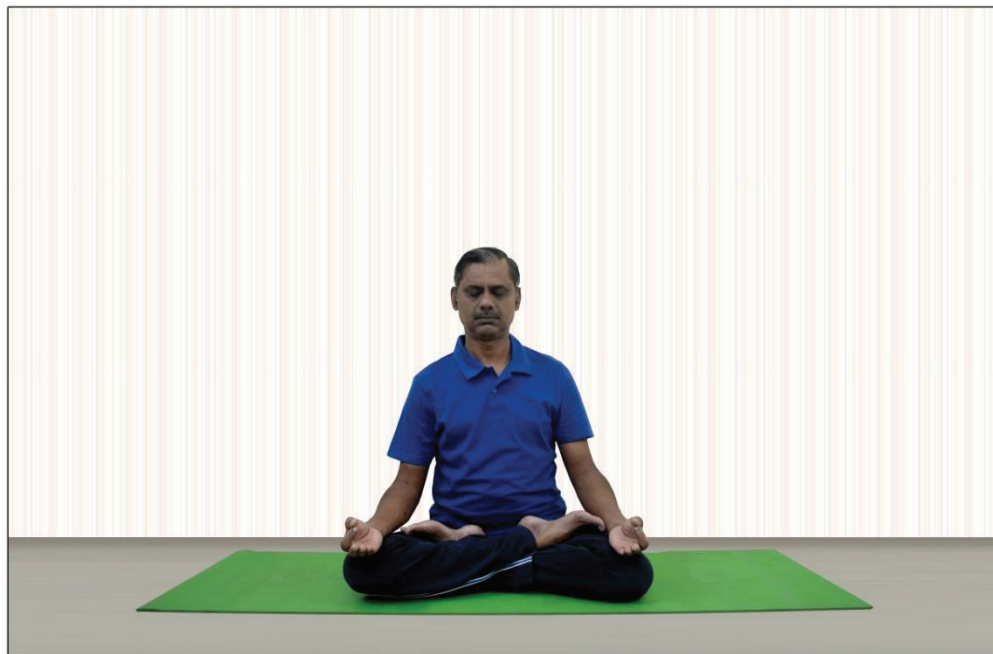
3.12.3 PRANAYAMA**3.12.3.1 KAPALBHATI PRANAYAMA (FRONTAL BRAIN CLEANSING BREATH)**

Figure 29. Kapalbhati Pranayama

The word Kapalbhati is made up of two words. Kapal meaning skull (here skull includes all the organs under the skull) and bhati means shining,

illuminating. Due to the process, the organs under the skull mainly the brain and the small brain are influenced in a good manner, hence the word is used in that way.

Pre Position: Meditation Position

Procedure

- Sit in any comfortable meditation asana; padmasana, as a first choice, or siddha/siddha yoni asana, with the head and spine straight and the hands resting on the knees in either chin or jnana mudra.
- Close the eyes and relax the whole body.
- Inhale deeply through both nostrils, expanding the abdomen, and exhale with a forceful contraction of the abdominal muscles. Do not strain.
- The next inhalation takes place by passively allowing the abdominal muscles to expand.
- Inhalation should be spontaneous or passive recoil, involving no effort.
- Perform 10 respirations to begin with. Count each respiration mentally.
- After completing 10 rapid breaths in succession inhale and exhale deeply.
- After completing the practice, maintain awareness of the void in the region of the eyebrow centre, feeling an all pervading emptiness and calm.

Breathing

- It is important that the rapid breathing used in these techniques be from the abdomen and not from the chest.
- The number of respirations may be increased from the initial count of 10, as the abdominal muscles become stronger.

Awareness

- Physical - on rhythmic breathing, keeping count of the respirations.
- Spiritual - on eyebrow center.

3.12.3.2 BHASTRIKA PRANAYAMA (BELLOWS BREATH)

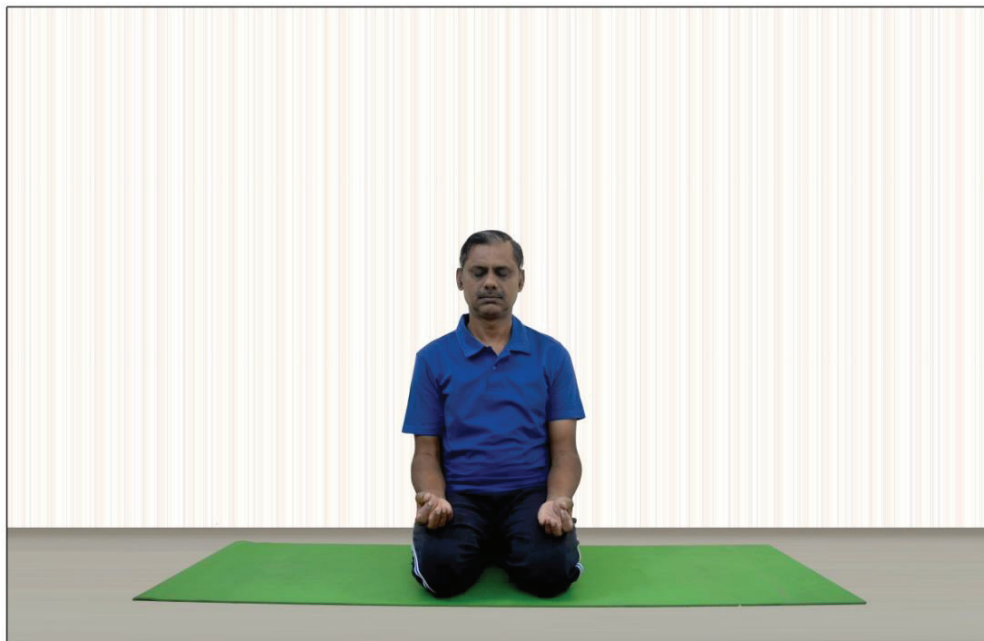


Figure 30. Bhastrika Pranayama

Preposition: Meditation posture,

Procedure:

- Sit preferably padmasana, ardha padmasana or siddha siddha yoni asana, with the hands resting on the knees in either chin or jnana mudra.
- Keep the head and spine straight, close the eyes and relax the whole body.
- Take a deep breath in and breathe out forcefully through the nose. Do not strain.
- Immediately afterwards breathe in with the same force.
- During inhalation the diaphragm descends and the abdomen moves outward.
- During exhalation the diaphragm moves upward and the abdomen moves inward.
- The above movements should be slightly exaggerated.
- Continue in this manner, counting 10 breaths.
- Take a deep breath in and breathe out slowly.
- This is one round.
- Keep the eyes closed and concentrate on the breathing and the counting.
- When accustomed to this style of breathing, gradually increase the speed, always keeping the breathe rhythmical.
- Inhalation and exhalation must be equal.

