

Gastroenteritis

(Vomiting and/or Diarrhoea)



Khoo Teck Puat - National University
Children's Medical Institute

What is gastroenteritis?

Gastroenteritis is the inflammation of the stomach and intestines. The signs and symptoms include diarrhoea, nausea, vomiting, abdominal cramps and sometimes fever. Gastroenteritis is commonly caused by viruses or bacteria (either directly or through their toxins) and as side effects of certain medicines.

Are vomiting and diarrhoea serious problems?

Infection by a virus is usually mild and does not last longer than one week. Your child should get better with lots of rest, liquids and appropriate foods. However, your child's illness may be deemed serious if he/she becomes dehydrated.

Dehydration can be very serious if your child is very young.

Does my child need any medication?



Medications are usually not needed to stop vomiting or diarrhoea. In fact, certain medications for adults are dangerous for children. In a hospital care setting, however, appropriate medications may be administered if required.

Your child does **not** need antibiotics for most illnesses that are caused by viruses as antibiotics do not kill viruses. Most of the bacterial infections do not need antibiotics as well unless the child is very sick (invasive bacterial infections).

How do I take care of my child?

Oral rehydration therapy is a simple way to help your child when he or she has vomiting or diarrhoea. This therapy has two simple steps:

Step 1: Give your child oral electrolyte solution

An oral electrolyte solution is a liquid that has exactly the right amount of water, sugar and salts. You can buy this solution in most pharmacies in different forms.

Warning: You must mix the powders exactly according to instructions. For the first 6 hours, make sure your child gets at least the amount prescribed below for his or her age.

- Less than 6 months old give 60 to 90mL
 - (12 to 18 teaspoons) every hour.
- 6 months to 2 years old give 90 to 125mL
 - (18 to 25 teaspoons) every hour.
- 2 years or older give 125 to 250 mL (4 to 8 ounces) every hour.

Do not stop breastfeeding. Feed your child for a shorter time and more frequently. Breast milk is the best liquid for your child.

If your child is vomiting, give frequent sips of liquid. Give your child 5mL of liquid (1 teaspoon) every 1 to 5 minutes.

When your child starts to feel better, you can give larger volumes but less often. Make sure that your child drinks the amount of liquid he or she needs for his or her age.

After 24 hours, give your child the oral electrolyte solution only after each watery diarrhoea.

Step 2: Feed your child healthy food

Feeding your child a healthy diet will help your child's fight against infection. It will also help to heal his or her digestive system and prevent weight loss.

Stop giving your child solid foods for 6 to 12 hours only if he or she is vomiting.

If your child has diarrhoea, do not stop feeding your child. Give your child small amounts of food that he or she likes every 3 to 4 hours.

Here is a list of appropriate and inappropriate foods for your child. Do ensure that the foods consumed are low in fat and sugar. Avoid foods that may upset their stomach or make symptoms worse:

Appropriate foods



- Breast milk, regular milk or formula; do not further dilute the milk
- Starchy foods such as rice, potatoes, noodles, toast and crackers
- Cereal such as rice or wheat cereal and oatmeal
- Protein such as boiled or baked meat, fish, chicken, soya products and eggs
- Vegetables with no added butter
- Fruits not packed in syrup
- Soup

Inappropriate foods



- · Fruit juice or soft drinks
- · Ice cream
- Fatty foods such as french fries, hamburgers and butter
- · Spicy foods

Important Tips

You can help to lower the chances of your child falling sick by:

- Washing your hands after touching raw meat, chicken or fish.
- Keeping raw meat and half-eaten food in the refrigerator. Do ensure that cooked/readyto-eat foods are stored separately from uncooked foods.
- Not feeding your child undercooked food.
- Throwing away eggs with cracked shells.
 Do not feed your child raw eggs.
- Sterilising bottles before each use if you are using formula milk.

You can prevent your child's illness from spreading by:

- Keeping your child at home until the vomiting and diarrhoea stop.
- Washing your hands after changing diapers, using the toilet and before preparing and eating food.
- Not sharing toothbrushes, drinking cups and utensils such as forks, knives, spoons and chopsticks. If your child typically puts toys in his or her mouth, do not let him or her share toys.

You can protect your child's bottom by:

- Changing your child's diapers often.
- Washing your child's bottom with soap and water; pat it dry or let it dry naturally. Avoid using baby wipes as they are abrasive.
- Using a barrier cream on your child's bottom.



Should I bring my child to the Urgent Care Clinic (UCC) or Children's Emergency?

