

APPENDIX E
A BOOKLET OF YOGA PROGRAM

The yoga program composes of the manual booklet for self-practice regarding basic knowledge of hypertension, human and health, a way to perform yoga, yoga asana, pranayama, and deep relaxation. However, cassette tape guidance was used during yoga practice. The cassette tape guidance contained 15 yoga asana postures, pranayama, and finally deep relaxation exercise guidance, which take place 63 minutes at 5 p.m. three times a week.

APPENDIX E (continued)

A MANUAL BOOKLET OF YOGA PROGRAM

The manual booklet for yoga self practices composed of basic knowledge of hypertension, human and health, a way to perform yoga, yoga asana, pranayama, and deep relaxation as follows.

Overview hypertension

Blood pressure is the measurement of the pressure produced by the flow of blood in the arteries of the body. Two blood pressures are measured systolic blood pressure and diastolic blood pressure. Systolic pressure is measure while the heart contracts actively pumping blood into the arteries and diastolic pressure is measure while the heart rests between beats.

Hypertension is defined as a systolic blood pressure greater than 140 mmHg and/or a diastolic blood pressure greater than 90 mmHg are confirmed of more than three measurements of systolic or diastolic blood pressure (Beyea, S.C., 1999).

The Report of The Joint National Committee on Detection, Evaluation and Treatment of High Blood Pressure (JNC VI, 1997) classified hypertension into three stages

Stage 1	Systolic, 140-159 mmHg,	Diastolic, 90-99 mmHg
Stage 2	Systolic, 160-179 mmHg,	Diastolic, 100-109 mmHg
Stage 3	Systolic, > 180 mmHg	Diastolic, > 110 mmHg

Etiology

More than 90% of patients with sustained elevation of blood arterial blood pressure have essential hypertension with no identifiable cause. However, there are

several associated risk factors that have been discovered on the common characteristics of people with hypertension

1. Age: hypertension and age are linearly associated in that the arterial blood vessels become less compliant with age, because of the build up of atherosclerotic plaques.
2. Family history: people whose parents have hypertension have a greater risk of developing high blood pressure at younger age.
3. Over weight or obesity
4. Diet: excessive sodium intake: a high sodium intake may activate blood pressure mechanism and cause water retention. Other dietary factors such as inadequate potassium intake (such as fresh fruit, vegetables).
5. Excessive alcohol intake: a moderate intake of alcohol more than 2 oz / day can elevate blood pressure
6. Smoking: smokers have evidence of increase in blood pressure because of the vasoconstriction by the nicotine
7. Physical inactivity:
8. Stress: Stress can increase peripheral vascular resistance and cardiac output by increased sympathetic activity resulting in released adrenaline.

Complication of hypertension

Sustained elevation of blood pressure in patients with essential hypertension results in damage to blood vessels in vital organs. These organs are:

Brain: essential hypertension produces thickening of the arterioles resulting in decreasing perfusion to body organ. These changes result in cerebrovascular accidents.

Heart: as a result of organ damage from decreased perfusion, myocardial infarction and peripheral vascular disease occur.

Kidneys: as the blood vessels thicken and perfusion decreases kidneys organ are damaged resulting in kidneys failure.

Retina: changes from vessels thickening and arterial narrowing in retina result in retinopathy.

Treatment of hypertension

There are two methods of managing hypertension

1. Pharmacology
2. Nonpharmacology: there are many way of nonpharmacological intervention to reduce blood pressure such as restriction of salty, weight reduction, and control risk factors for cardiovascular disease especially restriction of saturate fat, reduction of alcohol intake, smoking cessation, physical exercise, and stress management. The suggestion of yoga asana is proposed to manage stress and increase physical exercise.

Recommendation for controlling blood pressure: combinations of both pharmacological and nonpharmacological intervention are used for severe hypertension.

Health and illness

There are five sheaths to existence based on ancient Indian traditional beliefs about human existence, these are as following:

1. Physical body
2. Vital body made up of pran
3. Mind (lower mental) consists of emotions and thoughts
4. Intellect (higher mental) consists of perfect thoughts and knowledge

5. Bliss (universal consciousness) is thought to consist of positive energy associated with the divine

Disease arose through imbalance in any of the three lower sheaths of existence. Physical, pranic, and mind sheaths that are centered on the self can be easily disturbed. We will be free from disease, youthful, joyful, calm, and balanced through physical, mental, and spiritual by regular practice of yoga. Therefore, yoga practice helps in curing and preventing disease.

Concept of yoga

Yoga is a cultural heritage of India. It helps to develop spiritual human perspective leading to physical fitness, mental alertness, and emotional stability. In the philosophy of yoga, body and mind cannot be separated so perfect health comes from a good physical and a good mind.

