

“Postural Deformities”

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Lesson 4

Postures

Postures

- 4.1 Concept of Correct Postures: Standing and Sitting**
- 4.2 Advantage of Correct Posture**
- 4.3 Causes of Bad Posture**
- 4.4 Common Postural Deformities**
- 4.5 Physical activities as Corrective Measures**



4.1 Concept of Correct Postures: Standing and Sitting

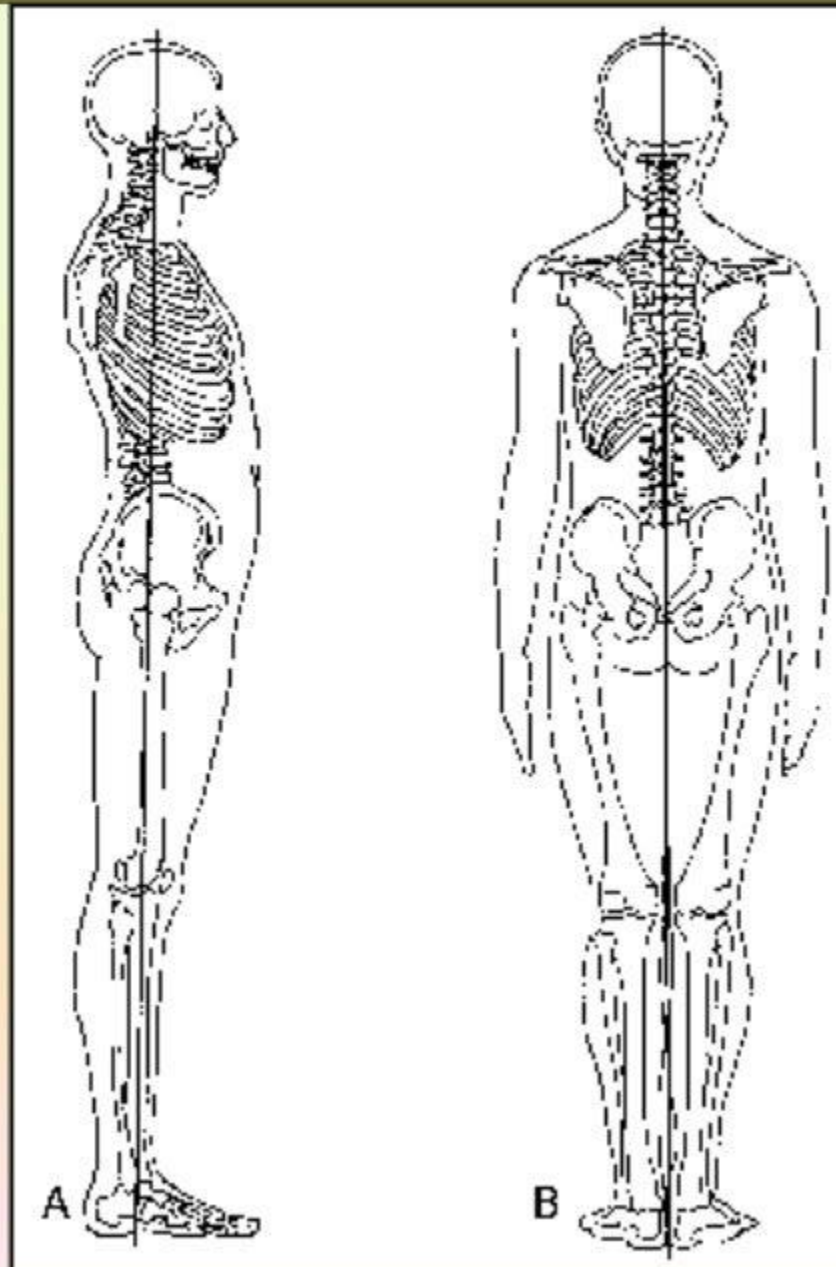
Concept of Correct Postures

Definitions:

