ALL YOU NEED TO KNOW ABOUT

DIVERTICULAR DISEASE

FUNDING RESEARCH INTO DISEASES OF THE GUT, LIVER & PANCREAS
THIS FACTSHEET IS ABOUT
DIVERTICULAR DISEASE

Diverticulum refers to a side-branch or pouch which sticks outwards from the wall of the large intestine (also known as the colon). The most common site for diverticula is in the lower part of the large bowel on the left hand side, although they do occasionally occur in the small intestine and, rarely, elsewhere in the gut. They are permanent unless the affected part of the intestine is surgically removed. Diverticular disease is extremely common in the developed world. Between 30% and 50% of this population will be affected during their lifetime with the likelihood of developing it increasing with age.

Diverticular disease is a term mainly used in people who develop symptoms. Diverticulitis means the condition that occurs when a single diverticulum or several diverticula become inflamed.

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WHY DOES DIVERTICULAR DISEASE OCCUR?
Imagine the large intestine as being similar to a bicycle tyre, with a soft, easily stretched inner tube and a tough outer tube. If a hole is made in the outer tube, when the inner tube inflates, it squeezes out through the hole. Like the tyre, our intestine has a soft flexible lining surrounded by a tougher outer tube of muscle. There may not be a hole in the outer tube as such, but where there is a weakness in the muscle, the inner layer can push through it to form the pouch that we call a diverticulum.

WHAT ARE THE CAUSES OF DIVERTICULAR DISEASE?
The physical cause of diverticular disease is when stools become small and hard rather than soft and bulky. These small stools pass through the intestine with difficulty and the intestine has to squeeze much harder than usual to push them along. These contractions create high pressure within the intestine. If this happens regularly and over a long period of time the pressure eventually weakens the lining of the intestine, which may then be pushed through its outer wall, resulting in diverticular disease.

The main reason why stools become small and hard is a lack of fibre in the diet. Fibre is roughage, the part of our diet that we can’t digest and is what passes through us via stools. Therefore, the more fibre is consumed, the bulkier and softer the stools. A low fibre diet increases the chance of getting diverticular disease. Generally, we eat far less fibre in our highly refined Western diet than people who live in developing countries, where diverticular disease is much less common.
WHAT ARE THE USUAL SYMPTOMS OF DIVERTICULAR DISEASE?

Around 75% of people who have the disease do not experience any symptoms at all, so the disease is usually diagnosed incidentally during investigation for another condition. The most common symptoms include lower abdominal pain, bloating (increase in abdominal size due to gas), change in bowel habit (diarrhoea or constipation) and mucus or blood in the stool. The pattern of symptoms varies from one person to the next, but pain is often crampy, comes and goes (intermittent) and is commonly focussed in the left side of the abdomen where the diverticula most often occur. Pain and bloating can often start after food is eaten and may ease when a stool or wind is passed. Many people experience a change with diarrhoea one day and constipation the next. It is important to remember that many symptoms of diverticular disease are very similar to those of more serious conditions such as bowel cancer so do not assume that they are due solely to diverticular disease.

When any of these symptoms occur, or if you experience a change in symptoms, tell your doctor who may suggest further investigations. It is not clear why most people with diverticular disease remain well whilst a minority go on to suffer symptoms.

HOW IS DIVERTICULAR DISEASE DIAGNOSED?

Diagnosis is made by a careful examination of the interior of the colon. During the examination the doctor will be looking for other abnormalities that could be causing the symptoms and so diagnosis is only confirmed once other conditions have been ruled out. This can be done via:

- **Colonoscopy**: a tube with a camera is passed into the colon via the back passage to view the inner surface of the colon. A sigmoidoscopy is a similar procedure that views less of the colon. Medication can be given to make the procedure comfortable and you will be given something before the procedure to ensure you completely empty your bowels.