Daily practice of a complete yoga session can restore natural balance and harmony, bringing positive good health to all part of life physical, mental, and spiritual. There are five elements to achieve natural balance.

1. Asana- practice asana leads to relaxing and toning muscles and internal organs
2. Pranayama- the slow breathing and regulates the pran leading to relaxing and meditating results in calming the mind.
3. Positive thinking and meditation
4. Relaxation
5. Diet and lifestyle

This manual booklet focus on Hatha yoga –asana, pranayama, and deep relaxation

Principle of yoga practice

There are four principles of practicing yoga asana


1. Stability
2. Comfort
3. Minimized effort
4. Concentration and awareness

Benefits of yoga

The regular practice of yoga leads to affecting the body and mind as follows.

1. Physical energetic, youthfulness and longevity
2. Strengthens immunization, prevention, cure, and rehabilitation
3. Calm both body and mind,
4. Emotional control
5. Promote concentration
6. Enlightenment and self- realization

Preparation for practicing yoga

1. Select the appropriate time for practicing yoga, it should be performed at early morning or in the evening for one hour
 2. Follow cassette tape guidance and manual booklet as instructed by the researcher
 3. Not immediately after heavy meal (breakfast, lunch, dinner)
 5. Wear loose clothing, and bare foot
 6. Practice in a quiet and ventilated area
 7. After each asanas relax before the next asana
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There are 15 postures to perform in the yoga program this program as follows:

1. Lotus pose



Technique:

1. Sit with the legs outstretched, keep heels slightly apart
2. Cross legged or place right foot on left thigh, left foot on right thigh
3. Sole up, palms up or down on knees
4. Closes eyes, be aware from head to toe, head, neck, back straight and relaxed and the spine should always be held erect.
5. Observe normal breathing, inhale slowly and deeply exhale, repeat 5 cycles

Benefits:

1. This is an extremely good pose for meditation and concentration.
2. It has a calming effect on the mind and the nerves.
3. Improves faulty posture and circulation in the legs
4. Helps keep the joints in flexible condition.

1. Yoga Mudra



Technique:

1. Sit in sukhasana or Padmasana hold wrist of right hand with left hand behind back.
2. Take a deep breath, inhale pulling the shoulder back and while exhaling touch forehead on the floor or bend forward as low as you can

Benefits:

1. Improves circulation
2. Strengthens the abdominal muscles
3. Tones up the nervous system and the colon, and massages the pelvic region.
4. Helps men to overcome seminal weakness.
5. Tones up the nervous system and flow of pran
6. In the higher stages of training it helps the awakening of the Kundalini

3. Joints exercise



Technique:

1. Sit with the legs outstretched; place the palms of the hand on the floor to the side behind the buttocks. Keep spine as straight as possible.
2. Move the toes of both feet slowly backward inhaling while forward and exhaling.
3. Repeat 5 times
4. Massage the foot from big toe to heel 3 times; repeat for other foot the same.
5. Rotate the ankle clockwise 5 times then repeat 5 times anti-clockwise.
6. Knee joint: bring right knee up to chest, put foot on the floor, then outstretch forward
7. Repeat 5 times with each leg
8. Bring the soles of the feet together and close to the body as possible, move both legs like butterfly. Practice 10 times with normal breath
9. Sitting with cross-legged pose the back remains straight then,
10. Hold both arms stretched straight in front of the body at shoulder level, palms down and stretch the fingers wide apart while inhaling. Clench the fingers around the thumb then release, repeat 5 rounds
11. Elbow-shoulder: in sitting position right hand touch right shoulder and left hand touch left shoulder, from this position extend both arms forward - repeat 5 times
12. Shoulder: place right fingers on right shoulder and left fingers on left shoulder fully rotate both elbows in a large circle, practice 10 times clockwise and anti-clockwise.
13. Neck: Slowly move the head forward and try to touch the chin to the chest, stretch neck and drop the head back as far as possible.

