

www.corecharity.org.uk

INFORMATION ABOUT

ACUTE DIARRHOEA

WHAT WHY
WILL HOW OR
IF WHEN

IN ASSOCIATION WITH:

core
FIGHTING GUT AND LIVER DISEASE

bsg
BRITISH SOCIETY OF
GASTROENTEROLOGY

PCSG
Primary Care Society
for Gastroenterology

ACUTE DIARRHOEA

Most healthy people open their bowels between three times a day and three times a week. Normal stools are usually solid. The term diarrhoea is used when the stools become loose or watery, often associated with more frequent bowel movements. In acute diarrhoea, symptoms come on suddenly but usually clear up within 5-10 days.

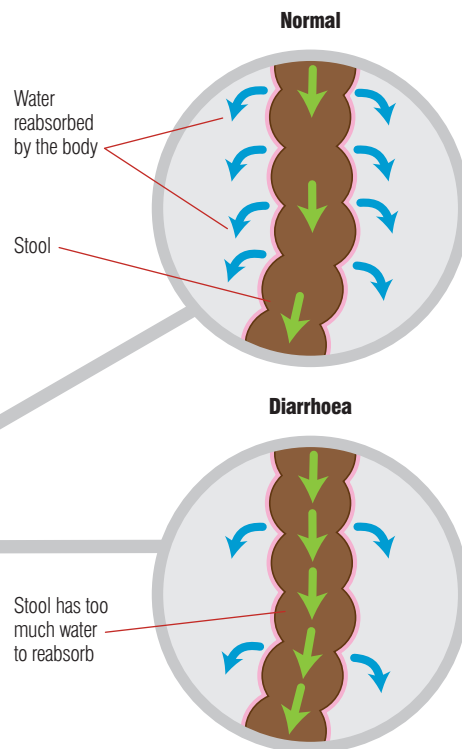
WHAT ARE THE MECHANISMS OF ACUTE DIARRHOEA?

Normal stools are solid because the small intestine and colon are highly efficient in absorbing nutrients, fluid and salts from the liquid and the upper gut contents

Diarrhoea occurs when these processes are impaired; for example when bacteria or viruses damage the lining of the gut.

Diarrhoea can also occur when there is excessive secretion of fluid, such as water, into the bowel that overwhelms the ability of the gut to reabsorb these secreted fluid and salts¹.

Some laxative drugs have this effect although the most common cause relates to infection with bacteria that produce proteins (enterotoxins) that stimulate gut secretion. In some situations acute diarrhoea may occur as a result of a combination of both mechanisms.



Diarrhoea may result when the bowel contents move too rapidly through the gut to allow sufficient time for absorption. Anxiety and some drugs can cause diarrhoea in this way. Bowel frequency is sometimes increased in those suffering from Irritable Bowel Syndrome. However, there is no increase in stool volume, which distinguishes it from acute diarrhoea, when stool volume is increased.

WHAT ARE THE CAUSES OF ACUTE DIARRHOEA?

The most common cause of an attack of acute diarrhoea is an intestinal infection (gastroenteritis). Infants and young children are particularly susceptible to intestinal infections, which are most commonly caused by a rotavirus². Bouts of norovirus diarrhoea often make the news since they can occur in local epidemics³.

Food poisoning is another common form of acute diarrhoea, most commonly caused by the bacteria *Salmonella* and *Campylobacter*⁴. These infections are passed on through contaminated food, such as poultry and eggs, or water; and sometimes by a person such as a food handler who has the infection, but has no symptoms of that infection (a carrier).

Acute diarrhoea can sometimes occur during or after a course of antibiotics, as a result of a variety of drugs and alcohol, and can also be associated with attacks of acute anxiety.

WHAT ARE THE SYMPTOMS THAT MIGHT BE ASSOCIATED WITH ACUTE DIARRHOEA?

Acute intestinal infections are commonly associated with cramping central or lower abdominal pain. Some infections may cause fever, particularly infections due to *Shigella* and *Campylobacter* that get into the lining of the bowel and cause acute inflammation. When there is direct damage to the bowel, blood may be associated with the diarrhoea, which is known as dysentery⁵. Nausea and vomiting often occur and put sufferers off their food.

WHEN SHOULD I CONSULT THE DOCTOR?

Most episodes of acute diarrhoea get better without the need for specific medical advice. However,

- if diarrhoea persists for more than 14 days;
- is associated with blood and/or high fever;
- or cramping abdominal pain becomes severe or constant

then you should seek medical advice. If you are a food handler then you should consult your doctor and inform your employer.

