

# Diarrhea

Diarrhea is characterized by passage of loose stools and an increase in frequency of more than 3 stools per day. Diarrhea can be classified as acute, persistent or chronic; acute being diarrhea lasting less than 14 days, persistent being more than 14 days while chronic is more than 30 days in duration of repeated diarrhea. Usually, diarrhea self resolves in one to two days; however, if it lasts longer, immediate medical attention is required.



### So... what causes diarrhea?

- 1. Infections are the most common causes of acute diarrhea. These can be caused by bacteria (like Salmonella species and Camylobacter jejuni), viruses (like Rotavirus and Norwalk virus) or parasites (Entamoeba histolytic and Giardia species). These infections can be spread by contaminated food or water as well as person to person as a result of poor hygiene.
- **2. Food intolerances** usually caused when a person is not able to digest a certain component of food (e.g., lactose intolerance).
- **3. Medications** Medications like antibiotics, chemotherapy drugs as well as other medications can cause diarrhea.
- Intestinal disease diseases like irritable bowel disease and celiac disease can cause chronic diarrhea.

## Red flags - when to see your doctor?

- Blood or mucous in stool
- People who are immunocompromised (for example, HIV infection)
- Pregnancy
- Severe abdominal pain
- Signs of dehydration (excessive thirst, dry mouth, light headedness)
- Diarrhea lasting more than 3 days
- Fever greater than 38.5 °C

Since diarrhea is common in children, it is important to see your health care professional if:

- Your child is less than 6 months old
- The child is unresponsive and hard to arouse
- Signs of dehydration (less than 4 wet diapers in 24 hours, crying without tears)
- The child has been vomiting for more than 4 to 6 hours
- Sunken soft spot (fontanel) on head of infants

#### **Prevention**

- Avoid foods that have caused diarrhea in the past (e.g., products containing lactose if an intolerance is diagnosed
- Wash hands after going to the washroom or changing a diaper as well as before and after preparing food.
- Cook foods thoroughly especially meats and eggs
- Drink bottled water in their original container and make sure the cap is sealed
- Wash fruits and vegetables thoroughly before consumption
- If you are travelling to an area with diarrhea endemic, make sure to "Boil it, peel it, cook it or forget it." If you cannot boil, peel or cook what you are eating, it is recommended that you do not consume it.

#### **Treatment**

Rehydration – Since there is an excessive loss of fluids during diarrhea, it is important to replace the lost fluids to prevent dehydration. Oral rehydration therapy (ORT) is recommended for use especially for children and the elderly.

Gastrolyte (for adults) and Pedialyte (for children) are the commercially available oral rehydration therapies.

Your health care professional might recommend medical treatment if you have worsening diarrhea and are unable to maintain hydration. Some over-the-counter medications that available to treat diarrhea are Loperamide (Imodium), Pepto-Bismol and Kaopectate. However, it is recommended that you consult your pharmacist or doctor before using medication to treat diarrhea, especially in children.

Over-the-counter Products	Adult Dosing
Loperamide (Imodium)	4mg to be taken immediately and then 2mg after each bowel movement
Pepto- Bismol	524mg every 30 to 60 mins as needed (Maximum daily dose: 4.2g/day)
Psyllium	Up to 40g/day in 2 to 4 divided doses
Attapulgite (Kaopectate)	1200 to 1500mg initially and then 1200 to 1500mg after each bowel movement

Prescription medications like Cholestyramine and Codeine as well as other oral antibiotics (like Ciprofloxacin or Azithromycin) may be prescribed by your doctor if deemed appropriate.

# **Tips**

- If a child is solely breastfed, breastfeeding should continue during episodes of diarrhea as well as simultaneous administration of the rehydration therapy.
- If the child is not being breastfed, age appropriate foods must be given in addition to the rehydration therapy.

Disclaimer: The information found in this brochure is not intended to replace the advice of your pharmacist or physician. If you have any questions specific to your health, please contact your healthcare provider.

- 1. Mayo Clinic Staff. Diseases and conditions diarrhea. Mayo Clinic. http://www.mayoclinic.org/diseases-conditions/diarrhea/basics/ treatment/con-20014025. Published June 11, 2013. Accessed January 18, 2016.
- 2. Marks JW. Diarrhea. MedicineNet. http://www.medicinenet.com/diarrhea/article.htm. Updated October 29, 2015. Accessed January 18, 2016.
- 3. World Health Organization. Diarrhoeal disease. http://www.who.int/mediacentre/factsheets/fs330/en/. Updated April 2013. Accessed September 25, 2015.

