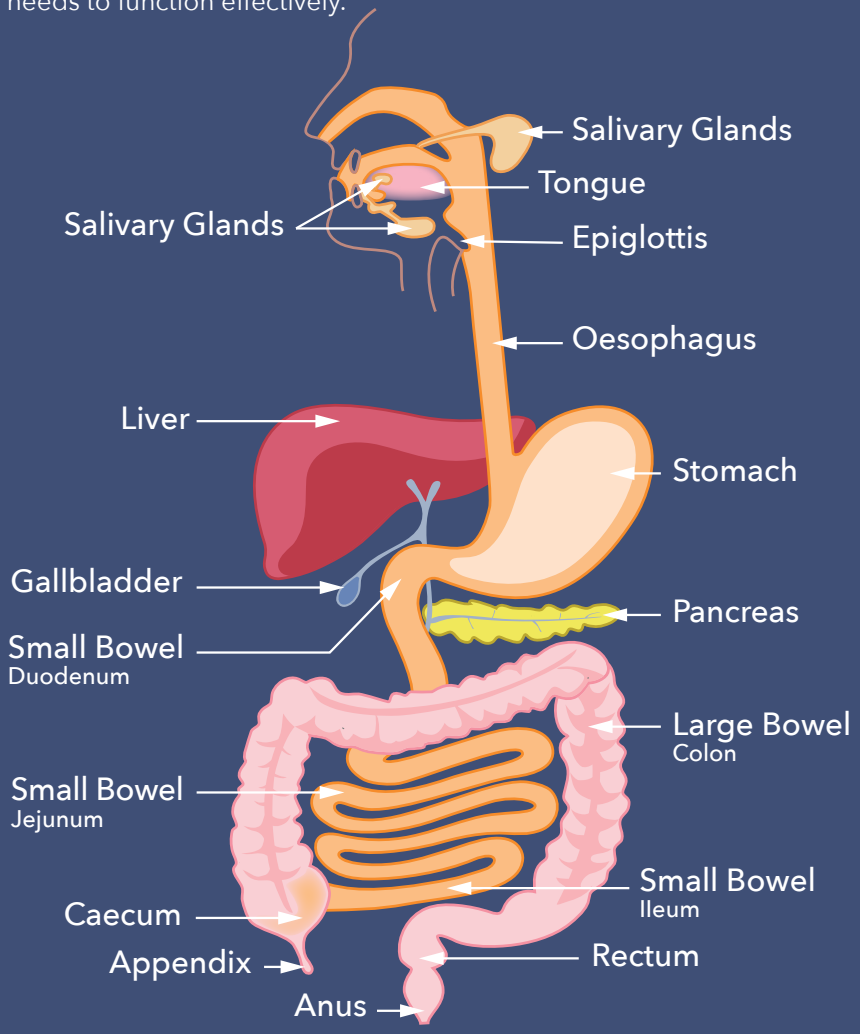
All you need
to know about

BOWEL CANCER

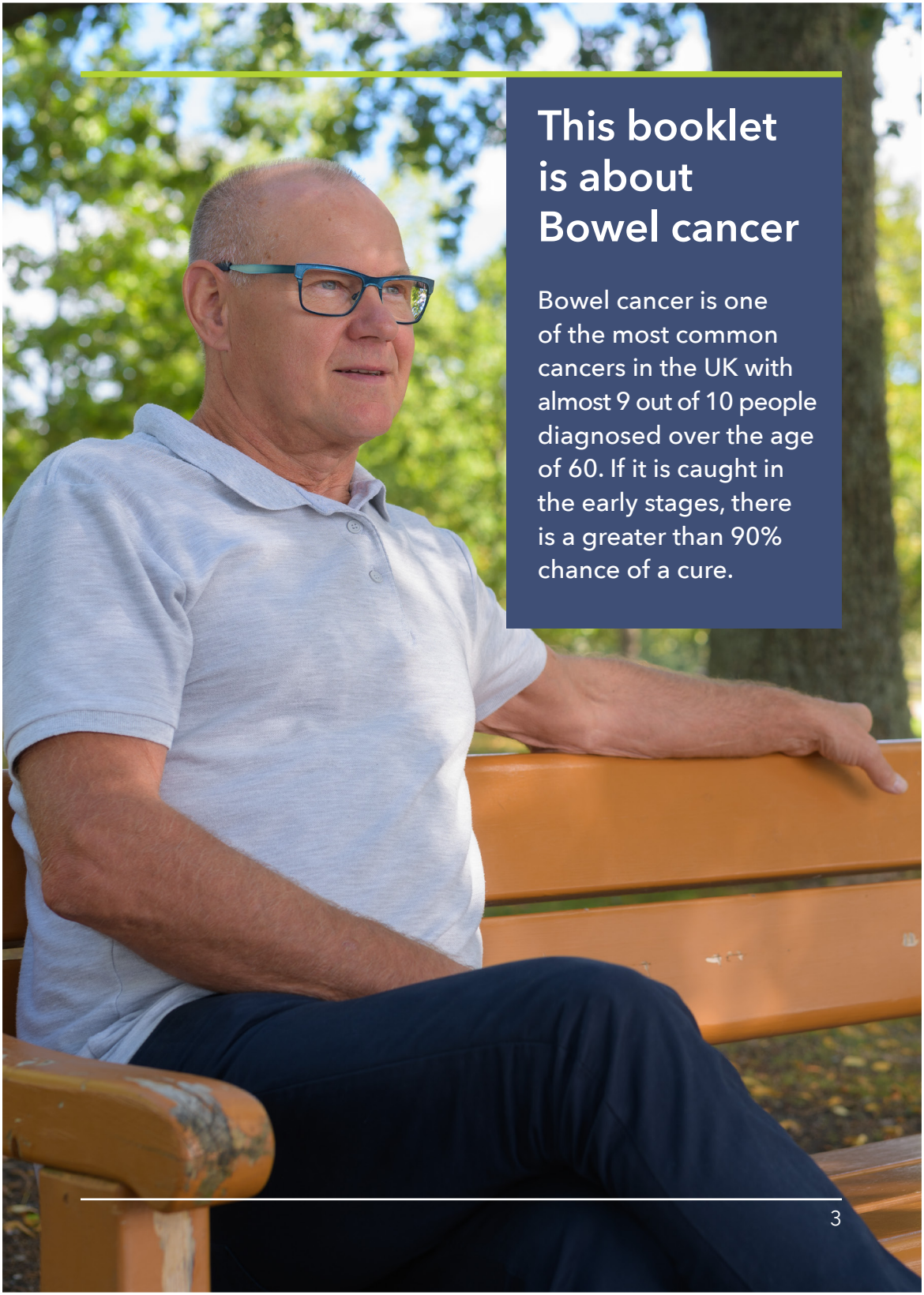
BRITISH SOCIETY OF GASTROENTEROLOGY

Our Digestive System

The Digestive System runs from the mouth to the anus and includes the stomach, the large and small bowels (intestines) and a number of accessory organs. The role of the digestive system is to turn food and liquid into the building blocks that the body needs to function effectively.



This leaflet was published by Guts UK charity in 2022 and will be reviewed in 2024. The leaflet was written by Guts UK and reviewed by experts in Bowel Cancer and has been subject to both lay and professional review.



This booklet is about Bowel cancer

