



ISSN: 2456-4419

Impact Factor: (RJIF): 5.18

Yoga 2017; 2(1): 116-119

© 2017 Yoga

www.theyogicjournal.com

Received: 21-11-2016

Accepted: 24-12-2016

**Dr. Augustine George**

Assistant Professor of Physical Education, Directorate of Collegiate Education, Government of Kerala, Thiruvananthapuram, Kerala, India.

## Reigning diabetes through yogic practices

**Dr. Augustine George**

### Abstract

Diabetes mellitus is a very common name in the world today. In 2000 India reported the highest case of diabetes in the world followed by China in second and United states in the third position. Diabetes is fast becoming a potential epidemic in India. The complications arising out of diabetes is enormous and is draining the family and society as well. It is exhausting the human resource and the economy. Study after study in top universities in the world has shown that the “Yoga” the ancient science of India can significantly rein in this threat. A combination of selected yogasanas, pranayama and meditation will effectively manage diabetes in patients and prevent the occurrence of diabetes in healthy people. An effort is made here to dig into the studies conducted in this area and to present the matter in a systematic way so as to enable the reader to absorb substantially and benefit from it.

**Keywords:** Diabetes mellitus, yogasana, pranayama, meditation

### Introduction

India is the world capital of diabetes. More and more money is pumped into the treatment side of the disease. We are still far away from understanding that prevention is better than cure. Studies have shown that the health benefits of yoga are bountiful. Studies have even indicated that yogic practice has the power to control diabetes. But due to certain unknown reasons it is not getting the proper attention and is still away from the mainstream. Most of the affected people manage diabetes through a series of tablets and diet control. Yoga should not be tried as an alternative to medicine but along with medicine it could also be started and with doctors' examination and advice medicines could be substantially reduced and even avoided.

### Understanding diabetes

There are three types of diabetes

**Type 1:** It is an auto immune disease where the body immune system begins attacking the pancreas. As a result pancreas produce too little or no insulin at all. Usually this type of diabetes is often seen in people below 20 years of age.

**Type 2:** Around 90 percent of people affected by diabetes fall into this category. In this type the pancreas doesn't produce enough insulin or the body does not properly use it. Inactivity is considered as a major contributor to this type of diabetes and type 2 is bracketed under life style diseases.

**Gestational diabetes:** This type of diabetes appears during pregnancy and will disappear after the baby is born. But it as an indicator that the effected women is at higher risk of developing type 2 diabetes later in life.

Risk factor for diabetes

1. **Stress:** It increases the secretion of glucagon hormones in the body, responsible for increasing blood glucose levels.
2. **Weight:** Fatty tissue makes the cell resistant to insulin.
3. **Inactivity:** Physical activity controls weight, uses up glucose as energy and makes cells more sensitive to insulin.
4. **Family history:** If parents or siblings have diabetes it makes the individual prone to it.
5. **Age:** As age increases muscle mass is lost, physical activity comes down, body gains weight and thus.

**Correspondence**

**Dr. Augustine George**

Assistant Professor of Physical Education, Directorate of Collegiate Education, Government of Kerala, Thiruvananthapuram, Kerala, India.

The normal blood sugar level is less than 100 mg/dL in fasting for at least 8 hours and less than 140 mg/dL after 2 hours of eating. A raise from these levels indicates diabetes. Insulin secreted by pancreas is the only hormone in the body that can bring down the blood sugar. Diabetes affects the whole body it can lead to heart attacks, high blood pressure, diminished vision, kidney problems, and brain hemorrhages and increases susceptibility to all infections. The usual management consists of a well-controlled, balanced diet, with different types of tablets, in order to increase insulin secretion from the pancreas or injecting insulin to supplement the body's store of this hormone.

### Understanding yoga

Yoga is a series of mental and physical disciplines that originated in ancient India. Yoga means "yuj" or 'union' of the soul with the universal self. It involves various body postures and movements (known as asanas), breathing techniques (known as pranayama) and meditation, which are all designed to promote physical comfort and mental composure. Yogic exercises are perhaps the only exercises that bring us close to the inner being or the soul, it helps to think about oneself which we rarely do in our hectic life. As peace fills our being, the body begins to function in harmony, which is a sign of good health.

Practitioners of yoga, pranayama and meditation, usually find a shift in their attitude towards life.

