# **TOWARDS BETTER HEALTH**

### **SANITATION AND DISEASES**



### THE TITLES OF THE FLIP CHARTS ARE

- 1. Sanitation and Diseases
- 2. Wastewater and Cattle Dung/Garbage Disposal
- 3. Disposal of Human Excreta—Sanitary Latrine
- 4. Vector Control
- 5. Personal Hygiene
- 6. Home Sanitation

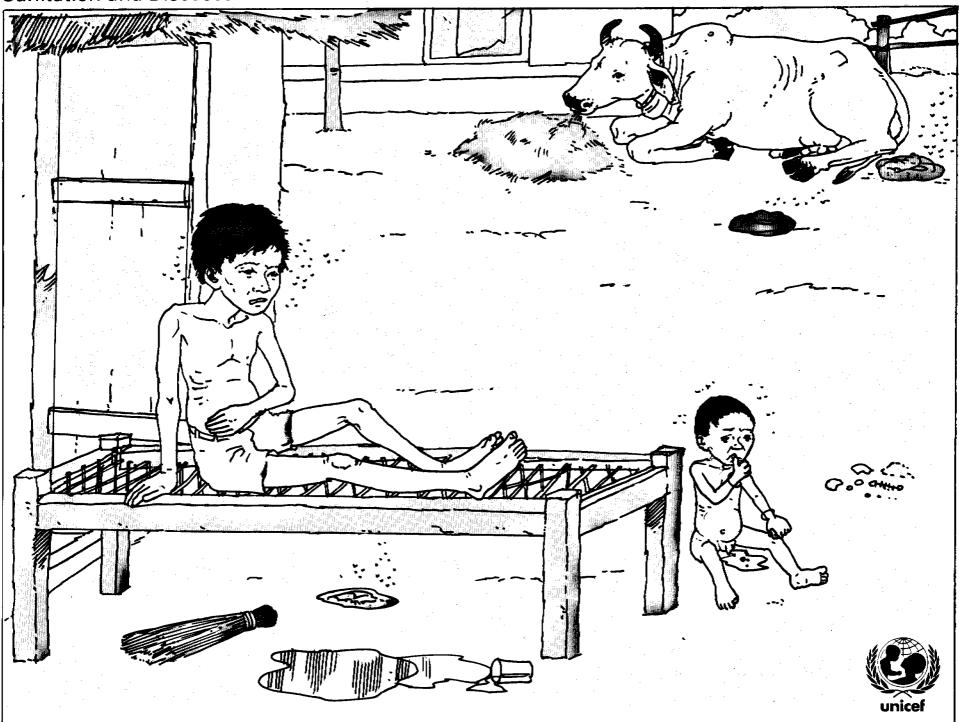
The Texts of these Flip Charts are available in English, Hindi, Telugu, Tamil, Oriya, Marathi, Bengali, Gujrati, Kanada, Malayalam and Urdu.

WATER AND ENVIRONMENTAL SANITATION SECTION
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CARD 1 Many people, particularly children get sick or even die as a result of poor sanitation.

The main source of disease is FILTH, of which HUMAN EXCRETA is a major source.