Bowel cancer is one of the most common cancers in the UK with almost 9 out of 10 people diagnosed over the age of 60. If it is caught in the early stages, there is a greater than 90% chance of a cure.

Overview

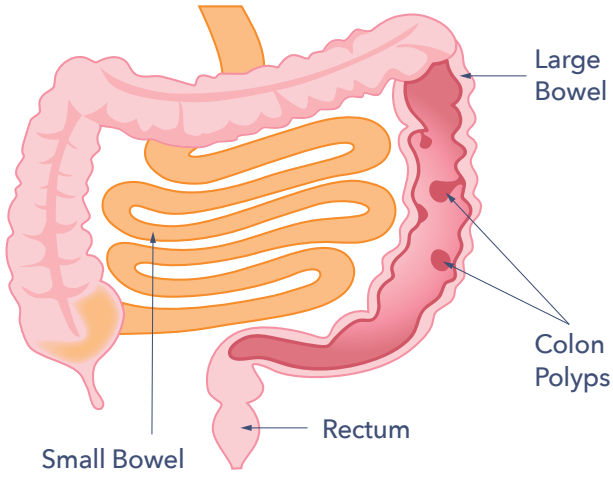
Throughout our lives, the lining of the bowel constantly renews itself. This lining contains many millions of tiny cells, which grow, serve their purpose and then new cells take their place. Each one of these millions of cells contains genes that give instructions to the cell on how to behave. When genes behave in a faulty manner, this can cause the cells to grow too quickly. Fast cell growth eventually leads to the formation of a growth that is known as a polyp. This can be the first step on the road towards cancer. See Guts UK's information on polyps here: **www.gutscharity.org.uk/advice-and-information/conditions/polyps-in-the-bowel/**

