



Prevention and Treatment of Intestinal Parasites



INTESTINAL PARASITES



A Global problem with a local solution

Half of the people on earth have intestinal worms. So why worry? Millions of people suffer illness because of these parasites! Children especially can become malnourished



Parasites can eat a third part a child's food.

MALNUTRITION

It is one of the reasons that
Many Children
Get Sick and Die.



SIGNS OF MARASMUS-TYPE MALNUTRITION

Face of an old person.

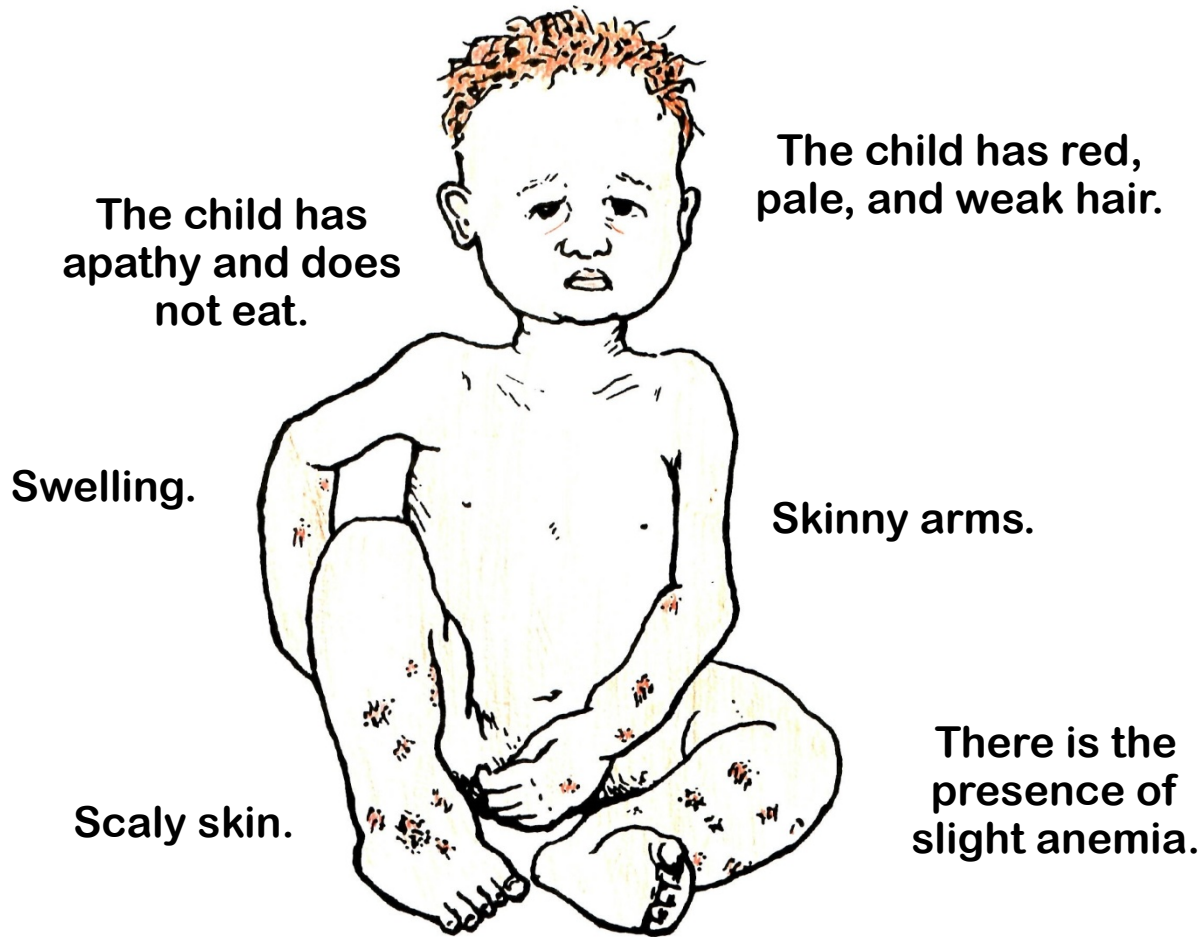
The child has an appetite.

Severely underweight.

The child doesn't have oil under the skin.