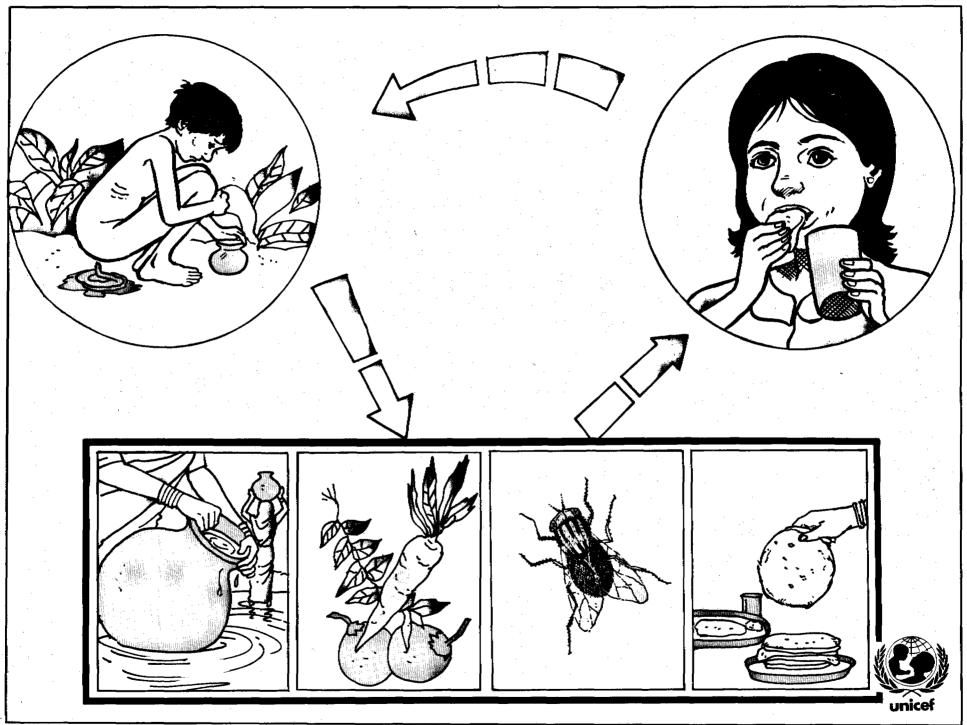
The most common excreta-related diseases are diarrhoea, cholera, typhoid, hepatitis, worm infestation and dysentery.



**CARD 2** Now let us see how excreta-related diseases can be transmitted from one person to another:

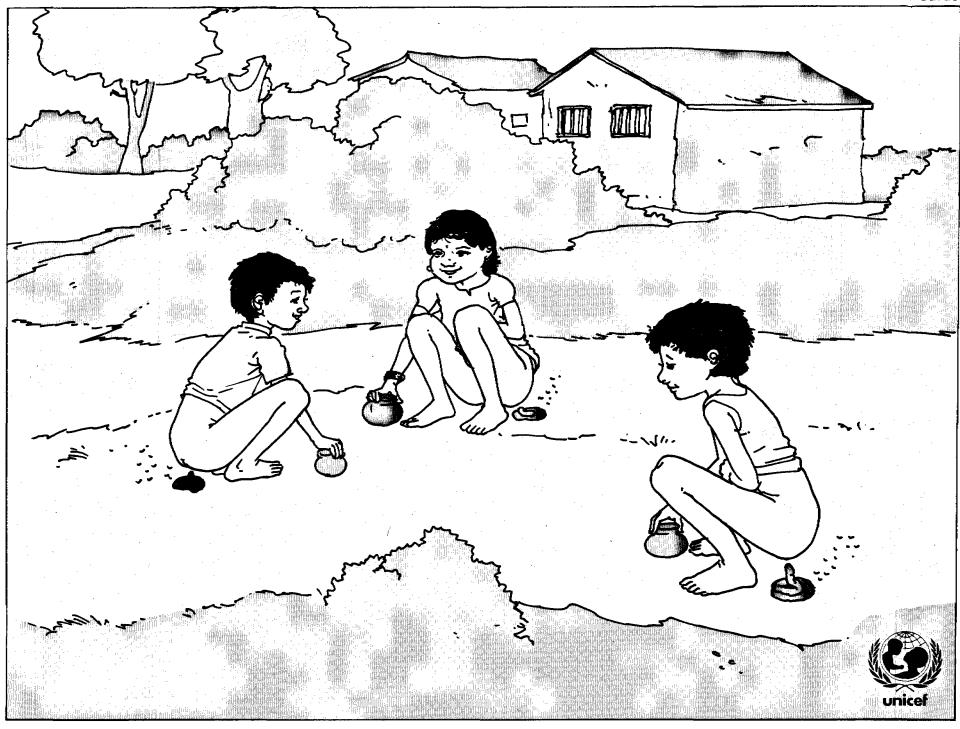
The faeces of a sick person contain disease-producing organisms called pathogens. These pathogens can cause diarrhoea, cholera, dysentery, hepatitis, typhoid and worm infestation. In India, diarrhoea is a major killer of children.

There are chiefly four ways by which faeces find its way to a person's mouth directly and indirectly. These are through (1) water: (2) vegetables: (3) insects such as flies, cockroaches: and (4) hands.



