# YOGA FOR DEPRESSION

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In collaboration with

MDNIY (Morarji Desai National Institute of Yoga) New Delhi.



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by AUTHORS

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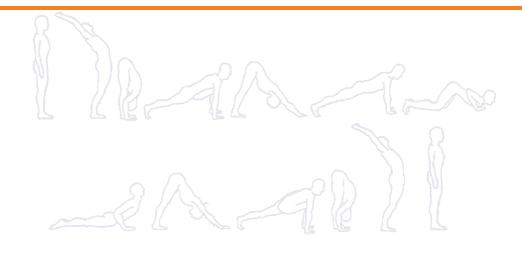
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# **FOREWORD**

Among mental disorders, depression is the commonest and it ranks first as regards the burden on the society from a mental disease. It is ubiquitous and the existing treatments are far from satisfactory. Search for alternatives to drugs against this disease is justified on many counts. Among the alternatives to conventional drugs, yoga is emerging as one of the most promising. Traditionally, yoga has been advocated for sound mental health and to free oneself from depression thereof. However, the advocates of yoga have tried different approaches. Sudarshana Kriya Yoga (SKY) is one form that has been tested in randomized designs. Among the non-proprietary methods, only a few have been tried. The claims made on one technique/procedures of yoga have not been confirmed by other yoga researchers. The sources of these practices to fight the disease of depression are poorly examined. The practices of yoga for treating depression can be found in some traditional texts. When searched with this specific objective, it becomes clear that yoga has evolved primarily for sound body and mind that helps one to travel in the direction on self-realization and attain divinity. The focused objective of curing/treating a certain disease gets a poor mention. In this background, the task of those who may wish to apply yoga for therapy in different disorders becomes challenging. What are the yoga practices that have the best potential to cure/alleviate a disease? In the context of depression it gets even more difficult to trace the roots for the most potent antidepressant-yoga

practices. Locating these in traditional texts and putting a package together allows a non-proprietary yoga therapy package for use to help the needy.

This work is an attempt to collate Yoga practices that are purported to alleviate symptoms of depression. An attempt has also been made to search other scientific publications and the yoga practices that have been found effective in treating depression. This is a compilation of available 'evidence'. Needless to say, this may not appear exhaustive. It is likely that yoga exponents would find/suggest other procedures to be added and some may even opine that a certain procedure is less helpful. The claim made is not from a this-is-the-only right-way perspective. However, for clinical scientists this offers a tool that can be tested. On the other hand for yoga enthusiasts who may advocate or teach certain procedures to help depression, this module would form a basis from authoritative traditional texts. Time, experience and research data will help further refine this module.

Place: Bangalore **Dr. B. N. Gangadhar** Date: 03/04/2010 Prof of Psychiatry

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# Introduction to Depression

Depression is the common major mental disorder that is expected to be the 2<sup>nd</sup> leading illness in the world by 2020 as projected by the World Health Organization (WHO). It is estimated that there are more than 120 million people worldwide suffering from depression (WHO report 2001). It is a major cause of disability and suicide.

Crude prevalence rates and gender-specific rates of mood disorders (Indian study): The rates of mood disorders were higher in urban areas compared with rural areas (18 v. 11) as reported by Reddy and Chandrasekhar (1998). The sex differences indicate higher rates among women (16 v. 9) with a ratio of 2:1.

#### DIFFERENT FORMS OF DEPRESSION

## Major Depressive Disorder

Major depression is a disabling condition which adversely affects a person's family, work or school life, sleeping, eating habits and general health. Depression causes greater disability and patients adhere to the treatment less, if co-exists with a medical condition. Further, it happens to be a leading cause for suicide.

## **Dysthymic Disorder**

Dysthymia is characterized by long term but less severe symptoms of depression. Though it may not disable a person but can prevent one from functioning normally or feeling well. People with Dysthymia may also experience one or more episodes of major depression during their life time.

#### **Psychotic Depression**

This is an episode of severe depression associated with psychotic symptoms such as delusions, hallucinations which are beyond reality.

#### **Post Partum Depression**

Depression seen in new mother within six weeks of delivery. Nearly 10-15% of women experience this kind of depression soon after the child birth which can lead to inconsistent child care. If left untreated, symptoms get worse and can last for as long as one year.

#### Seasonal Affective Disorder

Also known as *winter depression* or *winter blues*, this is a mood disorder in which people who have normal mental health throughout most of the year experience depressive symptoms in the winter or, less frequently, in the summer.

#### **SIGNS & SYMPTOMS (Clinical features)**

Prolonged low mood, mostly every day either reported by the patient (e.g feels sad or empty) or as observed by others.

Diminished interest or inability to enjoy activities most of the days as reported by the patient or observed by others.

Feeling of worthlessness, inappropriate guilt or regret, helplessness, hopelessness and self-hatred.

Diminished ability to concentrate. Poor memory, withdrawal social situations & activities, reduced interest in sex and others.

#### **CAUSES OF DEPRESSION**

Depression has no single cause. It likely results from a combination of genetic, biochemical, environmental, and psychological factors.

**Genetic:** Research indicates that depression can run in families for generations.

**Biochemical:** Certain neurotrasmitter systems namely Serotonin, dopamine, acetylcholine and noradrenaline are involved. Chemicals that brain cells use to communicate appear to be out of balance in depression. Brain imaging studies such as MRI have shown that parts of the brain responsible for regulating mood, thinking, sleep, appetite and behavior appear to function abnormally in depression.

**Environmental:** Trauma, loss of near and dear ones, medical illnesses or any stressful situation may trigger a depressive episode.

#### **CO-EXISTING CONDITIONS**

Depression often co exists with other illnesses. Such illnesses may precede the depression, cause it and/or be a consequence of it.

Anxiety Disorders: People experiencing anxiety disorders especially Post Traumatic Stress Disorder resulting after experiencing terrible events or ordeal such as violent assault, rape, an accident, natural disaster, terrorism, and Obsessive compulsive disorder (OCD).

Alcohol and other substance abuse or dependence: This is one of the most common coexisting conditions with depression.

*Medical Conditions:* Depression often co-exists with serious medical conditions such as hypothyroidism, heart disease, stroke, cancer, HIV/AIDS, diabetes and parkinson's disease.

**Recommended investigations:** Investigations are mainly for co-morbid medical conditions which may contribute to depression and complicate the treatment. Thyroid function tests may be advisable for a significant number of patients with depression.