Breathing

- Bhastrika may be practiced at three different breath rates: slow, medium and fast, depending on the capacity of the practitioner.
- Slow bhastrika is practiced to approximately one breath every two seconds, with no undue force on inhalation or exhalation. It is like amplified normal breathing. It is especially useful for beginners and those using bhastrika for therapeutic purposes, although it may also be practiced at all stages.
- Medium bhastrika increases the speed of respiration to approximately one breath every second.
- Fast bhastrika means a breathing speed of around two breaths per second. Both medium and fast breathing are suitable for intermediate and advanced practitioners.

Awareness

- Physical - on the breathing process, the physical movement of the abdomen and mental counting.
- Spiritual - on manipura chakra.

3.12.3.3 NADISHODHANA PRANAYAMA (PSYCHIC NETWORK PURIFICATION)



Figure 31. Nadishodhana Pranayama

The whole process of cleaning and purifying of nerves in the body is called psychic network purification.

Pre Position: Meditation Position

Procedure

- Sit in any comfortable meditation posture, preferably siddha/siddha yoni asana or padmasana. Keep the head and spine upright.
- Relax the whole body and close the eyes.
- Practice yogic breathing for some time.
- Adopt nasagra mudra with the right hand and place the left hand on the knee in chin or jnana mudra.

- In this technique the duration of inhalation/exhalation is controlled. Close the right nostril with the thumb and breathe in through the left nostril. At the same time count mentally, "1, Om; 2, Om; 3, Om", until the inhalation ends comfortably. This is the basic count.
- Breathe deeply with yogic breathing. Do not strain.
- Close the left nostril with the ring finger, release the pressure of the thumb on the right nostril and while breathing out through the right nostril, simultaneously count, "1, Om; 2, Om; 3, Om". The time for inhalation and exhalation should be equal.
- Next, inhale through the right nostril, keeping the same count in the same manner.
- At the end of inhalation close the right nostril, open the left nostril and exhale through the left nostril, counting as before.
- This is one round.
- Ratio and timing: After a few days, if there is no difficulty, increase the length of inhalation/exhalation by one count.
- Continue in this way, increasing the inhalation/exhalation by one count as it becomes easy.
- Do not force the breath in any way and be careful not to speed up the counting during exhalation to compensate for shortage of breath. At the slightest sign of discomfort reduce the count.

Breathing

- Breathing should be silent in all techniques of nadishodhana, ensuring that it is not forced or restricted in any way.

- The flow of breath must be smooth, with no jerks, throughout the practice. Always use the chest and diaphragm muscles and practice yogic breathing.

Awareness

- Physical - on the breath and the counting.
- Mental - it is easy for the mind to wander during nadishodhana. Simply be aware of this wandering tendency of the mind, continue the practice and the count. This will automatically encourage the awareness to return to the practice.
- Spiritual - on ajna chakra.

3.12.3.4 UJJAYI PRANAYAMA (THE PSYCHIC BREATH)

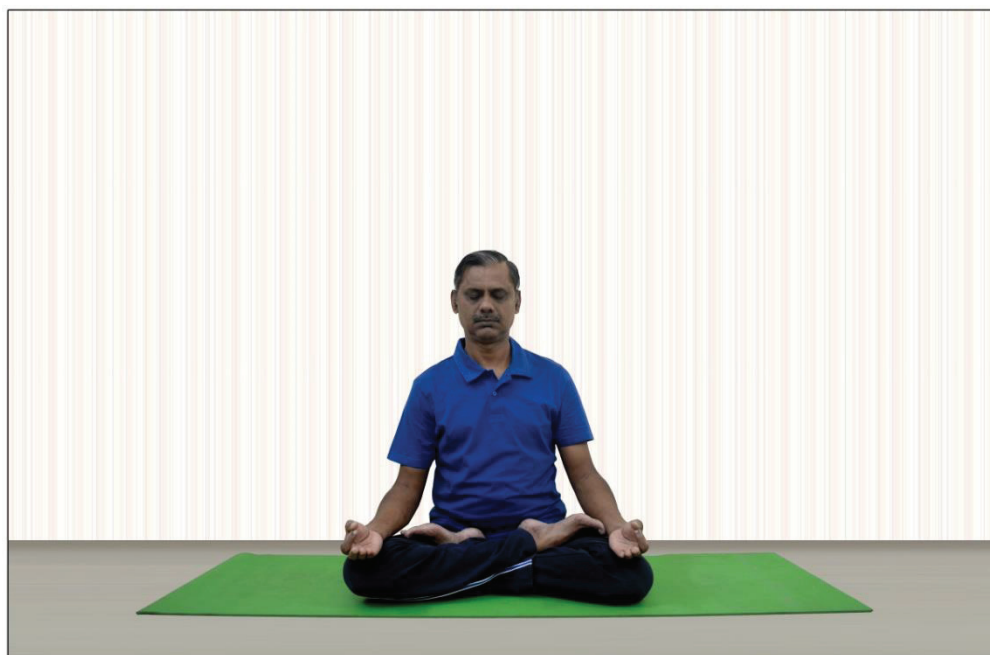


Figure 32. Ujjayi Pranayama

The Sanskrit word ujjayi means 'victorious'. It is derived from the root ji, which means 'to conquer' or 'to acquire by conquest' and the prefix ud, which means

'bondage'. Ujjayi is therefore the pranayama which gives freedom from bondage. It is also known as the psychic breath, as it leads to subtle states of mind.

Pre Position: Meditation Position

Procedure

- Sit in any comfortable position, preferably a meditation asana.
- Close the eyes and relax the whole body.
- Take the awareness to the breath in the nostrils and allow the breathing to become calm and rhythmic.
- After some time, transfer the awareness to the throat. Try to feel or to imagine that the breath is being drawn in and out through the throat and not through the nostrils; as if inhalation and exhalation are taking place through a small hole in the throat.
- As the breathing becomes slower and deeper, gently contract the glottis so that a soft snoring sound like the breathing of a sleeping baby is produced in the throat.
- If this is practiced correctly there will be a simultaneous contraction of the abdomen. This happens by itself, without any effort being made.
- Both inhalation and exhalation should be long, deep and controlled.
- Practice yogic breathing while concentrating on the sound produced by the breath in the throat.
- The sound of the breath should not be very loud. It should just be audible to the practitioner but not to another person unless they are sitting very close.

Awareness

- Physical - on rhythmic breathing, throat and flow.
- Spiritual - on vishuddhi chakra.