- 1. Good Posture is one in which the body is so balanced as to produce least fatigue**
- 2. That assumed position which enables the body to perform or function effectively**
- 3. There is no single best posture for all individuals, yet some general norms regarding postural positions**
 - A. Correct Posture of Standing**
 - B. Correct Posture of Sitting**

Correct Postures of Standing

1. A position in which the skeleton is held erect
2. Mechanically most favourable for transmission of body weight
3. Centre of gravity should be on the line shown passing thru the body



Correct Postures of Sitting

1. A position in which the body is seated comfortably on a chair with erect spine
2. Spine should maintain its natural curve . Not to put any stress on the back
3. Posture should not be forced or collapsed with belly bulging out





4.2 Advantages of Correct posture

Advantages of Correct Postures

1. Physical Appearance
2. Graceful & Efficient Movements
3. Physical Fitness
4. Less chances of injuries
5. Prevention from diseases
6. Improves confidence
7. Sports performance
8. Joint mobility
9. Longevity



Shri B K Iyenger
Father of Modern Yoga

Advantages of Correct Postures

- **Physical Appearance**

PERSONALITY
MATTERS

“Your
Personality
Can
Transform Your
Future”



Advantages of Correct Postures

Graceful & Efficient Movements



Advantages of Correct Postures

Physical Fitness



Advantages of Correct Postures

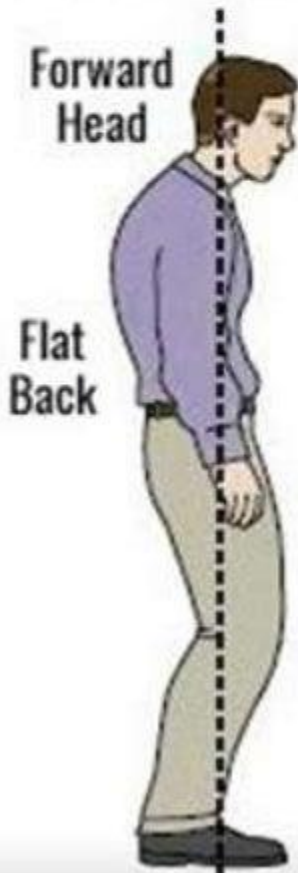
Less chances of injuries



Advantages of Correct Postures

Prevention from diseases

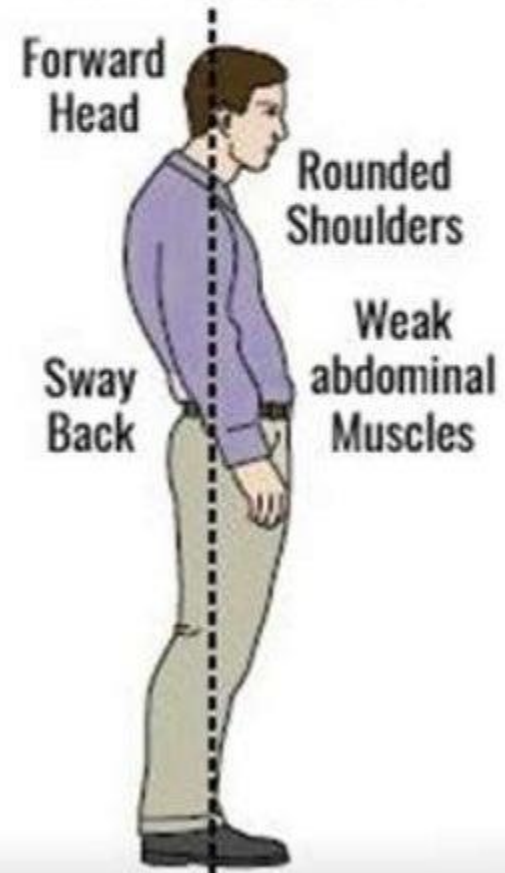
Poor Posture



Good Posture



Poor Posture



Advantages of Correct Postures

Improves confidence



Advantages of Correct Postures

Sports performance



Advantages of Correct Postures

Joint mobility



Advantages of Correct Postures

Longevity



Not Dady's world, but mine nevertheless!



