

## EXCRETION IN ANNELIDA

Excretion is the process of removal of toxic or ~~un~~ unwanted substance or metabolic wastes from the body of an organism to the medium. It is an essential process in all forms of life. It is a physiological process and is strictly found only in animals. Every organism must need itself of potentiality of harmful byproducts of its own vital activities. This process in living things is called elimination. ~~Through~~ Through excretion, organism control osmotic pressure the balance between inorganic ions and water and maintain acid-base balance. ~~for~~ This process ~~is~~ <sup>thus</sup> ~~promised~~ comes from ~~homeo~~ hemostasis, the consistency of the organism's internal environment.

Excretory Substances of Annelids:



The waste products and the nitrogenous by product of metabolism are called excretory substances. The excreted material or substances may be called as a ~~jector~~ ejector. The major excretory product of annelid ~~invertebrates~~ includes ammonia, urea, amino acids, water and different types of ions. ~~The organs of excretion~~

Excretory organs of Annelida :-

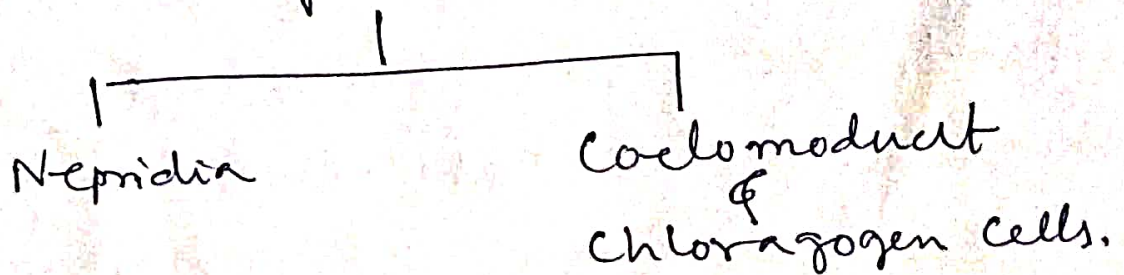
The organs of excretion make up the excretory system. Every animals have certain and specific organs that are responsible for elimination of waste from the body. ~~These~~ These organs are called the excretory organs. Excretory organs of ~~amns~~ annelida are ~~Catab~~ categorized into two types - the primary excretory organ



and the Secondary excretory organ.

The primary excretory organs in Annelida are the Nephridia while the Secondary excretory organs of these animals includes Coelomoduct and Chloragogen cells.

Excretory organs of Annelids



~~About these three organs~~

Coelomoducts acts as secondary organ. These are very primitive and mesodermal in origin. These are developed from <sup>the</sup> gonads; <sup>they</sup> grow out and opens to the exterior by a genital pore. The coelomoduct primarily function as gonoducts. But in some forms they may secondarily act as excretory organs.



They carry the gametes to the outside the exterior and along with the ~~gametes~~ gametes they also expel some sort of ~~exit~~ excretory products therefore <sup>they</sup> ~~they~~ act as ~~excretory~~ secondary excretory organs in these organisms.

Nephridia is the primary excretory organ in Annelida. These are segmental organ arranged in pairs. A pair of nephridia is present on each segment. They are Ectodermal in origin; developed from external surface; grow into the body and opens to the exterior by a nephridiopore. A typical nephridium consist of a ~~natural~~ ~~nephro~~ nephrostome ~~along~~ ~~duct~~ ~~and~~ ~~a~~ a long tubely nephridioduct and a bladder with a ~~nephro~~ nephridiopore. The ~~nephri~~ nephrostome is a funnel like component of an



a nephridium, ~~specialy meta-~~  
~~meta-nephridia~~. It is always  
oriented towards the coelom, The  
nephrostome is covered <sup>from inside</sup> with cilia  
which pulls the water metabolic  
waste and other substances into  
the ~~meta~~nephridia. The nephridia  
are lined with ~~so~~ short hair like  
structures called cilia. This cilia  
~~meet~~ <sup>beats</sup> repeatedly which drive  
fluid down the nephridioduct and  
thereby creating the lower pressure  
within the tubli way. This lower  
pressure draws ~~carrying fluid~~ body  
fluid carrying waste across the thin  
cell membranes and into the duct.

Function of Nephridia:-

As we know the nephridia  
are porous long thin and coiled,  
the primary function of nephridia  
is excretion. However they also

serve to convey the gametes  
to the exterior. Besides these  
organs also maintain osmoregulation