3.12.4 SILENT MEDITATION

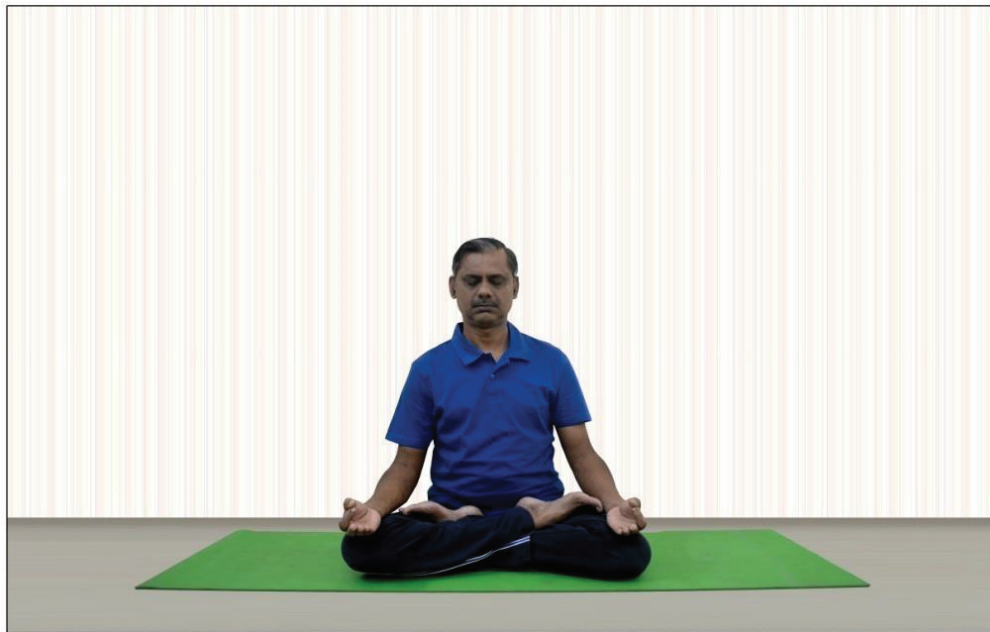


Figure 33. Silent Meditation

3.13 TRAINING PROCEDURE OF TIBETIAN YOGA

THE FIVE TIBETAN RITES

3.13.1 RITE 1

- Stand erect with arms outstretched, horizontal to the floor as in picture Rite 1.
- Spin around clockwise until you become slightly dizzy.
- Relax as in picture Rite 1A and get ready for next rite.
- Gradually increase practicing from 7 up to 21 repetitions for each rite.

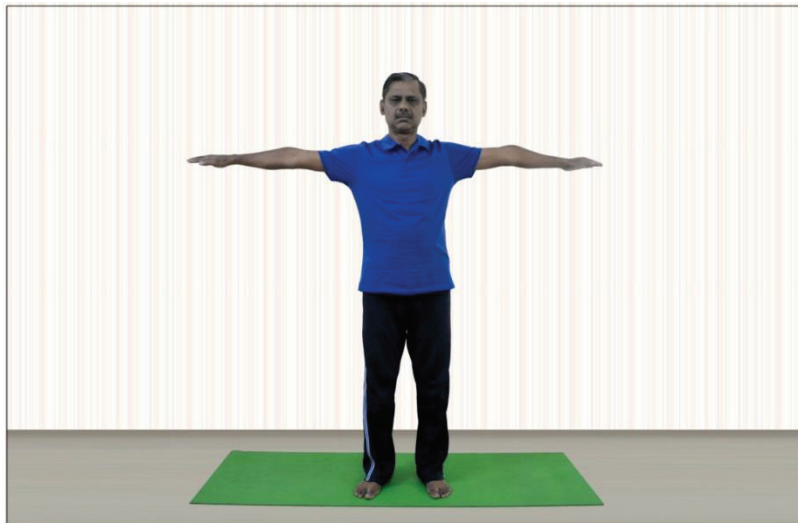


Figure 34. Rite 1

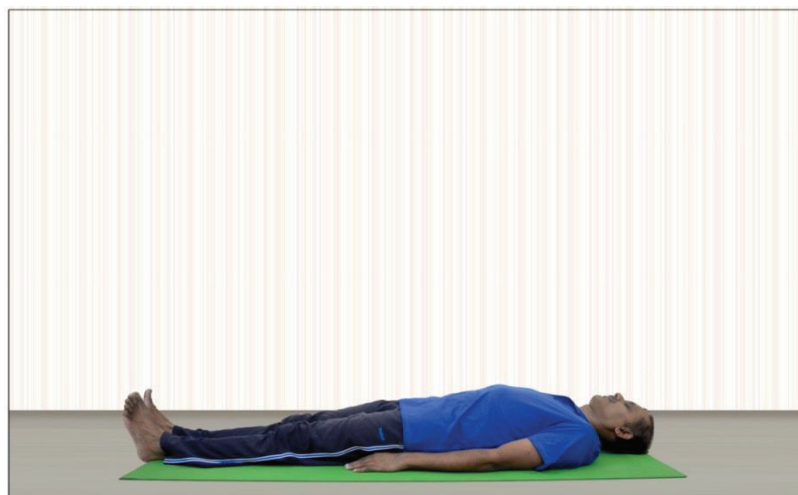
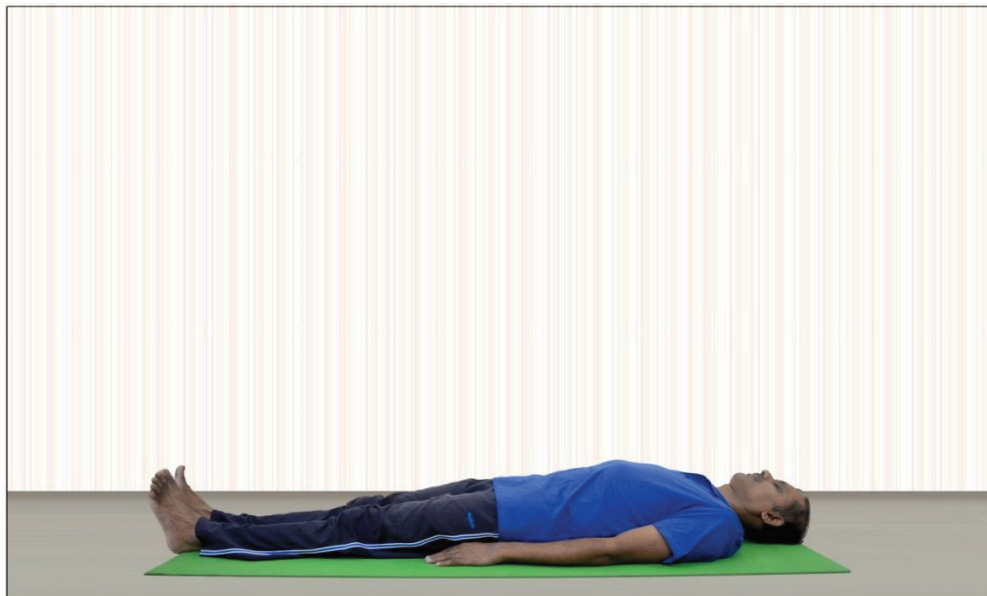


