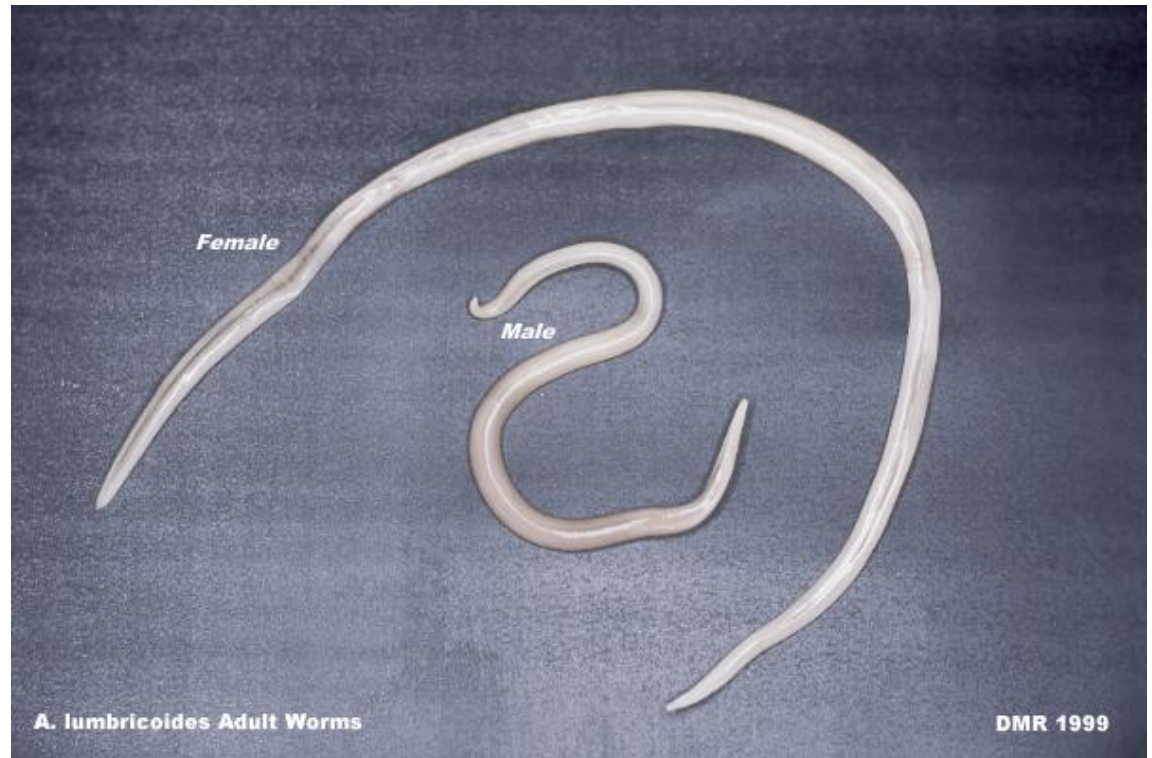


A microscopic image showing several long, thin, white, thread-like worms (Ascaris lumbricoides) against a dark purple background. The worms are tangled and curved, with some showing a distinct head region. The text is overlaid on the image in a large, bold, black font.

*Ascaris*  
*lumbricoides*  
(Roundworm)

