

Children and sports

CBSE Class 12 Physical
Education UNIT - 5 (Part-1)

Topics of Unit : 5

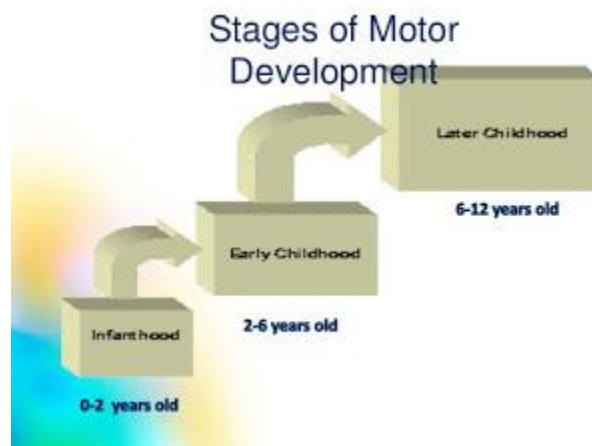
- Motor development & factors affecting it
- Advantages & disadvantages of weight training
- Concept & advantages of Correct Posture
- Causes of Bad Posture
- Common Postural Deformities - Knock Knee; Flat Foot; Round Shoulders; Lordosis, Kyphosis, Bow Legs and Scolioses

5.1 Motor development & factors affecting it :

Motor Development refers to the development of a child's Bone, muscles and ability to move around and manipulate his/her environment.



There are three stages of motor development in children as given below infancy or infancy hood , early childhood & later childhood



It is of two types:

1. Gross motor development involves the development of large muscles in the child's body such as sitting, walking, running etc.



2. Fine motor development involves development of small muscles of the body, especially during the small movements of the fingers and hands eg. Holding of javelin, discus and pole, catching a cricket ball etc.



Factors affecting motor development :

1. Nutrition: - Nutritious food promotes good motor development. Sensory motor development is dependent upon nutrition that the child gets to a great extent. Children get stronger and development is good if they get nutritious food.

2. Immunization: - If mother and child both are immunized at a proper time it leads to good sensory motor development.

3. Environment: - Encouragement, love and security help the child to take risk to explore fearlessly and to know more about environment which leads to a better sensory development.

More Factors affecting Motor Development :

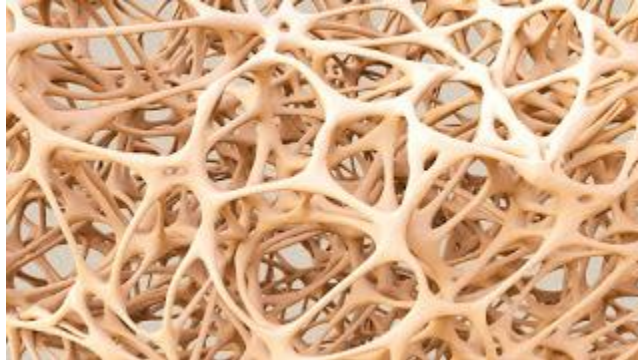
1. Heredity
2. Nutrition
3. Sleep
4. Immunization
5. Environment
6. Stimulation and Interaction
7. Opportunities
8. Training and Practice
9. Recreation
10. Education-Learning and Productivity
11. Gender
12. Posture Deformities
13. Sensory Impairment
14. Obesity
15. Social Skills
16. Mental Health

5.2 Advantages and disadvantages of weight training

Weight training:-Those exercise, that are designed to strengthen specific muscles. By causing them to overcome a fixed resistance, usually in the form of Bar bells or dumbbells.

Advantages of weight training

a) Increase bone density: weight training helps in increasing bone density. The risk for osteoporosis is lower for the individuals who do weight training exercises at least 3 times a week.



b) Helps in getting good shape: Weight training is magical as it shape up all by involving appropriate schedule. Fat peoples can become slim and slim can gain weight and become strong.



Disadvantages of weight training are:

a) Risk on injuries: there is always a risk of injuries while performing weight training without any companion. In case you are alone and you are not able to do the required repetitions of exercise, you may be injured.



b) Less flexibility; weight training reduces flexibility, if flexibility exercises are not done along with weight training. If flexibility exercises are done continuously then such disadvantage can be ignored.

