

### Terms

The older ones called Parents

The newly formed are called Progeny

Process by which living things produce more of their own kind is called reproduction

Asexual reproduction requires only one parent

Sexual reproduction requires two parents

Human beings are unisexual or dioecious or heterophrodite

Male reproductive system generates and delivers sperm to the female reproductive system

Female Reproductive system produces and prepares eggs for fertilization and provide support for fetal development during pregnancy

### Male Reproductive system

consists of internal and external genitalia

Internal genitalia includes, the paired gonads (organs that produce sex cells), the testes (singular, testis) where sperms are produced and accessory structures that store the sperm, - produce secretions that activate and nourish them

The penis and scrotum are the external genitalia

The scrotum maintains the testes at around 34 centigrade slightly lower than the body temperature 37 centigrade

### Male Reproductive system (cont)

The testis is composed of lobules, which contain tightly coiled seminiferous tubules, which make up most of each testis.

The Sertoli cells in the tubules responsible for the production of sperm

Process of sperm production is called spermatogenesis

The epididymis and rete testis are connected by a network of tubes known as the efferent ducts

Testis produce sperm and sex hormones

Epididymis sites of maturation and some storage of sperm

Vasa deferentia conduct and store sperm

Seminal vesicles add fluid to semen

Prostate gland add fluid to semen

Urethra conducts sperm (and urine)

Bulbourethral glands add fluid to semen

Testicular cancer is the most common type of cancer in young men between the ages of 15 and 34 but it has high cure rate with early treatment

Penis male external genitalia and copulatory organ

Scrotum male external genitalia and protects the testes and keeps them at a temperature several degrees below the normal body temperature

### Male Reproductive system (cont)

3 sets of accessory glands (the seminal vesicles, prostate gland and bulbourethral glands)

A pair of seminal vesicles contributes about 60% of total volume of semen

The prostate gland is the largest of semen producing glands

The bulbourethral glands are a pair of small glands along the urethra below the prostate

Each ejaculation of human male averages between 2 and 5 ml. Normally it contains 200 to 300 million sperms.

The main hormones involved in the male reproductive system are testosterone, FSH, LH, inhibin and GnRH

### Female Reproductive system

Comprises 4 main parts: the ovaries, oviducts, uterus & vagina

Each female ovary potentially contains 200,000 follicles

The cells of follicles produce sex hormone called estrogen

Oviducts (Fallopian tube or uterine tube), carry eggs from the ovary to the uterus, are each around 10cm long

The uterine wall is composed of 3 layers, endometrium, myometrium & Perimetrium

Ovaries, produce egg and sex hormones

Oviducts, Conduct egg; location of fertilization

### Female Reproductive system (cont)

Uterus, Houses developing embryo & fetus

Vagina, receives sperm & serve as birth canal

### The ovarian & Uterine cycle

One egg is released from an ovary once about every 28 days

Under regulation of FSH and LH  
Follicular phase (Days 1 -13)

Ovulation Day 14

Luteal phase Days 15-28

The Uterine cycle, Menstruation  
Days 1-5, Proliferative phase  
Days 6-13, Secretory phase  
Days 15-28

Menstrual cycle last around 28 days

Menstrual cycle regulated by 4 hormones FSH, LH, estrogen & progesterone

### Sexually transmitted Diseases

Gonorrhea, Syphilis & AIDS

Gonorrhea, caused by bacterium "Neisseria gonorrhoeae"

Syphilis, caused by bacterium Treponema pallidum

AIDS, Caused by HIV which attacks helper T cells, a type of lymphocyte