

# Gastroenteritis

## *Vomiting & Diarrhea*

Gastroenteritis is an inflammation of the stomach and intestines, often called the “stomach flu” (although it is not caused by the influenza virus.) The symptoms of gastroenteritis commonly include vomiting, stomachache, diarrhea, headache, fever and decreased appetite. Symptoms typically begin 1 to 2 days following exposure and may last for 1 to 10 days.

**You should call your Pediatrician immediately if your child has any of the following symptoms:**

1. Looks weak or is unresponsive
2. Severe worsening abdominal pain
3. A rectal temperature greater than 100.4°F if child is less than 3 months old
4. Vomits yellow or green bile
5. Blood or mucus in the diarrhea
6. Projectile vomiting occurring 2 or more times a day in a child less than 3 months old.  
(Projectile vomiting means that the vomit travels greater than 1 foot from the baby)
7. Vomiting over 24 hours without diarrhea
8. No improvement in diarrhea after 1 week

### **What is DIARRHEA?**

Diarrhea is the passage of watery stools, usually 3 or more in a 24 hour period. It is the *change in consistency* of the stools, more than the number, that is important. Babies fed breast milk will usually pass very loose, yellow stools. Mild diarrhea, during which a child’s energy level and intake of fluids remains normal, requires no special treatment other than the avoidance of excessive fruit juice. More significant diarrhea can cause dehydration and should be treated.

### **What is DEHYDRATION?**

Dehydration is a loss of both water and salt from the body. The usual cause is a lot of vomiting and/or diarrhea. Those most susceptible to dehydration are babies under a year of age and those with a significant fever in addition to vomiting and diarrhea. There is no one way to determine dehydration.

*Early signs of dehydration include dryness of the mouth and thirst. As dehydration worsens, symptoms can include irritability, lethargy, decreased urine output, few or no tears when crying vigorously, dry or sticky saliva, and worsening nausea.*

### **How do you AVOID dehydration?**

The best treatment for dehydration is oral re-hydration therapy (ORT). When successful, ORT can prevent trips to the emergency room and the need for intravenous fluids. ORT does NOT stop vomiting or diarrhea, but will help prevent dehydration.

ORT is different from other beverages in that it provides the proper balance of sugars and salts to safely rehydrate the body and prevent worsening of diarrhea. GOOD examples include Pedialyte, Rehydralyte, Ricelyte, Resol, and Gerber or Kaolectrolyte powders. POOR examples include sodas, sports drinks, or fruit juices. Sports drinks such as Gatorade and juices such as white grape juice should only be used in children with mild gastrointestinal symptoms who are not yet dehydrated. Apple juice can significantly worsen diarrhea.

Using ORT is not always easy. If a child is not yet dehydrated, they may refuse it due to its salty taste. If a child is actively vomiting or nauseated, they may also be reluctant to take the fluid. In this situation, treatment requires time and patience. To overcome a nauseated child's refusal to drink, ORT can be given in small, frequent amounts with a dropper or teaspoon every 2-3 minutes. If a child vomits, wait at least 10-15 minutes before giving more fluid.

- For a child less than 20 pounds, aim for 2 ounces of ORT every hour over a 4 to 6 hour period.
- For a child over 20 pounds, try for 3 ounces of fluid every hour over 4 to 6 hours.
- If your child is not vomiting and is improving consistently, you can gradually increase the fluids. Slow down if vomiting recurs.
- As long as tolerated, breastfeeding can continue in lieu of other fluids.
- If after 4 hours your child is not vomiting and is consistently thirsty, they can drink unlimited amounts of ORT.

#### **Tips on improving the taste of ORT:**

- The colder the ORT, the better it will taste.
- Try frozen ORT pops.
- Try kaolyte or Gerber powders (diluted in WATER) which have longer shelf lives than ORT liquids and are easier to carry on trips.
- Add sugar-free Koolaid or Crystal Light powder to ORT for better taste. ORT is NOT effective if mixed with other beverages.