Figure 35. Rite 1A

3.13.2 RITE 2

- First lie flat on the floor, face up as in picture Rite 2.
- Fully extend your arms along your sides, and place the palms of your hands against the floor, keeping the fingers close together.
- Then, raise your head off the floor, tucking the chin against the chest as in picture Rite 2A. As you do this, lift your legs, knees straight, into a vertical position. If possible, let the legs extend back over the body, toward the head; but do not let the knees bend.
- Then slowly lower both the head and the legs, knees straight, to the floor.
- Allow all the muscles to relax, continue breathing in the same rhythm.

**Figure 36. Rite 2**

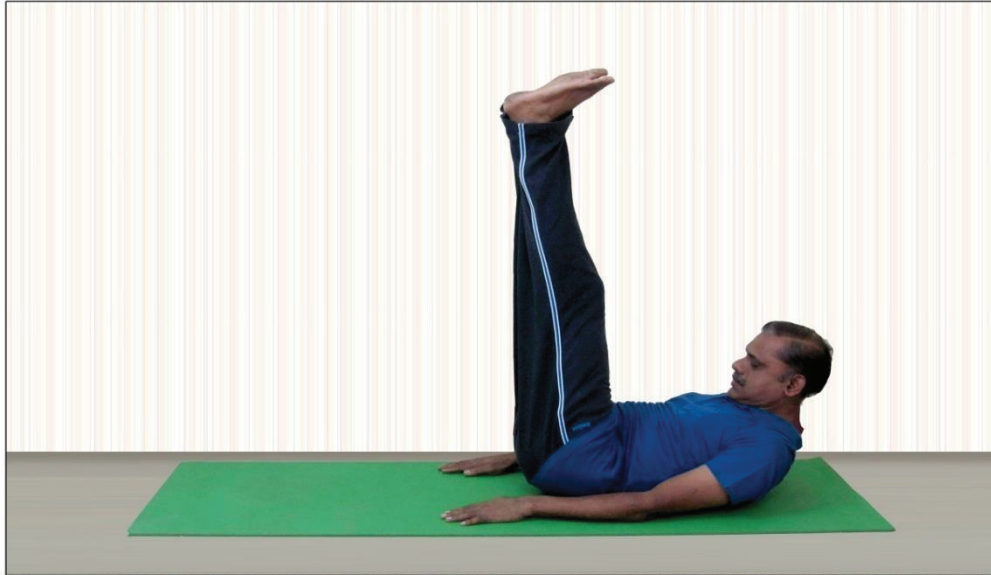


Figure 37. Rite 2A

3.13.3 RITE 3

- Kneel on the floor with the body erect. The hands should be placed against the thigh muscles as in picture Rite 3.
- Incline the head and neck forward, tucking the chin against the chest.
- Then, throw the head and neck backward, arching the spine. As you arch, you will brace your arms and hands against the thighs for support as in picture Rite 3A.
- After the arching, return to the original position and start the rite all over again.
- Breathe in deeply as you arch the spine, breathe out as you return to an erect position



Figure 38. Rite 3

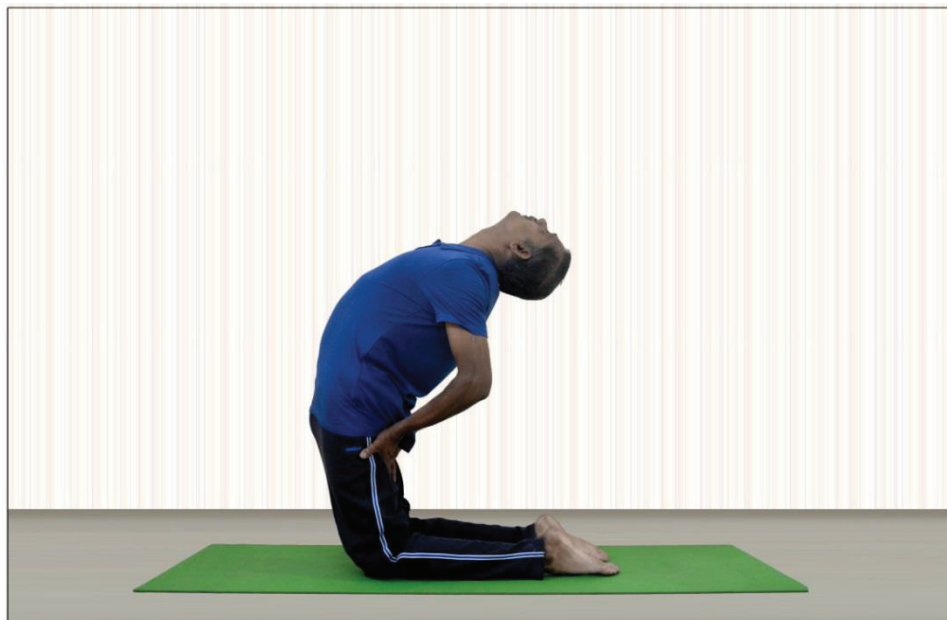


Figure 39. Rite 3A

3.13.4 RITE 4

- Sit down on the floor with your legs straight out in front of you and your feet about 12 inches apart. With the trunk of the body erect, place the palms of your hands on the floor alongside the buttocks.

- Then, tuck the chin forward against the chest as in picture Rite 4.
- Now, drop the head backward as far as it will go. At the same time, raise your body so that the knees bend while the arms remain straight. The trunk of the body will be in a straight line with the upper legs, horizontal to the floor as shown in picture Rite 4A.
- Then, tense every muscle in the body.
- Finally, relax your muscles as you return to the original sitting position, and rest before repeating the procedure.
- Breathe in as you raise up, hold your breath as you tense the muscles, breathe out completely as you come down. Continue breathing in the same rhythm as long as you rest between repetitions.