#### **MODERN MEDICAL MANAGEMENT STRATEGIES**

Both drug and psychosocial treatments are effective in the treatment of depression. Patients with moderate to severe depression need medication. Combined treatment usually yields better outcomes.

*Medication:* Commonly used antidepressants are Tricyclics, Selective serotonin reuptake inhibitors (SSRIs) and Mono amine Oxidase Inhibitors (MAOIs)

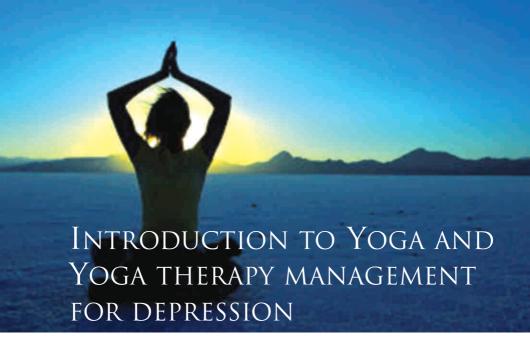
Apart from above drugs, there are newer antidepressants like *vanlafaxine*, *mirtazapine*, *reboxetine* etc which are also used with mixed outcomes

*Electro-convulsive Therapy (ECT):* is useful, particularly for individuals where depression is severe or life threatening or who do not respond/tolerate to medication\

#### Psychosocial treatments include:

- 1. Cognitive behavioral therapy
- 2. Interpersonal therapy
- 3. Psychoanalytic psychotherapy
- Behavior therapy
- Group therapy
- Family & Marital therapy

In spite of best available treatment, there is evidence that nearly one-third of patients with depression do not improve satisfactorily. Also, antidepressant medications may cause undesirable adverse effects and interact with medications being taken for other medical disorders. In light of this, there is a great role for yoga and other complementary approaches in the management of depression. Yoga has proven evidence for being an effective treatment in depression. This booklet is an attempt to produce an evidence based, practical module of yoga for the treatment of depression.



#### INTRODUCTION

Yoga is considered under the Complementary and Alternative system of Medicine (CAM) interventions. A significant proportion (>40%) of subjects who seek help from CAM the world over have cross sectional, diagnosable depression. Though the figures vary, a good proportion of patients with depression currently seeking allopathic medical treatment also have in the past sought or even are concurrently receiving one or the other form of CAM. The figures range from 30-80% across studies internationally. In India, yoga forms a large part of CAM. Depression perhaps ranks first among the psychiatric conditions researched for yoga interventions. Clearly, there is a prevalent belief that yoga is effective in depression. Case reports and case series abound suggesting benefits of yoga in depression. Sound clinical studies too suggest a role for yoga in the treatment of depression.

However, there is no single yoga procedure or package that has been used by different researchers. Each Yoga school advocates a set of



practices. There is hence a need to verify traditional texts from where yoga practices have been designed. It must be noted that the traditional text books on Yoga were not written for intervention in depression. Instead, yoga was a lifestyle for achieving divine salvation. The physical and psychological well-being achieved by Yoga was considered a by-product and necessary step in achieving the end.

Among the practices of Yoga, asanas, pranayama, relaxation techniques, mudras and meditation are employed for treating depression. Kriya that may be considered a variant of pranayama too has been examined as a potential antidepressant. Among the practices of Yoga asanas, pranayama, relaxation techniques, mudras and meditation are employed for treating depression. Many of the asanas are backward bending postures.

#### SOME IMPORTANT DEFINITIONS OF YOGA

# मनः प्रशमनोपायः योग इत्यिभधीयते । manah praéamanopāyaḥ yoga ityabidhīyate Yoga is the skill to calm down the mind

-Yoga Vasista (>6000 years)

#### 2. समत्वं योग उच्यते।

samatvam yoga uchyate Yoga is equanimity of mind

- Bhagavadgita (>5000 years)

# योगक्ष्चित्त वृत्ति निरोधः।

yogaścitta vritti nirodaḥ Yoga is the process of cessation of mental modifications

- Patanjali Yoga Sutra (PYS) I: 2 (>2000 years)



It can be seen that in all these definitions positive effects of Yoga on mind are recorded. Practice and detachment are the means for control of mental disturbances. Abhyasa means repeated practices such as Yama, Niyama, Asana and Pranayama. Vairagya means freedom from desires and passions that could be attained by the practice of Dharana, Dhyana and Samadhi.

Further, <u>Patanjali</u> who is known as the father of yoga, described the obstacles (Chitta Vikshepas) in the path of attaining a state of sound mental health. These obstacles are disease, lack of interest, doubt, indecision, carelessness, sensual gratification, living under illusion, wrong perception, sorrow, despair, unsteadiness of the body and irregular breathing (PYS I:30 & I:31). He has also given the solution to combat these obstacles by cultivating attitude of friendliness, compassion, joy and indifference to pleasure, mercy, virtue and vice (PYS I:33).

There are of five types of Kleshas (afflictions) which disturb the equilibrium state of consciousness. They are Avidya (ignorance), Asmita (ego), Raaga (attachment), Dvesa (Anger), and Abhinivesa (fear of death). Patanjali has prescribed Ashtanga (eight-limbed) Yoga also called Raja Yoga to get rid of these Kleshas (PYS II: 3 & 28). The eight limbs of Ashtanga Yoga are Yama (restraints), Niyama (observances), Asana (postures), Pranayama (breathing practices), Pratyahara (withdrawal of senses), Dharana (concentration), Dhyana (meditation) and Samadhi (realization of the true Self or Atman).

#### **A**SANA

Asana in Sanskrit means posture. There are 82 important asanas. However, no asana is prescribed exclusively for treating depression. In the <u>Yoga Sutra</u> 2500 years ago, <u>Patanjali</u> describes asana as the third of the eight limbs of <u>RajaYoga</u>.

# How to practice asana?

According to Patanjali, asana is defined as sthira sukham āsanam Postures are those which give stability and comfort.

prayatna śaithilya ananta samāpattibhyām By lessening the natural tendency for restlessness and meditating on the unlimited, posture becomes firm (sthiram) and pleasant (sukham) i.e., it should be practiced with ease and concentration on infiniteness).

# Following are the essential features of Asana

- Vinyasa—steps
- Svasakrama breathing pattern
- ❖ Dristi−vision
- ❖ Sthiti−position
- ❖ Vishranti−Relaxation

#### **Benefits of Asana**

tataḥ dvandvāḥ anabhighātaḥ Overcomes dualities (that are causes of disease)

Practice of asana makes practitioner to overcome dualities, i.e., there is no longer joy or sorrow, heat or cold, honor or dishonor, pain or pleasure (balanced state of mind & body).