Advantages of Weight Training

1. Improves Posture and range of motion
2. Increases muscles strength, bone density and endurance
3. Protection against injury
4. improve motor performance
5. Promote healthy Blood pressure and Cholesterol levels
6. Maintain Healthy Weight
7. Develop confidence and self esteem
8. Improve immune system functions
9. improve Psycho-socio well being
10. Promote and develops exercise habits

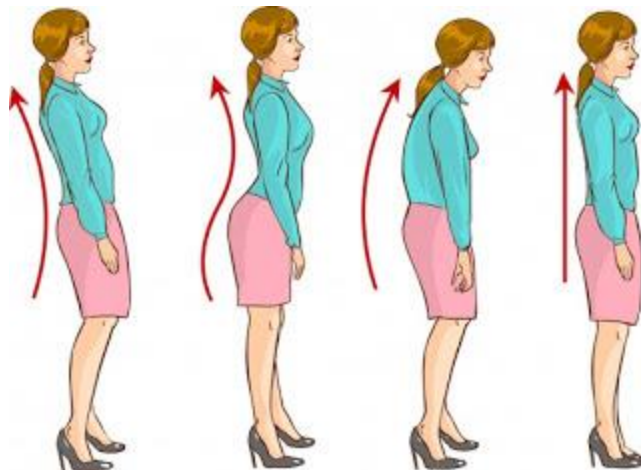
Disadvantages of Weight Training

1. Maturity
2. Introduce Injury
3. Safety
4. Loss of Flexibility

5.3 Concept of posture

The posture in which the body is so balanced as to produce least fatigue.

It means balancing the body in accurate and proper manner while sitting, standing etc or during any other actions.



Importance:-

- a) One's personality can be judged,
- b) Better balance, agility and overall physical performance.
- c) helps in maintaining proper manner of standing, sitting walking of one's body.
- d) it is a measure of one's alertness.
- e) has better alignment, which translates into less injury.
- f) recovers quicker from exercise or physical exertion, and feels more energetic

5.4 Causes of poor posture

(i) Injury when bone, ligament or muscle is injured, it weakens the support to that

(ii) Disease causes the joints to lose their strength and mobility.

(iii) Heredity Deformities like Kyphosis and flat foot are sometimes due to hereditary factors.

(iv) Overload Over work or fatigue also results in poor posture.

(v) Lack of Exercise The maintenance of erect posture requires strength and endurance.

5.5 Common postural deformities

It means not having proper alignment of body parts.

It reduce the efficiency of individual to great extent & cause more health problem.

1. Knock Knee -

A postural deformity in which both the knees touch or overlap each other in normal standing position



Causes of knock knee

- (i) Weakness of muscles and ligaments
- (ii) Overweight body
- (iii) Lack of balanced diet
- (iv) Lack of vitamin-D

Corrective measures of Knock Knees:

Walking on an outward inclining surface and applying pressure on the outer edge of the feet.



2. Flat Foot

It is a deformity of the feet. In this deformity, there is no arc in the foot and the foot is completely flat.



Causes of Flat foot:

1. Faulty posture
2. Prolonged standing
3. Excessive body weight
4. Lack of proper exercise

Corrective measures of flat foot:

1. Heel and toe Walking
2. Walking on heels



3. Walking on sloping surface

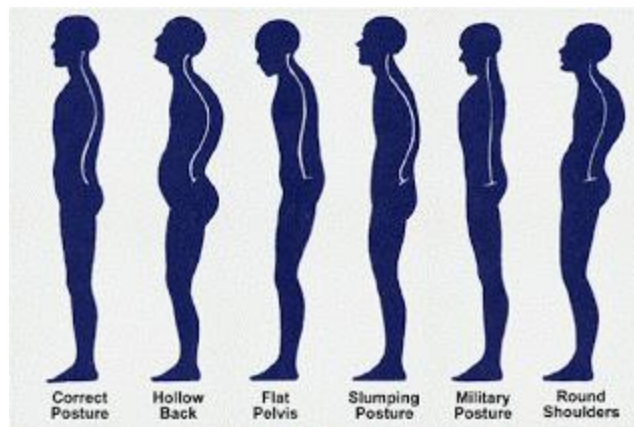
3. Round Shoulder:

It is a postural deformity in which the shoulders are drawn, the head is extended with the chin pointing forward.



Causes of round shoulders

- (i) Due to poor posture while working
- (ii) Faulty furniture
- (iii) Wrong habit of sitting / standing
- (iv) Carrying heavy load on shoulders
- (V) By sleeping on one side

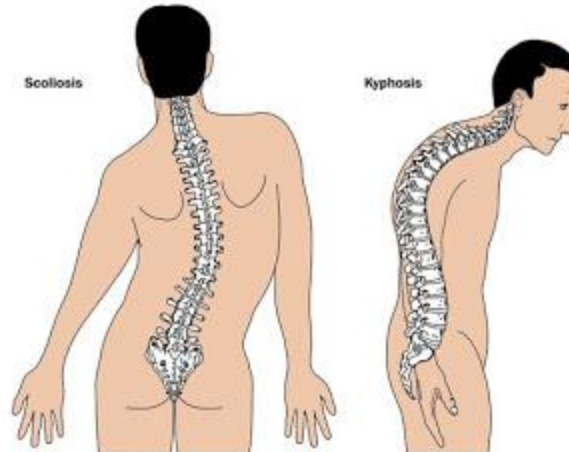


Corrective measures of Round Shoulders :

