

Diarrhoea is when bowel movements become watery, foul-smelling and the need to go to the toilet becomes frequent and urgent. It is important to note that diarrhoea has many different causes and can sometimes be a sign of a more serious condition, such as inflammatory bowel disorders. There are 3 different types of diarrhoea. **Osmotic diarrhoea** occurs when too much water is drawn into the bowels. **Secretory Diarrhoea** is when the body itself "secretes" water into the bowel in a greater than normal volume resulting in Diarrhoea. This may be caused by things like drugs, allergic reactions, and infection. **Exudative Diarrhoea** is when blood or pus in the stool also accompanies the loose bowel movements. Exudative Diarrhoea is obviously of most concern, as it is sometimes the sign of a serious disease such as Crohn's disease, Ulcerative colitis, or a severe bacterial infection.

Common Symptoms accompanying diarrhoea

- **Watery, foul smelling bowel movements**
- **Stomach cramps**
- **Nausea and vomiting**

When do I need to see the pharmacist?

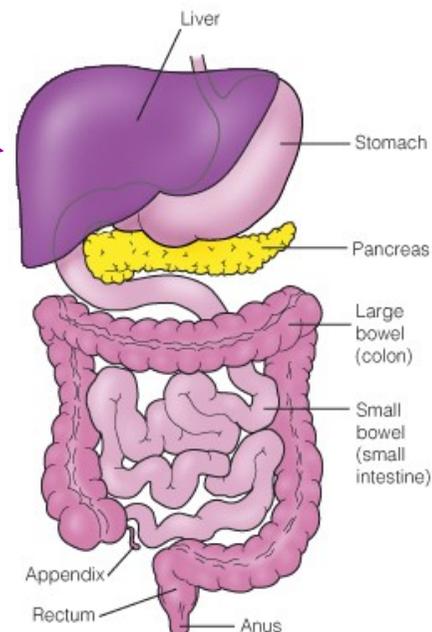
Please always check with the pharmacist if the person suffering with diarrhoea:

- Is a baby less than 6 months old or is elderly
- Is pregnant
- Has signs of dehydration (e.g. Sunken eyes, loss of skin elasticity)
- Is vomiting up all drinks for longer than 12 hours if an adult, or 6 hours if a child
- Has been vomiting for more than 24 hours
- Has had diarrhoea for more than a few days
- Vomits blood, or brown/green bile
- Has bloody or black faeces (bowel motions)
- Has severe pain in the abdomen or rectum
- Has a high fever (over 38°C)
- Is losing weight
- Has a weakened immune system
- Has an underlying medical condition (e.g., diabetes, epilepsy).

Basic Physiology of the Digestive Tract

The digestive system is a series of hollow organs joined in one long twisting tube from the mouth to the anus (as shown in the diagram right):

- The process of digestion starts when food is chewed and swallowed then passes from the mouth into the oesophagus; there it is pushed on to the stomach where the food mixes with digestive juices, it is churned and mixed up before it is slowly released into the small intestine. The food will then dissolve further as juices from the pancreas and the liver are mixed together with the food.
- Once the small intestine has absorbed all of the nutrients from the food it passes onto the large intestine.
- The large intestine, as well as acting as a passage way for the removal of body waste, acts as a provisional reservoir for water. As water is absorbed, the contents of the large intestine changes from watery liquid to semi solid faeces.
- The faeces moves down through the colon into the rectum and out through the anus after the brain sends a signal to indicate that it's time to empty the rectum.



Common risk factors and causes for diarrhoea

Sometimes, as in the case of food poisoning, the cause of diarrhoea may be quite obvious, but it can be worrying when you don't understand why you are experiencing these symptoms.

Some of the most common causes of acute diarrhoea include:

- Viral or bacterial infection
- Travellers' diarrhoea (discussed further on page 2)
- Allergy or intolerance to certain foods
- Eating too much spicy or oily food or drinking too much alcohol!
- Menstruation (many women suffer from diarrhoea just before or after their periods)
- Stress
- Irritable bowel syndrome or Inflammatory Bowel Disease (also further discussed on page 2)

A little more info on Traveller's Diarrhoea.....

Traveller's diarrhoea is a common condition suffered by people travelling from "developed" to "developing" countries. This condition is most common in areas where sanitation and hygiene standards are poor, such as in developing nations of Africa, the Middle East, Asia and Latin America. It can occur at any time during their holiday or even after the person gets back to their home.

