

DIROFILARIASIS: A MODEL FOR ONCHOCERCIASIS?

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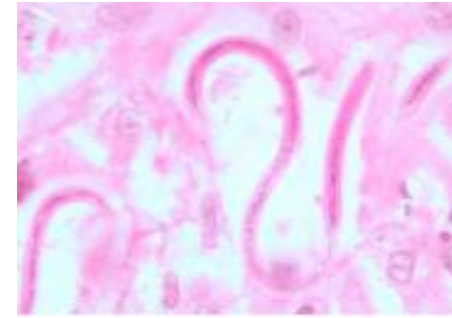
ONCHOCERCIASIS



“River Blindness”



Symptoms: visual impairment or blindness, skin disease, including nodules under the skin or debilitating itching.



Worldwide onchocerciasis is second only to trachoma as an infectious cause of blindness.

ONCHOCERCIDAE

- *Dirofilaria immitis* and *Onchocerca volvulus* are in the same family of round worms
- Disease transmission occurs similarly in both



DIROFILARIA

- “Dog Heart worm”
- Vectored by mosquitoes
- Microfilaria mature in malpighian tubules
 - 10-14 days



ONCHOCERCA

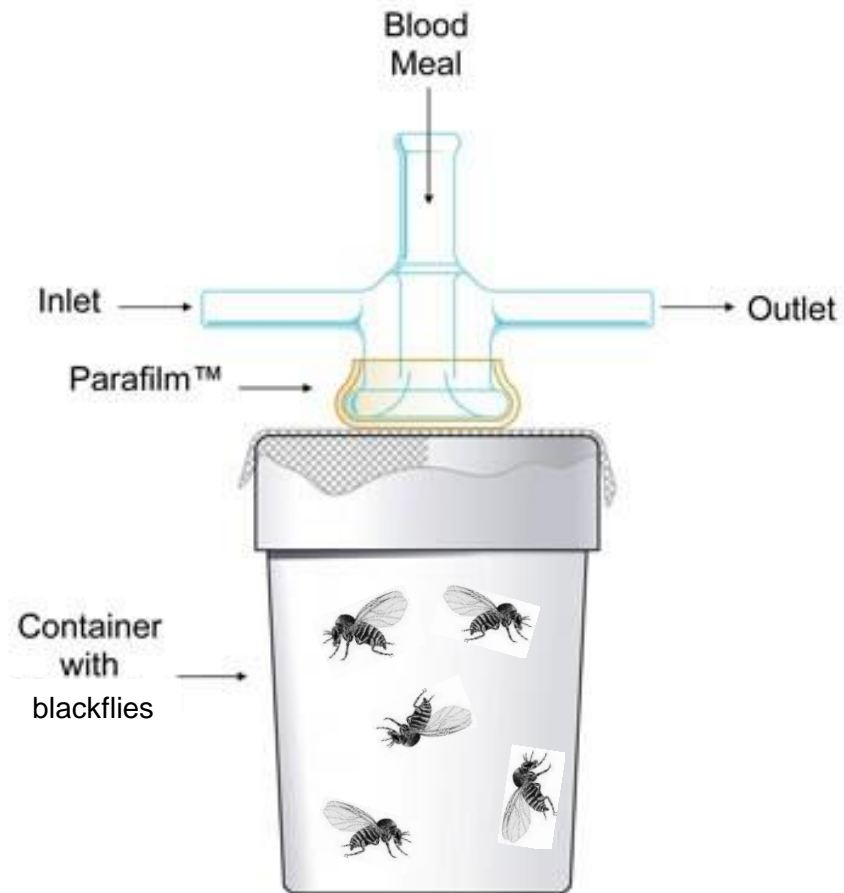
- “River Blindness”
- Vectored by black flies
- Microfilaria mature in flight muscles
 - 7-21 days



