

## Chapter-3

### Yoga and lifestyle

#### Asana as preventive Measures:

Asana is a body posture, originally a sitting pose for meditation, and later in Hath yoga and modern yoga adding standing (Trikonasana), sitting (Padmasana), Reclining (Shavasana), inverted (Shirsasana) Balancing, (Paschimotasana) and Backward (Dhanurasana), The Yoga sutras of Patanjali define Asana as a position that is steady and comfortable.

As a preventive measure, more recently, studies have provided evidence that asana improve flexibility, strength and balance, to reduce stress and conditions related to it, and specifically to alleviate some diseases such as asthma, and diabetes,. One remarkable aspect of asana is anyone can practice in it. One can adjust the level, the intensity depending on age and capacity. Regular Asana practice create mental clarity and calmness increase body awareness relieves chronic stress pattern, relaxes the mind, centers attention, and sharpens concentration and self awareness, Whenever Individual roll out their yoga mat and twist their bodies in different poses they are also reaping countless health benefits. Physiological Psychological Bio-chemical benefits, which ultimately help us in avoiding various lifestyle diseases such as diabetes, obesity and cardiovascular diseases.

#### Benefits of Asana for prevention of Diseases:

- Bones and joints become strong
- Muscles become strong
- Circulation of blood becomes normal
- Respiratory organs become efficient
- Efficiency of digestive system increases
- Nervous system strengthens
- Glandular activity is stimulated and regulated properly
- Efficiency of excretory system enhances
- Immune system is strengthened

Lifestyle related diseases are:

- Obesity
- Diabetes
- Asthma
- Hypertension
- Back pain

Asana plays an important role to prevent the lifestyle related diseases. They are as follows:

- **Maintain Weight:** Nowadays, obesity has become a challenging problem for the society. By doing asana daily, we exercise entire organs of our body. By practicing asana

regularly, it burns the excess fat of the body, and hence maintains healthy weight.

- Endocrine function normalizes: Diabetes is one of the most common lifestyle related disease. Diabetes occurs due to either the pancreas not producing enough insulin or the cell of the body not responding properly to the insulin produced. The asana like bhujangasana, paschimottan asana, pavanmuktasana, ardh-matsyendrasana etc, Help to stimulate and regulate pancreas to produce insulin which helps to maintain glucose level in the body.
- Respiratory efficiency increases: Asthma is a common lifestyle related disease. It occurs due to narrowing of trachea, due to which oxygen supply to lungs and body is compromised. Asana help in maintaining the trachea wide open, increase the lungs capacity and blood flow to lungs. Thus oxygen supply is maintained and asthmatic episodes is reduced and respiratory efficiency is increased.
- Regulates Blood Flow: Yoga/Asana regulate blood flow in the body and help maintain a constant blood pressure. They help the body to relax and thus reduce the high blood pressure. Yoga calm down the body and the mind and thus blood pressure is normalized.
- Proper Alignment of Spine: Asana, such as Tadasana, Ardhmatsyendrasana, Vakrasana, etc. correct the alignment of spine and thus improve posture and help in reducing back pain. More often back pain occurs due to incorrect posture, in which muscles get the strain and start aching. Correct posture relieves the back pain as spine straightens up.

### Obesity

Nowadays obesity has become a problem for the whole world obesity is a condition in which the amount of fat in the body increases to a very large extent. If a person is having BMI  $\geq 30$  he/she would be considered as obese. In other words, we can say obesity is when a person's weight is 20% or more than the ideal weight. There are two main reasons for obesity the bad habits of eating and deterioration of the digestive system. In such a person's life, there is no physical activity at all.

Due to many health risks of obesity it has been given the status of a disease. Due to obesity, diseases like diabetes, high blood pressure, cancer, arthritis etc. are caused. There are many causes of obesity such as overeating, Lack of physical exercise, thyroid. Genetics, diet high in carbohydrate frequency of eating, medications, psychological factors, social issues. Hormones changes (pregnancy, Menopause) to remove obesity, these postures should be done.

Due to many health risks of obesity it has been given the status of disease. Due to obesity, diseases like diabetes, high blood pressure, cancer, arthritis, etc. are caused. There are many causes of obesity such as excessive food, hard work, thyroid, hereditary.

