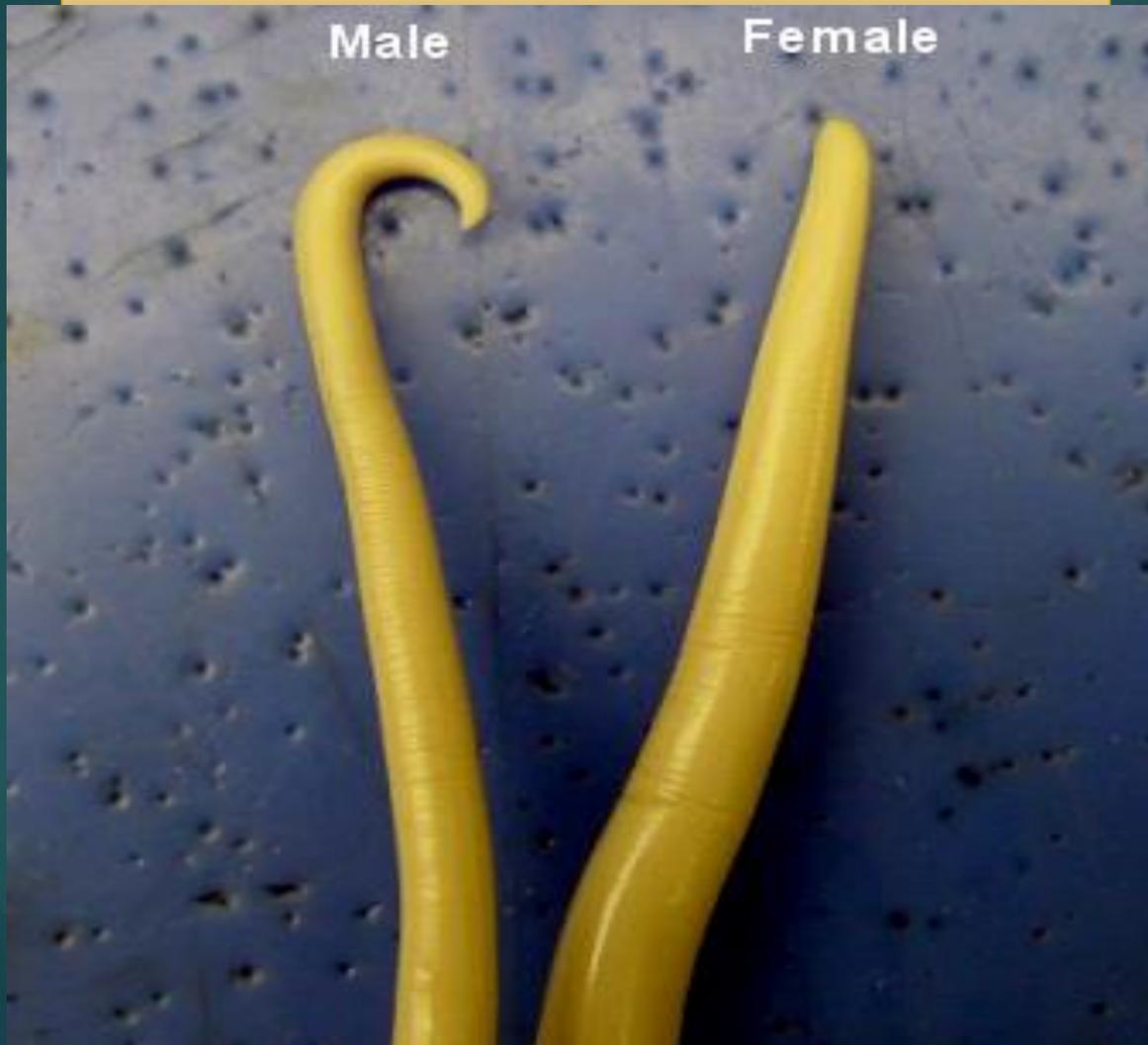


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