QUESTIONS

1. Can black flies ingest living *Dirofilaria immitis*?
2. Do these worms mature to the infective L3 stage?

BLOOD FEEDING BLACK FLIES

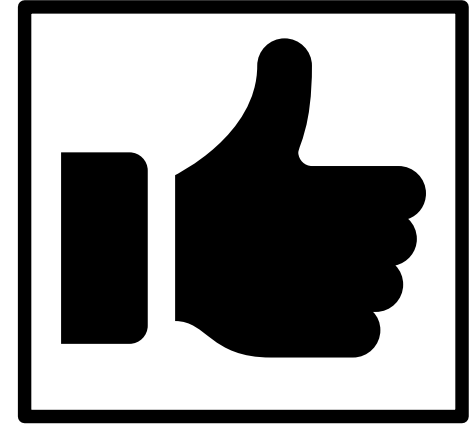


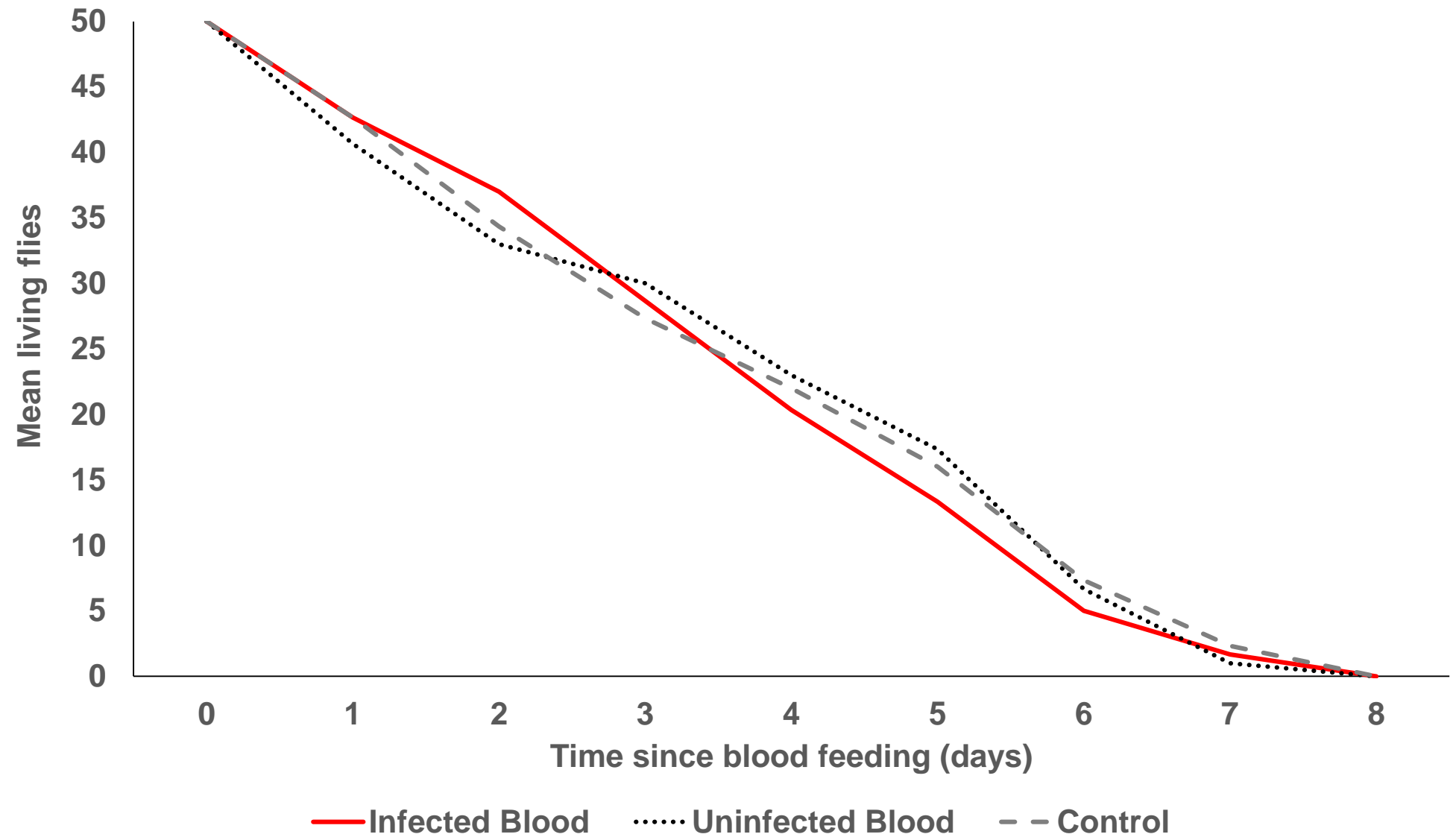
VISUALIZING MICROFILARIA