- **CT scan**: this is a non-invasive x-ray-based test although, as with the colonoscopy, you will be required to completely empty your bowels beforehand.
HOW CAN DIVERTICULAR DISEASE AFFECT YOU?
It is important to remember that most people with the disease will never have any complications. However, in some cases complications can occur and these include:

• **Infection (diverticulitis):** this is the most common complication, occurring in about 10%-25% of people with the condition. This can happen when a piece of hard stool gets stuck in one or more diverticulum, forming an ideal environment for bacteria to multiply, leading to infection. Signs that this has happened include worsening abdominal pain, high temperature, nausea (feeling sick) or vomiting (being sick). If any of these symptoms are experienced medical help should be sought immediately. Diverticulitis is normally treated with antibiotics and a fluid only, or low residue diet, which will rest the bowel and allow the inflammation to subside. Sometimes, when infection is severe, it can cause further complications such as a collection of pus (abscess), an obstruction (blockage of the bowel) or a perforation. If these complications arise, an operation to remove part of the colon, or a needle placed into the collection of pus may be needed.

• **Blockage of the gut:** scar tissue can sometimes form around the inflamed diverticulum. This may lead to narrowing of the colon, which can cause a blockage.

• **Perforation in the diverticulum:** sometimes an inflamed pouch (diverticulum) can burst, breaching the wall of the bowel and leading to peritonitis, a serious condition with widespread inflammation in the whole of the abdomen.

• **Large amounts of bleeding from the back passage:** a blood vessel in the wall of a diverticulum can rupture leading to bleeding into the colon.

• **Fistulas:** rarely, the presence of diverticula may lead to formation of abnormal connections (fistulas) between the gut and other organs such as the bladder or vagina. Signs of this include small amounts of stool in the urine or foul-smelling discharge from the vagina and, if diagnosed, surgery is usually necessary, so it is important to see a doctor if you have these symptoms.
WHAT TREATMENT IS AVAILABLE FOR DIVERTICULAR DISEASE?

Self Management
The main treatment is to keep stools relatively soft and bulky. This may reduce the likelihood of more diverticula developing and may reduce the risk of hard pellets of faeces lodging within the pouches. The best way to do this is to eat more fruit and vegetables, nuts, wholemeal bread and pasta, wholegrain cereals and brown rice, which are all good sources of fibre. The aim is to have at least one high fibre food with each meal, five portions of fruit or vegetables per day and try to drink at least two litres (eight to ten cups) of fluid every day.

However, people with diverticular disease can respond differently to fibre in the diet and even to different types of fibre. So whilst one person may be helped by increasing the amount of plant fibre in the diet, another may feel that their symptoms become worse. Some people find that it helps to take fibre in the form of fruit and vegetables rather than that in cereals and grains, which may cause more bloating and pain. Bran aggravates symptoms for some people and so is not routinely recommended. Avoiding large or fatty portions of food is a common-sense measure if symptoms are worse after meals. Overall it is not possible to make specific rules about diet and there is usually an element of trial and error for each individual until they find what suits them best.

If you change the foods you eat it is important to ensure your diet remains balanced and nutritious. The NHS website has useful information on what constitutes a healthy diet. It also contains the Eatwell Guide, a visual representation of which food groups you need to eat, and in what proportions, to achieve a balanced diet. Visit the NHS website at:

www.nhs.uk/live-well/eat-well

The British Dietetic Association (BDA), the association of UK dietitians, also has information on healthy eating on their website. Visit their Food Facts section at:

www.bda.uk.com/foodfacts

You can also request the Guts UK ‘Healthy eating and the digestive system’ leaflet or download it from the Guts UK website.
Medicines
There is no specific medical treatment for the general symptoms of diverticular disease although supplements which contain fibre such as ispaghula husk or methyl cellulose preparations will soften the stools. A pharmacist will be able to advise. Some doctors may prescribe an antispasmodic drug, but the results are often disappointing. An antibiotic may be tried if inflammation is suspected but painkillers such as codeine should be avoided as they tend to worsen and can even cause constipation.

