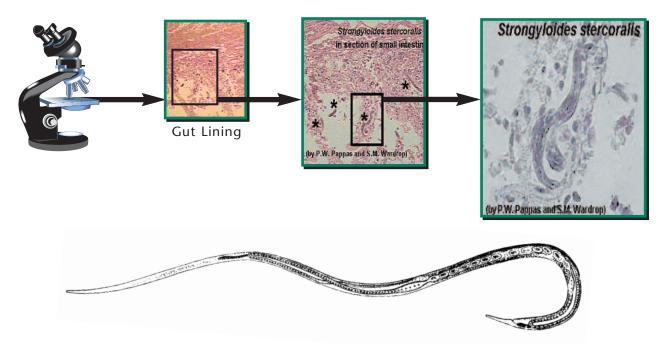


Strongyloidiasis is caused by worms living inside the body called Strongyloides stercoralis.

Other worms can make us sick, but Strongyloides can kill us.

The **adult female worm** (mewirri) is a very small, whitish, clear coloured worm. It is constantly moving and lives in the gut lining. It can only be seen with a microscope. Because it is a thin, transparent worm, light shines through its body and you can see the eggs inside. It lives on the gut cells and eats as it moves and makes its own path or burrow as it eats.



The adult female lays about 40 eggs each day in a burrow.

The eggs develop into **baby worms** (larvae) which wiggle and are very active. This is not where they want to grow up so they try to get out of the gut lining. This is because they are looking for food to eat which is bacteria (ditj'titj) in the faeces (gula). As the baby worms grow up they become infective teenage worms. Most baby worms leave the body in the faeces.



The **teenage worms** (infective larvae) look like the mother – but a lot smaller. They need only water and have only enough food stores for 3 weeks before they have to find a person to live in. If they don't find a person, they will die. The teenage worm finds a person by sensing the heat of the body. It may use an ambushing strategy like waiting in a drop of dew on a blade of grass, and when the person brushes their skin against the grass, the worm touches the person.



Direct Life Cycle



(4) Then, it takes a ride in the blood to the heart where blood is then pumped into the lungs.

③ When it gets through the skin, it can burrow anywhere in the body. Its food is body fluids and body cells.

2 The teenage worm enters the body through a hair follicle or scales on the skin where it secretes an acid to help it burrow through the skin. (5) In the lungs, it moves from the small airways to the larger airways where it is swallowed over into the stomach.

The young female then burrows into the gut lining and, like her mother, she feeds on the gut cells and lays eggs which develop into baby worms.

And the cycle continues.

① Outside the body Strongyloides worms live in faeces in moist, warm soil for up to 3 weeks.

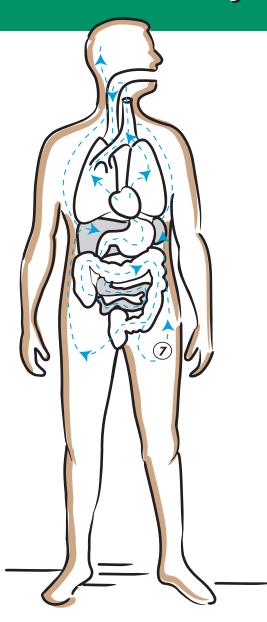
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Male

Female

Free living adult worms in soil

Autoinfective Cycle



Strongyloides is different from other worms because...



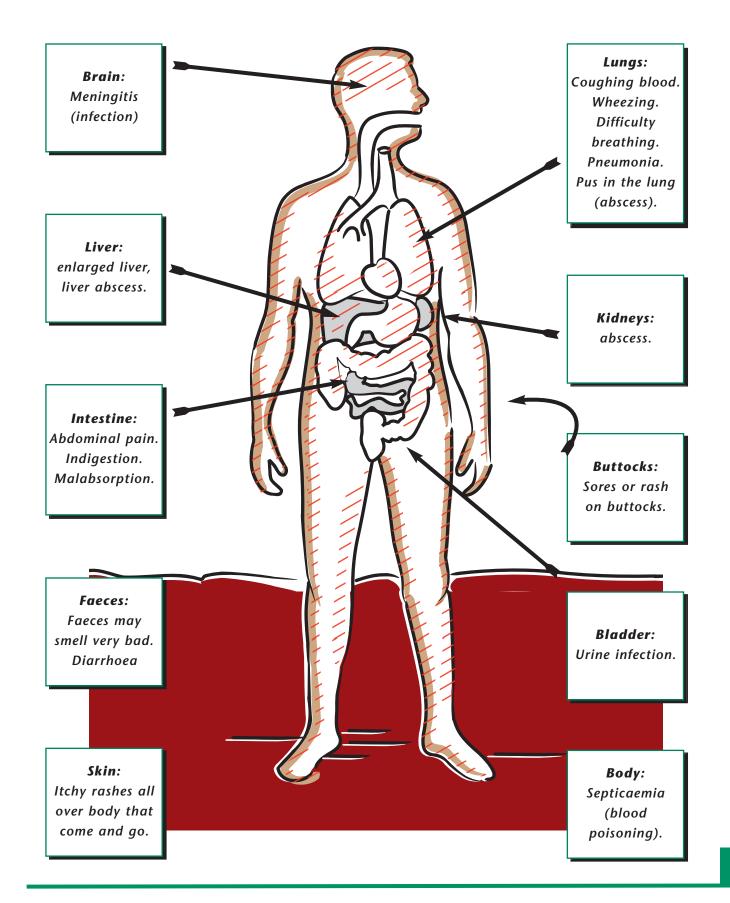
Some baby worms become teenage worms while in the gut. These teenage worms look slightly different like smaller forms of infective larvae. They are called **autoinfective larvae** and they feed as they go. These autoinfective larvae can travel anywhere in the body. Some return to the gut, become adult females and lay eggs and produce baby worms, and more infective and autoinfective larvae. Because they can breed this way without leaving the body, Strongyloides can stay in your body for the rest of your life.

When some of these autoinfective larvae travel from the faeces through the gut wall, they take bacteria with them which may cause infection in other parts of the body. These autoinfective larvae can travel to any organ of the body. A healthy body tries to kill autoinfective larvae but if the body's immune system is weak, then many more survive and reproduce into millions of worms. If they continue to breed out of control, this can result in death.

Strongyloides Story adapted from narration by Emeritus Professor Rick Speare

What happens when we have Strongyloides?

You may feel good, a little bit sick or very sick. The worms can infect any organ of the body. For example:



How do we get Strongyloides?



By touching faeces with Strongyloides worms in it.

By touching the ground close to the faeces which had Strongyloides worms in it.

By touching the damp plant or grass where the Strongyloides worms are waiting to get back into a person.

How can you avoid getting Strongyloides?

Make sure faeces is put in the right place – in a toilet or buried deep in the ground.

Keep your toilet clean so we don't give these worms a chance to find other people.

Be careful with faeces. Wash your hands straight away.

Wear longer clothing and shoes.







Can we be tested for Strongyloides?

Yes. Ask the clinic for a faeces or blood test for Strongyloides.



It is important to be tested for Strongyloides **<u>before</u>** being given certain drugs

that may weaken your immune system, for example, steroids.

How can we get rid of Strongyloides?

Special tablets need to be taken to get rid of worms completely.

Even if one worm remains in the body, it can reproduce more worms.



A 6 month follow-up is important to check that all worms have been completely killed otherwise more treatment will be required.

 Further information available at www.tropicalhealthsolutions.com/strongyloides-flipchart.pdf

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