Please bring your child to UCC* if he/she:

- · Has been drinking at least 50% of usual intake
- Is passing urine at least 3 times in a day
- Is vomiting frequently for more than 4 to 6 hours
- Is passing large volumes of watery diarrhoea in a day
- · Has intermittent stomach pain
- Has blood in the vomit or diarrhoea
- Has mild buttock redness

*UCC is a walk-in clinic in the community for children and adolescents up to 18 years old with urgent but non-life threatening conditions. It is open daily from 9am to 11pm (last registration at 10pm).

Please bring your child to the Children's Emergency immediately if he/she:



- Show signs of dehydration, such as
 - No tears when crying
 - Sunken eyes
 - Less than five wet diapers in 1 day
 - · Dry skin, mouth and tongue
 - A sunken fontanelle (the soft spot on your child's head if he or she is less than 18 months old)
- · Is not willing to drink
- Is vomiting frequently for more than 4 to 6 hours
- Is passing more than six large volumes of watery diarrhoea in one day
- Has stomach pain that is severe and does not stop

- · Has fast breathing
- · Is very sleepy or very fussy
- · Has cool or grayish skin
- · Has severe head or neck pain
- · Has green vomitus
- · Has blood in the vomit or diarrhoea
- Is crying and bringing the knees up to stomach
- Has fever of above 39°c for longer than 12 hours



Other Instructions

The information provided in this publication is meant purely for educational purposes and may not be used as a substitute for medical diagnosis or treatment. You should seek the advice of your doctor or a qualified healthcare provider before starting any treatment or if you have any questions related to your health, physical fitness or medical condition.

About the Khoo Teck Puat - National University Children's Medical Institute (KTP-NUCMI)

The KTP-NUCMI is the paediatric arm of the National University Hospital and comprises the Departments of Paediatrics, Paediatric Surgery and Neonatology. We provide comprehensive and specialised medical and surgical services for newborns, children and adolescents, and are the only public hospital in Singapore that offers paediatric kidney and liver transplant programmes. Through a generous gift from the Estate of Khoo Teck Puat, we have set up an integrated outpatient facility with medical, diagnostic and rehabilitation services.

For more information about us, visit www.nuh.com.sg/ktp-nucmi.

Contact Us

24-hour Children's Emergency

Location: NUH Main Building, Zone F, Level 1 General Enquiry: +65 6772 5000

KTP-NUCMI

Location: NUH Main Building, Zone E, Level 2

(Accessible via Kent Ridge Wing, Zone C, Level 2, Lift Lobby C)
 Operating Hours:
 8.30am - 5.30pm (Mon to Fri), 8.30am - 12.30pm (Sat)

 General Enquiry:
 +65 6772 5736
 Appointment Line: +65 6908 2
 Appointment Line: +65 6908 2222

Email: ktpnucmi_appt@nuhs.edu.sg

9a Viva-University Children's Cancer Centre

Location: NUH Medical Centre, Zone B, Level 9 Operating Hours: 8am - 5.30pm (Mon to Fri)

Appointment Line: +65 6772 5030 Fax: +65 6872 4314 Email: cbccappt@nuhs.edu.sg

NUH Children's Urgent Care Clinic @ Bukit Panjang

Location: Junction 10, 1 Woodlands Road, #01-22, Singapore 677899 Operating Hours: 9am - 11pm daily (including public holidays) General Enquiry: +65 6219 1538 Email: childrenucco

Email: childrenucc@nuhs.edu.sg Website: www.nuh.com.sg/ucc

NUH Child Development Unit @ JMC

Location: Jurong Medical Centre,

60 Jurong West Central 3, Level 2, Singapore 648346

Operating Hours: 8.30am - 5.30pm (Mon to Fri)

Appointment Line: +65 6665 2530/2531 Fax: +65 6665 0158

Email: cdu@nuhs.edu.sg Website: www.nuh.com.sg/cdu

NUH Child Development Unit @ Keat Hong

Location: Keat Hong Community Club,

2 Choa Chu Kang Loop, #03-01, Singapore 689687

Operating Hours: 8.30am - 5.30pm (Mon to Fri)

Appointment Line: +65 6769 4537/4637 Fax: +65 6665 0158

Email: cdu@nuhs.edu.sg Website: www.nuh.com.sg/cdu

National University Hospital

Location: 5 Lower Kent Ridge Road, Singapore 119074

Tel: +65 6908 2222 Email: contactus@nuhs.edu.sg

Website: www.nuh.com.sg



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