## CARD 3

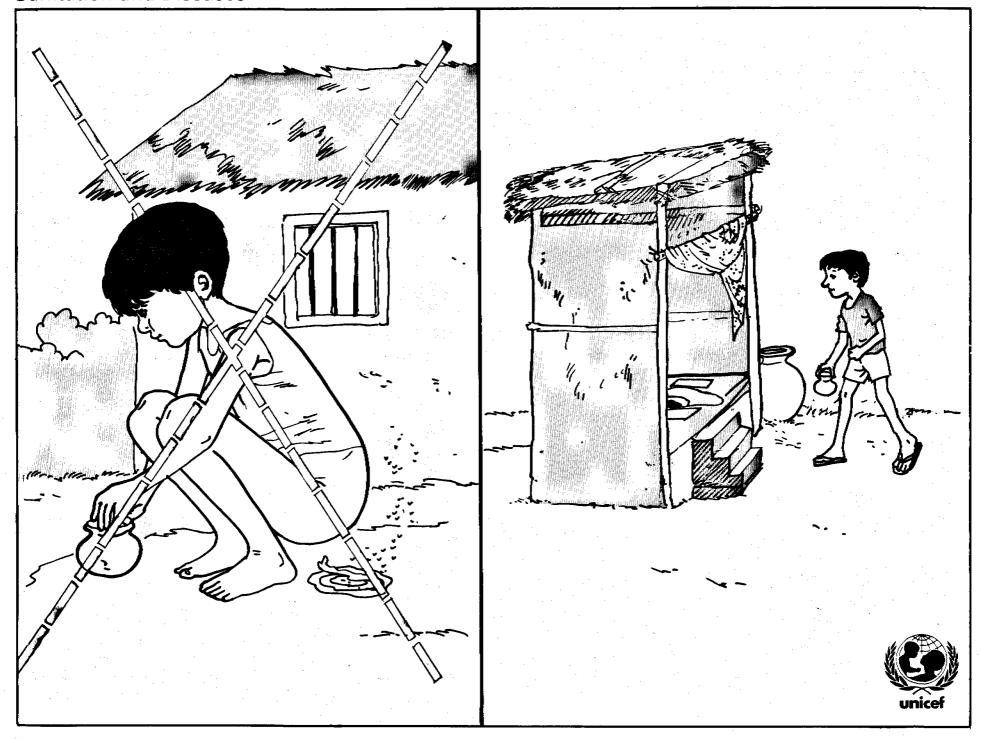
Open defecation is practised in almost all rural areas and some urban areas. It is one of the major factors leading to insanitary environment. It is responsible for the high mortality rates particularly among children of pre-school age. Safe disposal of human excreta by means of sanitary latrines is an effective intervention in combating faecal-borne diseases.



**CARD 4** STOP TRANSMISSION OF DISEASES. (1) DO NOT DEFECATE IN THE OPEN: (2) USE A SANITARY LATRINE.

(The subject of Sanitary Latrine is discussed under the topic "Disposal of Human Excreta—Sanitary Latrine.)

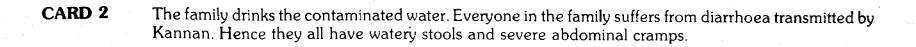
Let us explain each way in detail.

