

# DIARRHEA AND VOMITING

## WHAT IS DIARRHEA?

Diarrhea is the sudden increase in frequency and looseness of bowel movements/stool and occurs at some point in the life of nearly every child. Diarrhea is not a disease, but is a symptom of a number of illnesses. Although diarrhea is common and rarely life-threatening, it is important to understand when to seek help. Diarrhea 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/STOOL?

**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). Diarrhea can usually be defined as an increase in stool frequency to twice the usual number in infants or three or more loose/watery stools per day in older children.

**Consistency:** The consistency and color of a child's stool normally changes with age, which highlights the importance of knowing what is normal for your child. Young infants' stools may be yellow, green, or brown, and may appear to contain seeds or small curds. All children's stools can vary as a result of their diet. 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.**

## WHAT SHOULD MY BABY/CHILD DRINK OR EAT?

There has been much confusion and folklore about optimal foods for children with diarrhea. **Here are a few simple suggestions:**

## HOW DO I LOOK FOR DEHYDRATION?

Mild dehydration is common in children with diarrhea. 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.**

## **BOX 1 FEEDING ADVICE**

- Infants who are **breastfeeding should continue** to do so. Just feed your infant more regularly and offer ORS (*Hydrol/Rehydrate/Ceralyte*) between feeds.
- Infants **on formula can continue with their formula**. It is not necessary to dilute or avoid milk products or change your baby's regular formula to soy or lactose-free formulas. Offer extra ORS (see Box 2).
- Children who are not dehydrated should continue to **eat a regular diet and take extra fluids** (see later)
- **Dehydrated children/infants require replacement** of lost fluid (**see BOX 2**). After being rehydrated, children can resume their usual diet.
- Children who are not dehydrated should continue to **eat a regular diet and take extra fluids (see bottom)**
- Give your child **complex carbohydrates** (rice, wheat, cereals, potatoes, bread), lean meats, yogurt, fruits (bananas).
- **Avoid high fat foods** (fried chips, kentucky fried chicken, pizzas and burger) as they are more difficult to digest.
- Give your child an **oral rehydration solution** (*Hydrol, Rehydrate, Ceralyte, Electropak*) to drink when thirsty (as much as he/she wants) and extra after each loose bowel movement (roughly 10ml per kg weight).
- **Avoid drinks with high sugar content** (apple juice, pear juice, sports drinks).

## HOW CAN I PREVENT DEHYDRATION AND TREAT MILD DEHYDRATION AT HOME?

**Oral rehydration solution (ORS) may be given at home to a child who is mildly dehydrated, refusing to eat a normal diet, or has vomiting and/or diarrhea.** ORS is a liquid solution that contains glucose (a sugar) and electrolytes (sodium, potassium, chloride) that are lost in children with vomiting and diarrhea. Common examples are *Hydrol, Rehydrate, Ceralyte and Electropak*. These can be bought at most pharmacies without a prescription. ORS does not cure diarrhea, but it does help to treat the dehydration that often accompanies it. ORS can be given in frequent, small amounts by spoon, bottle, or cup over four hours. **Follow the INSTRUCTIONS IN BOX 2.**

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## DOES MY CHILD NEED OTHER MEDICATIONS?

**Antibiotics and anti-diarrheals:** These medications are generally not necessary and could be harmful for infants or children with diarrhea. Rarely, antibiotics may be used in cases of bacterial infection when a specific cause of the diarrhea has been found or is strongly suspected, particularly after recent travel.

**Antipyretics:** If your child has fever, you can give her/him paracetamol (Panado, Calpol) to make him/her feel better

**Probiotics:** There are "healthy" bacteria (called probiotics) that may help reduce the duration of diarrhea (by about 12 to 30 hours). Some of these are available in drug stores without a prescription (*Reuterina*, *ProB2*, *Lacteol Forte*)

**SMECTA:** This is a natural clay product in powder form that can help to bind the watery stools faster and help the intestine to heal faster. You can buy this without a prescription

## 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.

## **BOX 2 ORAL REHYDRATION METHOD**

1. Prepare the ORS (*Hydrol*, *Rehydrate*, *Ceralyte* and *Electropak* ) as instructed on the packet
2. Measure out the total amount to be given with a standardized syringe or measuring cup, rather than a regular cup or spoon. A total volume of **50 milliliters per kilogram**, should be given **over 4 hours**, for example a 10kg child, will need a total of 500 milliliters.
3. Give by teaspoon (approximately equal to 5 milliliters each) every one to two minutes or more if tolerated.
4. After the total amount has been given, a normal diet can be resumed if your child looks better.
5. If your child refuses to drink the ORS try a different flavor or mix a small amount of apple juice/*Oros/energade* to mask the flavor. If they still refuse and they become more dehydrated they must be seen by a doctor.
6. If your child vomits the ORS, try to give it more slowly. If your child continues to vomit and they become more dehydrated they must be seen by a doctor.

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

### **Call immediately:**

- Bloody diarrhea
- Severe diarrhea (>8 stools in 8 hours)
- If an infant refuses to eat or drink anything for more than 6 hours
- The diarrhea 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 diarrhea that lasts more than 2 weeks
- Other concerns or questions