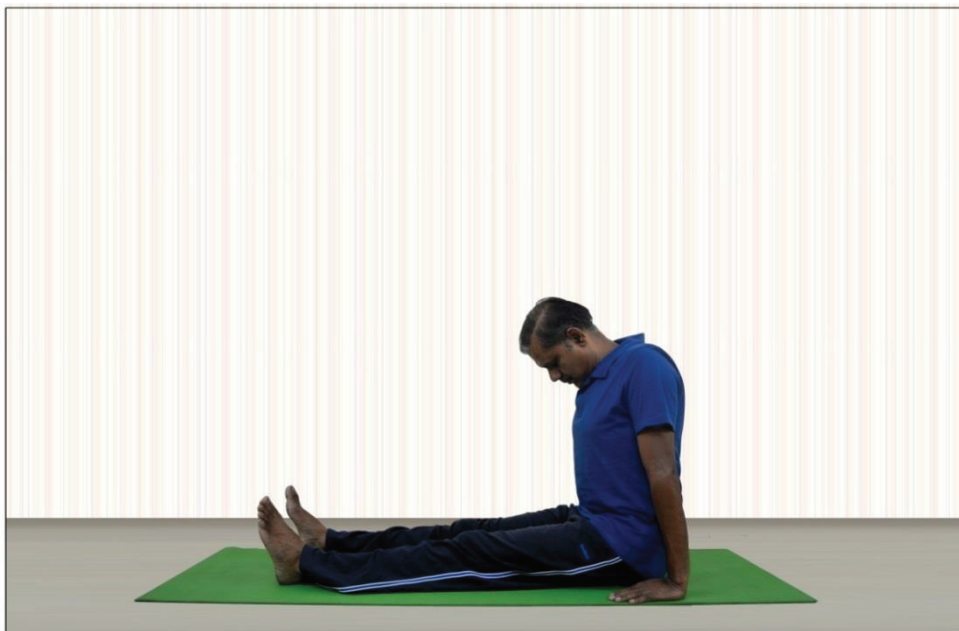


Figure 40. Rite 4



Figure 41. Rite 4A

3.13.5 RITE 5

- When you perform the fifth rite, your body will be face-down to the floor. It will be supported by the hands, palms down against the floor, and the toes in a flexed position.
- Throughout this rite, the hands and feet should be kept straight. Start with your arms perpendicular to the floor, and the spine arched, so that the body is in a sagging position.
- Now, throw the head back as far as possible as in picture Rite 5.
- Then, bending at the hips, bring the body up into an inverted 'V'. At the same time, bring the chin forward, tucking it against the chest as in picture Rite 5A.
- Breathe in deeply as you raise the body; breathe out fully as you lower it.