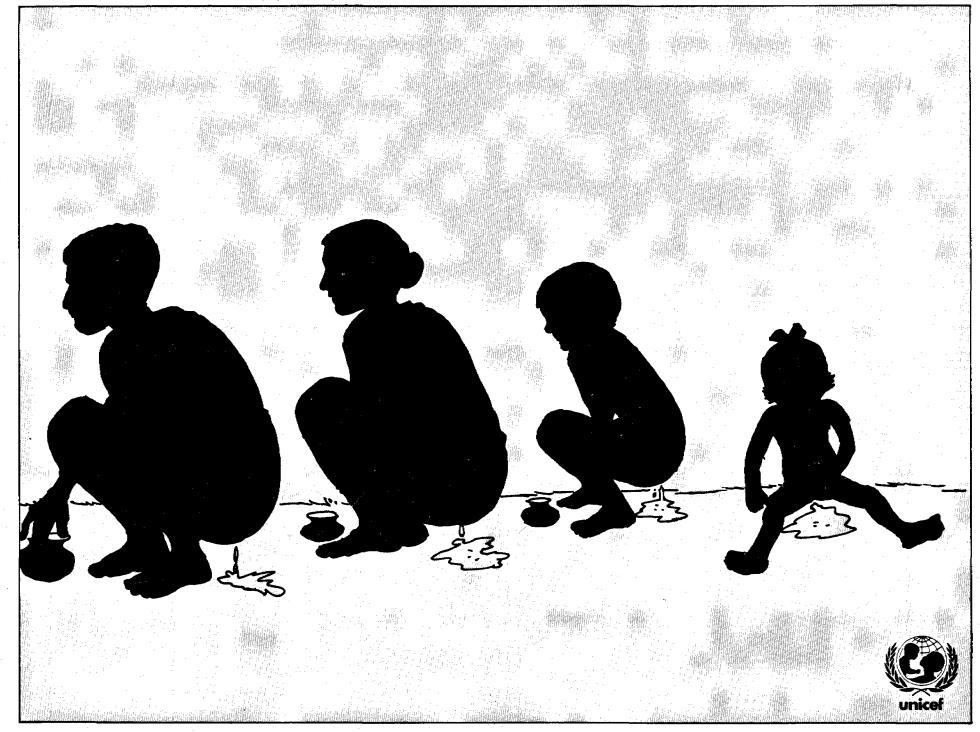


CARD 1 In rural areas people bathe, wash clothes and their animals, and even clean their mouth with river or pond water. The same water is also collected for drinking. Now, let us see what happens.

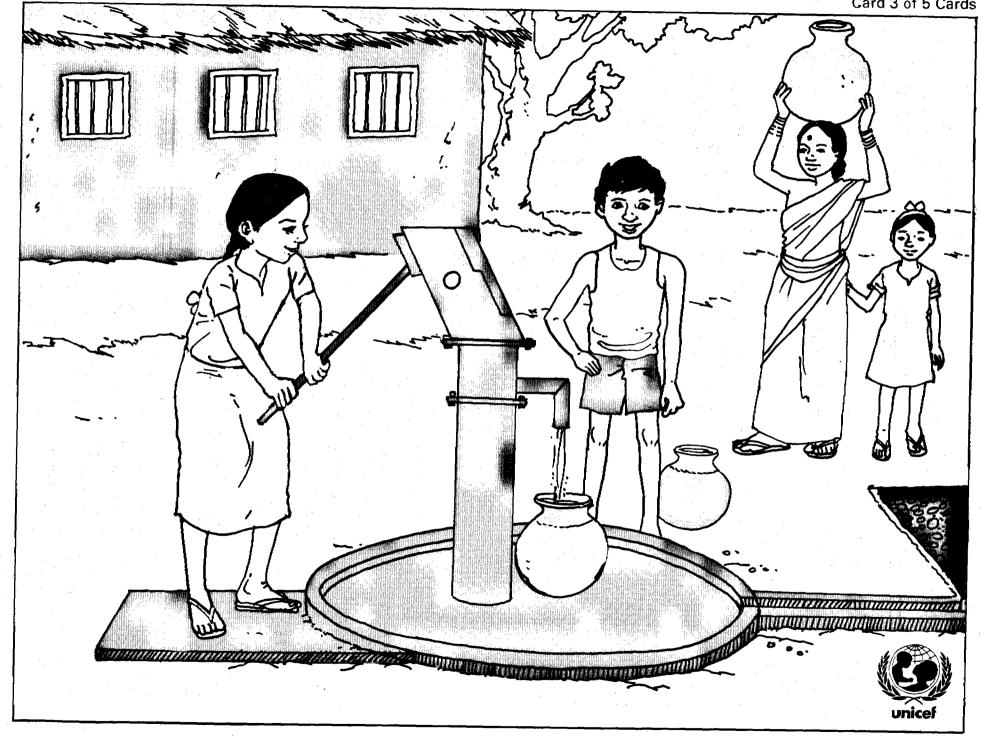
Kannan suffers from diarrhoea. He defecates near the river/pond. The faeces containing the pathogens reach the water by many ways; for example, carried by the wind, rainwater, animals or even human feet.