SIGNS OF KWASHIORKOR-TYPE MALNUTRITION





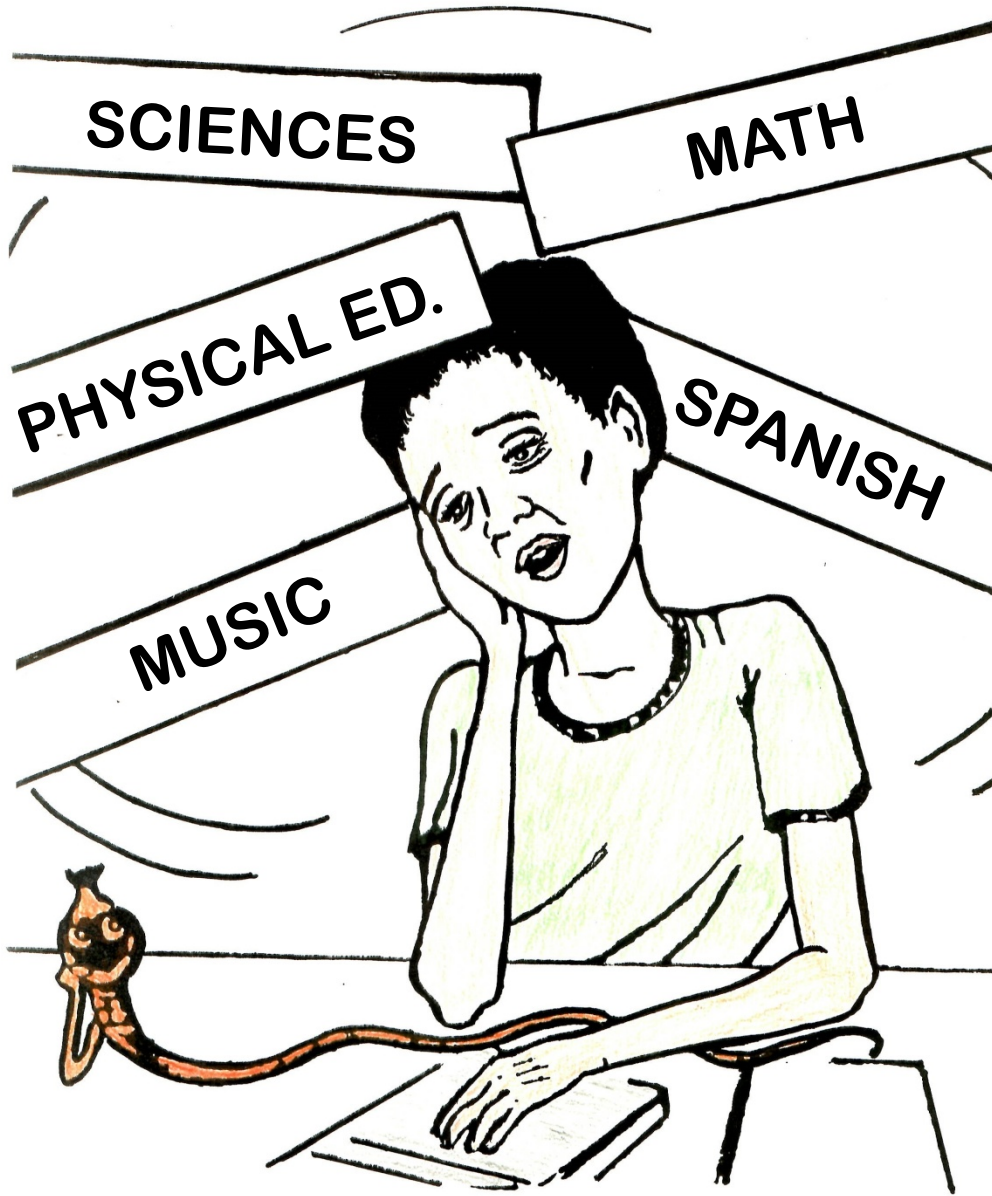
What are some signs that a child may be sick from parasites?

Lack of appetite.