4.3 Causes of Bad Posture

Causes of Bad Postures

1. **Improper Diet**
2. **Diseases**
3. **By Birth**
4. **Due to accidents**
5. **Fatigue**
6. **Fashion**
7. **Delicacy & Imitation**
8. **Lack of Fresh air & Rest**
9. **Lack of Proper Exercise**
10. **Lack of Awareness**
11. **Unsuitable Furniture**
12. **Obesity**
13. **Bad Habits**
14. **Improper way of Carrying Weight**
15. **Lack of Rest & Sleep**
16. **Other Reasons**

Effects of Bad Postures

1. Neck Pain
2. Lower Back Pain
3. Headache
4. Eye-strain
5. Digestive Problems
6. Breathing Difficulties





4.4 Common Postural Deformities

Common Postural Deformities

1. Spinal Curvature
2. Flat Foot
3. Knock Knees
4. Bow Legs
5. Round Shoulders



Bow Legs

Spinal Curvature

- Deformity is related to spine.
- Weak muscles cause the formation of spine curvature.
- Three types : 1 Kyphosis , 2 Lordosis , 3



Normal



Lordosis



Kyphosis



Scoliosis

Kyphosis

An increase or exaggeration of a backward or posterior curve or a decrease or reversal of a forward curve.



NORMAL SPINE



**Exaggerated
thoracic
curve**

KYPHOTIC SPINE

Kyphosis

Caused by malnutrition, illness, deficiency of pure air, insufficient exercises, rickets, carrying heavy loads on shoulders, unsuitable furniture, weak muscles and habit of doing work by leaning forward etc.

Precautions :

From the very beginning, appropriate posture of sitting, standing and walking should be paid attention

Lordosis

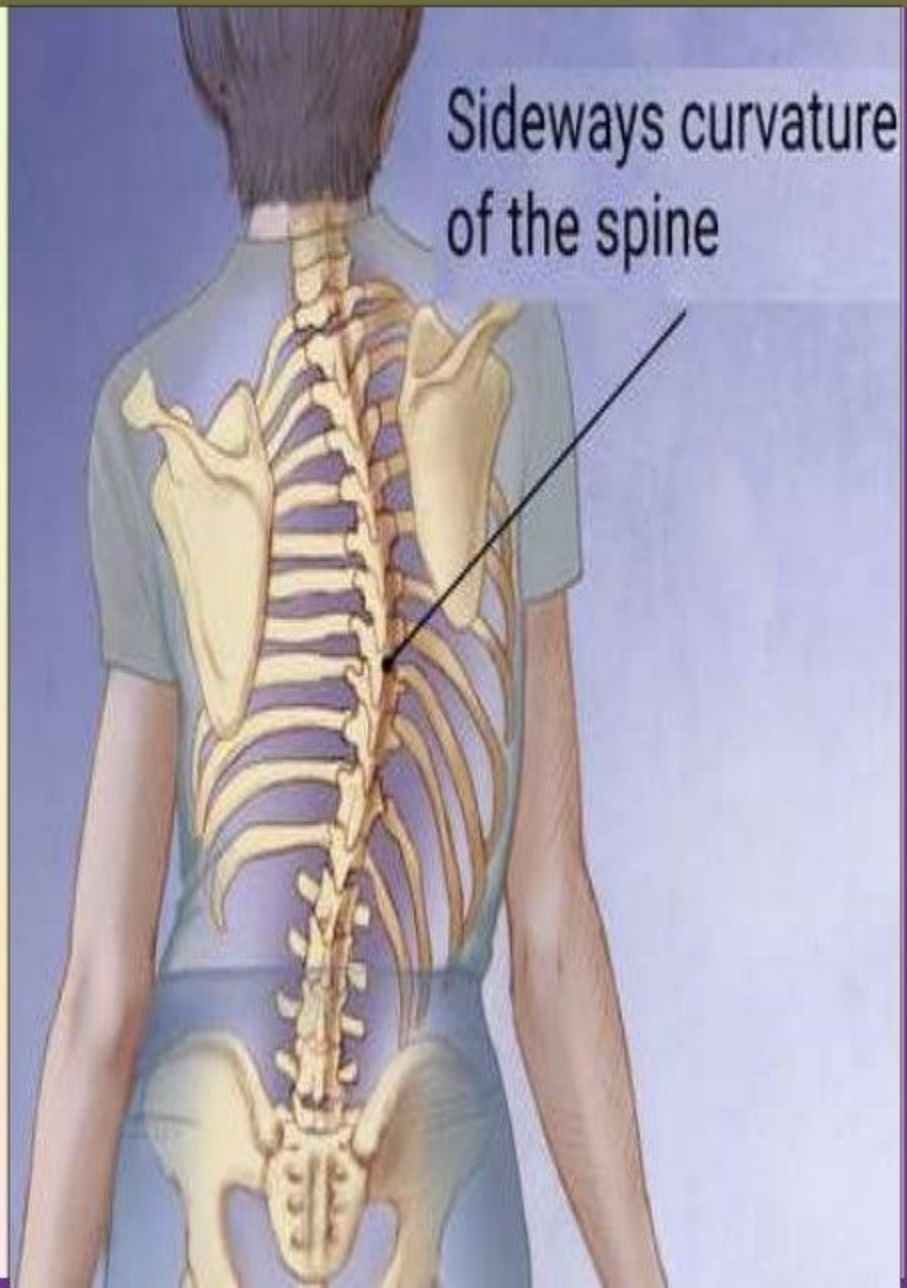
1. Inward curvature of spine
2. It is an increased forward curve in the lumbar region
3. It creates problem in standing and walking. The body seems to be stiff
4. Can be corrected in an early stage
5. Caused by imbalanced diet, improper environment, improper development of muscles, obesity and diseases affecting vertebrae and spinal muscles