According to HataYoga Pradeepika (HYP) by Swatmarama:

- Asana is said to make one mentally stable because it reduces Rajo Guna that causes fickleness of the mind.
- Heaviness of body is due to increased Tamo Guna and asana removes this.
- Imbalances in the humors of the body wind, bile and phlegm (Vata, Pitta and Kapha) - are the main causes for different diseases, which can be removed by the asanas.

#### **PRANAYAMA**

Pranayama (Sanskrit: Prānāyāma) - composed of two Sanskrit words; Prāna means life force or vital energy (breath) and āyāma means to lengthen or gain mastery. So mastery over Prana is called Pranayama.

"tasmin sati śvāsa praśvāsayoḥ gativiccedaḥ prānāyāmaḥ" (PYS II 49)

Controlling the motion of inhalation and exhalation of breath with retention.



## Pranayama has three phases

- a) Inhalation (Puraka): Breathing in as much air as possible.
- b) Retention (Kumbaka): Retaining the breath for half the time taken for puraka.
- c) Exhalation (Rechaka): Gradually breathing out this air over almost the same time taken for puraka.

#### Features of Pranayama

Pranayama is performed by emphasizing on the posture (asana), length and duration of the breath, and the number of times breath is taken. These are typically done in sitting postures. They are often practiced in conjunction with asanas. Typically, a third of the Yoga session would have this component.

#### **Text Benefits**

According to Patanjali:

tataḥ kśiyate prakāśaāvaraṇam

Removes covering of the mind, i.e., practice of pranayama destroys illusion, ignorance, desire & delusion which obscure the intelligence and make the inner light of wisdom to shine. PYS II: 52

dhāraṇāsu ca yogyatā manasaḥ

Mind becomes fit for concentration. - PYS II: 53

According to Swatmarama in HathaYoga Pradeepika:

- Freedom from diseases may be achieved through the proper practice of Pranayama (along with right food and Bandhas). (HYP II:16,17)
- Purification of nadis facilitates leanness and brightness of the body (HYPII-19).

# Different types of Pranayama: (In HataYoga Pradeepika, the following eight are mentioned)

Suryabhedana, Ujjayi, Sitkari, Sitali, Bhastrika, Bhramari, Murcha & Plavini.

Although it may be difficult to practice last two Pranayamas, the first six have been extensively used in treating different diseases. Pranayama is best practiced in a sitting posture and with eyes closed in a quiet ambience. All through the procedure the mind must remain focused on the movement of air in and out of the body. One may even avoid concentrating on an image or mantra.

#### **SUDARSHAN KRIYA**

Sudarshan Kriya is a rhythmic cyclical breathing of slow, medium and fast cycles. It is preceded by Ujjayi and Bhastrika Pranayamas as well as brief "OM" chanting. This procedure is practiced for 30 minutes while sitting with eyes closed and awareness focused on breathing. This process ends with rest in a tranquil but awake supine position. The Sudarshan Kriya should be practiced under the guidance of a certified instructor. Although a variant of breathing technique, it is not considered as a Pranayama but as a 'Kriya'. Significant antidepressant effects have been demonstrated with Sudarshan Kriya Yoga.

## MEDITATION (Dhyana)

tatra pratyaya ekatānatā dhyānam.

A steady and continuous attention directed towards the object of concentration is meditation. -PYS III: 2



#### Moderate diet (Mitāhāra)

Diet has an important role in health and well being. It was mentioned in the Chandogya Upanishad that "Diet is required for the development of person's body. Diet not only has an effect on the body but also on the mind". This has been given due importance in the Hatha Yoga Pradeepika, which prescribes the following diet:

susnigdha madhurāhārah ścaturthāmsa vivarjitaḥ bhujyate śivasamprityai mitāhāraḥ sa ucyate - (HYP I: 58)

'Moderate diet' is defined as agreeable, sweetish (Fresh, sweet fruits of all types), leaving one-fourth of the stomach free, eaten as an offering to God.

Yoga practitioner should take nourishing and sweet foods along with ghee and milk (HYP I: 63)

#### Foods to use (Pathya)

- Fresh, sweet fruits of all types & all vegetables except onions and garlic.
- Pulses such as greengram, bengalgram, soyabean, ground nut & alfalfa.
- Whole grains wheat, unpolished rice, ragi, barley etc
- All natural plant-based oils like sesame, olive and sunflower should be used for cooking purpose.
- Dairy products like milk, ghee, butter.
- Natural sugars like jaggery, honey, and molasses.

- Ginger, cumin, coriander, turmeric, mint, basil, fenugreek and other such sweet spices.
- \* Herbal teas, natural water, fresh fruits & vegetable juices.

Food should be taken in a moderate quantity irrespective of good qualities it has, since balanced diet in the form of nutrients has to be maintained.

# Foods to avoid (apathya)

- Meat.
- Refined & processed foods like spicy, bakery & fried foods.
- Poor quality plant based cooking oils.
- Vegetables such as Garlic & onions.
- ❖ White sugar and white flour (Maida).
- Foods that are sour (tamarind), bitter (bitter gourd) & Artificial sweeteners.
- Old, stale, excessively salty and reheated food.
- Stimulants like coffee & tea.
- Food kept in the refrigerator, genetically engineered, Micro waved and irradiated food.
- Foods eaten in a disturbed environment or eaten too quickly.

The Bhagavad-Gita classifies diet into Satvik, Rajsik and Tamsik diet. A Satvik diet is good for those who are practicing Yoga.

āyuhasattva balārogya sukhapreeti vivardhanāha rasayāha srigdhāha sthirā hridyā āhārāha sāttvikapriyāha (BG 17.8)



Those foods, which enhance quality of life, purity, strength, contentment, joyousness are juicy, unctuous, steady and pleasing to the heart, are liked by Satvikas. These Saatvik foods nourish the body and mind.

# Precautions to be taken to practice Asanas, Sukshma vyayama and Pranayama

#### Before the practice:

- 1. The urinary bladder and bowels should be emptied.
- 2. A minimum of four hours gap should be given after taking full meals, two and half hours after a light breakfast & one hour after taking tea/coffee/juice/other liquids
- 3. Avoid even water for half an hour before the practice.

## During practice:

- Care should be taken not give any jerky movements/strain to the body & mind (while doing the practice, do not go beyond the anatomical limitation for a given individual)
- 2. Breath should not be kept on hold at any point of Yoga practice.

