**Diphyllobothrium latum**

**Introduction**

*Diphyllobothrium latum* is an intestinal cestode or tapeworm which possesses a scolex with 2 bothria unlike the typical 4 suckers seen on the *Taenia* species. It has no hooks. The worm is widely distributed in sub-arctic regions.

**Life cycle**

Humans (definitive host)

- Adult worms in the intestine
- Eggs and proglottids are passed in the faeces
- The eggs hatch in fresh water to release coracidium larvae

2nd intermediate host

- Fish ingest copepod and the procercoid larvae mature to become plerocercoid larvae

1st intermediate host

- Copepods ingest larvae which form a second larval stage (procercoid)

**Clinical Disease**

The infection caused by *D. latum* is due to the ingestion of raw, poorly cooked or pickled fresh water fish. The symptoms associated with *D. latum* infection may be absent or minimal with eosinophilia. There may be occasional intestinal obstruction, diarrhoea, abdominal pain or anaemia. The worm may also cause a vitamin B$_{12}$ deficiency which may resemble pernicious anaemia in a small percentage of people.
Laboratory diagnosis

Laboratory diagnosis depends on the recovery of characteristic eggs from a formol ether concentrate of faeces. The eggs are ovoid, operculate and yellow brown in colour. They are 58 - 75μ by 40 - 50μ. The egg usually has a small knob at the abopercular end. Proglottids may also be seen in faecal samples usually in a chain of segments from a few centimetres to about 0.5 metres in length. The proglottids measure 3mm long and 11mm wide and have a rosette shaped central uterus. The adult worm reaches a length of 10 metres or more and may contain up to 3,000 proglottids.