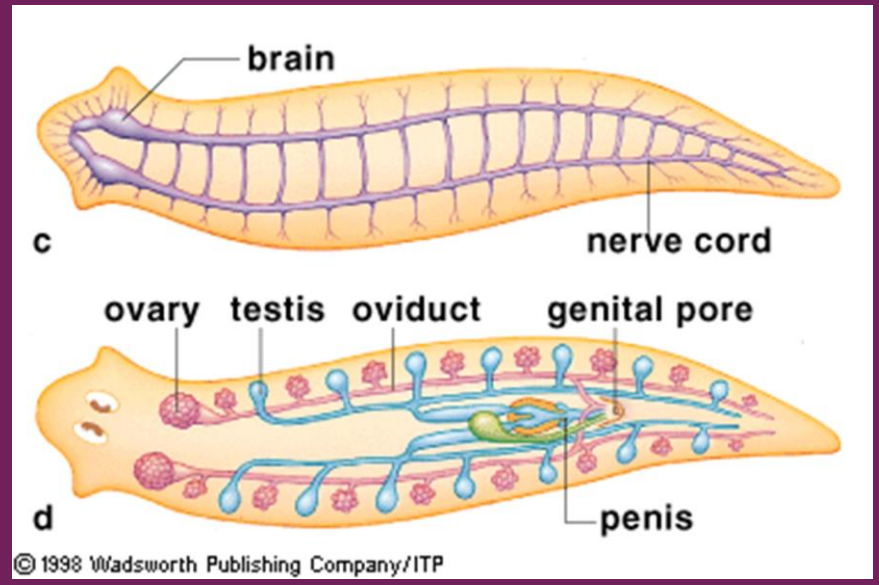
REPRODUCTION

- Free living
  - Most are Hermaphrodites that reproduce sexually
    - Have both male and female reproductive organs
    - Eggs are laid in clusters and hatch in a few weeks
  - Asexually reproduce
    - Fission
      - Split in two
      - Each half grows new parts to become a new organism
- Parasitic
  - More complex
  - Both asexual and sexual



GROUPS OF FLATWORMS

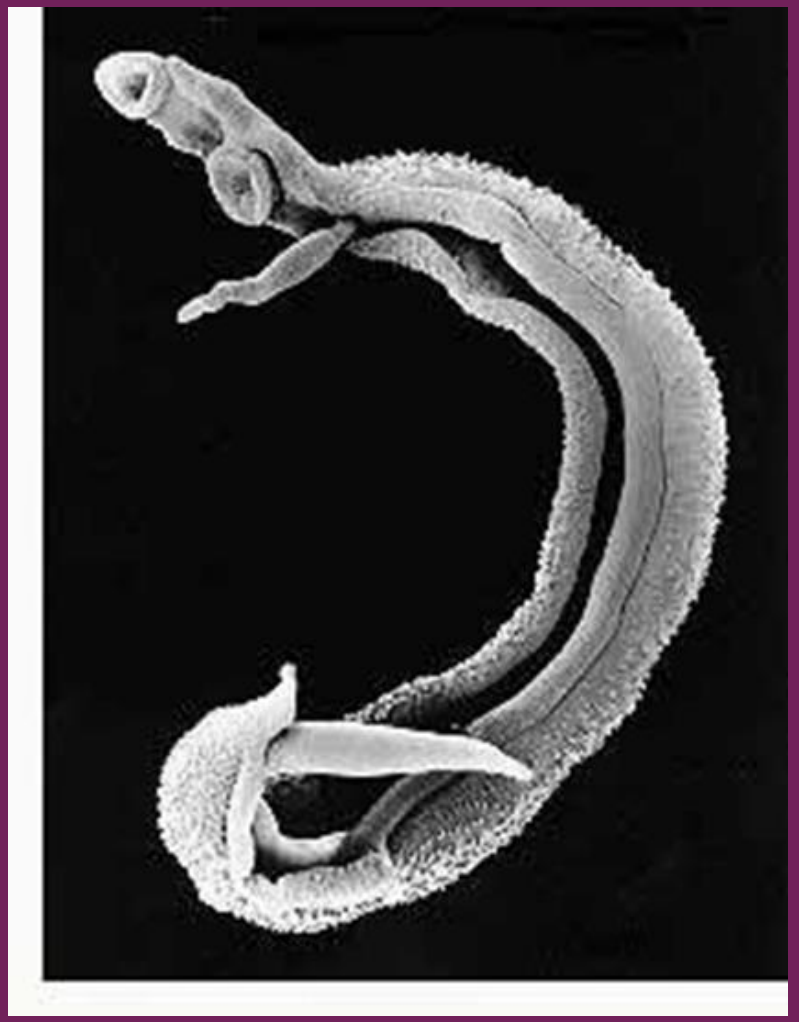
- The three main groups of flatworms are
  - Turbellarians
  - Flukes
  - Tapeworms
- Most turbellarians are free-living.
- Most other flatworm species are parasites.