#### After the practice:

 A minimum of fifteen minutes gap should be given before taking tea/coffee/juice, bathing, doing any exercise & half an hour before having meals.

**Note:** For practicing relaxation techniques / meditation, these restrictions may be relaxed.

# General therapeutic precautions

- 1. Except relaxing postures, pranayama and meditation, other practices should be avoided in conditions like hernia, peptic ulcer, chest pain, ischemic heart disease and slipped disc.
- 2. Those who have undergone recent abdominal surgery may avoid these practices for three to six months according to the severity.
- During menstruation limit practice to relaxing asanas such as Shavasana and Makarasana. Meditation may be done by stretching both the legs forward.
- 4. Similarly, during first three months of pregnancy, limit practice to techniques / Asanas such as Shavasana, Makarasana, Meditation and some Pranayamas. Some Asanas can be practiced in the next six months (second & third trimester). Patient may consult an expert yoga physician for guidance in this regard.

The yoga practices should be started under supervision. Yoga as treatment for depression should be considered only when prescribed for the individual patient. Based on the clinical status of the patient, some practices may have to be avoided.

The following yoga practices are recommended for depression. These practices have been selected based on the traditional and other important Yoga school texts,

- Gheranda Samhitha
- HataYoga Pradeeepika
- Light on Yoga & light on pranayama by BKS Iyengar
- Yoga vignana & Sukshma vyayama by Swami Dhirendra Brahmachari

#### YOGA FOR DEPRESSION



- Suryanamaskara & Yoga darshana by Swami Sathyananda Saraswati from Bihar school of Yoga,
- Yogasanas, Positive promotion of health & Pranayama by Dr Nagendra from Swami Vivekananda Yoga Anusandhana Samsthana (SVYASA), Bangalore.

Other traditional Yoga books like Yoga Vashista, Pathanjali Yoga Sutras, Upanishads, Bhagavadgita concepts and research evidence was also taken into consideration. Once or twice a day sessions may be suggested, if needed in the earlier part of the treatment. However, less frequent sessions (at least twice a week) are needed in the maintenance phase.

# THERAPY MANAGEMENT

# Yoga Therapy Module for Depression - One Hour

I. PREPARATORY PRACTICES: Sukshma & Sthula vyayama

SURYANAMASKARA: (3 Rounds) 15 minutes П SHAVASANA - 1 2 minutes III ASANAS AND MUDRA: STANDING POSTURE: 2 minutes Ardha chakrasana SITTING POSTURES: 4 minutes Ushtrasana Paschimottanasana PRONE POSTURE: 2 minutes Bhujangasana SHAVASANA (Yogic abdominal breathing) 2 minutes SUPINE POSTURES 6 minutes Pavanamukthasana ii. Viparithakarani mudra iii. Sethubandasana 4 minutes IV. SHAVASANA -2 (Yoga nidra) V. KRIYA 2 minutes Kapalabhati VI. PRANAYAMA 6 minutes i. Suryanulomaviloma ii. Ujjayi iii. Bhastrika VII. PRANAVA JAPA (AUM chanting) 5 minutes 9 times Α П 9 times 9 times AUM 9 times

VIII YOGIC COUNSELING AND EDUCATION

10 minutes



#### I. YOGIC SUKSHMA VYAYAMA

# SURYA NAMASKAR - Sun salutation (In 12 steps)

# Preparation (Sukshma & sthula vyayama):

Samasthithi: Stand straight with the feet together. Hands to be kept by the sides of the thighs with eyes wide open

# GRIVA SAKTI VIKASAKA - I (NECK) Sideward movement



- \* Relaxing your neck completely, keep your eyes wide open.
- While inhaling, turn your head first towards your right shoulder. While exhaling come back to the centre.
- While inhaling, turn your head towards your left shoulder. While exhaling come back to the centre.
- Repeat this five times each.

# **GRIVA SAKTI VIKASAKA - I** (Forward and Backward bending)





- While exhaling, take your head forward. Then while inhaling, take your head backward. Keep your neck relaxed throughout the practice.
- When it is forward, your chin should touch the sternal notch (chest).
- When it goes back, it should touch your nape of your neck.
- Repeat this 5 times each.
- \* Keep the mouth closed and eyes wide open.





# MANI BANDHA SAKTI VIKASAKA (Wrists)



- Stretch out your two arms straight in front of the chest at shoulder level, keeping them parallel to the ground.
- Make loose fists of your hands (palms facing down).
- Now, move the fists up and down from the wrists with force. Arms should be kept as stiff as possible. Keep normal breathing throughout the practice.
- \* Repeat ten times.

# KAPHONI SAKTI VIKASAKA (Elbows)



- Stretch the arms straight downwards beside the body, palms facing forward and make fists.
- ❖ While inhaling, bend the arms at the elbows and raise your clenched fists forward to the level of shoulders with a jerk. Then while exhaling stretch the arms downwards again with a jerk.
- \* Repeat it ten times.

**NOTE:** • The elbows should remain stationary.

- The fists / palms must come up to the level of the shoulders and then down straight.
- The fists / palms must not touch the shoulders when going up, nor touch the thighs when coming down.





# BHUJA - VALLI SAKTI VIKASAKA (Arms)



- Begin with both of your arms hanging relaxed by the side of your body; then raise it sideways above your head with the palm outward.
- Neither the arms should go up and down together but arms must not touch the head nor do the hands touch each other. The arms must not touch the thigh when coming down.
- Keep normal breathing throughout the practice.
- Bring it down both the arms in the same manner.





# JANU SAKTI VIKASAKA (KNEES)



- \* Raise your right foot forward with a jerk at the right knee then take it backward so that it hits the buttock with the heel. Repeat it five times.
- Then repeat it with the left leg. Keep normal breathing throughout the practice.
- Keep the upper part of the body erect and firm.
  - While taking the leg back, the heel must hit the buttock.





# GULPHA, PADA PRISTA, PADA TALA SAKTIVIKASAKA (ANKLES AND THE FEET)



- Stretch the right foot forward and hold it about 9 inches off the ground. Rotate the ankle like a circle first from right to left & then from left (5 times clockwise and 5 times anticlockwise direction) for 15 seconds.
- \* Repeat the same from the left foot.
- Keep normal breathing throughout the practice.
- **NOTE:** You can keep the hands on the waist too during the practice. Keep the legs stiff and unmoved while rotating, the foot.
  - $\bullet \ \ \$  Rotate slowly and in a continuous way.

