

CHAPTER 10

Reaching The Age of Adolescence

Increased activity of sweat and sebaceous glands:

- Sebaceous and sweat glands secrete and release their secretions through ducts.
- Leads to the appearance of acne and pimples on face.
- Problem of acne can be prevented by avoiding intake of fatty food and mental stress. Cleaning the face regularly with cleaners is advised.

Development of sex organs:

- At puberty, male sex organs like the testes and penis develop completely. The testes also begin to produce sperms.
- In girls, the ovaries enlarge and egg begin to mature also ovaries start releasing mature eggs.

Reaching mental, intellectual and emotional maturity:

- Adolescence bring a change in individuals way of thinking.
- Adolescents want to be independent.
- Greater capacity of learning is observed.
- They find a way to recognize and manage emotions.
- They develop interest in opposite sex.
- Intellectual development takes place and they spend more time in thinking.
- Trying to adjust to changes of mind and body is also observed.

- They easily get excited, emotional and under stress.
- Adjustment problems with their family members or friends.
- Which may lead to drug abuse, alcoholism and tobacco addiction.

Secondary sexual characters:

- Reproductive organs present in an infant stage, develop and attain complete maturity.
- Boys gain body weight, growth of prominent Adam's apple, deep voice, growth beard, moustaches and pubic hair, hair on chest, things and arms pits.
- Girls comparatively have shorter stature than boys, less facial hair, growth of pubic hair, hair in armpits, high pitched voice, development of breasts, broadening of pelvis, deposition of fat around hips, smooth skin texture. Distinguish the male from female they are called "Secondary sexual characters".
- In boys, testes secrete male hormone testosterone.
- In girls, ovaries secrete female hormone oestrogen.
- Apart from testes and ovaries, endocrinal glands such as thyroid, pancreas and adrenals also control proper growth and development.

Role of hormones in initiating reproductive function:

Endocrine glands release hormones into the blood stream to reach a particular body part called "Target site". The target site responds to the hormone. There are many endocrine glands or ductless glands in the body. The testes and ovaries secrete sex hormones. The

sex hormones are under the control of hormones from the pituitary gland.

The pituitary secretes many hormones, one of which makes ova mature in the ovaries and sperms form in the testes.