Lordosis



Scoliosis

1. Postural adaptation of the spine in lateral position
2. Scoliosis means bending, twisting or rotating
3. Scoliotic curves are defined in terms of their convexities.
4. Caused by disease in the joints of bones, underdeveloped legs, infantile paralysis, rickets, congenital or acquired abnormalities of vertebrae, muscles or nerves.



Flat Feet

1. A condition in which the foot has an arch that is lower than usual
2. Children with flat feet feel pain in feet
3. Person with flat feet can not walk long distances or walk at a brisk pace
4. Caused by weak muscles, rapid increase in weight, improper shoes



NORMAL ARCH



FLAT ARCH

Knock Knees

1. In this deformity, both the knees knock or touch each other in normal standing position
2. The gap between ankles goes on increasing
3. individual faces difficulty in walking and running
4. Caused by lack of balanced diet especially vitamin 'D', calcium and phosphorus, chronic illness, obesity



Bow Legs

1. Lower long bones of the legs get bent
2. Wide gap between the knees when standing with feet together
3. Can be observed when a person walks or runs
4. Caused by deficiency of calcium and phosphorus in bones, obesity, deficiency of Vitamin D, improper way of walking



Round Shoulders

1. Shoulder become round and sometimes they seem to be bent forwards
2. Alignment of the ears in relation to the shoulders is not proper
3. Occur due to shortening of chest muscles
4. Caused by wearing very tight clothes, Sitting on improper furniture, Lack of proper exercise especially of shoulders



Normal

Round

A physical therapist in a purple shirt is assisting a male patient lying on a table with a leg stretch. The patient is wearing a blue shirt and light-colored shorts. The therapist is holding the patient's right leg, which is raised and bent at the knee. In the background, a woman in a white lab coat is sitting on a blue mat, and another person is performing a pull-up on a bar. The setting is a well-lit gym or rehabilitation center.

