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## Chapter (4) Phylum Coelenterata (Cnidaria)

## Phylum Coelenterata or (Cnidaria) Jellyfish, anemones, corals







# The "simplest" of the complex animals . . .

#### **General characters of Coelenterata**

- > They are multicellular organisms, exhibiting tissue grade of the organization.
- They are diploblastic, with two layers of cells, an outer layer called the (ectoderm) and the inner layer called the (endoderm). There is a non-cellular layer that is the (mesogloea) in between the ectoderm and the endoderm.
- > They show radial symmetry.
- They have a single opening in the body through which food is taken in and also waste is expelled out.
- > The opening in the body is surrounded by tentacles.
- > Digestion takes place in the body cavity (coelenteron).
- > They can live in marine or freshwater habitats.
- They can be solitary or live in colonies. Each individual is called
  a zooid.

### **Continued: General characters of Coelenterata**

- These organisms show two morphological forms Polyps and Medusa Polyps contain exoskeleton and endoskeleton.
- > The skeletons are composed of calcium carbonate.
- Most if the coelenterates are carnivorous in nature with a few exceptions such as the sea corals. They get their food from other animals that live symbiotically within them.

Classification of Phylum Coelenterata Phylum coelenterata is divided into three classes:

1-Hydrozoa; Examples: Hydra, Obelia
2-Scyphozoa; Examples: Aurelia,
Lucernaria, Cephea, Cyanea, Rhizostoma
3-Anthozoa; Class Anthozoa is subdivided
into two subclasses:

1-Subclass:Alcyonaria Example : Tubipora 2-Subclass: Zoantharia Examples : Actinia, Fungia, Favia, Stylophora, Galaxia

## Class: Scyphozoa

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Lucernaria

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### Class: Anthozoa

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Sub class: Alcyonaria Figure 66: Iubipera



Figure 67: Actinia. Sub class: Zoantharia

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Sub class: Zoantharia