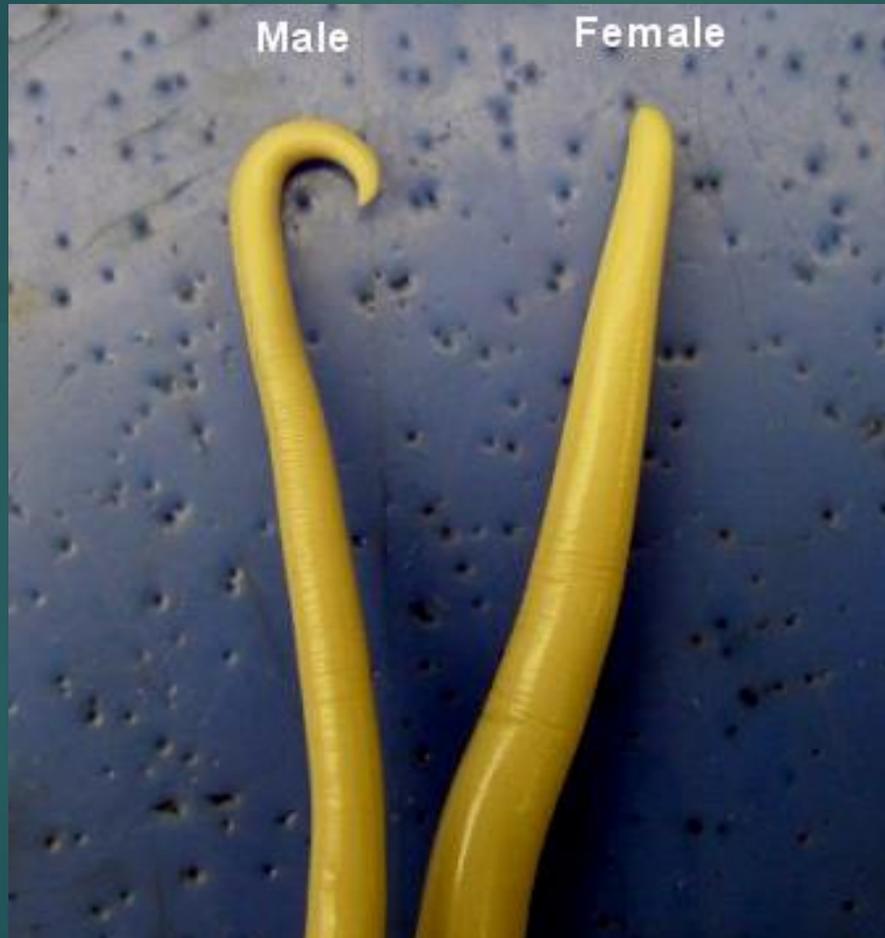
**PHYLUM: Nematoda<sup>™</sup>**  
**(Round worm)**