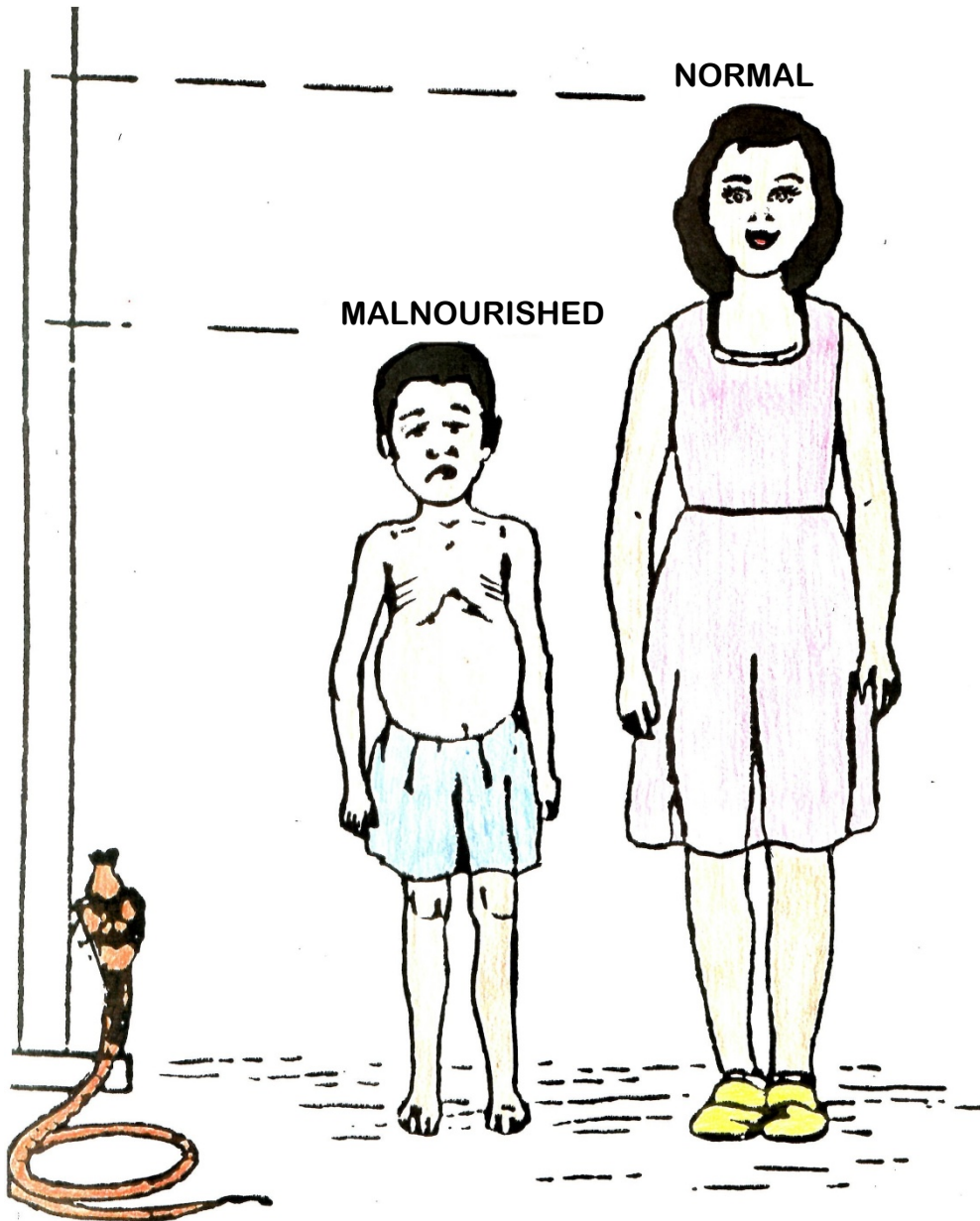




**Also,
parasites
can cause
headache
and
dizziness**



**Parasites
can affect
how well a
child can
learn in
school**



**Some child may
be stunted in
their growth
and physical
development**

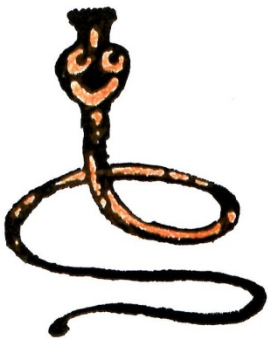
Anal itching,



Diarrhea,



And bloatedness



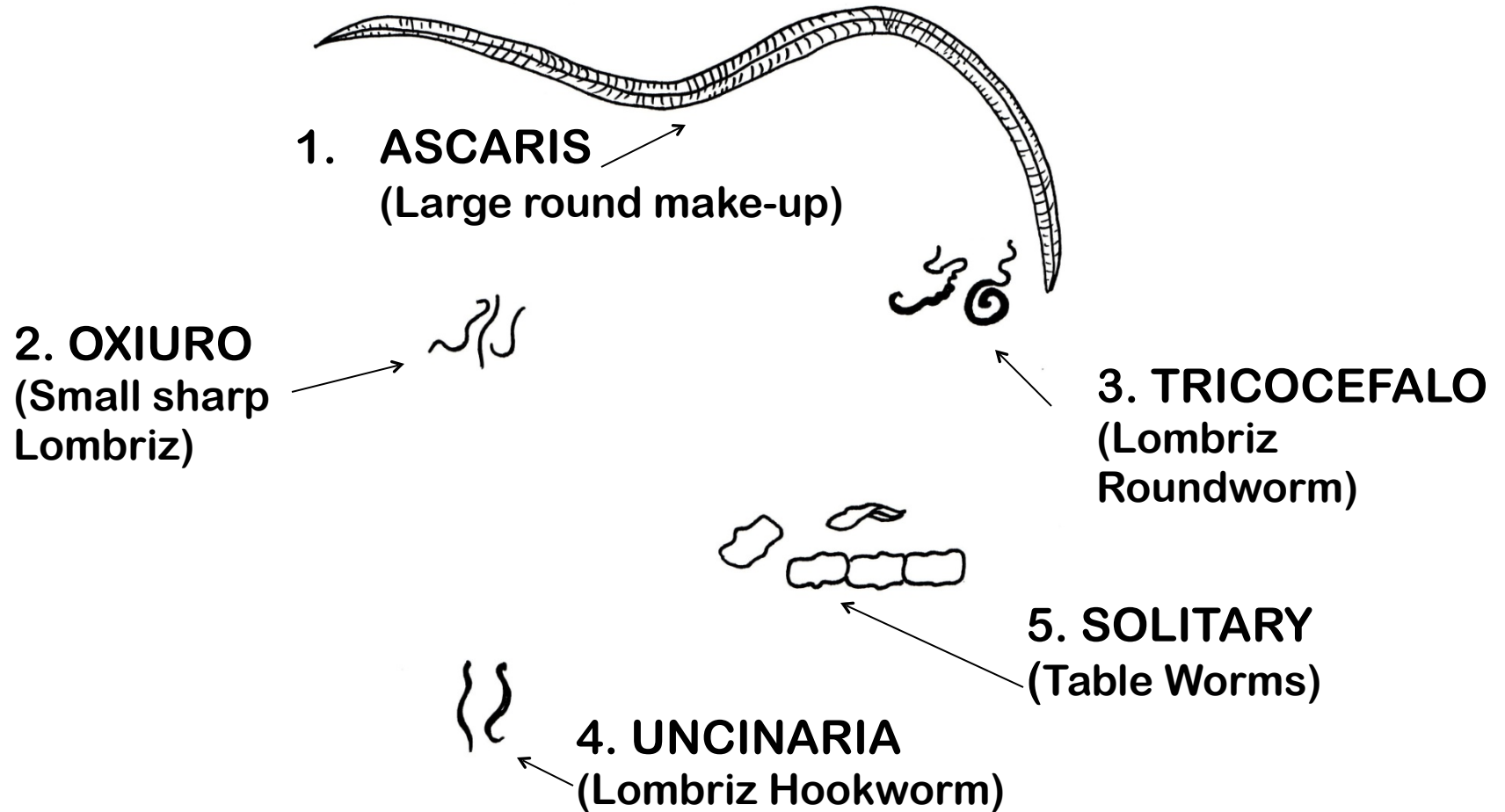


**Children
may have
anaemia,
tiredness,
and lack of
energy to
play or
work**

**Parasites
passing
through the
lungs can
cause cough,
bronchitis and
pneumonia**



WHAT ARE INTESTINAL PARASITES?