WHAT WILL THE DOCTOR DO?

The doctor will want to talk to you about your symptoms to try to identify a cause. The doctor will also want to examine you, including your abdomen and possibly your back passage.

The most important test to perform at this stage is an examination of your stool to determine whether there are any infective agents present that might be the cause of the diarrhoea and other symptoms.

It may also be necessary to examine the bowel by endoscopy, when a flexible tube with a camera is passed into the bowel via the anus, to determine whether there is inflammation in the rectum or colon (colitis).

HOW SHOULD I TREAT DIARRHOEA?

Before starting any treatment it is worthwhile considering that there might be an aggravating factor such as acute stress and anxiety, excess alcohol or a new recently prescribed drug.

Most episodes of acute diarrhoea will settle spontaneously without the need for any medical treatment. However, if the episode is severe, it is important to ensure that you take additional fluids and salts to replace those lost in the diarrhoea. For infants, young children and the elderly who are more sensitive to fluid losses, it is wise to use a pre-prepared oral rehydration solution, which can be purchased over the counter of most pharmacies.

For most adults oral rehydration can usually be achieved simply by increasing fluid intake in the form of mineral water, fruit juices (which also contain potassium) and salty soups (sodium), together with some form of carbohydrate (rice, pasta, salty crackers), which is important for promoting fluid and salt absorption⁶.

There is no need to stop eating although sufferers often prefer a lighter diet in the early phase of the illness. There is no need to interrupt breast-feeding for breast fed infants. Bottle-fed infants should still receive full-strength formula milk. In general, for adults, avoid dairy products and spicy foods until other foods are well tolerated⁷.

An anti-diarrhoeal drug such as loperamide is available from pharmacies without prescription. This is often helpful early in the illness to reduce bowel frequency. However, it should not be used in infants and very young children because of concerns that it may depress respiration.

For travellers with severe diarrhoea for whom loss of one or two days would seriously affect their activities (particularly the business traveller), the severity and duration of the illness can be dramatically reduced by taking a short course of a broad spectrum antibiotic. Even a single dose can be effective. If this might be the case, then it is worthwhile seeking medical advice about whether this might be appropriate for you before you travel.

CAN ACUTE DIARRHOEA BE AVOIDED?

The most important thing is to carefully wash the hands after using the washroom and before consuming food. Because most acute diarrhoea is related to intestinal infection that is usually transmitted by contaminated food or water, then it is possible to avoid an illness by being scrupulously careful about food and fluid intake. Only drink bottled or boiled water and avoid ice cubes when the origin of the water is uncertain. Avoid raw, unpeeled fruit and salads, shellfish and all foods that might contain raw egg. The safest food is that which is hot and well cooked⁸. Bouts of diarrhoea due to norovirus occur in local epidemics, and it is important not to spread infection, so avoid visiting hospitals and unwell relatives at such times.

CAN ACUTE DIARRHOEA BE PREVENTED?

For those travelling to high-risk areas (such as the Indian sub continent, South East Asia, Africa, Latin America) the chance of experiencing an attack of acute diarrhoea can be reduced by taking a broad-spectrum antibiotic. However, this is not generally advised because antibiotics do have adverse effects and widespread use in this way can lead to the emergence of antibiotic resistance. There is a danger, therefore, that the treatment might be worse than the disease.

Vaccines for traveller's diarrhoea are under development and one moderately effective vaccine is now available in the United Kingdom (Dukoral). It is aimed at the most common cause of traveller's diarrhoea, enterotoxigenic E.coli.

There is some evidence that probiotics (such as lactobacilli and bifidobacteria) found in 'live yoghurts' and other preparations, may also reduce the chances of experiencing an episode of infective diarrhoea. Prevention mainly lies in the avoidance strategies seen in the section above; avoiding tap water and drinking bottled water as well as ensuring that foods are cooked thoroughly all the way through and are piping hot.

YOU CAN HELP COMBAT GUT AND LIVER DISEASE BY MAKING A DONATION.

Conditions that affect the gut, the liver and the pancreas (collectively known as digestive diseases) are widespread but little known. They can cause significant health problems for people who live with them and, sadly, they are a factor in 1 in 8 UK deaths. Core is the only national charity working to change this by fighting all digestive diseases. As a charity, Core:

- Supports important medical research that looks for cures and for ways of improving the lives of patients;
- Provides evidence-based information that enables patients and families to understand and control their condition;
- Works to raise awareness of these conditions, their symptoms and impact.