What causes the development of bowel cancer?

We believe that all malignancies of the bowel probably start off as benign (non-cancerous) polyps. A polyp starts as a tiny bump of cells on the inside of the bowel. Some polyps remain very small throughout their lives while others slowly grow larger. At this stage, the lump is still benign. In some polyps, the instructions that the genes give the cell on how to grow become increasingly disordered. When this happens, the cells grow so quickly and in such a strange way that they grow not just on the bowel lining, but start to extend through the bowel wall. The polyp is no longer benign but has become malignant (cancer).

Most polyps remain benign throughout life but about 1 in 10 will turn into a cancer. Broadly speaking, the larger a polyp, the more likely it is to become cancerous.

Cancer is unusual if the polyp measures less than 1cm. We know that removing benign polyps can prevent cancer developing later.



How is bowel cancer diagnosed?

Sometimes, the doctor will be able to detect a lump in the abdomen or on rectal examination, but tests are usually needed. The most used are:

Flexible sigmoidoscopy

After an enema is used to clear the bowel, a flexible telescope (a long thin tube with a camera at one end) is passed through the anus, into the rectum. Sigmoidoscopy can visualise the lower half of the bowel.

Colonoscopy

A flexible telescope is passed through the anus into the rectum, but the tube is long enough to examine the whole of the large bowel. The procedure can be uncomfortable, and most patients are offered an injection to ease any discomfort.

CT pneumocolon

You may be offered a test called a CT pneumocolon (sometimes called CT colonography). Laxatives are usually taken to empty the bowel and carbon dioxide is gently pumped into the bowel to outline its lining. Sometimes a contrast dye may also be needed, this is given through an injection into the arm.

Colon capsule

This involves swallowing a tiny camera the size of a large vitamin pill, which passes through the bowel and takes pictures, which are beamed wirelessly to a recording device you wear at your waist. These images are then reviewed by a specialist and a report issued. It still requires taking bowel preparation medication, to help clear the bowel of it's contents but has the advantage (that many people appreciate) of not involving a tube being passed through the anus. It is currently the subject of a large study by the NHS and is offered by many hospitals across the country.

Both flexible sigmoidoscopy and colonoscopy have the advantage that a small sample of tissue (or biopsy) can be taken to look at under the microscope. The above tests are used in slightly different situations depending upon the symptoms that someone may have and the availability of the investigations.

What is bowel cancer screening?

Because polyps may bleed, one of the screening methods involves testing the stools chemically for traces of blood. Further investigations of the bowel are carried out if the test is positive. Trials of these methods on people who have no bowel symptoms have shown that more early cancers are being diagnosed. Early detection improves the chance of survival. Mass screening of the population for bowel cancer has now started in the UK and is currently taking the following format:

- In England all men and women aged 56 to 74, who are registered with a GP are automatically sent a bowel screening test every 2 years. The age range is planned to be expanded to age 50 over the next 4 years.
- In Scotland screening starts at age 50 to 74.
- In Wales the age range is 58 to 74.
- In Northern Ireland the age range is 60 to 69.

The test is called the faecal immunochemical test (FIT). FIT can pick up hidden blood in the poo that is not visible to the naked eye. The results of this test can aid any potential diagnosis or decision about referral to a specialist. This test is not a direct test for bowel cancer but may indicate that polyps are more likely to be found in the large bowel, leading to a referral from your doctor for a colonoscopy.