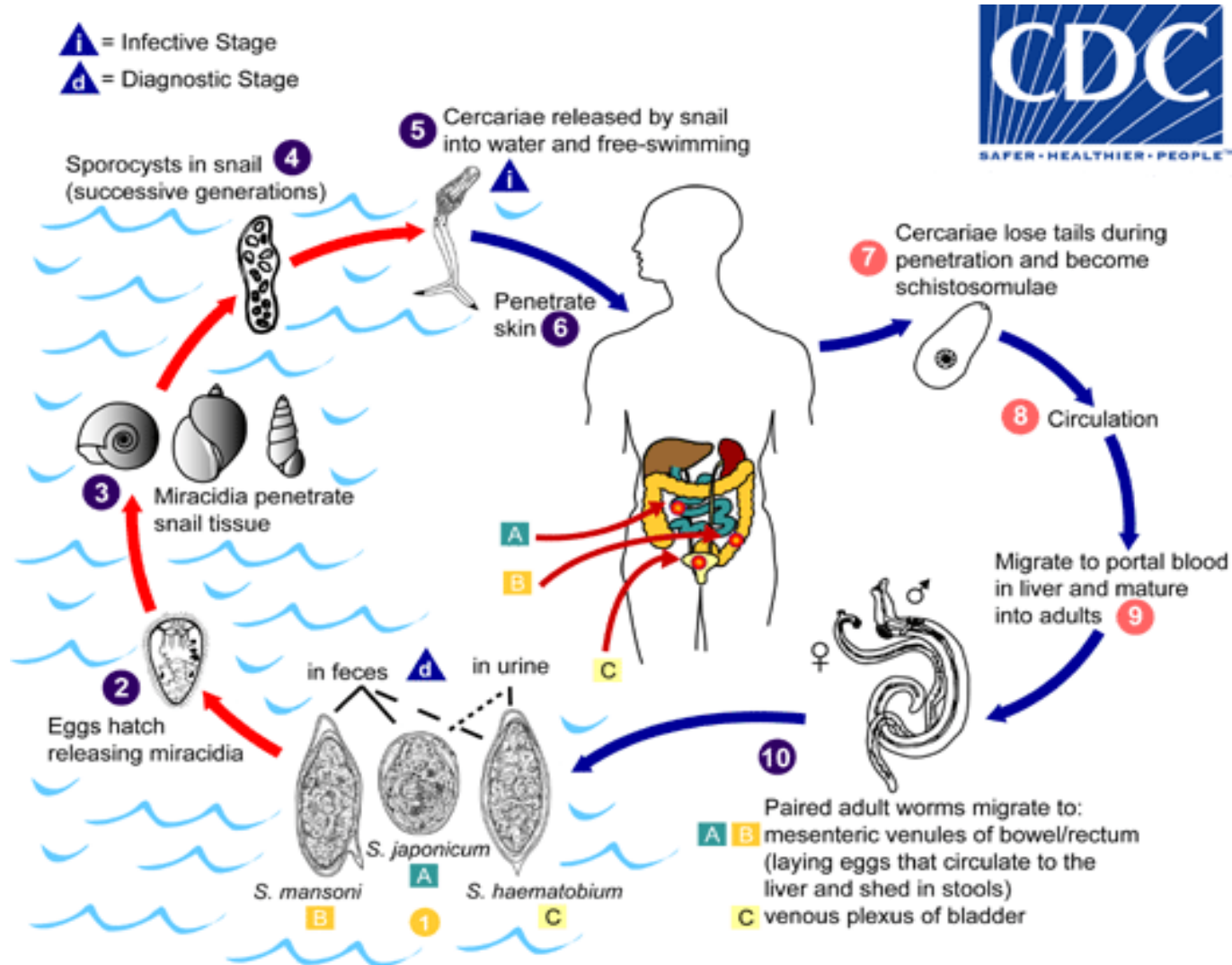
Schistosomiasis

- This is a unique disease with a tendency to be very serious in communities that are in proximity to rivers, lakes, and irrigation systems





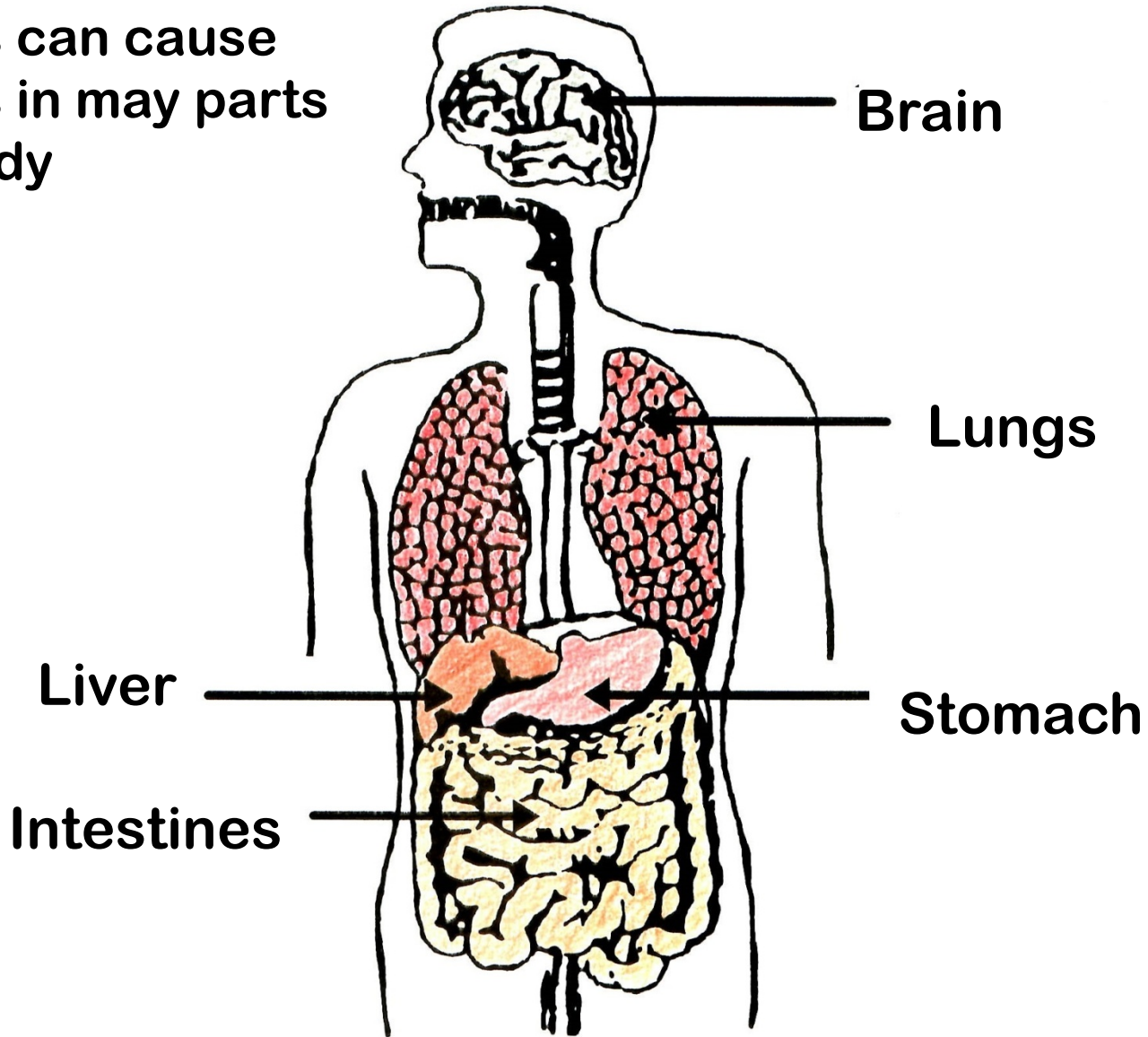
Schistosomiasis Life Cycle



Urine or feces from a person who has Schistosomiasis will contain parasite eggs. As human waste contaminates fresh water, eggs hatch to release MIRACIDIA which enter snails, reproduce twice, then re-enter water as swimming CERCARIAE that penetrate human skin, shed their tails, and circulate in the blood as SCHISTOSOMULAE which go to the liver, mature to adult worms (up to 2 cm) mate, shed eggs into the bloodstream which go to the liver, bowel and bladder, and break through the lining into the urine and stool, to re-enter water.