4.5 Physical Activities as Corrective Measures

Exercises Related to Kyphosis



Exercises Related to Lordosis



Exercise 1



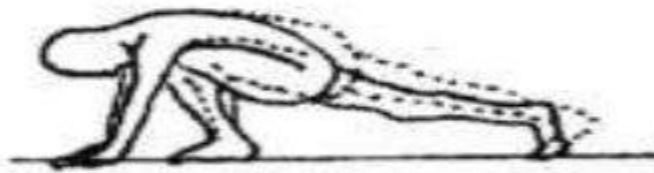
Exercise 2



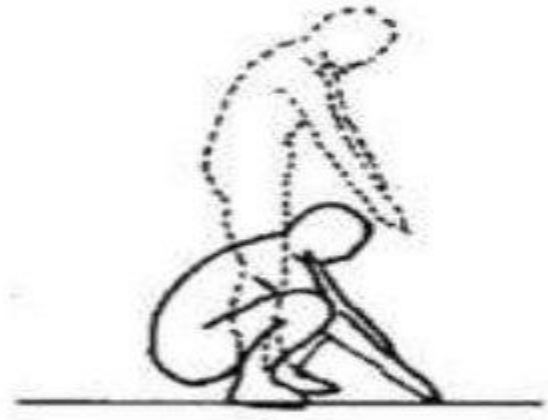
Exercise 3



Exercise 4



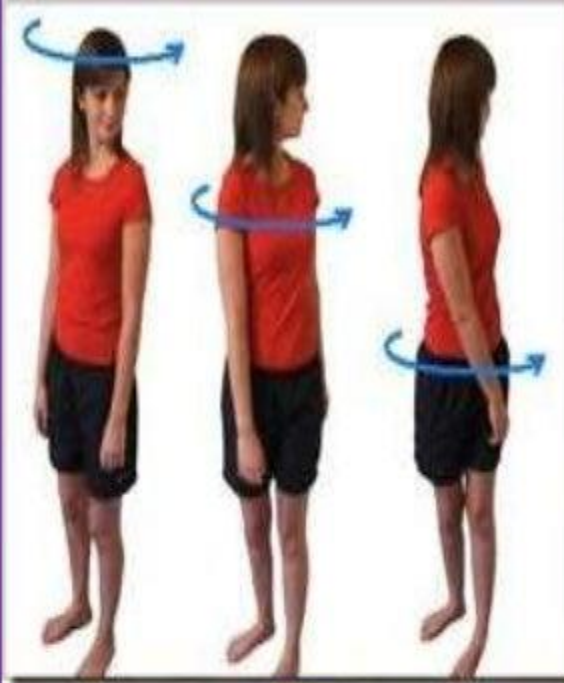
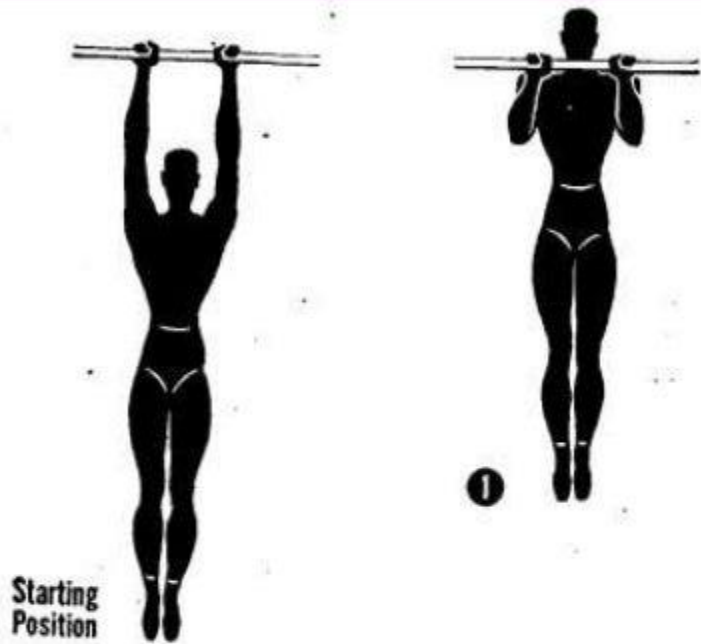
Exercise 5



