

## **6.4 Changes During adolescence**

During adolescence, changes in various aspects are seen in the life of an individual. Adolescents try to adjust themselves with these physical, psychological, emotional and social changes. Changes in values are also seen in this period. Hence adolescence is also known as the period of successive changes.

### **6.4 (A) Physical changes during adolescence :**

Important external and internal physical changes take place during

adolescence. These changes may not be similar in case of all adolescents.

**Height :** During adolescence, the average girl reaches her mature height between 16-17 years and the average boy a year later than girls. Boys gains about 20 centimetres height at the ages between 13-15 years and 18 centimetres by girls at the age of 11-14 years.

**Weight :** Alongwith growth in height, there is growth in weight during adolescence. Weight changes follow a time table similar to that for changes in height. Girls gain weight at the age of 10-14 years. In the case of boys, weight increment is seen two years later than girls. Fatty tissue increases after attainment of puberty in girls, whereas in boys, these tissues seems to be reduced.

**Body proportion :** During adolescence, various parts of the body gradually becomes proportionate. The upper part i.e., the trunk broadens, and lengthens and the arms and legs also grow similarly in length.

**Sex organs :** In late adolescence, both male and female sex organs reach their mature size.

Apart from these external physical changes, internal changes are also seen during adolescence. The stomach becomes longer and the muscles in the stomach becomes stronger and thicker. The weight of the liver increases and oesophagus becomes longer.

The heart grows rapidly. At 12-18 years of age, the weight of the heart is 12 times more that the weight at birth. The length and thickness of the blood vessels also increases at this period.

The sex glands becomes functional, but matures enough during late adolescence. Growth and development of muscle tissues also takes place during adolescence.