#### **TWISTING**



- Spread the legs about one foot apart.
- Raise the hands sideways parallel to the ground while inhaling.
- Keep the legs firm on the ground and twist to the right, keeping the right hand straight.
- Simultaneously twist the neck and look at the tip of the fingers.
- Bend the left hand at the elbow to bring the hand close to the chest.
- Come back while inhaling.
- \* Repeat the same on the left.
- Gradually increase the speed to your maximum capacity.
- \* Repeat it for 10 times each.
- Slow down the speed and stop the practice.
- Relax in samasththi.



# **JOGGING: 2 mins**

- \* Make loose fist of your hands and place them on the chest.
- Collapse and relax your shoulders.

# Slow Jogging



Start jogging on your toes slowly. Jog for about 1 min.



# Backward Jogging



- Lean a little forward and increase the speed of jogging gradually.
- Start hitting the buttocks with the heels. Repeat this for 10 times at your maximum speed.
- \* Then gradually slow down the speed. Without stopping continue and move on to slow jogging.





# Forward Jogging



- Lean backward a little and now as you increase the speed again, try to raise the knees higher and higher. Raise the knees forwards so that try to reach the chest level.
- \* Repeat for 10 times at your maximum speed.
- Slow down the practice coming back to the stage of slow jogging again.
- ${\ \ }{\ \ \ }$  Continue slow jogging for a few rounds, count for 5 times.

# Side Jogging



- Gradually increase the speed taking the heels side ways.
- As the speed increases bring the heels as close to the elbows as possible.
- \* Repeat this movement 10 times at your maximum speed.
- Gradually slow down to come back to slow jogging stage.





# Mukhadhauti (cleaning through a single blast breath) - 15 secs



- Bend forward and place the palms on the respective thighs keeping the arms straight.
- Inhale through the nose and exhale through the mouth.
- $\ \ \, \ \ \, \ \ \,$  While exhaling blast out the air forcibly through the mouth.
- \* Then, stand in samasthithi and relax for a while.



# SURYA NAMASKAR - SUN SALUTATION (IN 12 STEPS)

# Step 1:

Stand straight with the feet together facing east in the morning i.e, the direction of the rising sun with folded hands (**Pranamasana**). Breath normally.

# Step 2:

Inhale and slowly raise the hands upwards and bend the body slightly backwards at the waist region (Hastha uttanasana).

# Step 3:

Now exhale and bend forward slowly so that the hands touch the ground by the side of the feet, while the head touches the knees. Legs have to be kept straight without bending the knees (Padahasthasana).

# Step 4:

Inhale normally, then while exhaling take the left leg backwards smoothly. The right leg and the palms should be on the ground in the same line. Inhale, look up and expand the chest (Asva Sanchalanasana)

# Step 5:

While exhaling, take the right leg also backwards and lift the body to form a triangle. Look downwards (Parvatasana)

# Step 6:

While exhaling, place the forehead, palms, chest, knees and toes on the ground. Rest of the body parts should be above the ground.

The hip portion should be slightly elevated from the ground (Astanga Namaskarasana).

# Step 7:

Inhale and lift the forhead, chin, neck, expand the chest and look up. Keep the elbows in a semiflexed position (**Bhujangasana**).

# Step 8:

While exhaling, lift the body from the waist region upto toes so as to form a triangle, look downwards (Parvatasana).

# Step 9:

While inhaling, bring left leg forward so that the left leg and the palms are on the ground in the same line (Asva sanchalanasana).

# Step 10:

While exhaling, bring both the legs together so that both the hands has to touch the ground by the side of the feet, while the head touches the knees. Legs has to be kept straight without bending the knee (Padahasthasana).

# Step 11:

While inhaling, slowly raise the hands upwards above the head and bend the whole body slightly backwards at the waist as far as possible (Hastha uttanasana).

# Step 12:

While exhaling, stand straight with the feet together facing east i.e, the direction of the rising sun with folded hands (**Pranamasana**). Breathe normally.

This completes one round of Suryanamaskara





#### **Benefits**

- This practice brings about general flexibility of the body preparing it for asanas and pranayama.
- Energizes the entire neuroglandular and neuro muscular system of the body.
- Useful in patients with decreased appetite, fatigue, obesity, constipation, psychiatric disorders such as anxiety and depression.
- **NOTE:** 1. Breathing has to be done in a systematic manner. If the practitioner cannot adjust himself in the beginning in terms of breathing, they can keep normal breathing whenever they will be in the final position.
  - 2. Breath should not be kept on hold at any point.

#### Limitations

It should be avoided in case of backache and acute abdominal disorders.

#### II. SHAVASANA - 1



- Lie down on back in Savasana
- Phase I: Feel the abdominal movements, Observe the movements of abdominal muscles going up and down as you breathe in and out normally.



- Observe 3 cycles.
- \* Phase II: Synchronize the abdominal movements with deep breathing. The abdomen bulges up with inhalation and sinks down with exhalation.
- Observe 3 cycles.
- Phase III: As you inhale deeply and slowly, energize the body and feel the lightness and taking only positive thoughts into the mind. As you exhale completely collapse all the muscles, release the tension and enjoy the relaxation and getting rid of negative thoughts from the mind.
- Observe 3 cycles.
- Chant "AAA" in a low pitch while exhaling. Feel the vibrations in the lower parts of the body.
- Slowly come up from either the right or the left side of the body.

#### Benefits

- It helps to relax all the muscles and nerves of the body.
- Useful for stress related physical or mental tiredness.
- Useful in patients suffering from Insomnia.



# IV. ASANAS: PRACTICES, TECHNIQUE & BENEFITS

# STANDING SERIES OF ASANAS

1. **ARDHA CHAKRASANA** (Half wheel pose)

# Preparation

I. KATI SAKTI V1KASAKA - (BACK) Fast forward & Backward Bending



- Stand straight with the feet together. Hands to be kept by the sides of the thighs with eyes open (Standing samasthiti). Then stand with your legs separated as far as possible.
- Stretch the arms straight above the head with the palms facing forward.

- Inhale and bend backwards with arms stretched above the head.
- While exhaling bend forward as much as possible.
- While inhaling come up and bend backwards and go on rapidly to forward bending with exhalation.
- \* Repeat for 6 times with increasing speed.
- Gradually slow down and stop the practice.

NOTE: • Hands continue to be on the hips all through.