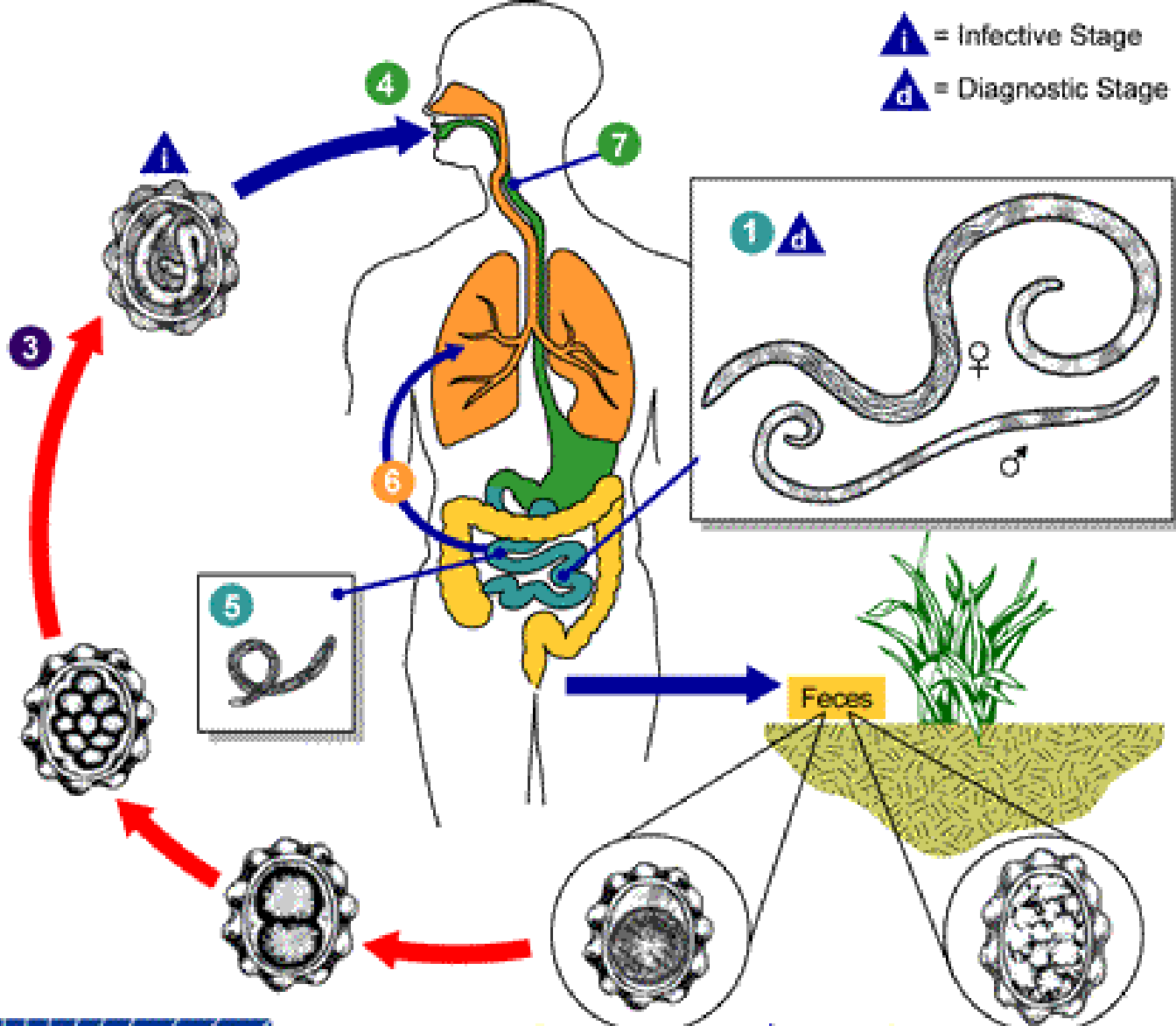
# Morphology

- White or Pink worm 10-35 cm in length, and about the thickness of a lead pencil



# Life Cycle

- Adults in small intestine of man → deposit eggs → passed in feces → eggs in soil become infective in 21 days → ingested by man → larva in intestine → circulation → right heart → lungs → break out of capillaries → coughed up → swallowed → mature in small intestine (mainly duodenum) to ovipositing stage at about 8 weeks after infection. Live 18 months



<http://www.dpd.cdc.gov/dpdx>

2 Fertilized egg **d**

2 Unfertilized egg will not undergo **d** biological development.

# Epidemiology

A microscopic image of a nematode worm, likely a pinworm, showing its characteristic long, thin, and slightly curved body. The worm is light brown or orange in color and is set against a blue background. The worm's head is at the top left, and its tail is at the bottom right. The body is segmented and has a slightly wavy appearance.