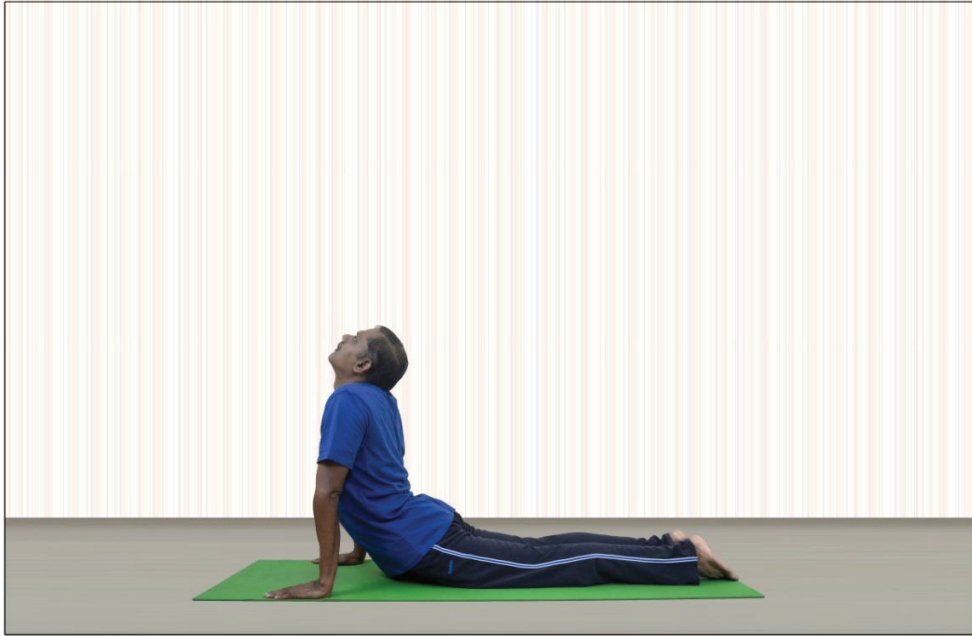


Figure 42. Rite 5

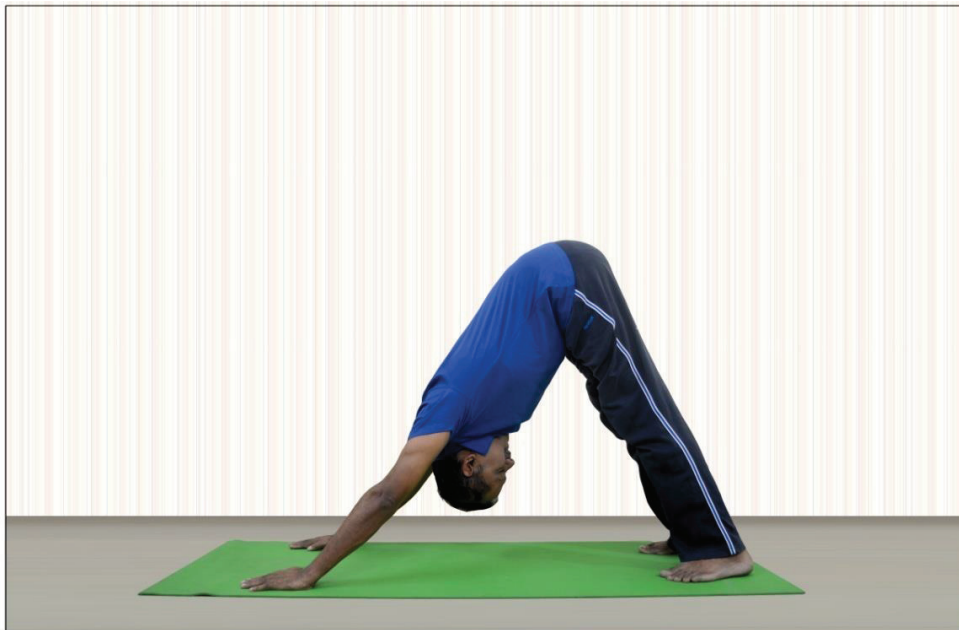


Figure 43. Rite 5A

3.13.6 RELAXATION AND AUM MEDITATION

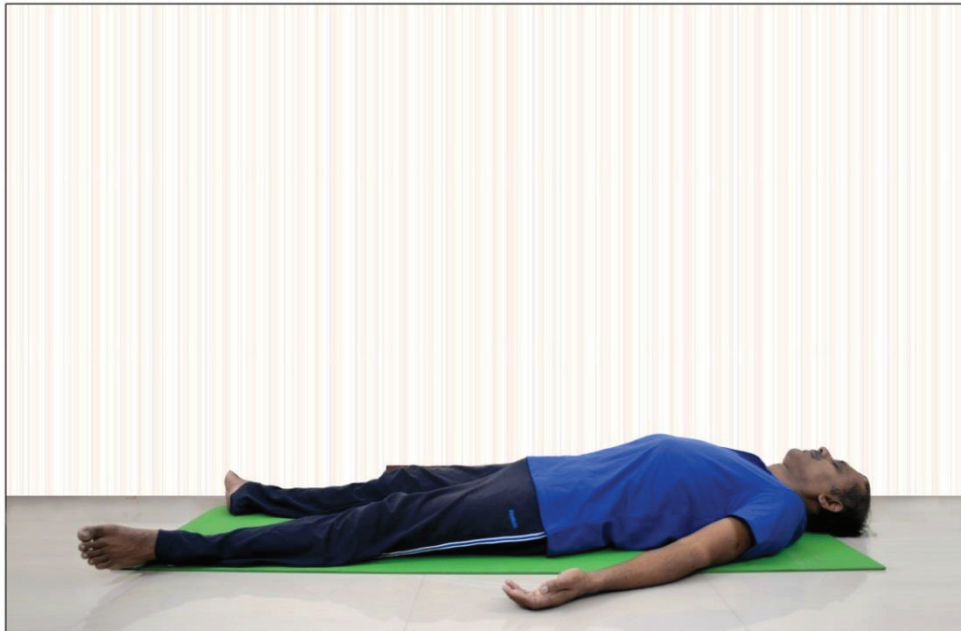


Figure 44. Relaxation and Aum Meditation

3.13.6.1 A – KARA CHANTING

- Lie down in Savasana.
- Feel completely relaxed and close your eyes.
- Adopt chin – mudra.
- Inhale slowly and completely.
- While exhaling chant ‘AAA’ in a low pitch.
- Feel the sound resonance in the abdomen and the lower parts of the body.
- Repeat the chants.

3.13.6.2 U – KARA CHANTING

- Continue same savasana posture.
- Adopt cinmaya mudra.
- Inhale slowly and completely.
- While exhaling chant ‘UUU’ in a low pitch.
- Feel sound resonance in the chest and the middle part of the body.
- Repeat the chants.

3.13.6.3 M– KARA CHANTING

- Continue same savasana posture.
- Adopt Adi Mudra.
- Inhale slowly and completely.
- While exhaling chant ‘MMM’ in a low pitch.
- Feel sound resonance in the entire head region
- Repeat the chants.

3.14 TRAINING SCHEDULE

The experimental factor selected for the Traditional Yoga and Tibetan Yoga were innumerable. So, the scholar consulted with experts in the field of yoga and then selected the following for the experimental group.

3.15 TEST ADMINISTRATION

3.15.1 PHYSIOLOGICAL TESTING

1. BMI

Purpose : To measure Body Mass Index

Equipment : Weighing Scale and Stadiometer

Procedure : Recorded in Standing Position

Scoring : Normal 18.5 – 25.00 kg/m x m

2. BLOOD PRESSURE

Purpose : To measure Blood Pressure

Equipment : Blood Pressure and Pulse Monitor

Procedure : Recorded in Siting Position-Heart Level

Scoring : Normal 120/80 mmHg

3. PULSE RATE

Purpose : To measure Pulse Rate

Equipment : Blood Pressure and Pulse Monitor

Procedure : Recorded in Siting Position

Scoring : Normal 70-80 Pulse/min

3.15.2 BIO-CHEMICAL TESTING

1. BLOOD SUGAR - FASTING

Purpose	:	To measure Fasting Blood Sugar
Equipment	:	Lab Test
Procedure	:	Blood Sample - Fasting Condition
Scoring	:	Normal 70-110 mg/dl

2. BLOOD SUGAR – HbA1C

Purpose	:	To measure Average Blood Sugar
Equipment	:	Lab Test
Procedure	:	Blood Sample
Scoring	:	< 6.5

3. TOTAL CHOLESTEROL

Purpose	:	To measure Blood Sugar
Equipment	:	Lab Test
Procedure	:	Blood Sample - Fasting Condition
Scoring	:	150-250 mg/dl

3.15.3 PSYCHOLOGICAL TESTING

1. ANXIETY

Purpose	:	To measure Anxiety
Equipment	:	Anxiety Scale Taylor's Manifest Questionnaire
Procedure	:	Recorded in a relaxed sitting position
Scoring	:	Score 0-50

2. WORK AND SOCIAL ADJUSTMENT

Purpose	:	To measure Work and Social Adjustment
Equipment	:	Work and Social Adjustment Scale Serenity Programme, Questionnaire
Procedure	:	Recorded in a relaxed sitting position
Scoring	:	Score 0-40

3. SATISFACTION WITH LIFE

Purpose	:	To measure Satisfaction with Life
Equipment	:	Satisfaction with Life Scale Diener, Fetzner Inst., Questionnaire
Procedure	:	Recorded in a relaxed sitting position
Scoring	:	Average 5-35

3.16 COLLECTION OF DATA

For the present study research collected data from various hospitals, clinics and Patanjalee Institute of Yoga & Therapy, Chennai, Total forty five (45) subjects were selected randomly and given Traditional yoga and Tibetan yoga practices accordingly. Twelve weeks training practices had given in Patanjalee Institute of Yoga & Therapy, Adyar, Chennai- 600 020.

3.17 STATISTICAL TECHNIQUES

The Analysis of co-variance (ANCOVA) was used to find out the pre-test and post-test significant differences among three groups. Analysis of co-variance (ANCOVA) removed the effect of confounding variables' influence from the study. It helped to compare adjusted means of the post test scores among the groups.

Scheffe's post hoc test was used to find out the paired mean differences.