- Do not bend the knees at any time during the practice.
- Make the movements within your capacity.





# II. Ardha chakrasana breathing



- ❖ Be in standing samasthiti.
- Follow the above step with synchronized breathing.
- Inhaling bend backwards as much has possible with hand support.
- Exhaling come back to samasthiti.
- Repeat this slowly for 5 times.

#### Asana maintenance

- Be in standing samasthiti.
- Support the back at the waist by the palms, fingers together pointing forward supporting the waist.



- Inhaling, bend backwards from the lumbar region as for as possible. Try to maintain the posture with normal breathing and without loosing the balance. This is called asanasthiti. Exhaling, slowly come back to the samasththi.
- Relax for a while in standing position by keeping the legs apart and placing both the hands behind in locked position (Standing vishrantisthiti).
- Feel the changes in the breathing and stretched part.

#### **Benefits**

Improves the balance of the body.

#### Limitations

It should be avoided in case of vertigo and acute abdominal disorders.



#### SITTING SERIES OF ASANAS

# 1. ARDHA USTRASANA: (Camel pose)



# Preparation

- I. Ustrasana with fast breathing
- Sit in Vajrasana & then come to kneeling down position on the floor (Samasthiti).
- Keep the knees about one foot distance apart and the sole of the foot facing upwards with toes pointing backwards. Keep the hands on the respective waist region. While exhaling, bend backwards as much as possible.
- Inhale and come back to the kneeling down position.
- \* Repeat the same fast 5 times.
- II. Ustrasana with slow breathing
- \* Repeat the above practice 5 times with emphasis on breathing synchronization.

#### Asana maintenance

- . Be in samasththi.
- Keep the knees about one foot distance apart and the sole of the foot facing upwards with toes pointing backwards. Keep the hands on the respective waist region. While exhaling, bend backwards as much as possible. This is called asanasthithi.
- Maintain for few seconds in this final position with normal breathing.
- Inhale and come back to the kneeling down position.
- Relax for a while by spreading both legs extended apart in forward direction & keeping both the hands on the ground beside the respective hips. Taking neck slightly backwards for few seconds (sitting vishranti sthiti).
- Feel the changes in breathing and stretched part.

#### Benefits

- This stretches the thoracic and neck region, there by regulating the thyroid and stimulates the respiratory organs functions.
- Increases the functions of digestive system.

#### Limitations

- People with severe back ailments should not attempt this posture.
- Proceed cautiously in knee joint pain.





# 2. PASCHIMOTTANASANA: (Posterior stretching pose)



# Preparation

- I Paschimottanasana with fast breathing:
- Sit on the floor with both the legs stretched together. Keep hands by the side of the hip region on the ground (Sitting samasthithi)
- Inhaling, raise both the arms above the level of the head so that the arm touches the ears. Exhaling, bend forwards at the waist and hold the big toes with the respective hands. With each exhalation try to bend forward. Face should be in between the knees.
- \* Repeat the same fast 5 times.
- II. Paschimottanasana with slow breathing
- Repeat the above practice 5 times with emphasis on breathing synchronization.

#### Asana maintenance

- Be in sitting samasthithi.
- Inhaling, raise both the arms above the level of the head so that the arm touches the ears. Exhaling, bend forwards at the waist and hold





the big toes with the respective hands. With each exhalation try to bend forward. Face should be in between the knees. This is called asanasthithi. Maintain in the final position for few seconds with normal breathing.

- Inhaling, raise both the hands upwards above the head. Exhaling, release the hands.
- Relax for a while by spreading both legs extended apart in forward direction & keeping both the hands on the ground beside the respective hips. Taking neck slightly backwards for few seconds (sitting vishranti sthiti).
- Feel the changes in breathing and stretched part.

**NOTE:** Do not bend at the knees

#### Benefits

- Improves flexibility of the spine. Stretches all the back muscles and induces contraction in the abdominal muscles.
- Health of the spinal nerves will be maintained or enhanced.
- Useful in constipation, indigestion, malabsorption, sciatica and impotence.
- ${\color{blue} \bullet}$  Mobilizes the abdominal fat so it is useful in obesity.
- Improves memory.

#### Limitations

People with back ailments should not attempt this posture.



# SHAVASANA: (Corpse pose) - Yogic abdominal breathing



- Lie on the back. Keep hands and legs apart from the body. Toes are pointing outwards.
- \* Keep the head in a comfortable position. Gently close the eyes.
- Place right hand on the abdomen.
- Concentrate on the abdominal breathing. Focus on the flow of the air in and out without moving the body.

#### **Benefits**

- ❖ It helps to relax all the muscles and nerves of the body.
- Useful for stress related physical or mental tiredness.
- Useful in patients suffering from Insomnia.

#### PRONE SERIES OF ASANAS

# 1. BHUJANGASANA (Serpent pose)



# Preparation

- I Bhujangasana with fast breathing
- Lie down in makarasana posture & bring the legs together (Prone samasthiti).
- Bend both the upper limbs at the elbows; place the palms on the ground under the shoulder.
- Inhaling, raise the forehead, chin, neck, chest and the abdomen. Keep the eyes wide open.
- While exhaling slowly bring the body back to the ground, starting from the abdomen, thorax, chin and forehead on the ground in order.
- Repeat the same fast 5 times.
- II Bhujangasana with slow breathing
- Repeat the above practice for 5 times with emphasis on breathing synchronization.





#### Asana maintenance

- ❖ Be in prone samasthiti.
- Bend both the upper limbs at the elbows; place the palms on the ground under the shoulder.
- Inhaling, raise the forehead, chin, neck, chest and the abdomen. Keep the eyes closed. Maintain the posture for sometime with normal breathing. This is called as an asthiti.
- While exhaling slowly bring the body back to the ground, starting from the abdomen, thorax, chin and forehead on the ground in order.
- \* Relax in makarasana (Prone vishranti sthiti). Feel the changes in breathing & stretched part.

**NOTE:** Keep the elbow in a semi flexed position.

#### **Benefits**

- \* Reduces the abdominal fat.
- Beneficial in digestive disorders.

#### Limitations

- Proceed cautiously in cervical spondylosis
- It has to be avoided in people having slip disc.