- Worldwide
- Uncommon in temperate and cold climates

# Symptomatology

- During larval transit through lungs
  - may have eosinophilic pneumonitis (Loeffler's)
- Adults may commonly cause vague abdominal discomfort
- Heavy worm burden
  - Some protein malnutrition may be seen especially in children due to competition for protein
- Less common but more important:
  - Mechanical intestinal obstruction, especially if many worms
  - Obstructive appendicitis
  - Migration
    - Liver
    - Peritoneum
    - Retrograde through mouth or nose
    - Through anus – usually caused by fever, pregnancy, noxious drugs

# Diagnosis

- Stool examination
- Occasionally by x-ray



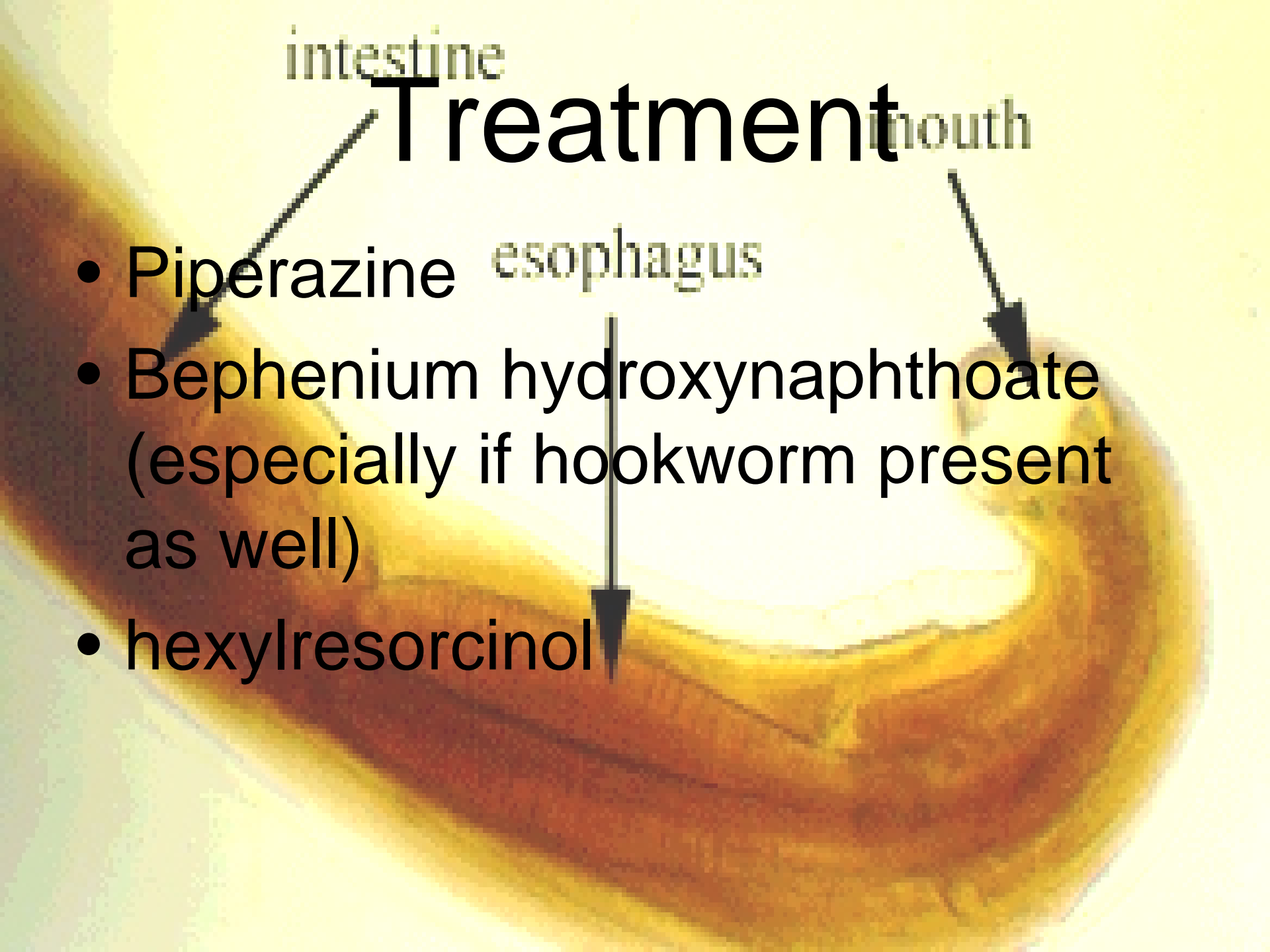
intestine

# Treatment

mouth

- Piperazine
- Bephenium hydroxynaphthoate (especially if hookworm present as well)
- hexylresorcinol

esophagus





# Prevention

- Proper disposal of fecal material
- Avoid uncooked vegetables in endemic areas



20µm