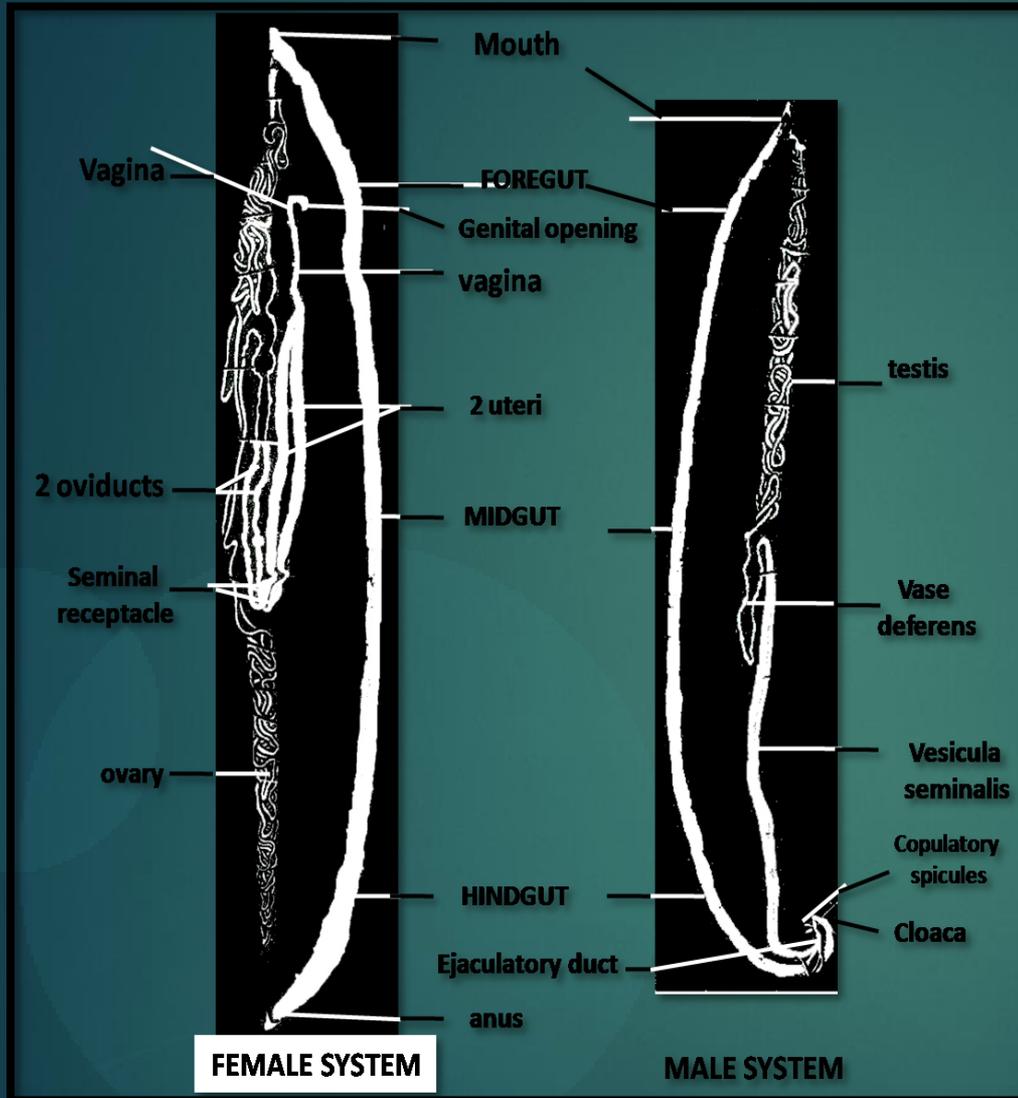
## GENERAL CHARACTERS OF NEMATODA

1. Bilateral symmetrical pseudocoelomates.
2. They have elongate, cylindrical, unsegmented body.
3. The body is covered with thick cuticle which moults during growth.
4. They have a complete digestive system with a mouth & anus.
5. The excretory system consists of 2 longitudinal excretory canals.
6. Sexes are separate and with direct life cycle.

e.g. *Ascaris lumbricoides*  
(Intestinal fluke)