To remove obesity, these postures should be practice.

Vajarasana: (Thunderbolt Pose)

Procedure: Sit and keep both leg straight.

Fold right leg and place it under right butt.

Fold left leg and place it under left butt.

Keep your spine, neck and head straight, interlock your toes, open your ankle and sit on it.

Knees should be touching the ground with each other.

Keep both hands on your knees and look straight.

Benefits:

This asana is for meditation.

- Strengthens pelvic muscles.
- It can be practiced after having food. It enhances digestion process.
- Stabilizes mind and body.
- Helps in sciatica
- It cures indigestion and improves metabolism.
- Improves flexibility in ankles.
- It gives strength to the tight muscles.
- Improve blood circulation.

Contraindications:

- Vajrasana should not be practiced by the people who have severe arthritis of the knees.
- Runners should avoid this if they have injury in their hamstrings or the calves.
- This pose may bring unwanted pressure to the intestine so those suffering from Hernia or ulcers should avoid it.
- This pose should not be practiced if one is suffering from injured ligament at the ankles or knee.

Hastasana:

Procedure: Standing erects and keeps the legs together. Lock the fingers together, keeping the palms facing up. Raise the arms straight up, keep them close to ears. While releasing the breath bend the waist to the right, exhale and come to the central position. Repeat it to left side also.

Be in bended position for 5 to 10 seconds.

Benefits:

- Gives rest to whole body.
- In children, helps in increasing the height.
- Increase flexibility in waist.
- Reduce belly fat.
- Also helps in reducing constipation.

- Improve pulmonary functions
- Stimulates nervous system.

Contraindications:

- One should avoid this pose if having neck pain.
- One should avoid this pose if having shoulder pain.
- One should avoid this pose if having spinal injury or pain.

**Trikonasan (Triangle pose)**

While inhaling stretches your right hand towards sky, arm should touch the ear. Bend left side slowly while exhaling, till it comes horizontal to the earth. Left hand should touch the ground or touch the left leg, knee should be straight. Inhale, come back to starting position. Change hand position and repeat it from another side.

Benefits:

- Trikonasana helps in digestions.
- Therapeutics for stress, anxiety, infertility, neck pain, sciatica.
- Heals Backache (in initial stage)
- Help women during their menstrual cycle.
- Improve flexibility of vest and spine.

Contraindication:

- Avoid if having low or high blood pressure.
- Avoid this pose if having any kind of neck injury.
- Avoid if having back injury.
- Avoid if an athlete having hamstring injury.

**Ardhamatsyendrasana : (Half Lord of the fishes pose)**

Procedure: Sit and keep both legs straight. Bending the knee of right feet and put right heel below the left hip. Bend left leg and placed the left foot to the right side of the right knee. Left knee closed to the chest. Exhale from the right nostril and turns towards the left, and touches the toe of left leg from the right hand. Body and head moves towards the left. Repeat while changing the position of legs.

Benefits:

- Helps nervous system and strengthen the back bone, stretching improves flexibility and tones of muscles.
- Controls menstrual cycle in women and brings shine on face.
- Also controls secretion from pancreas gland.
- Reduces fat and helps in controlling obesity.

- This pose flexes the lower part of the body making the hip stronger and toned.
- Releases excess heat toxins from organs and tissues.

Contraindications:

- Avoid while suffering from severe back or neck pain.
- Avoid this pose completely, if having slip disc problem.
- Those with internal organ issues may find this pose difficult and painful.
- It should be avoided while pregnancy.

### Diabetes

Diabetes is commonly known as metabolic disorder characterized by high blood sugar level over a prolonged period. Diabetes is due to either the pancreas not producing enough insulin or the cell of the body not responding properly to the insulin produced,. Due to diabetes the individual has fatigue, frequent urination, increased thirst and increased Hunger. It may cause blurred vision. Kidney failure, cardio vascular disease, loss of weight etc.

The main reason for diabetes in sedentary lifestyle. By doing bhujangasan, paschimottanasana, pavanmuktasana and ardhmatsyandrasana, one can get rid of this disease.

