

## Diarrhoea and vomiting

### What is diarrhoea?

Diarrhoea is the passage of unusually loose or watery stools, usually at least three times in a 24 hour period.

However, it is the consistency of the stools rather than the number that is most important. Frequent passing of formed stools is not diarrhoea. Babies fed only breastmilk often pass loose, "pasty" stools; this also is not diarrhoea.

Diarrhoea can lead to dehydration, which alters the child's natural balance of water and electrolytes (sodium, potassium, chloride).

It usually lasts several days to a week.

### What is normal bowel movements/stools?

**Frequency:** It is normal for young infants to have up to 3 to 10 stools per day; although this varies depending upon the child's diet (breastfed children usually have more frequent stools). Diarrhoea can usually be defined as an increase in stool frequency to twice the usual number in infants.

**Consistency:** The consistency and colour of a child's stool normally changes with age. Young infants' stools may be yellow, green, or brown, and may appear to contain seeds or small curds. Developing stools that are runny, watery or contain mucus is a significant change that should be monitored. **The presence of blood in stool is never normal** and always requires medical attention.

### How do I look for dehydration?

Mild dehydration is common in children with diarrhoea.

Signs and symptoms of **mild dehydration** include a slightly dry mouth, increased thirst, and decreased urine (one wet nappy or void in six hours).

Common findings with **moderate or severe dehydration** include decreased urination (less than one wet nappy or void in six hours), lack of tears when crying, dry mouth, sunken eyes or fontanelle and irritability.

**If you see signs of moderate-severe dehydration you have to take you infant/child to the nearest hospital/doctor to be evaluated.**

## **Feeding advice when my child has diarrhoea**

- Continue with breastfeeding. Feed more regularly and offer oral rehydration solution
- If on formula continue with formula. It is not necessary to immediately change the formula to soy or lactose-free formula.
- Children who are not dehydrated should continue their regular diet and take extra fluids.
- Dehydrated children require replacement of lost fluid with oral rehydration solution.
- Avoid drinks with high sugar content.
- Give oral rehydration solution when thirsty and extra after each loose stool.
- Unsuitable fluids:
  - commercial carbonated beverages
  - commercial fruit juices
  - sweetened tea.

## **Oral rehydration solution (ORS)**

ORS is a liquid solution that contains glucose (sugar) and electrolytes (sodium, potassium, chloride) that are lost in children with vomiting and diarrhoea.

Common examples are hydrol, rehydrate, ceralyte and electropak.

The solution does not cure diarrhoea but it helps to treat the dehydration that often accompanies the diarrhoea.

ORS can be given in small, frequent amounts (10 to 20ml/kg) by spoon, bottle or cup over 4 hours.

If your child vomits the ORS, try to give it more slowly. If your child continues to vomit and become more dehydrated they must be seen by a doctor.

## **How much fluid to give**

The general rule is: give as much fluid as the child wants until diarrhoea stops. As a guide, after each loose stool, give:

- children under 2 years of age: 50-100 ml (a quarter to half a large cup) of fluid;
- children aged 2 up to 10 years: 100-200 ml (a half to one large cup);
- older children and adults: as much fluid as they want.

### **Does my child need other medication?**

1. Antibiotics and anti-diarrhoeals and anti-emetics: These medications are generally not necessary and could be harmful for infants or children with diarrhoea. Rarely, antibiotics may be used in cases of bacterial infection when a specific cause of the diarrhoea has been found or is strongly suspected, particularly after recent travel.
2. Antipyretics: If your child has a fever, you can give her/him paracetamol (Panado, Calpol) to make him/her feel better.
3. Probiotics: There are "healthy" bacteria (called probiotics) that may help reduce the duration of diarrhoea (by about 12 to 30 hours). Some of these are available in drug stores without a prescription (Reuterina, ProB2, Lacteol Forte)
4. Zinc. Numerous studies have now shown that zinc supplementation (10-20 mg per day until cessation of diarrhoea) significantly reduces the severity and duration of diarrhoea in children less than 5 years of age. Additional studies have shown that short course supplementation with zinc (10-20 mg per day for 10 to 14 days) reduces the incidence of diarrhoea for 2 to 3 months. Based on these studies, it is now recommended that zinc (10-20 mg/day) be given for 10 to 14 days to all children with diarrhoea.

Dosage: Children < 10kg 10mg Zinc tablet

Children >10kg 20mg Zinc tablet

### **WHEN SHOULD I CALL MY DOCTOR OR SEEK HELP FOR DIARRHEA?**

Call immediately:

- Bloody diarrhoea
- Severe diarrhoea (>8 stools in 8 hours)
- If an infant refuses to eat or drink anything for more than 6 hours
- The diarrhoea is watery and your child vomits the ORS 3 or more times
- Your child acts very sick (including listlessness or decreased responsiveness)
- Moderate to severe dehydration (see signs mentioned before)
- Fever >39 °C

Call during office hours:

- Mucus or pus in the stools
- Fever over 38.5°C for more than three days
- Mild diarrhoea that lasts more than 2 weeks
- Other concerns or questions

### **WHAT CAN I DO TO PROTECT MYSELF AND MY OTHER CHILDREN?**

Hands should be cleaned after changing a diaper or touching any soiled item.

They should also be washed before and after preparing food and eating, after going to the bathroom, after handling garbage or dirty laundry, after touching animals or pets, and after blowing the nose or sneezing.

Wash hands and wrists for at least 15-30 seconds and dry with a single use towel.

Alcohol-based hand rubs are a good alternative for disinfecting hands if a sink is not available. Soiled nappies or linen should be removed as soon as possible and sick children should be kept out of school or daycare to limit the number of people exposed to the infection.

#### **Prevention:**

Rotavirus vaccine

Exclusive breastfeeding

Use of safe water

Hand washing

Food safety