Exercise 6



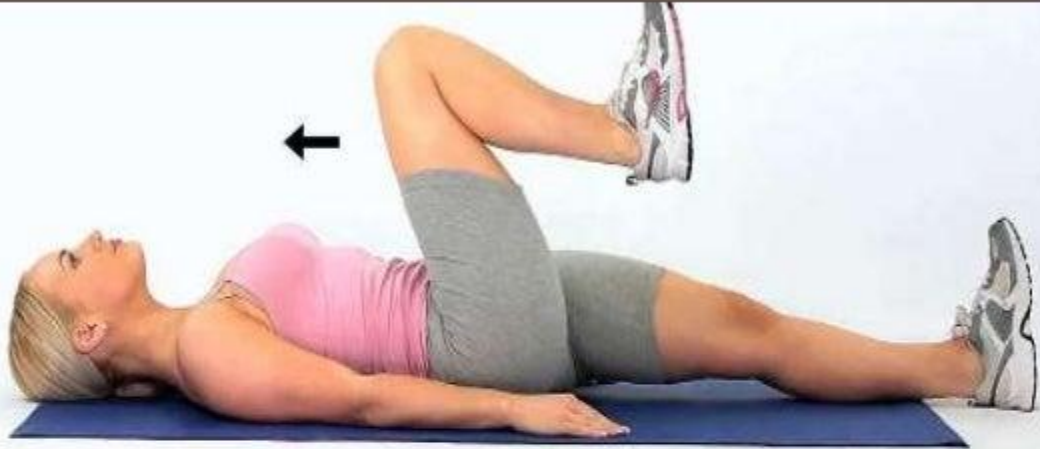
Exercises Related to Scoliosis



Exercises Related to Knock Knees

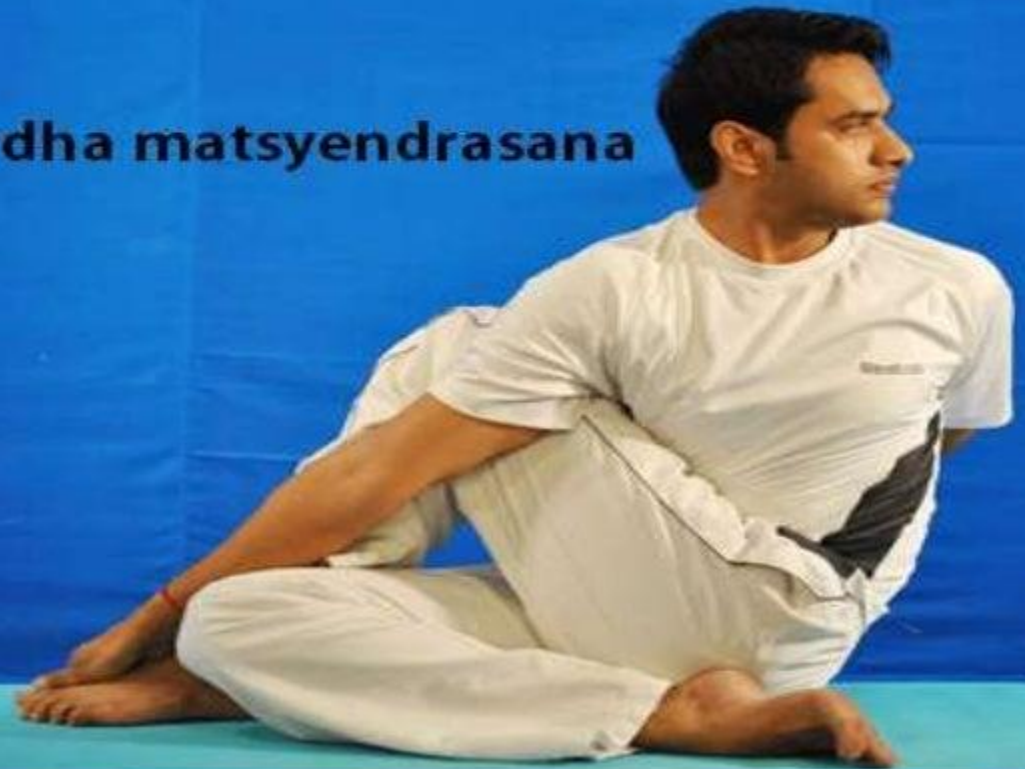


Exercises Related to Bow Legs