Yoga is considered to be a cost-effective option in the control and prevention of diabetes, it helps by-

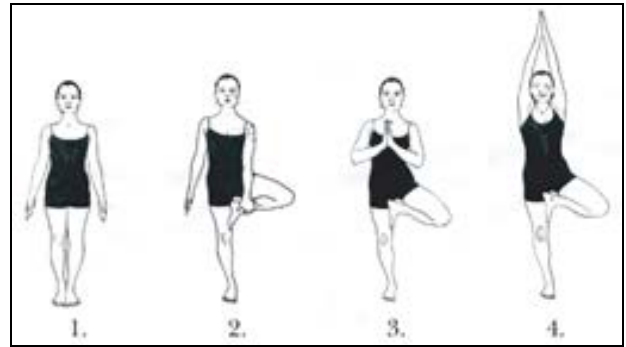
- **Rejuvenating pancreatic cells:** Yoga postures stretch the pancreas, which can stimulate the production of insulin-producing beta cells [1].
- **Exercising the muscles:** Like other forms of exercise, yoga increases glucose uptake by muscular cells, which in turn, helps to lower blood sugar levels, improve circulation and reduce the risk of cardiovascular disease.<sup>2</sup>
- **Promoting peace:** Yoga helps the individual to attain peace and harmony. The slow movement of asanas, breathe control and pranayama soothes our nervous system and enable us to cope up with the ever mounting stress of daily life.
- **Improving your mental attitude:** Regular yoga practice can help to focus the mind and create the right mental approach to dealing with diabetes [3].

### Yogic Asanas, Meditation and Pranayama for Diabetes

Pancreas is about 6 inches long and is located behind the stomach and asanas which bring stretch and twist in this area (lower thoracic and upper lumbar) helps the management and prevention of diabetes. These are believed to increase the blood supply, massage the organs, activate its cells and thereby cause an increase in all its secretions including insulin. Yogic exercises also cause the muscles to absorb the excess glucose in the blood, thereby reducing the blood sugar level. Asanas induce relaxation, which also plays a key role in the healthy functioning of the internal organs of the body.

Yogasanas should be executed without exertion. One should feel relaxed and comfortable in all the asanas. Breathing should be normal and movements should be smooth and in a controlled way. Asanas should be done early morning or after 4 hours of having food. Bladder and bowels must be evacuated before practicing asanas. The following asanas are found effective for diabetes.

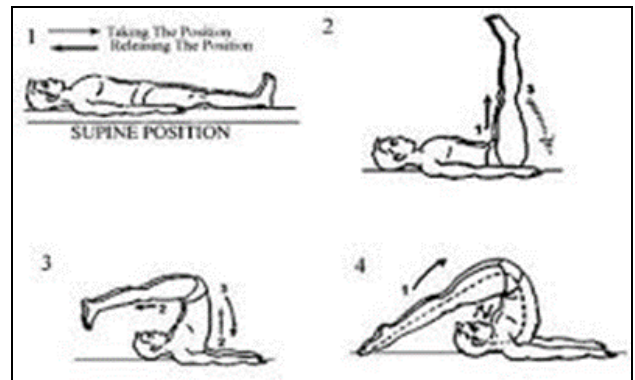
#### 1. Vrikshasana (Tree Posture)



#### Method

1. Stand with both feet together arms by the side of the body. Slowly bend the right leg and place the feet of the right leg to the inner side of left thigh with right toes touching the upper side of the left knee.
2. Slowly raise both the arms up and join the palms and fingers together.
3. Stretch the whole body upwards and focus on a particular object. Stay in this position for one's comfortable time and then repeat the same amount of time with the left side.
4. Relax after performing both the sides in Shavasana or Makrasana.

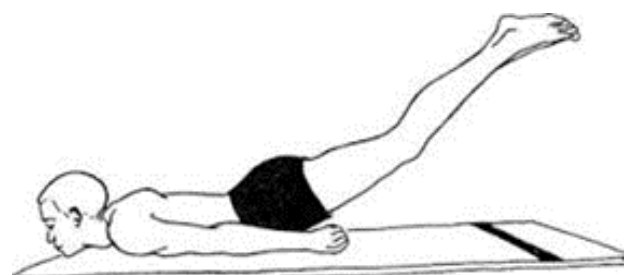
#### 2. Halasana (Plough Pose)



#### Method

1. Lie down in supine position with legs together and arms by the side of the body.
2. Slowly raise both the legs up without bending at the knee form a right angle with the trunk.
3. Slowly raise the hip and move the legs above the face towards the back of the head.
4. Stretch the legs completely and try to touch the floor behind the head.
5. Hold for the comfortable time with normal breath.
6. Slowly lower the hip and bring the legs back to the starting position. Relax in Shavasana.