TURBELLARIANS

- Class Turbellaria
- Vary in colour, form and size
- Free living
- Marine and fresh water
- Bottom dwellers
- Most species live in the sand or mud under stones and shells.
- Planarians
  - Freshwater worms

FLUKES

- Class Trematoda
  - Parasitic flatworm
- Most infect internal organs of host
- Some infect externally
  - Mouth, gills, skin

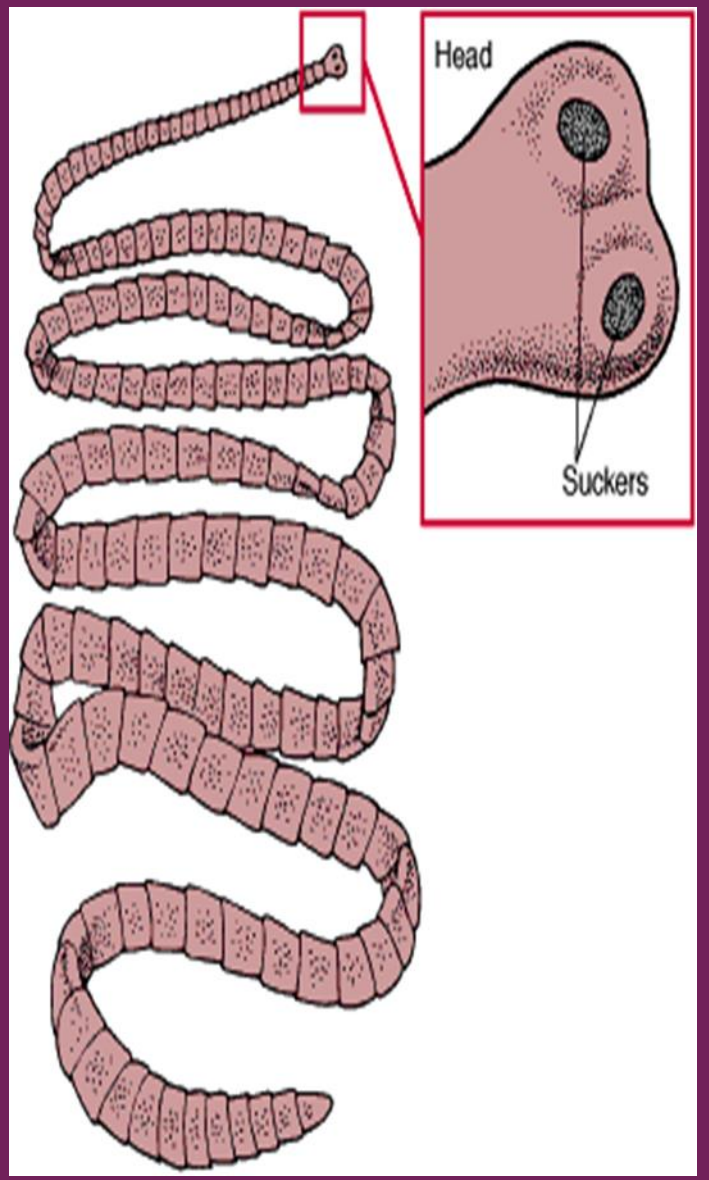


LIFE CYCLE OF A BLOOD FLUKE

- Lives in multiple hosts
- Primary host is human
- Reproduces sexually

TAPEWORMS

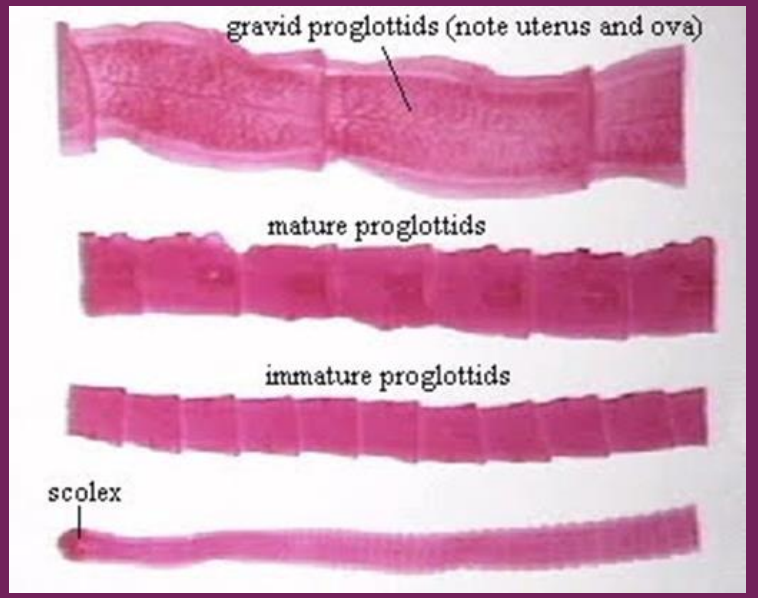
- Class Cestoda
- Long flat parasitic worms
- Live in intestines of host
- No digestive tract
  - Food in intestine has already been digested
  - Food absorbed through body walls
  - Tapeworm removed from dog