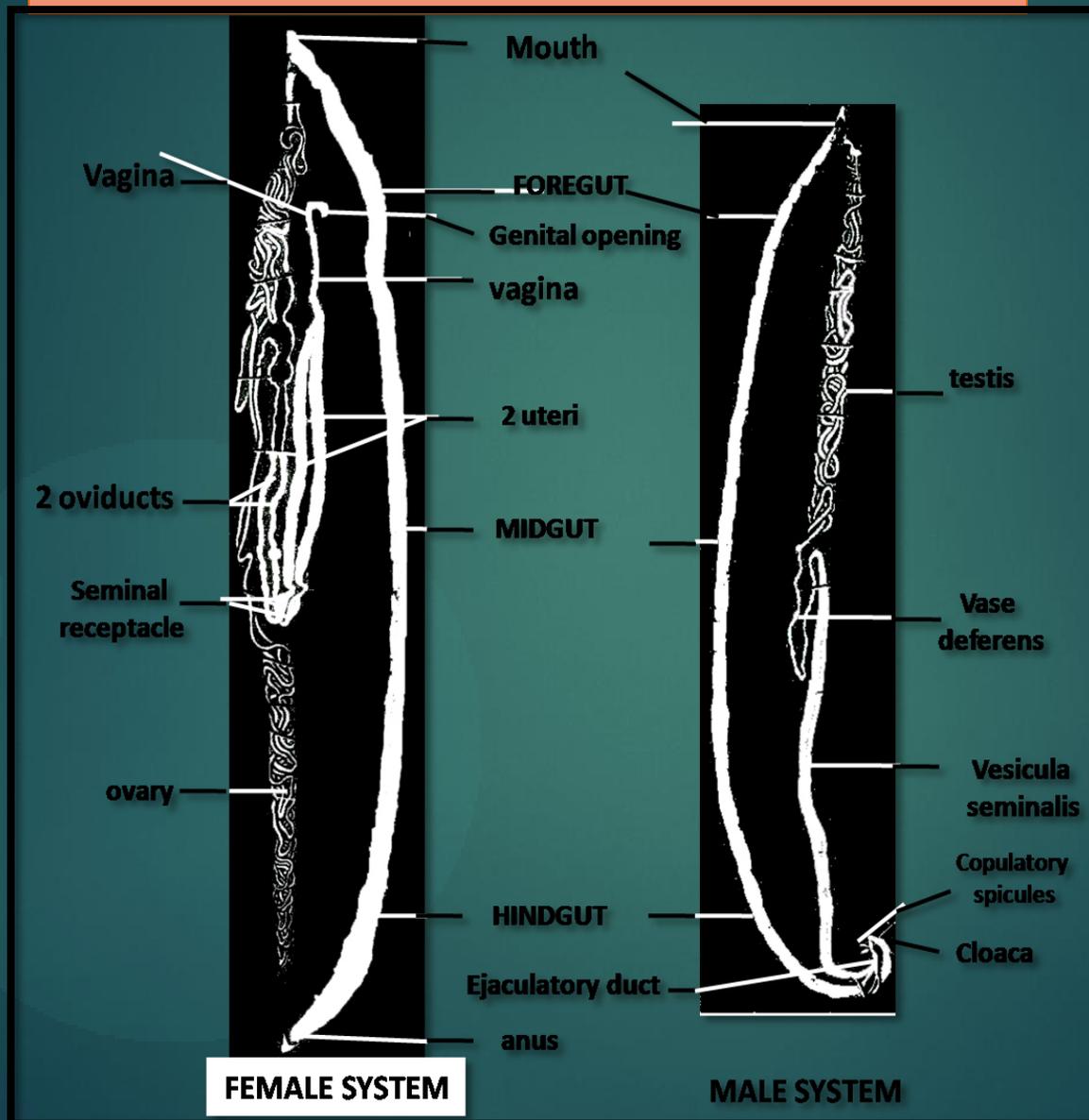
# DIGESTIVE SYSTEM



It consists of:

1. Mouth
2. Foregut
3. Midgut
4. Hindgut

# Reproductive system



## REPRODUCTIVE SYSTEM

Reproductive organs are tubular. Male has a single reproductive tubule. The female has double reproductive tubules and the vulva is ventrally located at the posterior part of the anterior third of the body.

### **Male System**

The male system consists of a single thread – like coiled testis. It leads into vasa deferentia and then to a wider tube, the vesicula seminalis. This ends in ejaculatory tube, which joins the proctodaeum to the anus and has a pair of penial sacs containing two copulatory spicules.