Symptoms of Diabetes

- Fatigue
- Increased Thirst
- Increased Hungers Blurred Vision
- Kidney Failure
- Cardio vascular Disease
- Loss of Weight
- Frequent Urination

Diabetes is a metabolic disorder in which the level of sugar in the blood rises from its normal reference value.

Types of Diabetes:

- Type I Diabetes: In that type of diabetes blood sugar level rises very high due to non secretion of insulin hormone by pancreas. In that of diabetes effected person has to take artificial insulin through injection.

- Type II Diabetes: In that type of diabetes blood sugar level rises but not as such as high in type I diabetes. In that type of diabetes our pancreas secreting the insulin hormone but it may be insufficient to control the blood sugar level normal or body cell are not able to respond insulin properly.

Paschimottanasana:

Procedure:

Sit down with your legs stretching straight in front of you. Keep your head, neck and spine erect and stretch hands upwards with a deep breath. Now, exhale and bend your head and trunk slowly forward to catch the toes with the thumb. Try to touch head, chest and stomach to the legs and elbows to the floor.

Benefits:

- It improves digestive system and much blocked gas get released.
- Improves the respiratory system.
- Improve the alignment of the vertebral column.
- Helps as a therapy for diabetic patient, with weak liver and kidney.
- Benefits women during menstrual disorder.

Contraindications:

- Avoid of having slip disc problem.
- Someone who is suffering from hernia should avoid this pose.
- Pregnant women should avoid this pose.
- Person having back or spinal problem should avoid this pose.

Pavanmuktasana:

Procedure:

Lie flat on your back and keep the legs straight. Inhale slowly and lift the legs and bend the knees. Bring knee upwards to the chest till your thigh touches the stomach. Hug your knees and lock your fingers, touch your chin to the knee while exhaling. Repeat it with another leg.

Benefits:

- Strengthen the back and abdominal muscle, leg and hip.
- Intestine gets massaged; also bring fresh blood to lower abdomen.

- Helps in spondylitis.
- Remove excess fat around the lower abdomen.
- Release excess heat, toxins from organs and tissues.

Contraindications:

- Avoid while suffering from severe back or neck pain.
- Avoid this pose completely, if having slip disc problem.
- Those with internal organs issues may find this pose difficult and painful.
- It should be avoided while pregnancy.

Bhujangasana : (Cobra position)

Procedure:

Lie down on your stomach. Joint the legs and stretch as much as possible. Place the palm near the chest facing the ground. Take a deep Breath and lift your upper body upwards. Elbow should be slightly, touch the ground, weight should be on pelvic region. Move your head and neck backwards as much as possible. Exhale and slightly bring the body in starting position.

Benefits:

- By doing this, digestion improve.
- A sluggish liver is also taken care of
- Thyroid gland improves.
- Kidney function improves.
- Tones the ovaries which help to remove any disorder in connection with uterus.
- Therapeutic benefits: Relieves back ache, neck pain, stress, purifies blood, relieves constipations and addresses gynaecological disorder.

Contraindications:

- Avoid if spinal problem
- Avoid if neck problem
- Do not do if having ulcer
- Pregnant women should avoid.

**Asthma:**

Asthma is a disease of lungs in which the airways become blocked or narrowed causing difficulty in breathing. The airways also swell up and produce extra mucus. It may be due to genetic factor. These reactions cause contraction in the tubes this reduces the amount of air in the lungs. Due to which it become difficult to breath. Common symptoms of asthma are coughing, heavy breathing. Chest tightness, fatigue, pain in hands, feet, shoulders and back. Reasons are dust, smoke, air pollution, pollen grains, animal's skin, hair or feather etc. are the main reasons. Asthma may be controlled by sukhasana, chakrasana, Gomukhasana, Bhujangasana, paschimo-ttāsana, matsyasana.

**Gomukhasana:**

This asana gets its name because while doing this asana body resembles a cow face pose. In English it is called the cow face pose.

**Procedure:**

Sit in sukhasana or dandasana pose. Place the ankle of left leg near right but under the anus. Place the right leg over the left leg so that knees should place over left knee. Sweep your left hand behind your back, facing palms upwards. Sweep your right hand over the right shoulder, bend your elbow and place it behind your back. Now inter lock fingers of both hands behind your back. Now stretch both hands in their respective directions. Look straight. Repeat with changing leg position.

