

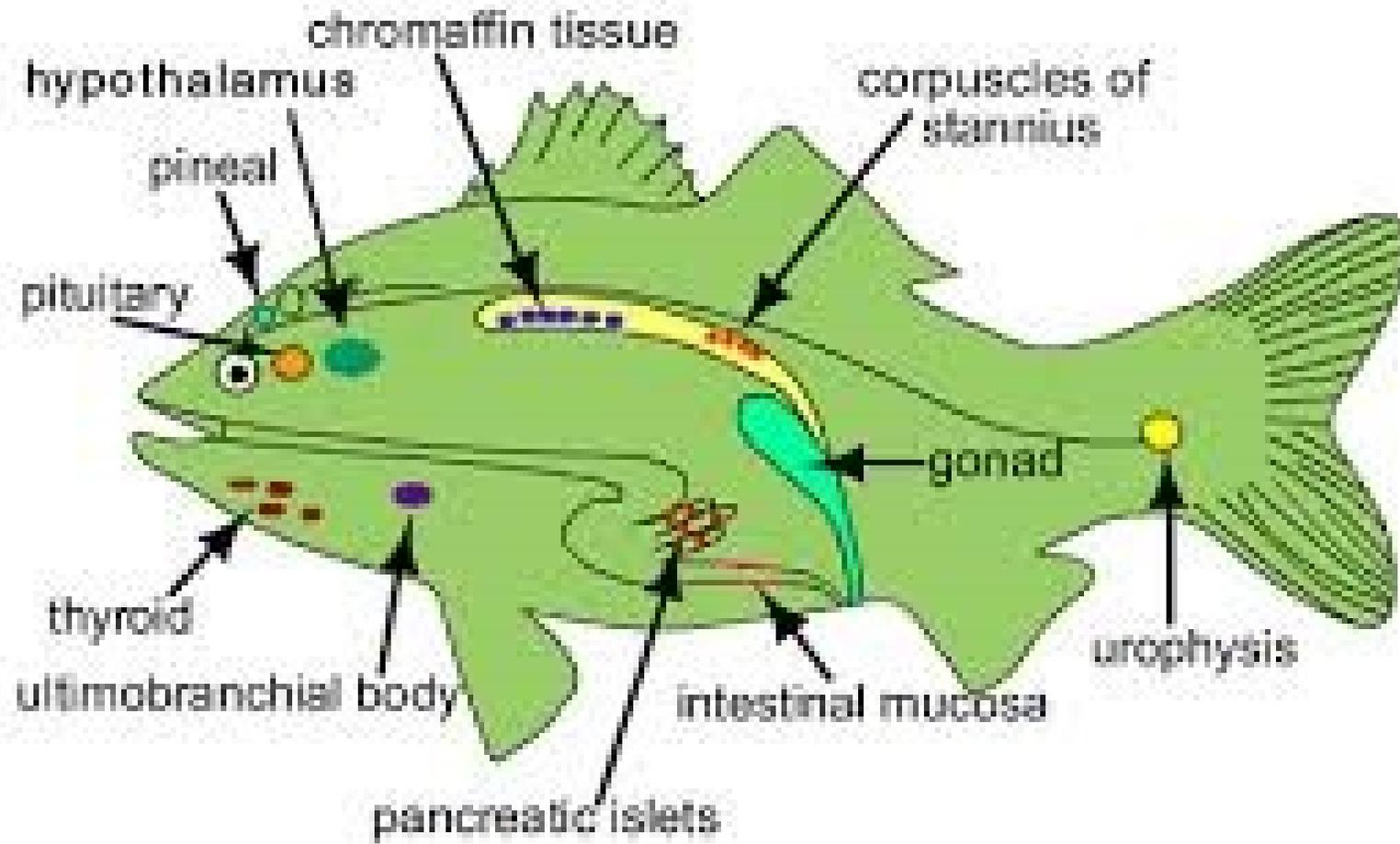
Endocrinology of Fish

MS I (Semester-II)

Maj/Zoo-S-406

Lecture – 15

Corpuscle of Stannious



Structure

- Corpuscle of Stannious is present in kidney.



Structure

- They are found only in bony fishes.
- Functionally similar to adrenal glands in mammals
- Corpuscles are a large number of spherical bodies.

Structure

- These are separated from each other by loose connective tissues.
- Each body or lobule is in turn composed of several columnar cells.
- Columnar cells contain secretory granules.

Structure

- Each Secretory granule is spherical in shape and measures 0.5 to 1 μ m in diameter.
- Hormone secreted by corpuscle is called Stanniocalcin.

Functions

- Bony fishes obtain calcium directly from water.
- Staniocalcin regulates the blood circulating level of calcium.
- Similar to parathyroid hormone and calcitonin that regulate calcium metabolism in mammals.

Functions

- Stanniocalcin is influenced by the level of circulating calcium.
- When calcium level increases, the corpuscles are stimulated to secrete Stanniocalcin.