Parasites can cause problems in many parts of the body

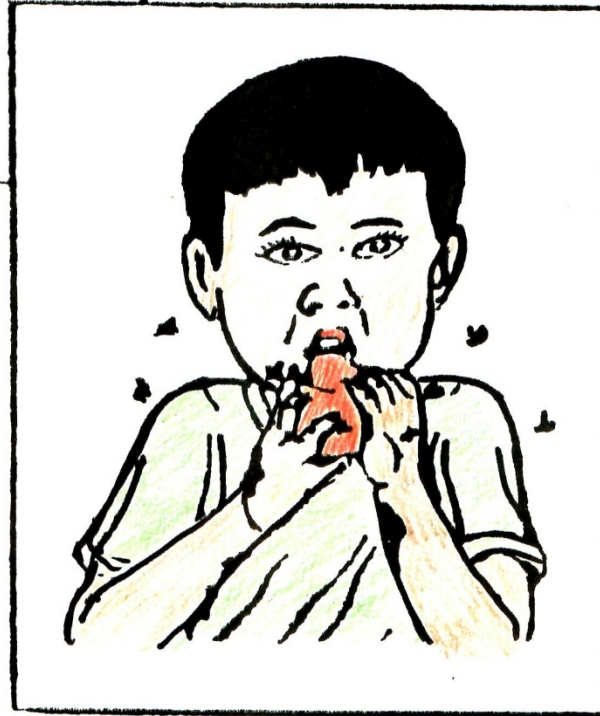
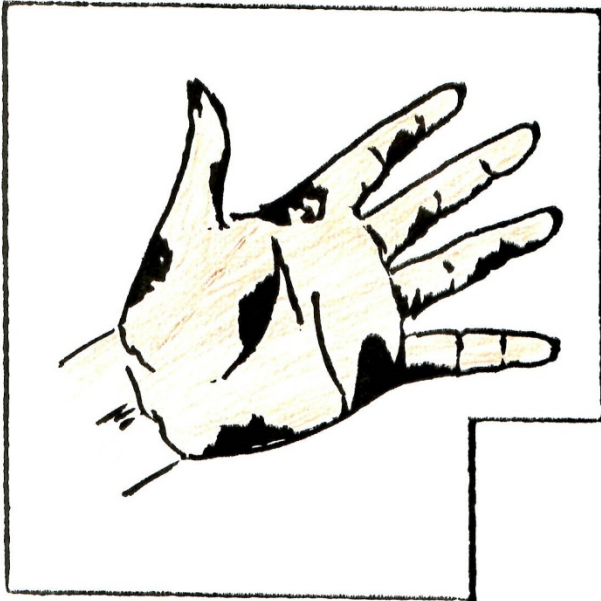


So, why do people get intestinal parasites?

By drinking contaminated water.



By walking barefoot in the dirt.



**By eating with
unwashed
hands.**



When people have parasites and other illnesses like diarrhea, they can spread to others by defecating outdoors.



By eating meat that hasn't been well-cooked can also spread another kind of parasite that attacks muscles.

HOW DO WE PREVENT PARASITES?

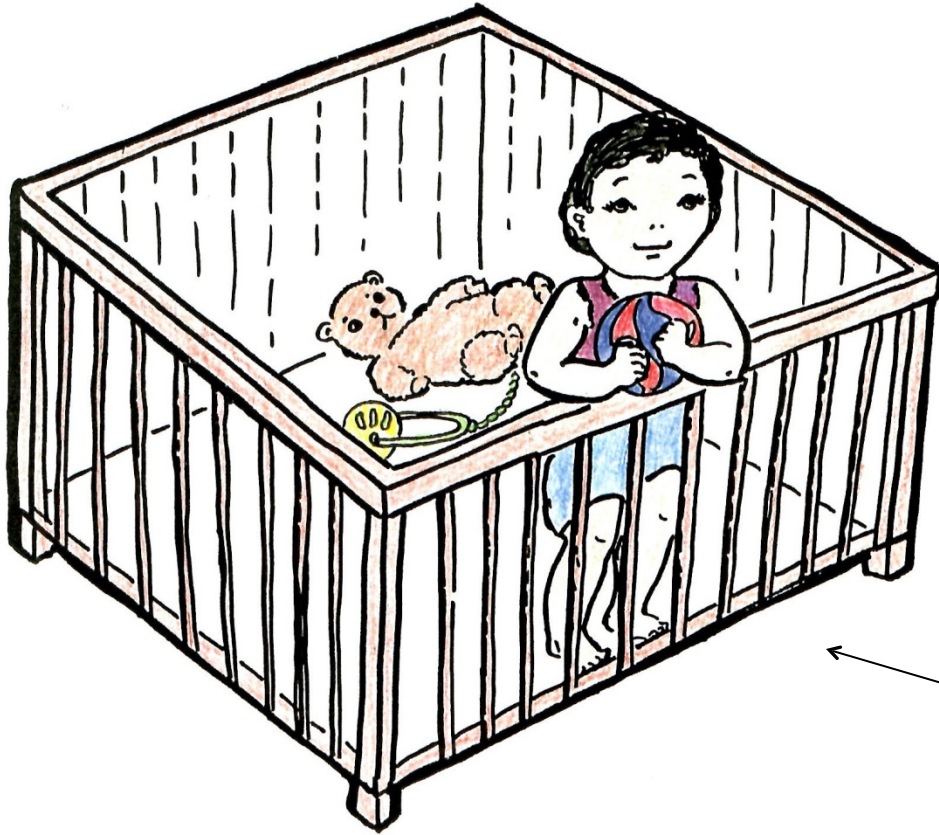




Wash hands and faces before eating. Supervise and actively feed young children. Do not leave your child alone while eating!