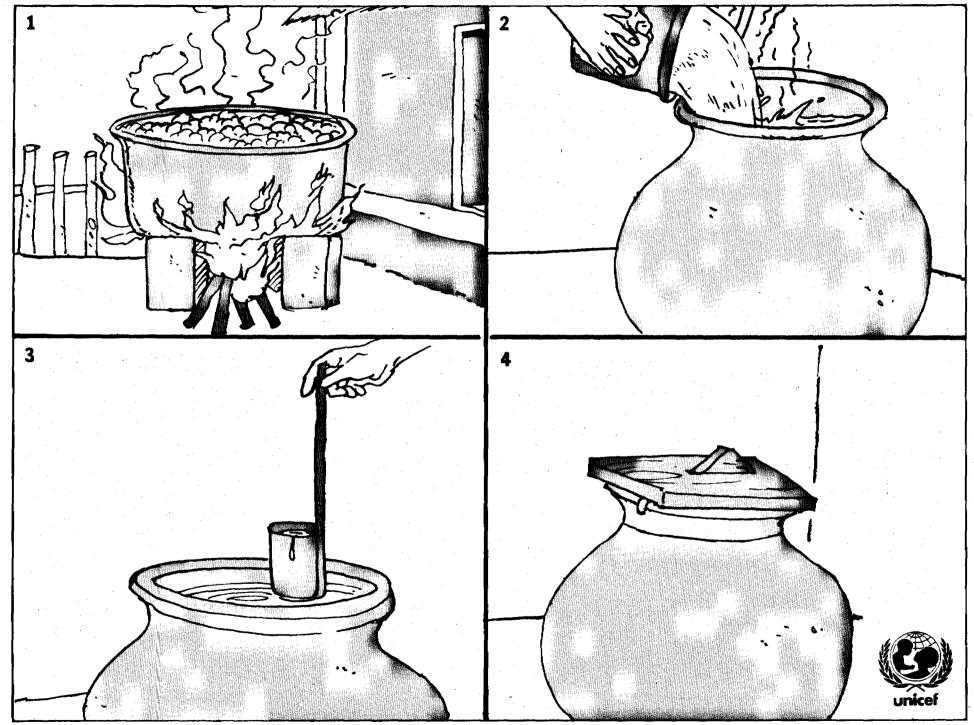




**CARD 3** To avoid catching diseases, always take drinking water from protected sources. Use a handpump or a public tap. These sources provide better water than ponds, rivers or even open wells.



If there is no handpump or public tap in your area, you should boil the water for drinking. After boiling, store the water in a clean pot and cover it. Use a clean ladle to take water out for drinking. Alternatively, chlorine can be added to disinfect the water.



