

## Practical No. -5-

### Food and feeding Habits

#### Objectives:

1. Determination the food type of provided fishes specimen.
2. Study about stomach and intestine forms of fishes.

The food type of any fish is determined by the study of the Alimentary canal stomach, intestine and mouth structures (teeth).

#### Stomach Forms:

- The shape, size and wall thickness differs between the different types of fishes according to the food type.
- The general shape of stomach may give indication of food type.

#### Types of stomach:

##### 1. Mixed food:

- Formed of two parts long and short parts.
- Omnivores. (Fig.5).

##### 2. Plant feeder:

- The stomach is formed of two long parts, due to long time of cellulose digestion.
- e.g. *Bolti* (*Tilapia nilotica*) and *Bori*.

##### 3. Animal Feeder:

- The stomach consists of one short part and fusiform part.
- e.g. Sharks, Cartilaginous fishes Dogfish.

##### 4. Grainy stomach:

- The stomach like gizzard in birds.
- The fish in this type feed on grains, hard structures, shells and most of the feeding on invertebrates.

#### Intestine forms:

Depends on the length of intestine.

1. THE long intestine means the fish is herbivorous. It needs long time for cellulose digestion.
2. Short intestine means that the fish is carnivorous. (i.e. the intestine is short, straight and consists of one twisting or two. e.g. Sharks and Cartilaginous fishes.

2. The medium intestine mean that the fish is omnivorous, i.e. eats mixed food.

**Teeth Forms:**

-The strong teeth mean the fish grinding hard substances. The fish may be mixed food or animal feeder.

-The long teeth mean the fish grinding cellulose.

**-The practical part:**

1. Dissect the fishes provided.
2. Remove the alimentary canal, stomach and intestine.
3. Examine the morphology of the stomach and intestine and draw each of them.
4. Examine the food contents in both stomach and intestine and determine the nature of the food preference.
5. The results obtained have to be checked by examination of mouth structure and teeth.
6. Determine the food type of each specimen provided.

# **“Stomach Forms”**

**Mixed Food**

**Plant Feeder**

**Animal Feeder**

**Grain Hard  
Substances**

**Gill Chamber**

**Dense hairs**

**Carni-Herbivores**

**Plankton filter**

**Operculum**