Lift the child onto your lap, put food right into their mouths and speak to them lovingly.

**How can we
keep babies
clean and out of
all danger?**



**Make a
special play
area.**

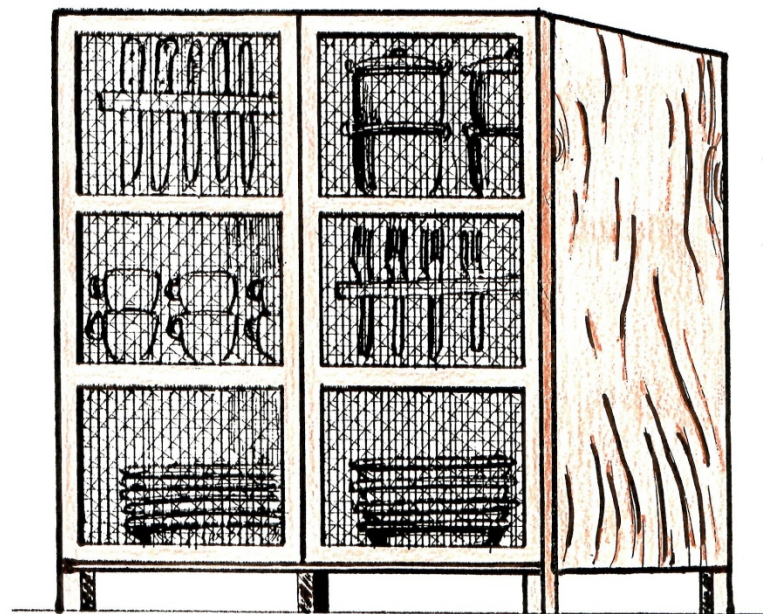


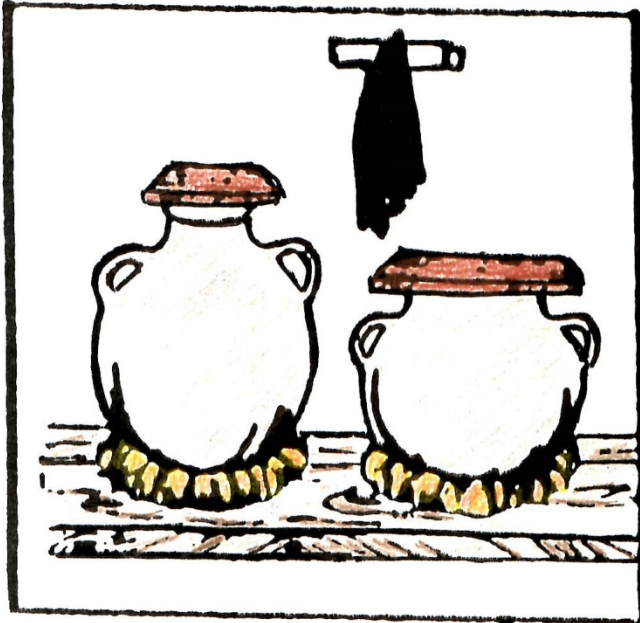
**Wash
foods,
fruits, and
vegetables
well.**



To protect food, it should be covered with a clean cloth or placed in a container with a lid. The same should be done with the utensils with which it is prepared.

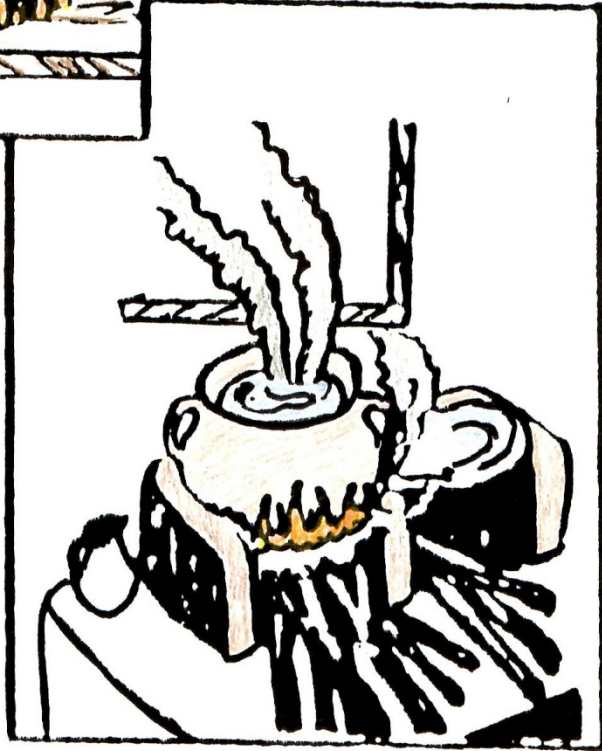
Keep the dishes and utensils in a clean and safe place to protect them from flies, mice, cockroaches, and animals.





We must keep the water clean!

Wash the food and make sure it is cooked well:



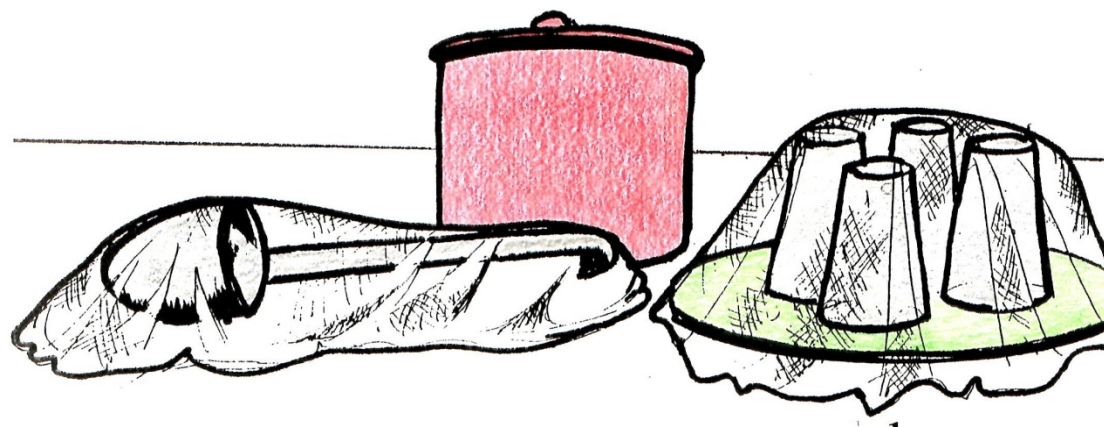
Boil, or Filter and chlorinate your drinking water and water for the kitchen.