#### CARD 5

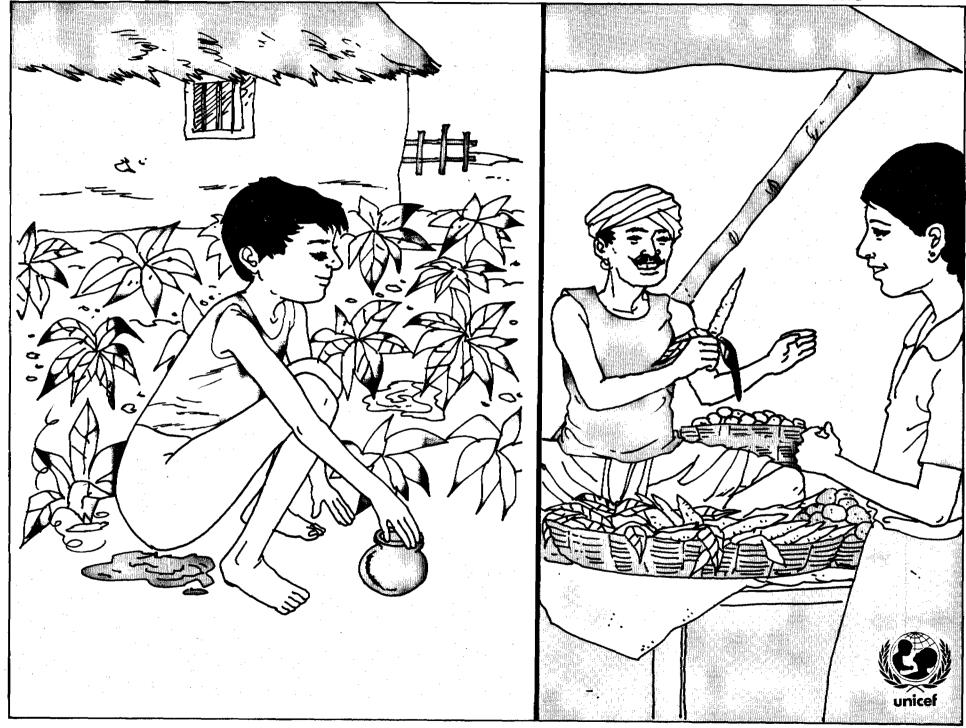
If your children get diarrhoea, you prepare a solution by mixing a scoop of sugar or a piece of jaggery (size of betel nut) and a pinch of salt in one glass of water (200 ml). Give your child one glass of this solution to drink after every watery stool he (she) passes. If you do not have sugar or jaggery at home, you can give him a glass of rice water with a pinch of salt (or water in which dal is boiled; or coconut water). When a child has diarrhoea, his body loses water and salt. If a stool is more watery, he is losing more water. If he loses too much water and salt, and his body is not replenished with water, the child will die. This solution or the rice water with salt will replace the water your child lost through watery stool.

For a baby, you should not stop breast feeding. For older children, you should feed them well at all times even during diarrhoea. A well-fed child has the strength to fight against the illness. If the child does not get better in two days, the mother should take the child to the nearest health centre.

STOP DISEASE TRANSMISSION (1) DO NOT DEFECATE IN THE OPEN: (2) USE A SANITARY LATRINE: (3) BOIL DRINKING WATER.



Ram Singh has dysentery. As usual, he defecates in his neighbour's agricultural field where vegetables are growing. The disease-causing organisms in the faeces, called pathogens, contaminate the vegetables. These vegetables are then sold in the market.



### CARD 2

You buy the contaminated vegetables. Since the pathogens are so small, they are not visible to the naked eye. If you do not wash the vegetables properly and eat them raw, you are all eating the pathogens from the faeces.

NOTE: (Even for vegetables which are to be cooked, it is important to wash them properly).



CARD 3

You and your family therefore get dysentery from people like Ram Singh and from your own carelessness about washing vegetables. Remember that repeated attacks of dysentery weaken the body and can even be fatal particularly among children.

STOP TRANSMISSION OF DISEASES: (1) DO NOT DEFECATE IN THE OPEN (2) USE A SANITARY LATRINE (3) WASH VEGETABLES THOROUGHLY BEFORE EATING THEM RAW (4) ALL COOKED FOOD SHOULD BE WELL COOKED.