**Benefits:**

- Helps in curing Asthma, reduce weight makes body flexible and attractive.
- It helps to make spine strong and erect.
- Helps to make abdominal organ function well.
- Helps to reduce obesity.
- Diaphragm improves and keeps away from all kinds of intoxicification.
- Upper body becomes flexible and strong.
- It helps to circulate blood to the entire body.

**Contraindications:**

- Person having stiff shoulder should avoid this.



- Any kind of hip problem or knee, hamstring and quadriceps should be avoided.
- If one has to sciatica problem, one should avoid this pose. Avoid if any neck or shoulder injury.
- Avoid to perform or practice during pregnancy.

Parvatasana :

While performing this asana body resembles like a mountain that's why it's named as parvatasana. It is a very easy asana.

Procedure:

Sit in padmasana pose on ground. Raise both hands by side ward while inhaling and joint together upward above the head. Exhale and come at initial position.

Benefits:

- It helps to spinal problem.
- Strengthens the muscles of arms.
- If increase the blood flow to the brain.

Contraindications:

- It should not be plasticised if one has wrist, hip or ankle injury.
- It should not be practice while spinal injury.

Matsyasana : If this asana is performed in water body can float easily thats why it is called matsyasana.

Procedure:

Sit in padmasana pose. Take support of your elbow and lie on your back bend your neck with support of your hands, and try to touch your fore head to the ground. Hold toes of the feet firmly with both hands and touch the ground with the elbows. Stretch the stomach as up as possible.

Benefit:

- This asana is very useful for asthma patients provide relief from indigestion and other digestive problems.
- Keep the blood clean.
- Helps in curing diabetes.
- Helps in cough and respiratory problems, makes body and face attractive.

Contraindication:

- Avoid this posture if any kind of neck injury.
- Avoid doing this asana if you have high or low blood pressure
- People suffering from migraine and insomnia should also refrain from performing this asana.

Sukhasana :

Procedure:

Keep both feet in front and sit straight. Sukhasana is simply sitting in the normal form. Keep the left foot folded under the right leg's thigh. Fold right and placed it under the Left thigh. Keep head, neck and waist straight. Keep both hands in the meditation (palms stacked up in lap) posture. You can use it for longer periods of meditation. One can change feet for sitting.

Benefits:

- This posture can be used for a long time during meditation and study, etc.
- Straightening the waist gives strength in the legs.
- Pain is removed and person can perform other postures like Ardh Padmasana and Padmasana.

Contraindications:

- Avoid if arthritis
- Avoid if backache.
- Avoid if spinal disc problem.
- Do not practice if migraine or Anxiety occurs.
- Do not practice if weak digestive system.

Chakrasana:

Procedure: Lie down on the back and make both leg straight. Bend your knees so that the soles of your feet are on the floor. Your hands must be placed behind your

shoulders and fingers pointed towards your shoulders. Then, press your feet and palms, and lift your entire body off the mat. Hands and feet are half feet apart. Head hang gently between hands. Make the body stretch towards the top so that it becomes circle shape.

**Benefits:**

- It affects the whole body, which gives flexibility in muscles and bones & increases blood circulation.
- Relieve waist pain.
- Increases the supply of oxygen in the lungs.
- The overall functioning of the body increases.

**Contraindication:**

- Avoid practicing if any back injury.
- Someone having heart problem should not do this pose.
- If having high/ low blood pressure, do not try this
- Someone undergone with cataract surgery, avoid this Asana.
- Do not practice if any cervical injury.

**Hypertension:**

Hypertension means increased blood pressure. Reasons for high blood pressure increased with age, Genetic, obesity, lack of physical activity, smoking, and alcohol, more intake of salt in food, tension or mental stress, diabetes, pregnant women are more prone to high B.P. All these factors can lead to high blood pressure. The main function of the heart is to supply pure blood to the various parts of the body through different arteries when the heart contract it pushes the blood through blood vessels and consequently the blood pressure increase in arteries this pressure is known as systolic blood pressure it is represented by the first number the pressure between two heartbeats is called diastolic blood pressure it is represented by bottom or second number these two number of blood pressure are measured in mm/Hg. Unit means millimetre of mercury. The normal blood pressure of an adult is considered

120/80mm/ Hg. The person whose blood pressure readings are beyond 140/90 mm/Hg are said to be having hypertension.