1. Regular Exercise
2. Leaning back on the chair

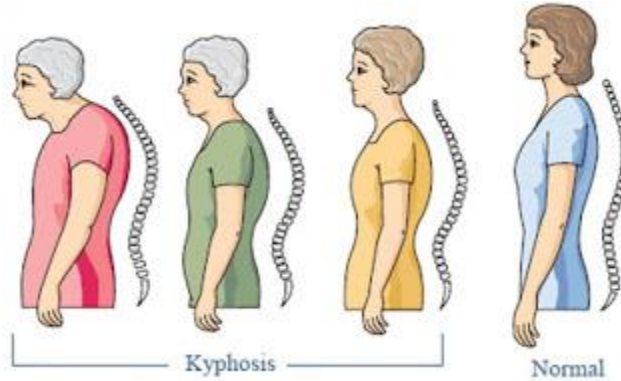
4. Kyphosis

It is a deformity of the spine in which there is an increase or exaggeration of a backward curve.



Cause of Kyphosis:

1. Habit of holding the head forward in an abnormal manner



Corrective measures of kyphosis :

- (i) Perform Dhanurasana regularly

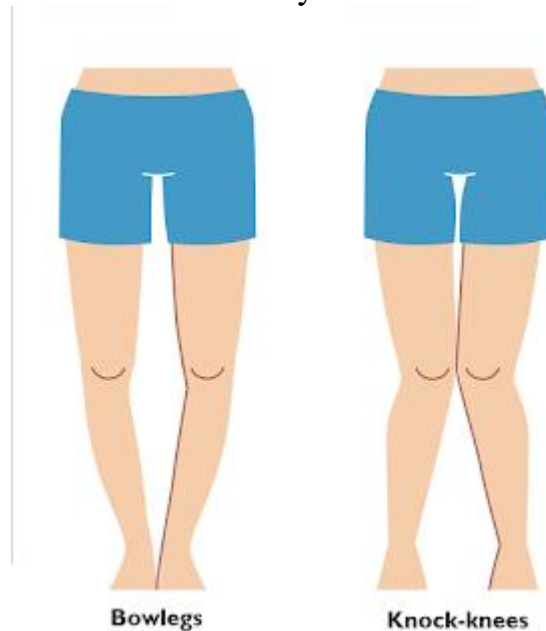


- (ii) Bend your head backward in standing position.
- (iii) Reverse sit-up

(iv) Perform Bhujang Asana

(v) Perform ushttt Asana

5. Bow Legs is a deformity opposite knock knee. In fact, if there is a wide gap between the knees, the deformity can be observed easily.



Causes of Bow Legs:

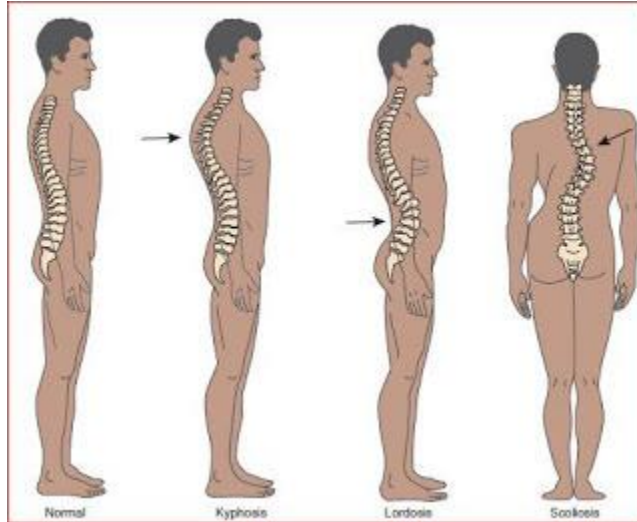
1. Deficiency of Calcium and Phosphorus

Corrective Measures of Bow legs:

1. Feed calcium to children

6. Lordosis

It is a common defect in deformity & posture. Here lumber curve becomes more pronounced and front central position of pelvic region is tilted forward.



Cause of Lordosis :

1. Bad posture

Corrective measures of Lordosis :

- (i) Forward bending
- (ii) Alternate toe touching



- (iii) Sloop walking
- (iv) Perform paschimotan Asana



(v) Perform sit-ups regularly

7. Scoliosis

It is a postural defect in which there may be one large lateral curve extending through the whole length of spine.



Cause of Scoliosis:

1. Some disease or injury
2. Adoption of wrong sitting position during study

Corrective measures of scoliosis

(i) Perform Ardh Chakra Asana



(ii) Chin-ups

(iii) Swim by using breast stroke technique

(iv) Perform Trikon Asana

(v) Perform TadaAsana