Common symptoms associated with traveller's diarrhoea include:

- Abdominal cramps, pains and bloating
- Nausea
- Urgency to go to the toilet
- Loose, watery stools passed frequently
- Mild temperature
- General malaise (a vague feeling of illness and/or discomfort)

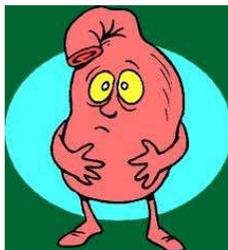
So why do we suffer from this condition when travelling?

Traveller's diarrhoea is generally caused by consuming contaminated food or water. Often the micro-organisms in this food and water (e.g. Bacteria, parasites, viruses) that trigger the illness appear to be harmless to the local population of the area, presumably because they have acquired "immunity" to them.

Risky things to avoid:

- Avoid using tap water to wash your fruit and vegetables, or brush your teeth and boil this water for at least 5 minutes before drinking. Bottled water is best!
- Avoid drinks containing ice
- Foods washed in tap water, such as salads
- Raw/undercooked meat or seafood
- Unpeeled fruits and vegetables
- Food from street vendors

Please consult your pharmacist if you believe you could be suffering from traveller's diarrhoea!



I've heard some people say they have diarrhoea from Irritable Bowel Syndrome.....what is this condition?

Irritable bowel syndrome (IBS) is a disorder that leads to abdominal pain and cramping, changes in bowel movements, and other symptoms. People with IBS have colons that are more sensitive and reactive to things that might not bother other people, such as stress, large meals, gas, medicines, certain foods, caffeine, or alcohol.

IBS does not harm the intestines and does not lead to cancer. It is not related to Crohn's disease or ulcerative colitis.

Most people can control their symptoms by taking medicines such as laxatives, anti-diarrhoeal medicines, antispasmodics, or antidepressants; reducing stress; and changing their diet.

The pharmacy is a great place to get some help for this conditions and relief of your symptoms. Always ask for advice from your LiveLife pharmacist!

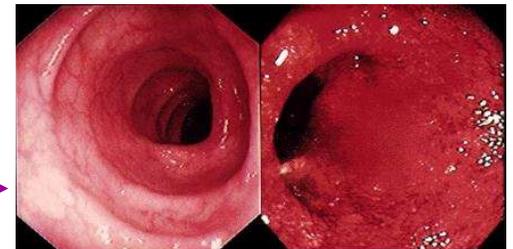
So then what is Inflammatory Bowel Disease (IBD)? Is it just another name for IBS?

No! IBD is associated with 2 conditions that are very different to IBS, and generally much more severe in symptoms and complications. Crohn's disease and ulcerative colitis are collectively known as inflammatory bowel disease (IBD). Both conditions affect the bowel, but in slightly different ways.

Crohn's disease causes inflammation of the full thickness of the bowel wall and can target any part of the digestive tract, from mouth to anus. Ulcerative colitis is inflammation of the large bowel (colon and rectum).

The causes of IBD are unknown, but researchers suspect either an autoimmune reaction (where your immune system attacks your body) or some kind of infection. It is important to note these conditions may lead to nutritional deficiencies and other inflammatory responses in the body (e.g. In the joints, eyes and skin) and therefore, it is important to always seek advice from the pharmacist on this condition.

Please see one example of what inflammatory bowel disease can do to the body (right)



Healthy Colon

Ulcerative Colon

Treatment Options for Optimal Care

Oral Rehydration fluids

These oral rehydration solutions are scientifically formulated to contain the correct balance of electrolytes and glucose to provide rapid rehydration. This type of treatment prevents and treats dehydration by replacing water and electrolytes (salts) lost through diarrhoea. It is essential in the management of diarrhoea in any form and should be the **FIRST CHOICE** for all people suffering with this condition, especially in groups with a higher-risk of dehydration (i.e. children and the elderly).

Can diabetics use these rehydration fluids?

Yes—these rehydration fluids contain only a small amount of glucose and are considered safe as part of an overall daily diet. When unwell with diarrhoea or vomiting, it is important to supply the body with some glucose, even for people with diabetes. However, blood glucose levels should be monitored more closely by diabetics at times of illness—consult your pharmacist

Are these rehydration fluids safe in pregnancy and breastfeeding?

Yes—these fluids are considered safe. However, please consult your pharmacist to ensure you are receiving optimum care.

Does it matter how much water you add to the sachets/ effervescent tablets when making up this formula?

Yes—it is very important to make these rehydration formulas up **EXACTLY** as stated on the box instructions, as they need to contain the correct concentration of electrolytes/glucose to be effective in the body.

Can't I just drink sports drinks to get hydrated?

No! These drinks are high in sugar and can sometimes cause further dehydration!

Examples: Hydralyte, Gastrolyte, ORS.