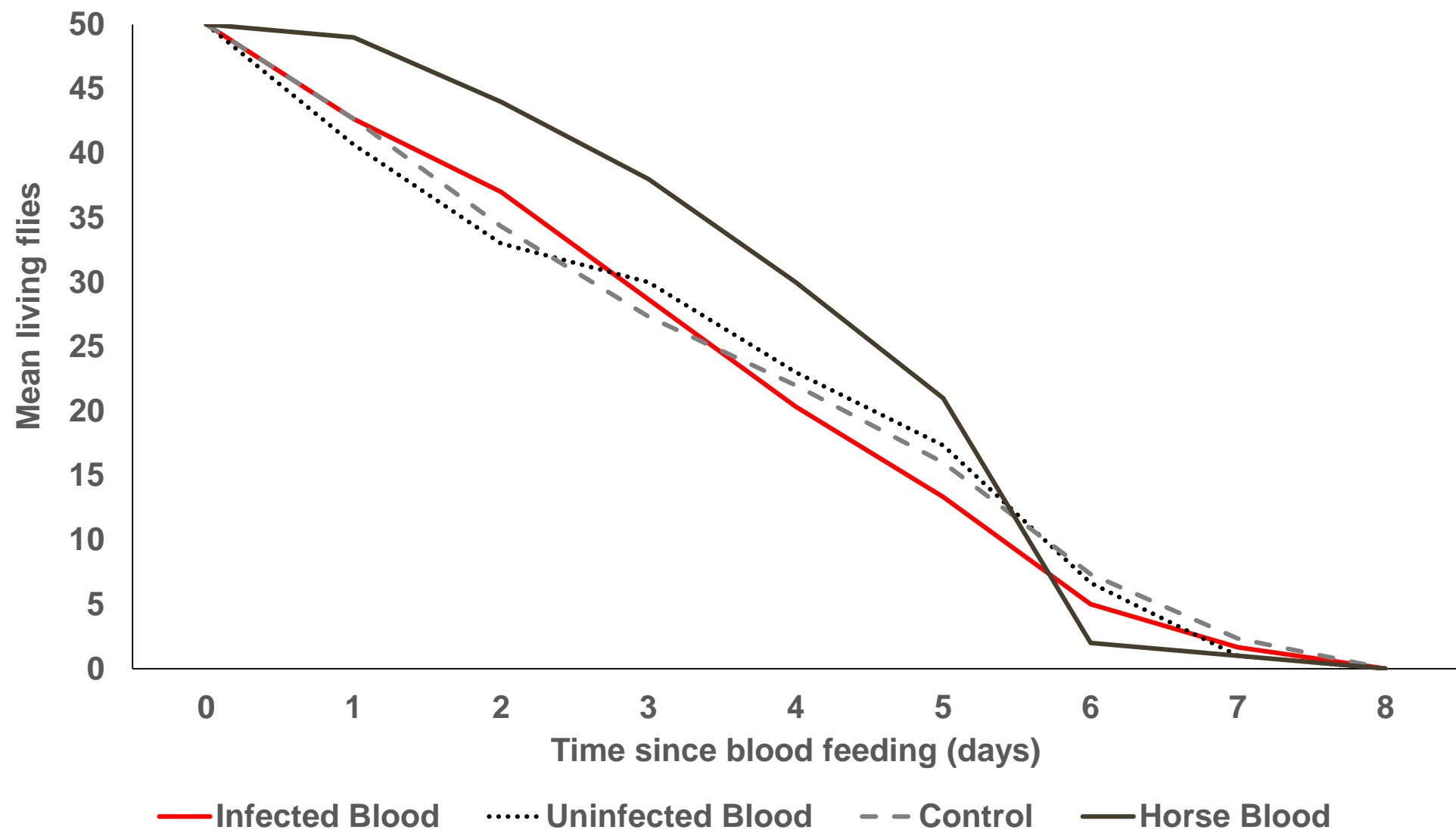


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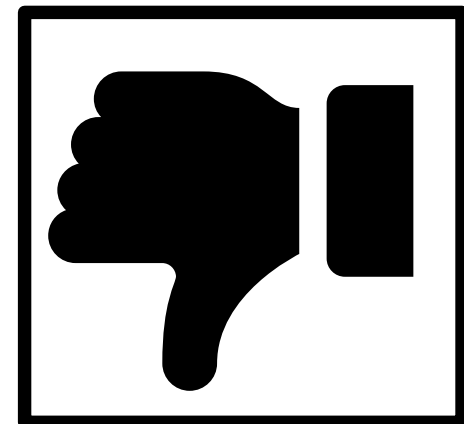
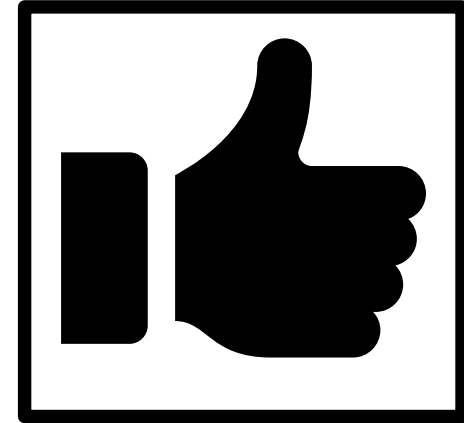






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