*Trichostrongylus spp.*

**Trichostrongyliasis**

**Introduction:**

*Trichostrongylus* parasite:

- It is parasitic nematodes, has at least 32 species, most of which are found predominately in animals (in sheep & cattle) like *T. orintalis* & *T. culoliformus*. However, at least 8 spp. have been reported in humans who are incidental hosts. Its greatest effect on man occurs through the livestock industry. By infecting various grazing ruminants, this parasite causes significant economic loss and considerable economic effort is put into controlling it.
- *Trichostrongylus* is similar to Hookworm but requires a different treatment. This parasite is also troublesome in its genetic variability, which allows rapid response to new selection pressures and growing development of antihelminthic resistance.
- **Synonyms:** *Trichostrongylus*, *Trichostrongylosis*
- **History of Discovery:** The history of this parasite and its interactions with man is closely tied to man's interactions with animals. Humans are only incidental hosts, however, the parasite has long been a negative factor in the survival and economic benefits of the animals humans rely on to survive.
- **Disease caused by Trichostrongylus spp.** Called *Trichostrongyliases*
- **Habitat:** in small intestine (s.i.).
- **Mode of Transmission:** Ingestion of infective third stage from feces-contaminated food or soil; contact with herbivore feces.
- **Geographic Distribution:** Eastern Europe, former USSR, Iran.

**MORPGOLOGY:**

The egg: They measure between 80 and 90 mm long. They are already segmented when laid and develop into infective larvae

![Image of egg](image)

The ovum of *Trichostrongylus spp.*

- Adult worms: The worms are slim, with small anterior ends and no buccal cavity. Male worms can be recognized by their asymmetrical dorsal ray and two short nearly equal spicules. The female has a vulva of about 1 mm near the tip of the tail. Often eggs can be observed in her body.
Life cycle:

- The eggs produced by the female will pass in the feces and hatch outside the host. They are already segmented when laid and develop into infective larvae within 6 days. The L1 and L2 stages of the larvae are microbivorous. The L3 stage, reached after 16-18 days, is non-feeding and infective by ingestion. L3, L4 and L5 are immature adults that develop into mature forms in the digestive tract of the host. The life cycle is direct, with no intermediate hosts.

Infection in man:

- It is very rare infection in man, the infection occurs by swallowing or eating vegetables containing the filariform larva, which pass unharmed through the stomach and resides in the small intestine where it becomes an adult (direct infection).

Symptoms: It cause abdominal pain associated with diarrhea.

Laboratory Diagnosis:

- Diagnosis is made by finding eggs (or sometimes larva) in stool examination.
Ovum of *Trichstrongylus spp.*