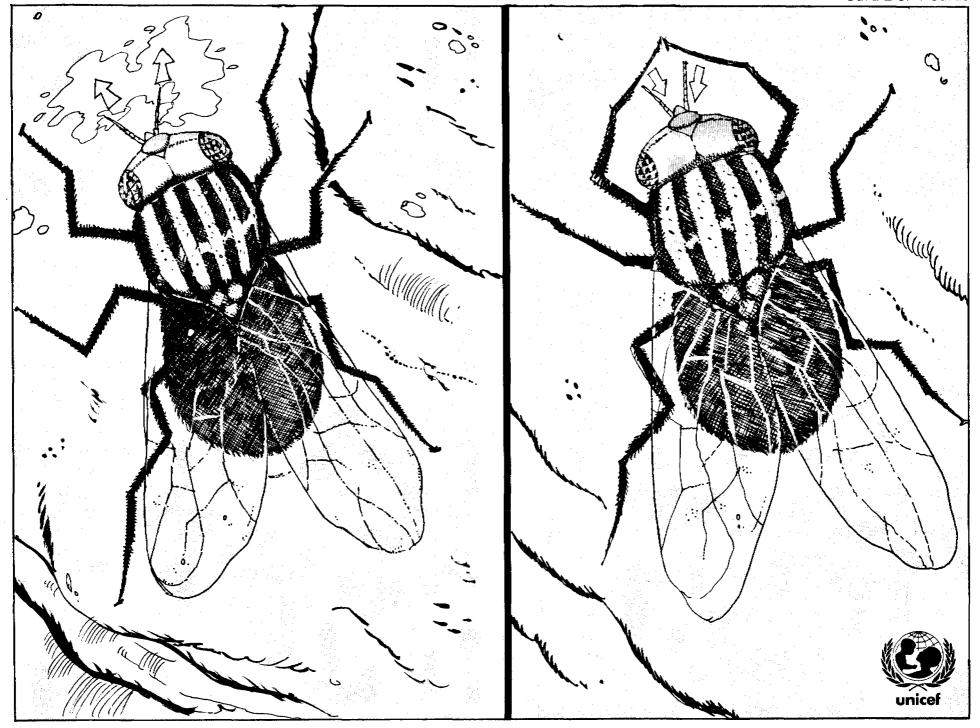


**CARD 1** Now let us see how insects can transmit diseases.

Raju is 4 years old. He has always defecated near his house. His parents and neighbours do not mind because they believe that children's stools are harmless. This is not true: children's stools carry more pathogens, for the same weight of excreta, than adult excreta. One day he has diarrhoea and defecates near his house.



Flies sit on the excreta. Faeces containing pathogens get stuck to their hairy legs. At the same time, the flies feed on the excreta. They do it by first vomiting on the food to soften it and then sucking the liquid excreta.



**CARD 3** Some flies enter the house and sit on the uncovered foods.

Other flies are attracted to the uncovered sweets being sold in the street.

The droplets of faeces carried by the flies' legs are left on the foods and sweets. While feeding on the food, the flies also vomit some of the excreta they had swallowed earlier.

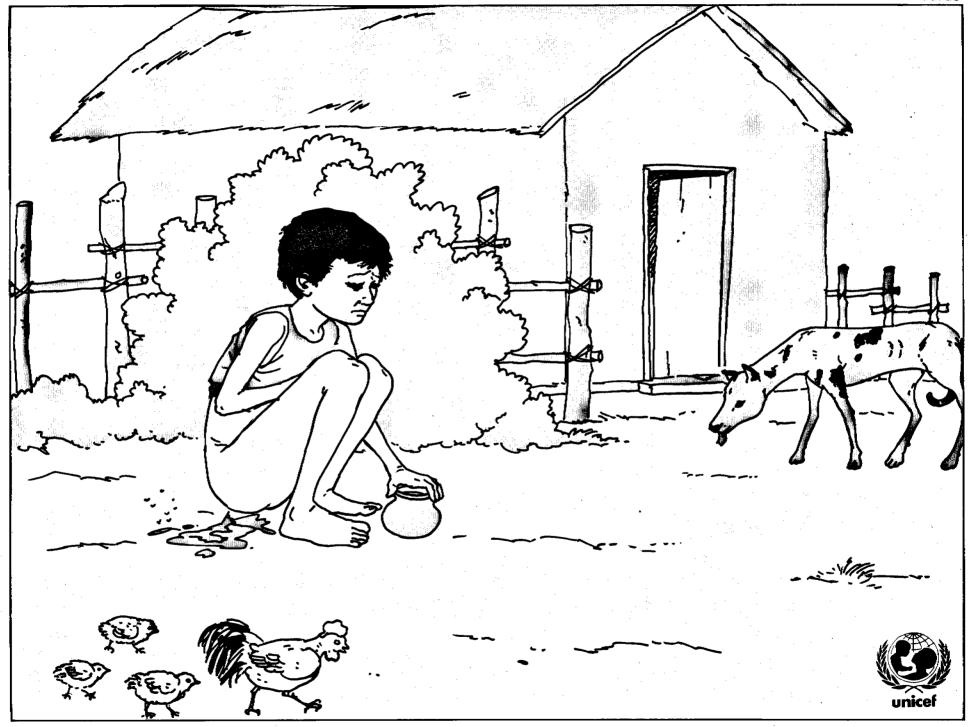
You and your family eat the food and sweets without realising they are contaminated.