High blood pressure can be controlled by doing the following yoga asanas Tadasana, vajrasana, pavanmuktasana, ardha chakrasana, bhujangasana, shavasana.

Ardh Chakrasana:

Procedure:

Stand straight and keep your hand close to your body. Place your hands on your buttocks. Breathing gently, bends backwards while keeping the knees straight. Stay for sometime in this position. Come back to starting position.

Benefits:

- Waist becomes flexible.
- Strengthen back bone.
- High BP comes to normal.
- Tones the arms and shoulder muscles.

Contraindication:

- Avoid doing this asana if you have peptic ulcer and hernia.
- Avoid this asana in case of hip or spinal problems.
- Pregnant should avoid doing this asana.

Shavasana :

Procedure:

Lie flat on your back. Keep your arms at your side and your palms facing up. Legs should be separated and just relax. Start concentrating from your head to your feet and relax each part of your body and feels that you are just like a dead body.

Benefits:

- Relax whole body.
- Release stress, fatigue, depression & tension.
- Calms the mind and improves mental health.

- Strengthen the nervous system.
- Regulates blood circulation and gives relief in various aches and pains.
- It helps to cure many cardiac problems.

Precautions: Place where Shavasana is performed should be peaceful with no noise at all.

Tadasana

Procedure:

Stand up in attention position. Lift your arms upwards. Stretch your hands upwards. Raise your heels, and come on your toes. Also pull up your body upwards. After some time breathe out slowly and come to the previous position.

Benefits:

- It is helpful in developing physical and mental balance.
- It reduces obesity.
- Cures constipation.
- Improves body posture.
- It alleviates sciatica.
- It is beneficial in treating hypertension.

Contraindications:

- If you have low blood pressure you should not do this asana.
- In case of headaches or insomnia you should avoid doing this asana.
- Who suffer from blood circulation problems such as faulty valves, should not perform this asana.

### Back Pain:

Back pain is a wide spread problem people around the world are suffering from various problems due to changing habitat and changing lifestyle. Back pain is one of them about 95% of the people who sit in one place and 60% of the rest of the people are upset with back pain and number of women are more in them. The main reasons for this are long sittings; the habit of modern equipment, being more fashionable, lack of knowledge regarding right way of exercising, weight lifting, wrong way of sleeping, due

to an accident problem can arise. Back pain can be prevented by doing these asanas Tadasana, vakrasana, bhujangasana, shalabhasana and ardh matsyendrasana.

Vakrasana: In this asana back bone is twisted, that's why it named as vakrasana. This asana increases the flexibility, activeness to back bone

Procedure:

Keep both feet in front and sit straight. Sit down stretching your legs forward on the ground. Bend your left leg and place it around the right knee. Keep spine straight, while exhaling bend towards left. Now place the right arm by the outer side of left knee and pull the left knee towards the body. Pull the knee so that it pressures on the stomach. While exhaling, return to the initial position. Repeat it from the other side its one complete cycle do it 3 to 5 times.

Benefits:

- It brings flexibility in back bone and makes it healthy.
- Relieves stiffness from the back.
- Help in relieving back pain.
- It improves the function of both spinal cord and nervous system.
- It reduces belly fat.

Contraindications:

- Avoid this asana in case of high blood pressure.
- Who suffer from peptic ulcer should not do this asana.

- This asana should not be performed in case of back injury.

Shalabhasana :

Procedure:

Lie down on your stomach. Place your palms under you things keep ankles close to one another. Breathe in and lift your legs upwards, while doing so your chin should rest on the ground. Hold this position for some time after that exhale and take down your legs in initial position. Repeat this for 3 to 5 times.

Benefits:

- This asana is very helpful in back pain.
- Increase flexibility reducing fat.
- It improves posture.
- It helps in relieving stress.
- It alleviates lower back pain.
- It helps in removing constipation.

Contraindications:

- People with weak spine should avoid this asana.
- The individuals with a weak heart, high blood pressure and coronary problems should avoid this asana.