Benefits:

1. Improves flexibility
2. Relieves joints and muscles pain
3. Prepares for readiness in asana

4. Corpse pose*Technique:*

1. Lie down on the back; place the arms beside the body, palms upturned. Keep heels slightly apart.
2. Close eyes and mount
3. Breathe slowly and deeply, feeling a sense of calm relaxation come over the whole body from the head to the toes.
4. Release all tensions.
5. Keep body still

Benefits:

1. Relaxation for both physical and mental fatigue
2. Sense of renewed

3. Teaches mental concentration
4. Promotes sleep

5. Matsyasana (Fish posture)



Technique:

- 1 Sit in sukhasana or pudmasna
- 2 Lie back on the floor bent and put arms by the side.
- 3 Arch the back as much as possible while raising it off the ground by pushing the floor with the elbows
- 4 At the same time, tilt the head backwards, resting the crown of the head on the floor. Use the forearm and elbows to support the neck
- 5 Expand the chest. Breathe deeply with the abdomen and concentrate on the thyroid gland.
- 6 Stay in this position for about one minute. Slowly come back to the starting position and relax in the corpse position

Benefits:

1. The fish posture normalizes the function of the thyroid, pituitary, and pineal gland
2. It limbers and stretches the neck, strengthens and tones the nervous system

3. This is the only posture in this sequence, which bends the spine (including the neck) backwards
4. This is essential, to counteract the preceding asanas, which bend the spine, forwards
5. Reduce abdominal and leg fat

6. Makarasana (Crocodile pose)



Technique:

1. Lie on the belly, with the arms crossed under the head and rest your head on the arms
2. Both legs straight and feet slightly apart
3. Close the eyes and let the whole body relax into the floor
4. Breathe deeply, pressing the belly down into the floor with each inhalation and hold for 10 breaths
5. With each exhalation allow the body to relax deeper into the floor

Benefits:

1. Removes fatigue and contributes to physical and mental relaxation.
2. Reduces stress and tension, promotes sleep
3. Improve respiratory function and promote calmness
4. Promote strong body, arms, and legs

7. Bhujangasana (Cobra pose)



Technique:

1. Lie on the stomach and place the hands on the floor beside the pectoral muscles
2. Place the hands, palms down, under the shoulders on the floor
3. Raise the chest and head, arching the back
4. Completely stretch of the body
5. Inhale and hold the breath, then exhale while slowly lowering to the floor
6. Rest, then repeat two times

Benefits:

1. Affects the adrenal glands, sending them a richer supply of blood
2. Muscles of the back, abdomen and entire upper body are strengthened by the practice of the Cobra Pose
3. Relieves constipation
4. Benefits back ache
5. Increases flexibility of spine

8. Dhanurasana (Bow posture)



Technique:

1. Lie in a prone position
2. Flex the legs to bring lower legs close to the thighs
3. Direct the hands over the back, grasp the ankles
4. Raise the entire body; support the weight on the navel.
5. Extend the neck and chest as far back as possible, look toward the front
6. Breathe in while raising the body and maintain in this state for three seconds, then relax in the crocodile pose

Benefits:

1. Massages abdominal muscles and organs such as adrenal glands, pancreas, thymus
2. Good for gastrointestinal disorders, constipation, upset stomach, sluggish liver
3. Reduces abdominal fat
4. Increase strength of arms, legs and body

9. Vajrasana (Thunderbolt pose)



Technique:

1. Sit on the knees keeping them together
2. Draw the feet together, with heels separately, soles upward and sit
3. Keep the hands straight on the knees
4. Breathe normally with the spine straight
5. Place Relax , hands on the thighs and release the legs, concentrate on every parts of body
6. Close your eyes, relax

Benefits:

1. Ankle flexibility
2. assists digestion and prevents excess wind formation
3. Helps in mental concentration

10. Janushirasana (Head-To-Knee pose)



Technique:

1. Extend the right leg straight out in front of you, place the bottom of the left foot against the right thigh
2. Inhale, while raising arms up and lengthening the spine
3. Exhale while bending forward and clasp the right foot with both hands or place both hand over the sank, and then place the head over the knee
4. Inhale while raising the arm over the head, exhale and allow the arms to fall to the floor
5. Repeat other side

Benefits:

1. This posture calms the mind and emotions, stimulates the nervous, reproductive, endocrine and urinary systems
2. It keeps the liver healthy and ensures that it functions normally
3. It cures stomach disorders and, helps the secretion of digestive juices.
Stimulating the solar plexus

11. Vakrasana (Twisting pose)



Technique:

1. Sit on the ground and stretching legs out in front, keeping them together
2. Raise right knee and press the foot by side of the left knee.
3. Place the right hand behind the right buttock
4. Press the raised knee with the left elbow and grasp the ankle of raised knee or place on the floor, push the knee and slowly twist the trunk shoulder, neck, head, remain and release.
5. Repeat to the other side

Benefits:

1. Improve heart function
2. Good function of abdomen organs
3. Flexibility of spine, correcting postural defects
4. Strengthen neck muscle
5. Stimulates nerves of the spines

12. Yoni Mudra (Symbol of the embryo)



Technique:

- 1 Sit in the meditative posture of sukhasana
- 2 Raise the hands to the face, keeping the elbows in line with the shoulders.
- 3 To withdraw the sense, lightly press the ear openings with the thumbs; place the index fingers on closed the eyelids. There should be no undue strain. Press the base of the nostrils with the middle fingers, the area above the upper lip with the ring fingers and the below the lower lip with the little fingers.
- 4 Remain in this position motionless for as long possible; listen to the breath sound or any other sound vibrating in the ears or within the body.