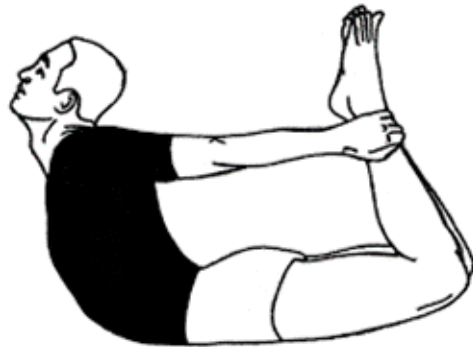
#### 3. Shalabhasana-The Locust



### Method

1. Lie down in prone lying position. Forehead resting on the floor, arms close to the body and legs together with toes stretching out.
2. Make fist with both hands and tuck it inside the thighs. Raise the head and place chin on the mat.
3. Inhale slowly and raise both legs together as high as possible. Breathe normally. Hold in this position for one's comfortable time. Try to keep the legs straight with toes stretched out.
4. Exhale and slowly bring down the legs. Release the tucked fists underneath the thighs and release the chin. Relax in Shavasana or Makrasana for double the time of holding the asana.

### 4. Dhanurasana (Bow pose)



### Method

1. Lie down in prone lying position. Rest forehead on the floor. Keep arms close to the body and legs together with toes stretched out.
2. Slowly exhale completely and bend legs at knee and hold the both ankles with respective hands.
3. Lift the lower part and upper part of the body equally up. Let the body rest on the abdomen.
4. Relax the facial muscles. Breathe normally. Stay for a comfortable time.
5. While releasing slowly bring the body down and release ankles and bring them back to the starting position.
6. Relax in Makrasana

### 5. Paschimottanasana



Paschimottanasana (Seated Forward Bend)

### Method

1. Sit in long sitting position. Keep both the legs together and hands on the thighs.
2. Slowly bend forward from the hip and slide the hands onto the legs to the toes.
3. Hold both the toes with respective hands and try to touch the head on to the knees. Try to keep the knees straight.
4. Stay for a comfortable time and slowly come back.
5. Release the toes and slowly come up. Just move the

knees a little bit if there is any discomfort.

6. Turn to the left side and slowly lie down with the support of hands to supine position.
7. Relax in Shavasana.

### 6. Vakrasana (Half Twist Pose)



VAKRĀSANA

### Method

1. Sit in long sitting posture with arms at the side of the body and legs together and stretched out.
2. Bend left leg at knee and keep the left feet's heel by the side of right knee.
3. Raise the right arm and keep the right palm by the outer side of left feet with right elbow pressing the outer of left knee.
4. Place the left hand on the floor at the back of the spine. Twist head by looking towards back by the left side.
5. Hold for the comfortable time and then slowly first release the right arm and then the left arm and straighten the body.
6. Repeat the same towards the right side with opposite arms and legs. Hold for the same time as that of left.
7. Relax in Shavasana for double the holding time.

### Meditation

#### Method

1. Sit in a comfortable position and close your eyes.
2. Chant 'Om' and concentrate on the sound. Control the thoughts that keep rushing in and concentrate on the sound.
3. In the beginning start with one minute and slowly extend up to one's comfortable time.

### Pranayama

Anulom Vilom is found useful in diabetes as alternate nostril breathing has calming effects on the nervous system, this manages the stress levels, helping in diabetes treatment. It should be done on an empty stomach, bladder and bowels.

### Method

1. Sit in a comfortable position.
2. Close the right nostril with the thumb and slowly breathe in with the left nostril.
3. Close the left nostril with the middle finger and simultaneously release the thumb and open the right nostril and slowly exhale.
4. Initially breathe in and breathe out should be done in a ratio of 1:1. Start with 4 seconds inhalation and 4 seconds exhalation. Slowly it could be extended to 20 seconds inhalation and 20 seconds exhalation.

5. Relax in Shavasana.

N:B unlike asanas pranayama could have negative effects. So it is advised to learn the breathing technique from a qualified yoga expert.

**Conclusion**

It is high time to accept our own ancient science 'yoga' in the prevention and control of this potentially epidemic disease. Let's embrace the yogic way of life to remain free from diseases and enjoy a quality life.

**References**

1. Malhotra V, Singh S, Tandon OP, Sharma SB. The beneficial effect of yoga in diabete. Nepal Med Coll J. 2005; 7:145-147.
2. Bijlani RL, Vempati RP, Yadav RK, Ray RB, Gupta V, Sharma R *et al.* A brief but comprehensive lifestyle education program based on yoga reduces risk factors for cardiovascular disease and diabetes mellitus J Alt complement med. 2005; 11:267-274.
3. Lazar SW, Bush G, Gollub RL, Fricchione GL, Khalsa G, Benson H. Functional brain mapping of the relaxation response and meditation Neurorep. 2000; 11:1581-1585.
4. Chandrasekhar, Raja: can yoga cure diabetes? Health Administrator. 2009; 22(1 & 2):40-41.
5. www.mayoclinic.com.