#### **SUPINE SERIES OF ASANAS**

# 1. **PAVANAMUKTHASANA**: (Wind releasing pose)

#### Preparation

- I. Pavanamukthasana swing
- Lie on the back. Bring both the hands and legs together. Keep the head in a comfortable position. Gently close the eyes (Supine samasthti).
- Inhaling, slowly raise the legs together without bending at the knees till it forms about 45 degree to the ground. Raise the legs further to 90 degree. Bend both the lower limbs at the knee joint. Raise the head and shoulder slowly and place the chin in between the knees. Simultaneously place the upper limb around the knees.
- Then rock the body forwards and backwards five to ten times.
- While rocking forward, try to stand on the feet and while rocking backward, feel the nice massage to the spine.
- Relax for a while in the same position.
- Exhaling, release the head and chest, then release the hands.
- Exhaling, release the legs upto 90 degree to the ground and release the legs 45 degree further to the ground, then bring it on the ground.
- Then relax in shavasana (Supine vishranti sthiti) and feel the changes.





#### Asana maintenance



- Be in supine samasthti.
- Inhaling, slowly raise the legs together without bending at the knees till it forms about 45 degree to the ground. Raise the legs further to 90 degree. Bend both the lower limbs at the knee joint. Raise the head and shoulder slowly and place the chin in between the knees. Simultaneously place the upper limb around the knees. Maintain the final posture for few seconds with normal breathing. This is asanasthithi.
- Exhaling, release the head and chest, then release the hands.
- Exhaling, release the legs upto 90 degree to the ground and release the legs 45 degree further to the ground, then bring it on the ground.
- Then relax in shavasana (Supine vishranti sthiti) and feel the changes.

#### **Benefits**

- Abdominal muscles are toned up.
- Beneficial in flatulence, constipation, hyperacidity, indigestion, malabsorption and helps reducing abdominal fat.
- Useful in impotence.

#### Limitations

Persons with acute abdominal disorders should not practice this asana.

### 2. VIPARITHAKARANI MUDRA

# Preparation

I. Utttitha padasana with fast breathing

Samasthiti: Supine

- ❖ While inhaling, raise both the legs without bending at the knee, as far as comfortable (up to 90°, if possible). While exhaling return the leg to the floor. This completes one round. Do not bend at the knee joint.
- Repeat the same fast 5 times.
- II. Utttitha padasana with slow breathing
- Repeat the above practice for 5 times with emphasis on breathing synchronization.





# Viparithakarani mudra maintenance:



- Lie on the back. Bring both the hands and legs together. Keep the head in a comfortable position. Gently close the eyes (Supine samasthti).
- Inhaling, slowly raise the legs together without bending at the knees till it forms about 45 degree to the ground. Raise the legs further to 90 degree. Now give support to the waist region with the hands. Raise the legs to the vertical position and keeping the trunk at an angle of 45 degree to the ground, so that weight of the body rests on the shoulders. Chin should not press against the chest. Close the eyes and feel comfortable. This is asanasthithi.
- \* Focus awareness on the perineum.
- Exhaling, release the legs upto 90 degree there by 45 degree to the ground, then bring it on the ground.



Then relax in shavasana (Supine vishranti sthiti) and feel the changes.

#### **Benefits**

- Useful in gastrointestinal disorders, Varicose veins, piles, hernia and menstrual disorders.
- This asana practice improves venous drainage and hence increases circulation to the pelvic organs, abdominal and chest region.
- Regulates thyroid functions.

#### Limitations

People with Cervical spondylosis, low back ache, acute abdominal disorders and hypertension should not practice this posture.



# 3. **SETHUBANDASANA** (Bridge pose):



# Preparation

- I. Sethubandasana with fast breathing:
- Lie on the back. Bring both the hands and legs together. Keep the head in a comfortable position. Gently close the eyes (Supine samasthti).
- Fold both the legs at the knees and bring the heels near the body.
- Inhaling, slowly raise your buttocks and trunk up as much as you can with the support of hands.
- \* Exhaling, slowly lower the body back on the floor.
- \* Repeat the same fast 5 times.
- II. Sethubandasana with slow breathing:
- Repeat the above practice for 5 times with emphasis on breathing synchronization.

#### Asana maintenance

Lie on the back. Bring both the hands and legs together. Keep the head in a comfortable position. Gently close the eyes (Supinesamasthti).

- Fold both the legs at the knees and bring the heels near the body.
- Inhaling, slowly raise your buttocks and trunk up as much as you can. Hold this position as long as you can with normal breathing. This is asanasthithi.
- Exhaling, slowly lower the body back on the floor. Relax in shavasana (Supine vishranti sthiti) and feel the changes.

**NOTE:** Give support to the waist region with the respective hands.

#### **Benefits**

 Regulation of thyroid functions takes place by enhanced blood supply to that region.



# SHAVASANA - 2 (Yoga nidra): 4 mins



- \* Bring your a awareness to the tip of the toes, gently move your toes and relax. Sensitize the soles of your feet, loosen the ankle joints, relax the calf muscles, pull up the knee caps, relax your thigh muscles, buttock mucles, loosen hip joints, relax pelvic region and the waist region. Totally relax your lower parts of the body.
- Gently bring your awareness to the abdominal region and observe the abdominal movement for a while, relax your abdominal muscles, relax the chest muscles. Gently bring your awareness on your lower back, relax your lower back, middle back, shoulder blades and upper back muscles, totally relax. Relax your fingers one by one. Relax your palms, loosen the wrist joints, relax the forearms, loosen the elbow joints relax the hind arms and relax your shoulders. Relax the muscles and nerves of the neck.
- Gently bring your awareness to your head region. Relax your lower jaw and upper jaw and relax your tongue. Relax your cheek muscles, and have a beautiful smile on your cheeks. Relax your eye ball muscles, relax your forehead, temple muscles, ears the side of the head. Relax your head region totally relax.
- Observe your whole body from toes to head and relax.



# IV. KRIYA

# 1. KAPALABHATI

The Technique of Kapalabhati involves forceful exhalations (active) and inhalation happens automatically (passive).



- ❖ Sit comfortably in a meditative posture, either vajrasana or padmasana, with closed eyes. Keep the spine erect.
- Exhalations should be active and forceful, whereas inhalations should be totally passive. It is accompanied by up and down abdominal movement. Exhalation should be done as quickly as possible at the rate of 60 strokes/ minute. Gradually increase it to 120 strokes / minute, according to the capacity. The individual would observe an automatic suspension of breath at the end of the practice.
- Chant "A" Kara for two times. Enjoy the relaxation state of the mind.





#### Benefits

- \* Brain cells are invigorated.
- Massages the abdominal organs and muscles.
- It reduces the distractions of mind and prepares it for meditation.
- Beneficial in digestive disorders such as hyperacidity, indigestion etc.