TABLE - XI TRADITIONAL YOGA PRACTICES FROM 1 TO 4 WEEKS (50 MI

EXPERIMENTAL GROUP I								
Sl.No.	PRACTICES		Duration	Rest Time	Total Duration	No.of Rep	No.of Breath	No.of Rounds
1	OPENING PRAYER		2 min	0	2 min	1	FREE	NA
2	LOOSENING EXERCISES		5 min	1 min	6 min	1	FREE	NA
3	SURYA NAMASKAR		10 min	0	10 min	6 in 10 min	-	NA
4	ASANA	Shavasana	3 min	0	3 min	1	30	NA
		Vrikshasana	20 sec	10 sec	30 sec	1	3	NA
		Padahasthasana	20 sec	10 sec	30 sec	1	3	NA
		ParivrttaTrikonasana	40 sec	20 sec	60 sec	1	7	NA
		Vakrasana	40 sec	20 sec	60 sec	1	7	NA
		Ardhamatsyendrasana	40 sec	20 sec	60 sec	1	7	NA
		Yogamudra	20 sec	10 sec	30 sec	1	3	NA
		Bhujanagasana	20 sec	10 sec	30 sec	1	3	NA
		Shalabasana	20 sec	10 sec	30 sec	1	3	NA
		Dhanurasana	20 sec	10 sec	30 sec	1	3	NA
		Naukasana	20 sec	10 sec	30 sec	1	3	NA
		Ushtrasana	20 sec	10 sec	30 sec	1	3	NA
		Paschimottanasana	20 sec	10 sec	30 sec	1	3	NA
		Sarvangasana	20 sec	10 sec	30 sec	1	3	NA
		Halasana	20 sec	10 sec	30 sec	1	3	NA
		Matsyasana	20 sec	10 sec	30 sec	1	3	NA
		Pawanmuktasana	20 sec	10 sec	30 sec	1	3	NA
Shavasana	3 min	0	3 min	1	30	NA		
5	PRANAYAMA	Kapalbhati	20 sec	10 sec	30 sec	NA	10	1
		Bhastrika	20 sec	10 sec	30 sec	NA	10	1
		Nadisodhana	60 sec	20 sec	80 sec	5 BREATH (L & R)		3
		Ujjayi	60 sec	20 sec	80 sec	NA	10	3
6	SILENT MEDITATION		5 min	0	5 min	1	FREE	NA
7	CLOSING PRAYER		2 min	0	2 min	1	FREE	NA

TABLE - XII TRADITIONAL YOGA PRACTICES FROM 5 TO 8 WEEKS (60 MIN)

EXPERIMENTAL GROUP I								
Sl.No.	PRACTICES	Duration	Rest Time	Total Duration	No.of Rep	No.of Breath	No.of Rounds	
1	OPENING PRAYER	2 min	0	2 min	1	FREE	NA	
2	LOOSENING EXERCISES	5 min	1 min	6 min	1	FREE	NA	
3	SURYA NAMASKAR	10 min	0	10 min	9 in 10 min	-	NA	
4	ASANA	Shavasana	4 min	0	4 min	1	40	NA
		Vrikshasana	30 sec	15 sec	45 sec	1	5	NA
		Padahasthasana	30 sec	15 sec	45 sec	1	5	NA
		ParivrtaTrikonasana	60 sec	30 sec	90 sec	1	10	NA
		Vakrasana	60 sec	30 sec	90 sec	1	10	NA
		Ardhamatsyendrasana	60 sec	30 sec	90 sec	1	10	NA
		Yogamudra	30 sec	15 sec	45 sec	1	5	NA
		Bhujanagasana	30 sec	15 sec	45 sec	1	5	NA
		Shalabasana	30 sec	15 sec	45 sec	1	5	NA
		Dhanurasana	30 sec	15 sec	45 sec	1	5	NA
		Naukasana	30 sec	15 sec	45 sec	1	5	NA
		Ushtrasana	30 sec	15 sec	45 sec	1	5	NA
		Paschimottanasana	30 sec	15 sec	45 sec	1	5	NA
		Sarvangasana	30 sec	15 sec	45 sec	1	5	NA
		Halasana	30 sec	15 sec	45 sec	1	5	NA
		Matsyasana	30 sec	15 sec	45 sec	1	5	NA
		Pawanmuktasana	30 sec	15 sec	45 sec	1	5	NA
Shavasana	3 min	0	4 min	1	40	NA		
5	PRANAYAMA	Kapalbhati	30 sec	15 sec	45 sec	NA	15	2
		Bhastrika	30 sec	15 sec	45 sec	NA	15	2
		Nadisodhana	60 sec	20 sec	80 sec	5 BREATH (L & R)		3
		Ujjayi	60 sec	20 sec	80 sec	NA	10	3
6	SILENT MEDITATION	7 min	0	7 min	1	FREE	NA	
7	CLOSING PRAYER	2 min	0	2 min	1	FREE	NA	

TABLE – XIII TRADITIONAL YOGA PRACTICES FROM 9 TO 12 WEEKS (75 M

EXPERIMENTAL GROUP I								
Sl. No.	PRACTICES	Duration	Rest Time	Total Duration	No.of Rep	No.of Breath	No.of Rounds	
1	OPENING PRAYER	2 min	0	2 min	1	FREE	NA	
2	LOOSENING EXERCISES	5 min	1 min	6 min	1	FREE	NA	
3	SURYA NAMASKARA	13 min	0	13 min	12 in 13 min	-	NA	
4	ASANA	Shavasana	5 min	0	5 min	1	50	NA
		Vrikshasana	45 sec	15 sec	1 min	1	8	NA
		Padahasthasana	45 sec	15 sec	1 min	1	8	NA
		ParivrttaTrikonasana	90 sec	30 sec	2 min	1	15	NA
		Vakrasana	90 sec	30 sec	2 min	1	15	NA
		Ardhamatsyendrasana	90 sec	30 sec	2 min	1	15	NA
		Yogamudra	45 sec	15 sec	1 min	1	8	NA
		Bhujanagasana	45 sec	15 sec	1 min	1	8	NA
		Shalabasana	45 sec	15 sec	1 min	1	8	NA
		Dhanurasana	45 sec	15 sec	1 min	1	8	NA
		Naukasana	45 sec	15 sec	1 min	1	8	NA
		Ushtrasana	45 sec	15 sec	1 min	1	8	NA
		Paschimottanasana	45 sec	15 sec	1 min	1	8	NA
		Sarvangasana	45 sec	15 sec	1 min	1	8	NA
		Halasana	45 sec	15 sec	1 min	1	8	NA
		Matsyasana	45 sec	15 sec	1 min	1	8	NA
		Pawanmuktasana	45 sec	15 sec	1 min	1	8	NA
Shavasana	5 min	0	5 min	1	50	NA		
5	PRANAYAMA	Kapalbhati	45 sec	15 sec	1 min	NA	45	3
		Bhastrika	45 sec	15 sec	1 min	NA	45	3
		Nadisodhana	5 min	1 min	6 min	15 BREATH (L & R)		1
		Ujjayi	4 min	0	4 min	1	40	1
6	SILENT MEDITATION	7 min	0	7 min	1	FREE	NA	
7	CLOSING PRAYER	2 min	0	2 min	1	FREE	NA	

