Sexual behavior

The term of sexual behavior involving three subtitles which are:

- Maternal behavior or motherhood (e.g. lactation, protection….etc.).
- Social mannerism (living of animals in group within own species).
- Mating behavior

The perfect mating behavior should involves; **sexual desire** (= sex drive or libido) which can estimated by "*Serving capacity test*" and **capability of copulation.**

The consequence of copulation (mating or coitus) process is composed of serial events such as:

- Postural adjustment.
- Intromission.
- Ejaculation.
- Orgasm.
- Post copulation behavior.

Factors affecting sexual desire:

I. Internal factors:

1- Hormones: in females there is always relation between the physiological status of ovaries and sexual desire i.e. when increases estrogen h. during estrous phase this will reflect the behavior for example homosexual behavior in cattle, with ovarioctomy operation the sexual desire of female will disappear rapidly. While in males the androgen have a main role in libido control, if the male castrated before it reaching the puberty age this will lead to avoid growing of libido and secondary male characteristics (increases muscular mass, aggressiveness behavior….etc) and the infected male tend to be female in feature this case called **"Docility"**.

But if castration took place after reaching of male to the puberty age and the male get an experience in libido this resulting in continual of sex drive for a long period post castration operation and it disappeared slow and gradually, in addition, the sexual desire can be resumed into normal level by exogenous steroid medication.

Androgens in male life have an important roles twice, first time during fetal life which responsible for growing of neural center (in hypothalamus). Second time is after puberty age aid in developing of this center. In tom cat there is sex-inhibiting center in hypothalamus, any lesion for this center leads to sexual-hyperactivity, this case treated with tom castration.

2- Genotype or breed and inherited: beef cattle have lesser libido than dairy cattle, also with homozygous twin males tend to be very closely in sexual performance.

II. **External factors**:

1- Environmental factors: majorly in seasonal breeder animals they influenced by photoperiod and temperature which are effect on hypothalamic-pituitary-gonadal axis.

2- Confinement and domestication: especially in wild animals (psychological effect).

3- Social interaction: when introduce immature male into herd of sexual active females this will enhancing the puberty and maturity for this male and vice versa.

4- **Pheromones:** they are chemical substances secreted from variable specific glands responsible mainly on the communication between animals and insects each within own species. Pheromones mainly effects through olfaction and taste on the hypothalamus-adenohypophysis-gonadal axis.

The ram pheromones increasing the LH levels in the sera of ewes to reaching LH-surge rapidly, and ewe pheromone increasing letdown of LH in ram leading to elevation in androgen production then increasing libido. Pheromones act via nasal septum which contains large number of sensory neurons. Pheromones in canine secreted from anal and vaginal gland also secreted with urine to attract dogs from far distances. In boars pheromones secreted with saliva and urine also from preputial glands.

5- Vision, tactile and hearing: senses assist in increases the libido; e.g. homosexuality indicate bull to recognize the estrous cow.

6- Physical problems: lameness, hernia, obesity and age.

7- Diseases: especially which effect on gonads function, the etiology of disease either inherited (hermaphrodite and testicular hypoplasia), or from pathological status (orchitis, epididymitis, testicular degeneration….etc).