Benefits:

- 1 Controls external senses; give rest to a turbulent mind; conserves energy.
- 2 Induces joy of solitude and leads to pratyahara (abstraction)
- 3 Reduces stress

13. Nadi-shodhana pranayama



Technique:

- 1 Sitting in a comfortable position, bend the first and second finger of the right hand down to the palm.
- 2 Place the thumb on the right nostril, closing it, and exhale and inhale slowly in the left nostril. Then close your left nostril with the fourth and fifth fingers and open your right nostril
- 3 Exhale and inhale through the right nostril. Repeat the cycle least five times with slow, even, deep, and silent breathe
- 4 Repeat breathing 5-10 cycles with concentration to the breathing

Benefits:

- 1 Balances between body and mind
- 2 It calms the nervous system and the mind
- 3 Helps to cleanse and nourish the physical body
- 4 Prepare for meditation

14. Tada-asana (Mountain pose)



Technique:

- 1 Stand with both feet touching from the heel to the big toe, keeping the back straight and the arms pressed slightly against the sides with palms facing inward
- 2 Slightly tighten or flex the muscles in the knees, thighs, stomach and buttocks maintaining a firm posture
- 3 Balance your weight evenly on both feet
- 4 Slowly inhale and exhale through the nostrils

Benefits:

1. Help to re-train the body to stand correctly and reverse the negative effects of poor posture
2. The mind is focused and free of distraction, the body is experienced as being rooted firmly to the earth and as steady and motionless.

15 Chakrasana (Wheel pose)



Technique:

1. Stand with the feet together hands in line with the body
2. Slowly raise one arm sideward at the shoulder level, turn palm upward and keep the arm close to the ear
3. Bend the trunk to the opposite side of the raised hand maintain and slowly extend one arm to the side
4. Repeat the other side

Benefits:

1. Lateral flexibility of the spine
2. Improves respiratory function
3. Increases circulation to the arms

Deep relaxation



Technique:

1. Lie down on the back; place the arms beside the body, palms upturned; Keep heels slightly apart and motionless as in the Corpse pose
2. Close the eyes and relax the body, feeling a sense of calm and relaxation come over the whole body from the head to the toes. Concentrate on loosening all bodily tension; beginning from the toes to the head..... Feel a tingling throughout whole body; slowly inhale through the nostrils ...Relax the toes...the soles of the feet.....the ankles..... exhale and relax the feet. Relax the calf muscles, the knees and kneecapsthe thighs, the buttocks.....relax all of the legs from the toes to the buttocks. Inhale deeply and chant 'AH ' feeling the vibrations in the abdomen travelling down to the toes. Inhale and feel the surge of energy each time the upper body expands...Exhale feeling the wave of relaxation, you exhale travel outward..... Feel a tingling of the chest cavity...relax the heart, lungs,Feel a tingling in the tips of your fingers, and to the root of the fingernails...Relax the muscles of the hands, arms, waist, back, and shoulders.....Loosen the spine vertebra by vertebra. Inhale with long and deep breaths let the chest expands. Inhale and chant 'OO' feeling the

vibrations in the chest cavity spread down the arms and fingers.....relax the throat and then the face...start with the chin, lower jaw, teeth, and the root of the tongue. Relax the palate and upper jaw.... the cheeks and cheekbones.... relax the lips, nose, eyes, eyebrows...forehead.... ears.... scalp back to the head.... Inhale deeply and chant 'OM' feeling the vibration in the throat spread through the head.....Now relax the entire body. Relax totally, imagine a vast sky and relax.....relax.

3. Change from lying down to sitting in sukhasana and relaxthe eyes still close Inhale deeply and chant'AH'

Inhale deeply and chant'OO'

Inhale deeply and chant'OM'

4. Puts the hand together in salute and take a vow to take care of the body, mind, and spirit.

5. Hold wrist of right hand with left hand behind back; take a deep breath, inhale pulling the shoulder back and while exhaling touch forehead on the floor or bend forward as low as possible.This posture is a form of respect to the yoga teacher

Benefits:

1. Complete relaxation both body and mind
2. Increase the potentiality of body and mind