#### **"BRAT" diet:**

As soon as your child's appetite returns, you can feed them (assuming they have tolerated 4 to 6 hours of fluid replacement without vomiting.) Good food choices include toast or crackers, rice, noodles, applesauce, bananas or yogurt. Avoid fatty foods and milk until your child has not vomited or had diarrhea for 24 hours.

Occasionally when your child has had a prolonged bout of diarrhea, their intestines may not properly absorb lactose, a milk sugar, for several weeks. Try lactose-reduced milk (i.e. lactaid) or a lactose-free formula (or breastmilk) for 1-2 weeks to allow the intestinal lining to recover.

## Assessing Dehydration

Determine your child's degree of dehydration and follow the treatment plans below

SYMPTOMS	NO DEHYDRATION	SOME DEHYDRATION	SEVER DEHYDRATION
Check Diarrhea - number of loose stools per day	Less than 4 hours	From 4 to 10 hours	More than 10 hours
Vomiting	Less than 4 hours	Less than 8 hours	Over 8 hours
Thirst	Normal	Greater than Normal	Unable to Drink
Urine Output	Normal	Small Amount	No Urine for 8 hours
Tears	Present	Decreased	Absent
Mouth and Tongue	Wet	Slightly Dry - (Some Saliva)	Very Dry - (No Saliva)
General Condition	Alert, Near Normal Activity	Unwell, Fussy or Sleepy	Very Sleepy, Very Fussy
<b>ASSESSMENT:</b>	<b>2 or More of the Above Symptoms</b>	<b>2 or More of the Above Symptoms</b>	<b>2 or More of the Above Symptoms</b>
<b>DECISION:</b>	<b>USE PLAN A</b>	<b>USE PLAN B</b>	<b>USE PLAN C</b>

If your child is younger than a year old, please call your pediatrician.

Always check with your pediatrician with any questions or concerns as the need arises.

*Assessing and treating potential dehydration is not a simple process. This guide has been established solely as an additional resource for parents to utilize as they deal with the potential symptoms of gastroenteritis and dehydration at home. These guidelines do not constitute medical advice and do not replace the need to seek the independent medical judgment of your physician in each specific case. These guidelines are current as of the date that they are printed but are subject to change as new information regarding potential dehydration is developed.*

## Treatment Plans for Dehydration

PLAN A No Dehydration	PLAN B Some Dehydration - If your child is younger than a year old, please call the Doctor -	PLAN C Severe Dehydration
<ul style="list-style-type: none"> <li>Feed your child normally.</li> <li>If possible, try giving extra fluids for each bout of diarrhea. Use ORT* for infants.</li> <li>ORT* is also appropriate for older children, but they may not take it due to its salty taste. You may substitute water and salty foods such as pretzels or saltines.</li> </ul>	<p><b>IF VOMITING:</b></p> <p>Start slowly. For a child under 20 pounds, aim for 2 ounces of ORT every hour.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p><b>For a Child weighting Less than 20 lbs</b> Give 1-2 oz of ORT each hour</p> <p><b>For a Child weighting More than 20 lbs</b> Give 3 oz of ORT each hour</p> </div> <p>For a child over 20 pounds, try 3 ounces of ORT every hour.</p> <p>If your child vomits, it is appropriate to wait 10 to 15 minutes before giving more fluid. If your child will not take ORT, try giving him/her less, 1 to 2 teaspoons every 2 to 3 minutes.</p> <p><u>After 4-6 hours</u>, check how your child is doing and choose the suitable treatment plan. If your child's vomiting is improving, increase the fluids to 1 to 2 ounces per feeding. You may need to go more slowly if the increased amount makes your child vomit. Breastfeeding can continue as tolerated. When your child's appetite returns, you may feed them. If your child has failed to tolerate therapy after 4-6 hours, please call your pediatrician's office.</p> <p><b>IF NOT VOMITING:</b> You can give unlimited amounts of ORT. If your child resists ORT, try giving 1 to 2 teaspoons at a time by dropper or teaspoon every 2 to 3 minutes. Breastfeeding can continue as tolerated. Feed your child once their appetite returns.</p>	<p>Sever Dehydration</p> <p>Please call your pediatrician's office immediately.</p> 

\* ORT is not effective if mixed with other beverages.