#### Limitations

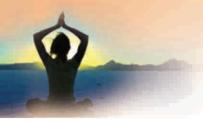
Kapalabhati is to be avoided in case of moderate and severe high blood pressure, ischemic heart disease, vertigo, epilepsy, hernia, gastric/duodenal ulcer, slip disc and spondylosis.

# V. PRANAYAMA

# 1. SURYANULOMA VILOMA PRANAYAMA



- Sit comfortably in any meditative posture either vajrasana or padmasana with closed eyes. Keep the spine erect. Adopt Nasikagra Mudra
- Close the left nostril with the ring finger. Inhale and exhale slowly through the right nostril only. Feel the air going in and coming out of the nostrils.
- ❖ Keep the left nostril closed all the time during the practice. One cycle of inhalation and exhalation forms one round.
- Start with 9 rounds increase upto 21 rounds according to the capacity.



#### **Benefits**

- Useful in depression.
- Helps to burn excessive calories in the body, so it is useful in obesity.

#### Limitations

This practice should be avoided in hypertension, epilepsy and ischemic heart disease.

#### 2. BHASTRIKA PRANAYAMA





- Bhastrika practice is the bellows breathing technique in which the breath is forcibly drawn in and out through the nose in equal proportions, like the pumping action of the bellows.
- Sit comfortably in any meditative posture either in vajrasana or padmasana with closed eyes. Keep the spine erect.
- Make a fist of your both the hands and bring it in front of the respective shoulders.



- Inhale, raise your both the hands up and exhale, bring your hands in front of the chest forcefully with equal force. This mimics the bellow of a smith.
- ❖ Continue for 10 − 15 rounds in the beginning and increase the number of rounds according to the capacity.
- \* Chant "A" Kara for two times. Enjoy the relaxation state of the mind

#### **Benefits**

- Bhastrika practice stimulates the whole body, improves circulation and invigorates the nerves.
- It stimulates the abdominal organs by increasing the circulation.
- It mobilizes excessive fat from the abdominal region.

#### Limitations

\* Bhastrika pranayama has to be avoided in case of moderate and severe high blood pressure, ischemic heart disease, vertigo, epilepsy, hernia, gastric/duodenal ulcer, slip disc and spondylosis.



#### 3. UJJAYI PRANAYAMA:



- Sit comfortably in any meditative posture either in vajrasana or padmasana with closed eyes. Keep the spine erect.
- Partial closure of the epiglottis should be adopted (partial Jalandhara bandha).
- Gently draw the air in through both the nostrils, producing a hissing sound so that the air is felt from the throat to the chest.
- Then gently exhale the air through both the nostrils. Relax and feel the changes.
- Practice for 9 rounds.

#### **Benefits**

- Soothes the nervous system and calms the mind.
- Slows down the heart rate and respiratory rate.
- Beneficial in insomnia and mental fatigue.

# VII. PRANAVA JAPA

# 1. A- Kara chanting

- Sit in any meditative posture.
- \* Be completely relaxed and close your eyes.
- Inhale slowly and completely.
- Adopt cin mudra and while exhaling chant 'A' kara in a low voice.
- Feel the sound resonance in the abdomen and the lower parts of the body.
- \* Repeat nine times.

# 2. U- Kara chanting

- Inhale slowly and completely.
- Adopt cinmaya mudra and while exhaling chant 'U' kara in a low voice.
- Feel the sound resonance in the chest and the middle part of the body.
- \* Repeat nine times.







# 3. M- Kara chanting

- Inhale slowly and completely.
- Adopt adi mudra and while exhaling chant 'M' kara in a low voice.
- Feel the sound resonance in the entire head region.
- \* Repeat nine times.



# 4. A U M chanting

- Inhale slowly and completely.
- Adopt Brahma mudra and while exhaling chant 'A U M' in a low voice.
- Feel the sound resonance through out the body.
- \* Repeat nine times.



- Improves concentration.
- Overcomes mental afflictions.





# VII. YOGIC COUNSELLING AND EDUCATION

Yogic counseling and education is based on Panchakosha theory (Taitirya Upanishad).

It mainly works at the level of Vignanamaya kosha (Intellectual level). Yoga therapist/Physician educates the person regarding Yoga, psychological components of Yoga and its benefits. He also counsels the patient regarding psychological components given in Vedas/Upanishads and different traditional Yoga texts such as Yoga Vashishta, Pathanjali Yoga sutras, Bhagavad-Gita and others. These texts are the basis for Indian psychology.

# CONCLUSIONS WITH SPECIAL FOCUS ON SCIENTIFIC EVIDENCE RELATED TO YOGA IN DEPRESSION

Yoga has been found to be useful in treating various medical and psychiatric disorders, including stress-related disorders. There is also evidence linking stress and depression. Yoga has been shown to be an effective treatment option for depression. Depression is one psychiatric disorder where yoga has been used extensively in clinical settings and various scientific studies have been conducted.

Khumar et al (1993) allocated university students (all females) to receive Shavasana or nothing for 30 days. Yogasanas lowered depression scores more effectively.

Yoga as a therapeutic application in depression was the focus of the Janakiramaiah et al (1998) study. They treated a series of out patients of Dysthymia (Chronic depression) with Sudarshan KriyaYoga (SKY). All but five of 30 patients who practiced SKY regularly (at least thrice a week) achieved remission (the state of absence of disease activity in patients with a chronic illness). On the other hand all patients who failed to practice regularly failed to achieve remission.

In a second study, Janakiramaiah et al (2000) randomly allocated 45 patients of major depression to receive one of three treatments (15 patients in each treatment). They were SKY, Imipramine (150 mg) and Modified ECT. SKY and antidepressant drugs were equally effective, although ECT was by far the best treatment on post hoc comparison.

Shapiro et al (2004) showed that practicing Yoga back bends results in increases in positive moods and decreases in negative moods. Practice of back bending postures may have the potential benefit in helping an

individual cope with depressed affect. They have found significant reductions in depression, anger, anxiety, neurotic symptoms in the 17 completers. Eleven out of the completers achieved remission.

Sharma et al (2006) showed that Sahaj Yoga practice improved the cognitive domains of verbal working memory, attention span, visual-motor speed, executive functions in patients with depression.

Thus, Yoga appears to be a promising intervention for depression, since it is cost-effective and easy to implement. It produces many beneficial effects in terms of emotional, psychological and biological measures, as supported by observations of several studies across the globe.

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