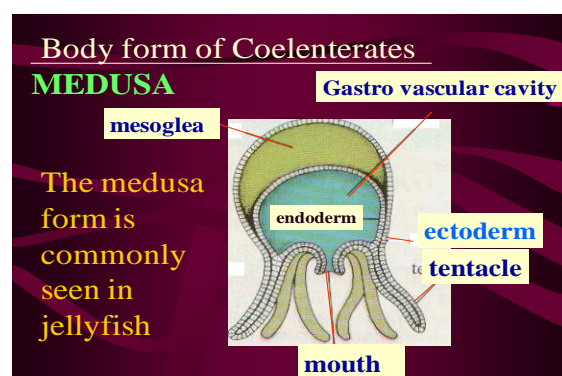
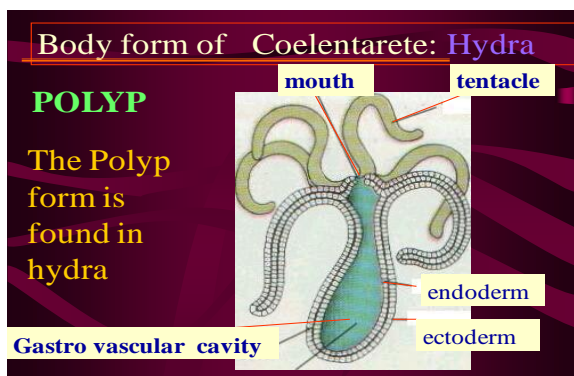


Phylum: Coelenterata ‘Cnidaria’ “hollow body cavity”.

1. Coelenterates are freeliving animals that mostly live in marine; but some live in freshwater solitary or in colonies; sedentary (sessile) or free-swimming.
2. Body is soft, colorful; diploblastic; polymorphism; radial or bilateral symmetry; consisted of many cells much more specialized to tissues than that of Porifera. Body has a single cavity called gastrovascular cavity (enteron) with one opening (mouth) surrounded by several tentacles (cnidae). Tentacles bear many defensive stinging cells (cnidocytes) called Nematoblasts are found used for defense and feeding by numbing of prey.
3. Digestive system is incomplete that consisted of a gastric cavity with mouth that acts as mouth and anus. They are predatory animals; feed on aquatic arthropods, like Cyclops sp, and there are 2 digestion types; extracellular and intracellular digestions.
4. Respiration; Excretion; Circulatory systems are not found. They are done by diffusion.
5. Nervous system is simply formed of a network of similar cells and sense cells.
6. Reproduction occurs asexually (by budding) and sexually (by gametes). They are either hermaphroditic or dioecious animals.
7. Life cycle includes alternation of asexual **hydroid** and sexual **medusoid** generation.

Two Basic forms: -

1. **Polyps:** - a polyp has a tubular body with a mouth surrounded by tentacles at one end. Other end is blind (no opening) and usually attached.
2. **Medusa:** - a medusa has an umbrella shaped body with marginal tentacles and a mouth, centrally located on a position (Manubrium) of the lower concave surface.



Phylum: Coelenterata divided into three Classes as follow:

1. Class: Hydrozoa, example; Hydra sp., and Obelia sp.
2. Class: Scyphozoa, example; Aurelia aurita
3. Class: Actinozoa (Anthozoa), example; Alcyonium sp., and Metridium sp.

Kingdom: Animalia

Subking.: Metazoa

Phylum: Coelenterata

Class: Hydrozoa

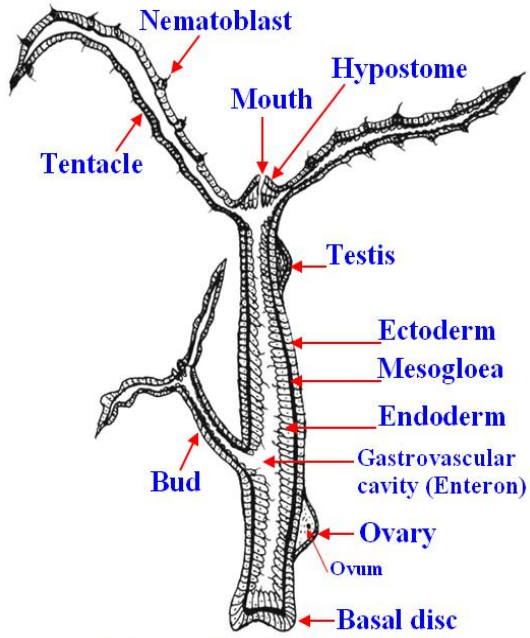
Order: Hydroida

1. Family: Hydridae

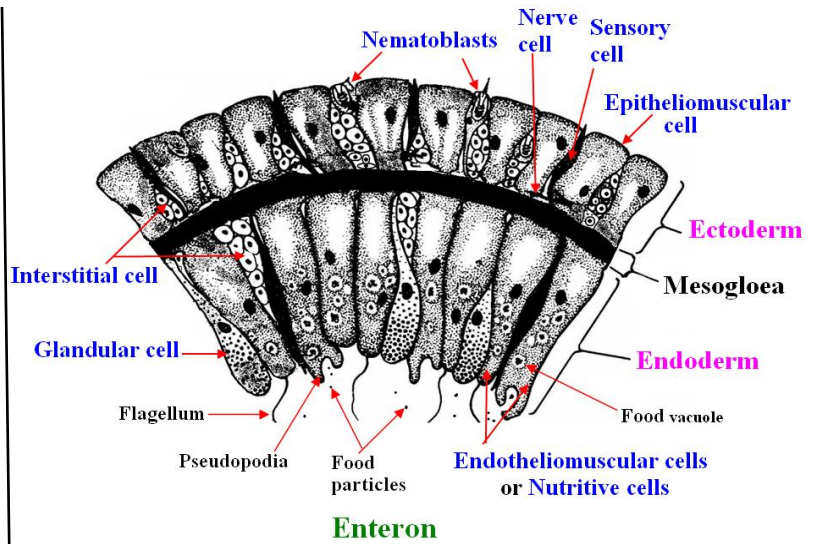
Hydra vulgaris

1. Genus: Hydra sp.; Characteristics:

1. Polyps were brown in colour, without distinct stalk
2. Body is cylindrical (1.97-9.88mm); number of the tentacles per poly is 5-7 around mouth, it were transparent and moniliform used for feeding and somersaulting movement, other end (basal disc) that secrets a sticky mucous to adhere to the substratum.
3. Body wall consisted of two layers; Ectoderm and Endoderm separated by a non-cellular, gelatinous mesogloea.
4. Hydra reproduces asexually by **budding** and sexually not found. They are mostly hermaphroditic.
5. Lifecycle includes **hydroid** (polypoid) while medusoid stage is absent.



L.S. of Body of *Hydra* sp.



Part of C.S. of *Haydra* sp.