THERE ARE MANY WAYS YOU CAN SUPPORT OUR WORK NOW:

- Call us on **020 7486 0341**
- Text **CORE14** plus your donation amount to **70070**
- Complete the form overleaf and return it to us
- Donate via our website at **www.corecharity.org.uk**

You can find more information about digestive diseases and about Core's work by visiting our website at **www.corecharity.org.uk** or by calling **020 7486 0341** during office hours.

REFERENCES

1. Gastroenterol Clin North Am. 2012 Sep;41(3):629-37. Epub 2012 Jun 28. Functional diarrhea.
2. Ref: McMahan ZH, DuPont HL. Aliment Pharmacol Ther. 2007 Apr 1;25(7):759-69
3. Ref: Matthews et al. Epidemiol Infect. 2012 Jul;140(7):1161-72
4. www.nhs.uk/Conditions/Food-poisoning/Pages/Causes.aspx
5. www.nhs.uk/conditions/dysentery/Pages/Introduction.aspx
6. Am Fam Physician. 2012 Jun 1;85(11):1066-70. Gastroenteritis in children: Part II. Prevention and management. Churgay CA, Aftab Z.
7. Pieścik-Lech M, Shamir R, Guarino A, Szajewska H. Aliment Pharmacol Ther. 2013 Feb;37(3):289-303
8. www.nhs.uk/Conditions/Diarrhoea/Pages/Prevention.aspx

This leaflet was published by Core in 2014 and will be reviewed during 2016. If you are reading this after 2016 some of the information may be out of date. This leaflet was written under the direction of our Medical Director and has been subject to both lay and professional review.

All content provided for information only. The information found is not a substitute for professional medical care by a qualified doctor or other health care professional. ALWAYS check with your doctor if you have any concerns about your condition or treatment. The publishers are not responsible or liable, directly or indirectly, for ANY form of damages whatsoever resulting from the use (or misuse) of information contained in or implied by the information in this booklet.

Please contact us if you believe any information in this leaflet is in error.

This information booklet is produced by Core, the only national charity fighting all digestive diseases. Show your support for Core by making a donation today or by joining us as a Core Friend.

I would like to join **Core Friends** and will be making a **Monthly/Quarterly/Annual** donation of £

I have completed the Direct Debit form below and signed the Gift Aid declaration if appropriate.

I would like to support Core with a donation of £5 £10 £25 Other £

I have signed the Gift Aid declaration below.

Please find a cheque enclosed **OR** Please charge my credit card

Name

Address

Postcode

Tel Email

MAKE A DONATION TODAY

Card No. Expiry / Sec. code

Address (if different to below)

Please call me on to take my payment details.

giftaid it

Please treat as Gift Aid donations all qualifying gifts of money made today, in the past four years and in the future. I confirm I have paid or will pay an amount of Income Tax and/or Capital Gains Tax for each tax year (6 April to 5 April) that is at least equal to the amount of tax that all the charities or Community Amateur Sports Clubs (CASCs) that I donate to will reclaim on my gifts for that tax year. I understand that other taxes such as VAT and Council Tax do not qualify. I understand the charity will reclaim 28p of tax on every £1 that I give up to 5 April 2008 and will reclaim 25p of tax on every £1 that I give on or after 6 April 2008.

Signature Date / /

SUPPORT BY REGULAR GIVING

Instruction to your Bank or Building Society to pay by Direct Debit

Please fill in form in ballpoint pen and send to: **Freeport RTJK-YYUL-XXSZ, Core, London NW1 4LB**



Name(s) of Account Holders(s)

Originator's Identification Number

Bank/Building Society Acc No. Branch Sort Code

Core Reference

Name and address of your Bank or Building Society

Branch Name

Address

Postcode

Instruction to your Bank or Building Society

Please pay Core Direct Debits from the account detailed in this instruction subject to the safeguards assured by the Direct Debit Guarantee.

I understand that this instruction may remain with Core and, if so, details will be passed electronically to my Bank/Building Society.

Contact Number

Signature(s) Date

NOTE: Banks and Building Societies may not accept Direct Debit instruction for some types of accounts.

Payment Date (not 31st) Amount £

Please contact me about supporting Core in other ways

I require a receipt for this donation I do not wish to be contacted by Core

Please send your completed form to **Freeport RTJK-YYUL-XXSZ, Core, London NW1 4LB**

You can also support Core online at www.corecharity.org.uk

or call us on **020 7486 0341**

Core is registered charity 1137029.

SUPPORTED AND PRINTED BY



T: 01273 420983 E: info@cmprint.co.uk
www.cmprint.co.uk