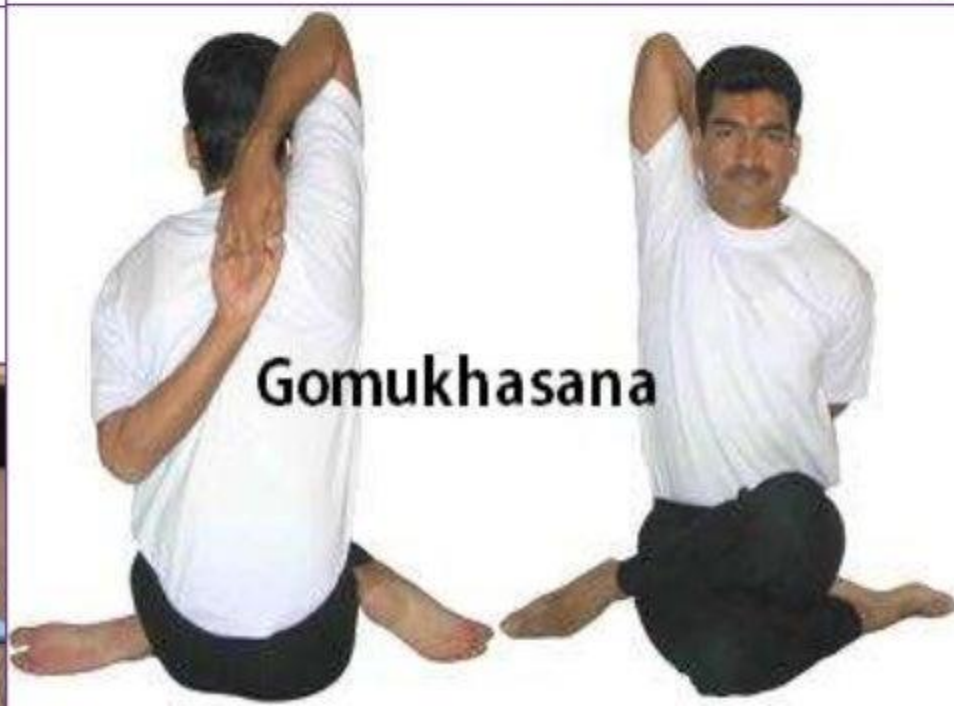
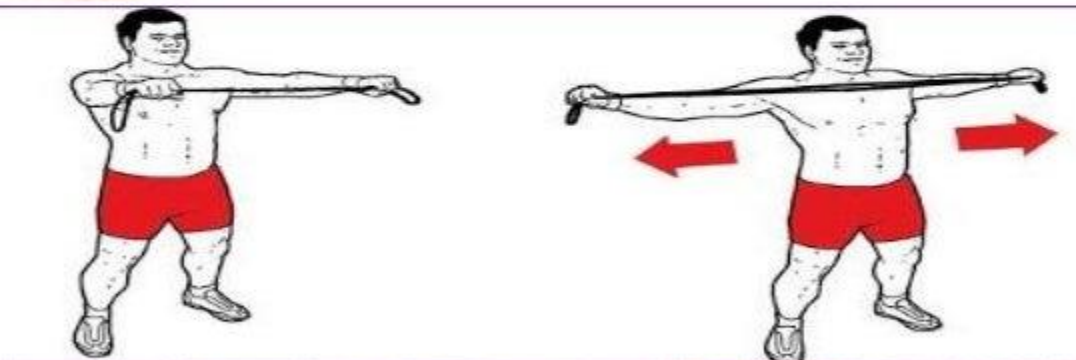
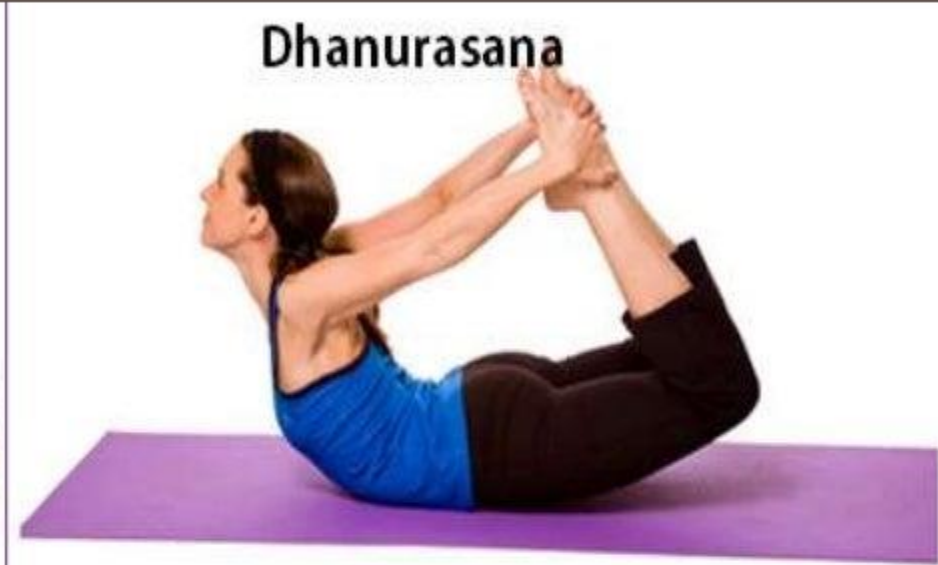
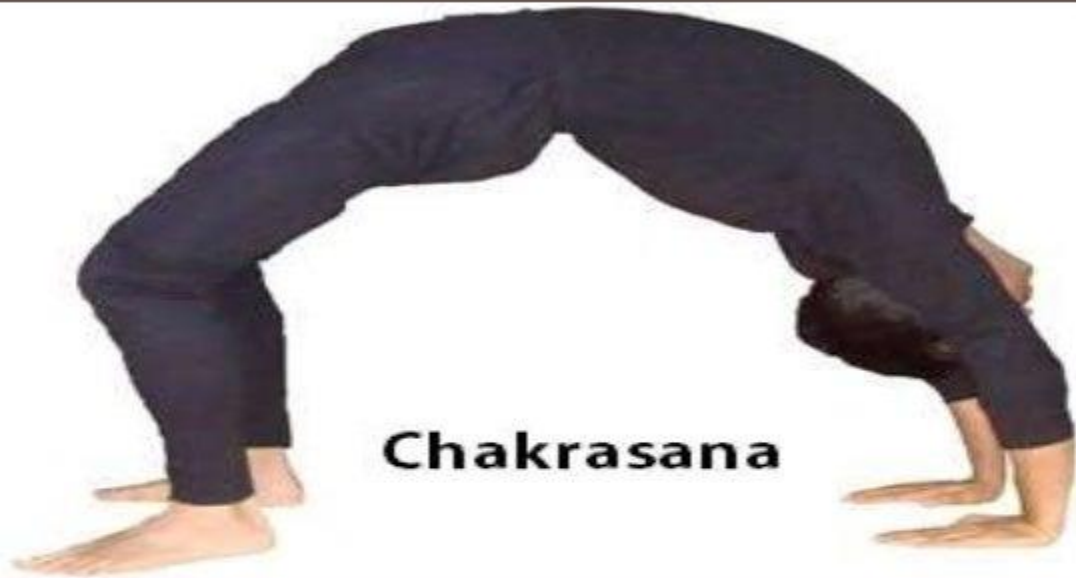


Garudasana

Ardha matsyendrasana



Exercises Related to Round Shoulders



Exercises Related to Flat Foot

Strengthening exercises

- Towel curls
- Marble pick-ups
- Toe taps
- Deep tissue Massage