The water to drink or prepare the food must be pure and uncontaminated.

To ensure that the water is not contaminated with microbes it should be boiled or filtered and chlorinated.

The container for the boiled water must be kept covered, taking care not to introduce glasses, cups, or hands when using the water.

*See the MAMA PowerPoint on Water Filtration and Chlorination for further information.



**Use a bucket with a spigot to store your purified water.
Keep it covered.**



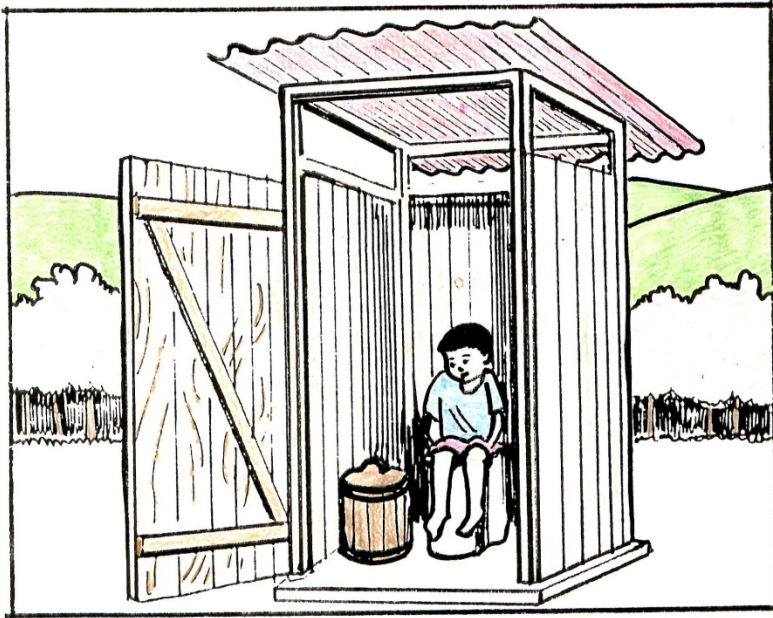
Now you can fill your cup with pure, filtered and chlorinated water.

See MAMA PowerPoint on filtration and chlorination for home use for further information on using clean water.



Use the latrine

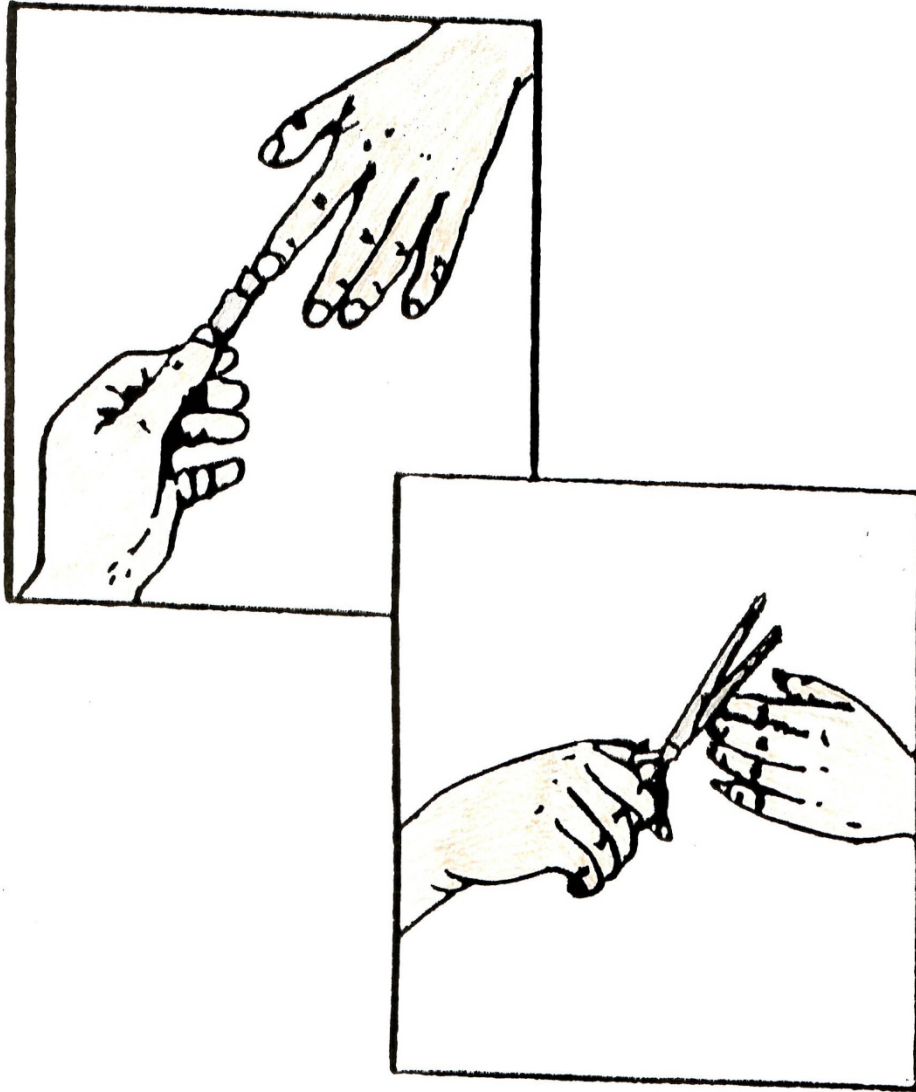
OR bury the feces



WASH YOUR HANDS:



- a) **Before and after preparing food**
- b) **Before eating**
- c) **After using the latrine or changing a diaper**
- d) **After work in the field with earth or animals**



**Cut your nails
each week.**

The use of clean clothes and a daily bath...