Surgery
This is usually only undertaken after an episode of inflammation because an abscess has formed around the colon, or infection from the inflamed perforated diverticulum has spread more widely within the abdomen. The most commonly performed operation cuts out the segment of the bowel with the infected pockets. One end of the bowel is brought up to the skin as a stoma where the bowel content comes into the bag. This can later be reversed if the inflammation is not too severe and the bowel can be joined back together.

HOW CAN DIVERTICULAR DISEASE AFFECT YOU OVER TIME?
Most people with the condition never get any symptoms at all and if they do arise, they are not likely to be serious and can be well managed with a simple change of diet. Relatively few patients ever get complications severe enough for them to be admitted to hospital and very few people die of this very common disease.

WHAT TO ASK YOUR DOCTOR?
• Has my colonoscopy/CT scan ruled out any other conditions or are there any issues of potential concern in my colon?
• What dietary changes would help my condition?
• What monitoring or follow up will I be offered?

For more information about research in this area please contact Guts UK.
gutscharity.org.uk  |  020 7486 0341  |  info@gutscharity.org.uk
Can you support Guts UK charity? Whatever you do already, do it for Guts UK charity. The more we all know about our digestive system, the better we can look after it.

Fancy making us a knitted guts set for education purposes? Contact us for a pattern

IF YOU FIND THIS INFORMATION USEFUL, PLEASE SHARE IT WITH OTHERS

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About Guts UK

Guts UK’s vision is of a world where digestive disorders are better understood, better treated and everyone who lives with one gets the support they need.

Our mission as Guts UK is to provide expert information, raise public awareness of digestive health and transform the landscape for research into our digestive system to help people affected by diseases of the gut, liver and pancreas.

WE ARE PASSIONATE ABOUT OUR GUTS. COME ON BOARD AND JOIN US.

This charity was set up to change something – to increase the levels of research into diseases of the gut, liver and pancreas so no one suffers in silence or alone. Since 1971 we have funded almost 300 projects and invested £14 million into medical research that leads to better diagnoses and treatments for the millions of people who are affected by digestive diseases and conditions.

But we still have much more to do. Will you support Guts UK?

Give a donation today and play your part in the next vital research that will change things for future generations of people affected by the frustration and misery of digestive disease.

Together we can make more important change happen. Vital answers, new treatments and hope.

FIND OUT MORE
visit gutscharity.org.uk
FUNDING RESEARCH INTO DISEASES OF THE GUT, LIVER AND PANCREAS
DONATING IS EASY

1. Choose whether you want to make a one-off donation, or make regular donations.
2. Enter your details in the form below.
3. Send this form, via Freepost to us or call us to take payment.

YOUR DETAILS

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MAKE A ONE-OFF DONATION

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I would like to support GUTS UK with a donation of

- £5
- £10
- £25
- £50
- £100
- £500
- Other

SUPPORT BY REGULAR GIVING

Instruct your Bank or Building Society to pay by Direct Debit. Please fill in the form in ballpoint pen and send to: Freepost RTJK-YYUL-XXSZ, Guts UK, London NW1 4LB

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Name and address of your Bank or Building society

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Instruction to your Bank or Building Society

Please pay Guts UK 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 GUTS UK and, if so, details will be passed electronically to my Bank/Building Society.

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

Please turn every £10 you donate into £12.50 - at no extra cost to you!
I am happy for all gifts of money that I have made to Guts UK charity (Core) in the last four years and all future gifts of money that I make to be Gift Aid donations. I am a UK taxpayer and understand that if I pay less Tax & Capital Gains Tax in that tax year than the amount of Gift Aid claimed on all my donations across all charities, it is my responsibility to pay any difference. Guts UK charity claims 25p for every £1 you donate from the tax you pay for the current tax year. If your circumstances, name or address change, please do let us know.

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