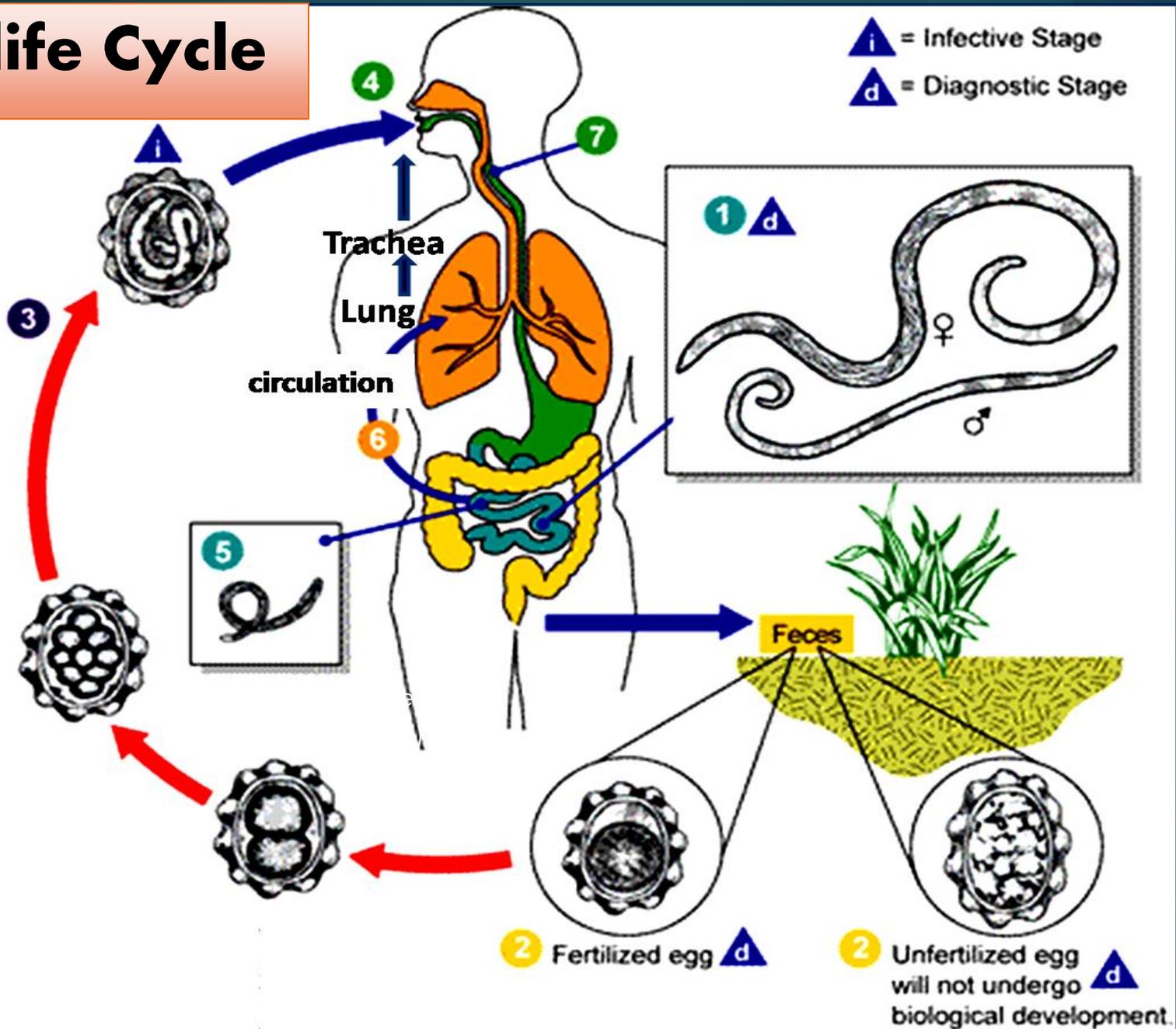
### **Female system**

The female system consists of two long coiled thread – like ovaries found in both ends. Each ovary leads into an oviduct which passes into a wider tube, the uterus. The two uteri join to form the vagina that opens into the exterior by a gonopore. A seminal receptacle is found at the base of either uterus to store the sperms received during copulation.

During copulation the male introduces the amoeboid sperms into the vagina. The sperms travel to the lower part of the uteri to fertilize the eggs.

The produced zygote is then enveloped by a vitelline membrane and a mammillated coat.

# life Cycle



# HOST-PARASITE RELATIONSHIP

## Effect of migrating larvae on the host

The presence of larvae in the lung initiate some tissue reactions and hemorrhages and this may allow secondary infection. the larvae may cause a pneumonia. These clinical manifestation is also called Loeffler's syndrome.

## Effect of the adult worms on the host:

1. The nutritional demands and the space requirement of the parasite may lead to serious problems.
2. They secrete certain substance which inactivate trypsin. Thus, host's food protein remains undigested. This cause the school children infected with *Ascaris* become shorter and have less memory and thinking capacity than the uninfected ones.
3. They may entangled in masses which completely block the intestine.
4. They may invade the bile or pancreatic ducts and obstructing these passages.
5. The excretory products are toxic.



الشكر حسن اتباعكم

اللهم لك الحمد كما ينبغي

لجلال وجهك و عظيم سلطانك





THANK

شكرا

YOU