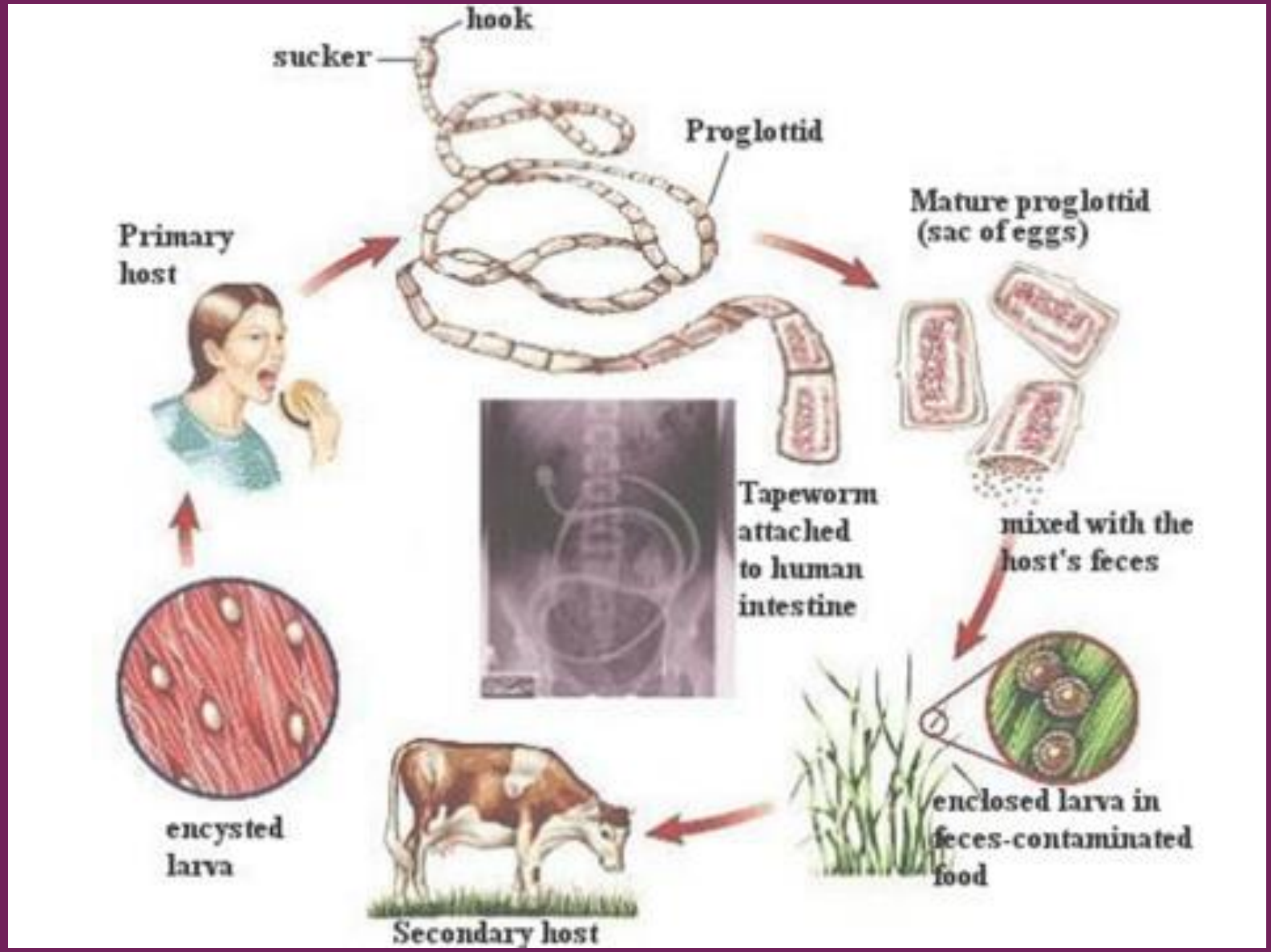
STRUCTURE

- Structure
  - Scolex
  - Contains suckers and hooks
  - Used to attach to intestine wall of host to absorb nutrients

- Proglottids
  - Behind scolex
  - Makes up most of body
  - Mature proglottids contain both male and female reproductive organs
  - a section of the tapeworm body Contains male and female reproductive organs
  - Able to self- or cross-fertilize
  - The Proglottids at the end of the body break off and pass out in feces of host
  - Each Proglottids contains many fertilized eggs



LIFE CYCLE OF A TAPEWORM



FAD DIETS IN THE 1900'S