**TABLE – XIV TIBETIAN YOGA PRACTICES FROM 1 TO 4 WEEKS
(50 MINUTES)**

EXPERIMENTAL GROUP II					
SL. NO.	PRACTICES	Grand Total Duration	Rest Time	No.of Repetitions	Frequency (weekly)
1	OPENING PRAYER	2 min	0	1	6 days
2	LOOSENING EXERCISES	16 min	60 sec	1	6 days
3	RITE - 1	15 Min	15 Sec	7 - 14 each	6 days
4	RITE - 2				6 days
5	RITE - 3				6 days
6	RITE - 4				6 days
7	RITE - 5				6 days
8	SHAVASANA	5 Min	0	1	6 days
9	MEDITATION	12 min	0	1	6 days
10	CLOSING PRAYER	2 min	0	1	6 days

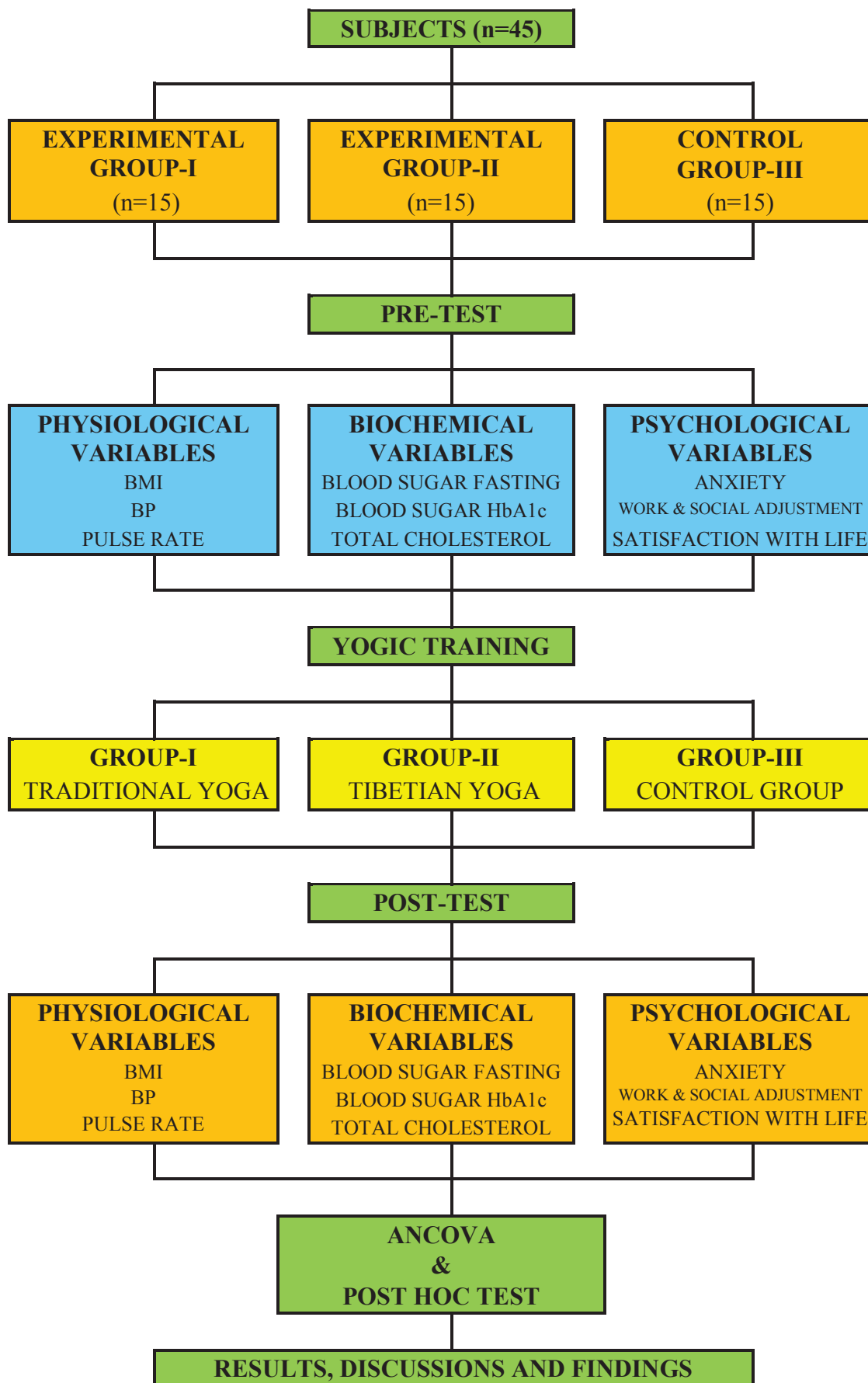
**TABLE – XIV (A) TIBETIAN YOGA PRACTICES FROM 5 TO 8 WEEKS
(60 MINUTES)**

EXPERIMENTAL GROUP II					
SL. NO.	PRACTICES	Grand Total Duration	Rest Time	No.of Repetitions	Frequency (weekly)
1	OPENING PRAYER	2 min	0	1	6 days
2	LOOSENING EXERCISES	16 min	60 sec	1	6 days
3	RITE - 1	20 min	15 Sec	14 - 21 each	6 days
4	RITE - 2				6 days
5	RITE - 3				6 days
6	RITE - 4				6 days
7	RITE - 5				6 days
8	SHAVASANA	5 min	0	1	6 days
9	MEDITATION	15 min	0	1	6 days
10	CLOSING PRAYER	2 min	0	1	6 days

**TABLE - XV TIBETIAN YOGA PRACTICES FROM 9 TO 12 WEEKS
(75 MINUTES)**

EXPERIMENTAL GROUP II					
SL. NO.	PRACTICES	Grand Total Duration	Rest Time	No.of Repetitions	Frequency (weekly)
1	OPENING PRAYER	2 min	0	1	6 days
2	LOOSENING EXERCISES	16 min	60 sec	1	6 days
3	RITE - 1	26 Min	15 Sec	21 each	6 days
4	RITE - 2				6 days
5	RITE - 3				6 days
6	RITE - 4				6 days
7	RITE - 5				6 days
8	SHAVASANA	8 Min	0	1	6 days
9	MEDITATION	21 min	0	1	6 days
10	CLOSING PRAYER	2 min	0	1	6 days

Figure.45 FLOW CHART - METHODOLOGY



TRADITIONAL YOGA TRAINING







Figure 46. Traditional Yoga Training

TIBETIAN YOGA TRAINING







Figure 47. Tibetan Yoga Training