**CARD 4** The result is diarrhoea for everyone in the family. Who are the culprits? Raju and the flies. Also the parents who did not train Raju in practising healthy habits.

STOP TRANSMISSION OF DISEASES (1) DO NOT DEFECATE IN THE OPEN; (2) USE A SANITARY LATRINE (3) KEEP FOOD UNDER COVER (4) DESTROY BREEDING GROUNDS OF INSECT VECTORS.

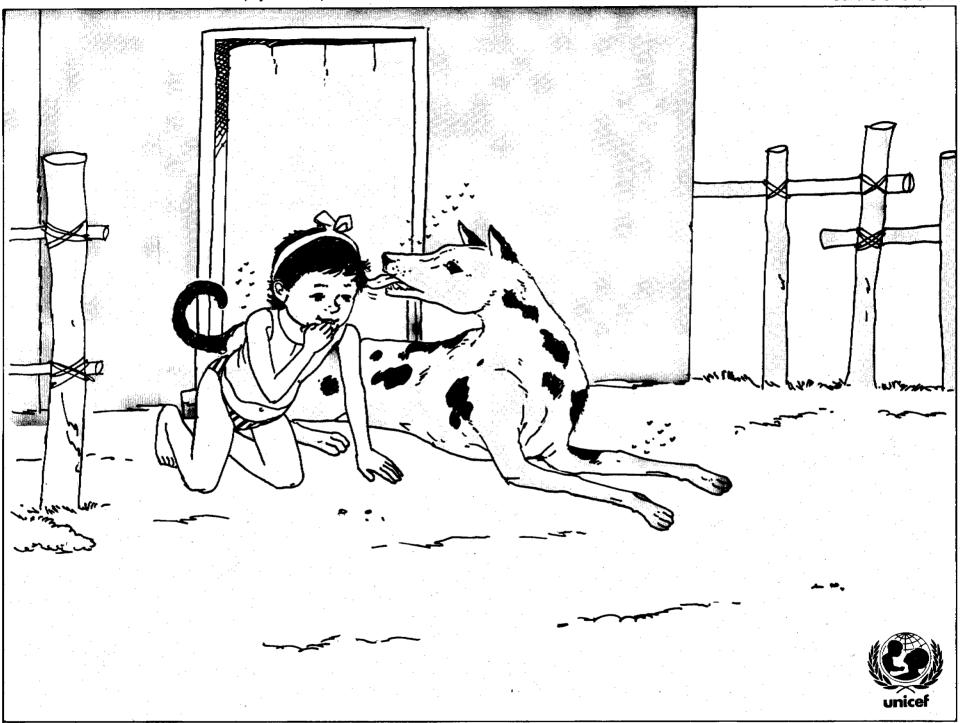


CARD 1 Another way that excreta can reach the mouth of a person directly and indirectly is by HANDS. Once again, Krishna has diarrhoea and, as usual, he likes to ease himself in front of his house.



The family dog eats the faeces containing pathogens and also walks on it. The dog's mouth and feet are thus dirtied with human faeces. Later, the dog enters the house. Naturally some of the excreta stuck to its feet and mouth is left on the floor.

The toddler crawls on the floor. She dirties her clothes and fingers with the faeces on the floor. The toddler sucks her fingers and therefore swallows the faeces. Other animals such as chickens can also carry excreta to the house in the same way. So can children



Moments later, the mother nurses the toddler. Her hands pick up some faeces from the toddler's clothes, hands and feet. Soon after, without washing her hands, the mother serves chapatis. The unnoticed faeces stuck on her hands contaminate the food.



CARD 5 The family consumes the contaminated food. Naturally, nobody realised that excreta could have travelled from the front door to the mouth.



**CARD 6** Everyone in the family including the toddler gets sick with diarrhoea.

TO STOP TRANSMISSION OF DISEASES: (1) DO NOT DEFECATE IN THE OPEN (2) USE A SANITARY LATRINE (3) ALWAYS WASH HANDS WITH SOAP AFTER DEFECATION, BEFORF EATING AND PREPARING FOOD.

While you are saving money to build a latrine for yourself and your family, everybody including children should go far away from the house for defecation. Dig a small hole for defecation and cover the excreta with earth afterwards.