...are important for personal hygiene and to protect the health.



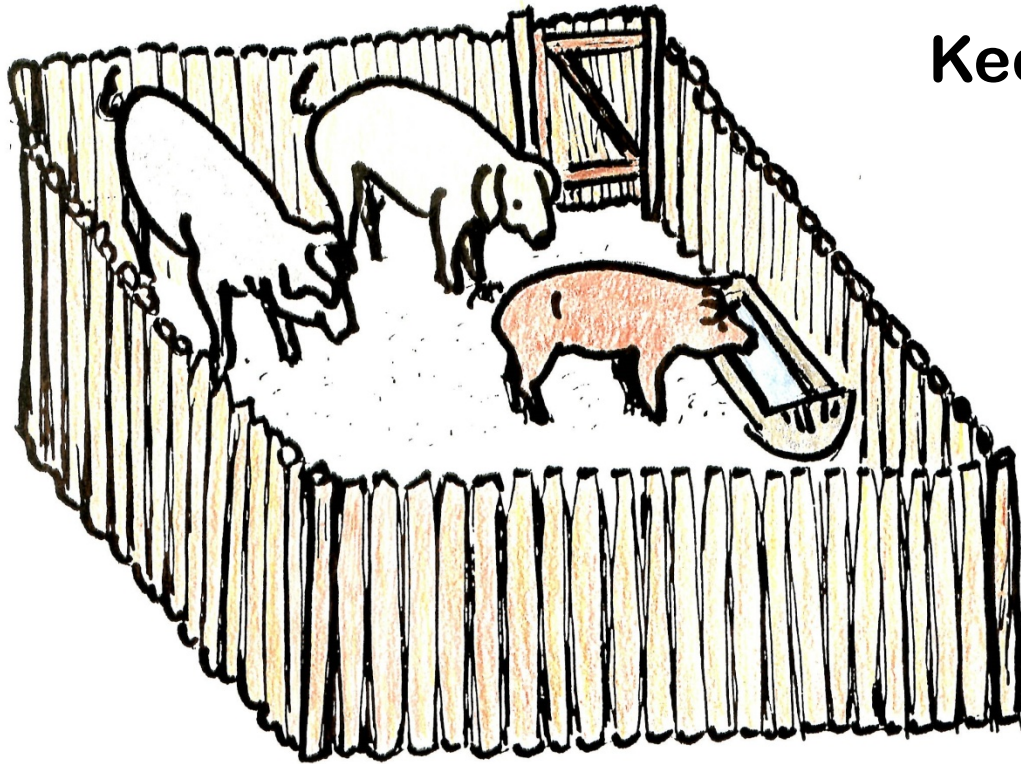
**Wear shoes or
flip flops at all
times.**



Cover the garbage.

Burn it or bury it.





Keep animals out of the house.

Build enclosed shelters for the animals.

Albendazole

400mg Chewable Tablets

International Norms for Treatment of Intestinal Parasites in Community Deworming Campaigns Given with Megadose Vitamin A Capsules

Infants under 1 year	No treatment with Albendazole
Children 1-2 years (12-24months)	200mg (1/2 tablet) (Crushed and suspended in water)
Children over 2 years and Adults	400mg (1 tablet) (Crushed and suspended in water up to age 3, or as long as needed)
Pregnant Woman?	Safe in pregnancy after the first 3 months

Always follow the guidelines of your Ministry of Health!



Schistosomiasis Treatment Dosing by Height Praziquantel 600 mg Tablets

Height in cm	Number of Tablets	Total Dose
60-84	1/2	300 mg
84-99	3/4	450 mg
99-110	1	600 mg
110-125	1½	900 mg
125-138	2	1200 mg
138-150	2½	1500 mg
150-156	3	1800 mg
156-160	3½	2100 mg
160-164	4	2400 mg
164-178	4½	2700 mg
≥178	5	3000 mg

For young children, tablets can easily be crushed and mixed with flavoured juice to make them more palatable and easily swallowed.
Give one extra tablet of Praziquantel 600mg to overweight or obese adults.

Ref: *Schistosomiasis in African infants and preschool children: let them now be treated!* Trends in Parasitology, April 2013, Vol 29, No. 4 p 197-204 Corresponding author J. Russel Stothard, Parasitology Dept, Liverpool School of Tropical Medicine jrsto@liv.ac.uk (For Pediatric dosing)

Dosing of Praziquantel by Height in Sub-Saharan African Adults [Am J Trop Med Hyg.](#) 2014 Apr 2; 90(4): 634–637 (For Adult height modification. Also, recommendation to give extra Praziquantel 600mg to overweight and obese adults
Chart created by PB - MAMA Project 28March2019





FIGHTING THE PARASITES

In a community where there is a lot of parasitic disease, it is very reasonable to de-worm collectively every six months. It is practical and safe to use a treatment with an Albendazole 400 mg tablet in one shot for adults and children (between 1-2 years of age it is 200 mg – ½ tablet). Do not use during pregnancy before the first three months. It may be used during lactation. Always respect the guidelines of your Ministry of Health



Adverse effects: Sometimes it causes diarrhea and stomach pain. If the child is very full of parasites, Piperazine can be taken at the same time as Albendazole, to prevent the parasites from coming out through the mouth or nose.

COMMUNITY ACTIVITIES

Each community can carry out activities to work together with the community leaders, health officials, schools, and other groups. These activities can help:

- Evaluate your community – your resources and your problems
- Take a census of the population of your village
- Observe the growth of the children to know how many are healthy and how many are malnourished and what is the degree of malnutrition
- Have seminars, trainings, and orientations
- Learn from the elderly: for example, to recognize edible wild plants to improve the diet of the malnourished children
- Facilitate and promote campaigns of environmental Hygiene, deworming, and distribution of Vitamin A.