Anti-motility medicines

Although you aren't able to get rid of the virus/toxin/bacteria causing diarrhoea symptoms with over-the-counter products, you **CAN** relieve symptoms, making it possible for you to continue in your daily tasks, work, looking after children etc. "Anti-motility" medicines are the key to this symptom relief and are available from your local LiveLife pharmacy!

How do they work in the body?

These products work by slowing the motility of your intestines and thus helping to slow down the frequency and urgency of needing to go to the toilet. This in turn gives you more control over your bowels.

Can I use these products when pregnant or breastfeeding?

No—please consult your pharmacist if you are pregnant/breastfeeding and requiring this type of medication.

Is it safe to use these in children?

We do not recommend these anti-motility agents in children under 12 years of age. Please always consult your pharmacist, as children also have a much higher risk of dehydration from diarrhoea.

What is the difference between all of these anti-motility medications in the pharmacy?

- Imodium, Gasto-stop, Pharmacy Action Diarrhoea Relief, Amcal Anti-diarrhoea tablets—Contain loperamide to slow down the motility of the intestines
- Imodium Advanced—Contains loperamide to slow down the motility of the intestines **AND** simethicone to relieve abdominal pain/wind/gas
- Lomotil tablets—Contain Diphenoxylate and atropine. Diphenoxylate is a more potent option than loperamide for slowing down the motility of the intestines. Atropine is included only as a deterrent to avoid over-use/dependence on the product.
- Please note this is a S3 product and **MUST** involve the pharmacist in its sale.

NB: It is important to follow package directions carefully and stop taking them as soon as stools are no longer loose—you do not want to cause CONSTIPATION!



Adsorbents and bulk forming antidiarrhoeals

This particular choice of treatment is for management of diarrhoea, nausea, vomiting, gastroenteritis and nervous dyspepsia. It works by reducing secretions in the gut, adsorbing and bulking the intestinal contents and neutralising excessive acidity in the stomach.

Example: BisPectin—contains codeine phosphate, aluminium hydroxide, light kaolin and pectin.



Is this product for children?

This product is not suitable for children under 8 years of age. Please note this is a S3 Pharmacist-Only product and **MUST** involve the pharmacist in its sale.

Optimal Care Products

Probiotics—e.g. Ethical Nutrients Inner Health Plus, Irritable Bowel Support, Gastro Relief, and Travel Bug

Aid in the maintenance of a normal healthy gastrointestinal system and digestive function. May assist in maintaining the balance of good bacteria and useful for the symptoms of bloating, gas or flatulence.



Anti-spasmodics—e.g. Buscopan—work by relaxing the muscles in the stomach to relieve cramping symptoms associated with the diarrhoea.



Mintec capsules—contain peppermint oil, which is a natural, herbal antispasmodic often used in IBS. The peppermint oil acts to directly relax the muscles of the bowel, which relieves pain, bloating and wind.



Hand Sanitiser—to avoid passing on those nasty germs!



Water purification tablets—for those travelling overseas and worried about contracting traveller's diarrhoea from contaminated water

Lifestyle Advice and Prevention of "Gastro"

As diarrhoea is commonly caused by an infection, proper hygiene techniques need to be applied; this is especially important for a person with symptoms. In order to discourage growth and passing on these micro-organisms it is important to:

- *Wash hands with soap after going to the toilet or changing nappies, and before preparing or eating food. Use hand sanitizers such as Aqium gel throughout the day to keep the hands clean!*
- *Disinfect bathrooms and toilets, concentrating on toilet seats, door handles and taps*
- *Stay home from work or school while symptomatic if possible. Do not visit hospitals and nursing homes and do not swim in public pools.*
- *Ensure food is adequately stored and prepared: Refrigerated items should be kept below 5° C, and hot items kept above 60° C. Food should be thoroughly cooked and cooking utensils should be cleaned with hot soapy water. Utensils used to prepare raw meat should be different from those used to prepare other food*
- *Do not prepare food for others when symptoms are present*
- *Tea towels should be washed in hot water.*
- *Sponges should be avoided and disposable paper towel used instead*

Also remember:

- *Babies suffering with diarrhoea should be breastfed/formula-fed normally; do not dilute the formula*
- *While suffering with diarrhoea, avoid dairy foods, alcohol, fatty, sweet or spicy foods, which may worsen the symptoms*
- *Increase consumption of starchy foods like banana, rice and bread*



Most bouts of diarrhoea are caused by viruses, not from "last night's dinner" - it is important to follow good hygiene practises at all times, as this will provide you with the best chance of avoiding those nasty trips to the toilet!