- Those over the age of 75 who reside in England can ask for a screening kit every two years by calling the free bowel cancer screening helpline on **0800 707 60 60**.
- If you reside in Scotland people and are aged over 74, can request a screening kit by contacting the bowel cancer screening programme on **0800 012 1833**.

People with conditions that increase their risk of bowel cancer may also be screened by going straight to colonoscopy rather than having an initial stool test. This may start at a younger age and happen more often. Examples of people at higher risk are those with Lynch syndrome, familial adenomatous polyposis (FAP) a strong family history of bowel cancer, inflammatory bowel disease, a previous bowel cancer or polyps.

What are the symptoms of bowel cancer?

The development of a bowel cancer from a polyp may take between five and ten years, early on there may be no symptoms at all. The most common symptoms are:

- Bleeding from the bowel
- Change in bowel habit (such as unusual episodes of diarrhoea or constipation)
- Abdominal pain or weight loss

A bowel cancer can enlarge causing partial or complete blockage of the bowel leading to abdominal pain, constipation and bloating. Sometimes tiny amounts of bleeding may go unnoticed but result in the development of anaemia, a low blood count. Anaemia may cause tiredness and a decreased ability to work and exercise. Unexplained weight loss is also a symptom. Some of these symptoms are just like those of irritable bowel syndrome (IBS). However, a new, prolonged change in bowel habit lasting more than two or three months should always be discussed with your doctor. It might not require an invasive test like a colonoscopy. If you have a family history of bowel cancer (someone aged under 50 with cancer, or three or more relatives affected) you should visit your doctor within a few weeks of any changes. Achieving a complete cure of bowel cancer usually depends on detecting it early on and if people wait too long before reporting symptoms, the opportunity to completely remove the cancer may be lost. An early diagnosis can also be made if you don't have symptoms by using screening.

Can bowel cancer be hereditary?

If a person is young (40-50 years of age) when bowel cancer is diagnosed or if cancer is very common in the family (three or more family members), there may be an inherited genetic (born in) abnormality. An example is Lynch syndrome, a condition that raises the risk of bowel cancer. Where inherited conditions occur, brothers, sisters, and children of the person identified may be referred to a specialist for advice. If the risk of inherited disease is high enough, some relatives may be advised to go through regular colonoscopies. There are uncommon and inherited conditions including familial adenomatous polyposis (FAP) in which many polyps develop throughout the bowel and the cancer risk is greatly increased. The family of people with inherited risk of bowel cancer may require referral to an inherited cancer specialist who can do a blood test that looks for the possibility of an inherited condition.

What happens if bowel cancer is diagnosed?

Once all the relevant information including biopsies, blood tests and scans have been collated, the case will be presented at a Multi-Disciplinary Team meeting (MDT) where a diagnosis and management plan will be discussed and agreed.

The oncologist (cancer doctor) or bowel cancer surgeon will then explain this decision to the patient and answer any questions they may have. At this time, the patient will probably be introduced to a clinical nurse specialist (a colorectal nurse) who is a senior nurse with expert knowledge of colorectal cancer. He or she will be fundamental to the patient's bowel cancer treatment.

The nurse is beneficial for ensuring that treatment runs as smoothly as possible and that the person diagnosed with bowel cancer feels supported throughout what can be a very upsetting time. The clinical nurse specialist, rather than the doctors, will usually be the first point of contact throughout the whole process.

What treatment is available for bowel cancer?

Unless the tumours are very small and can be removed by a local operation, most cancers need to be carefully evaluated, usually at the Multi-Disciplinary Team, before any surgery happens.

Chemotherapy or Radiotherapy

The MDT will decide whether, or not the cancer can be shrunk down by radiotherapy or chemotherapy before surgery. This can often improve the outcome of the cancer. If so, any treatment will usually be given every day for five weeks, Monday to Friday, followed by a 12-week break. The patient will then be rescanned and discussions will take place again at the colorectal MDT meeting, where a decision will be made on surgery.

Surgery

Once a check has been made to make sure that that there is no spread anywhere else, most bowel cancers are treated by surgery. This will usually involve removing the cancer together with the lymph glands next to the blood vessels supplying that section of the bowel. In most cases, the two ends of the bowel are joined together again (anastomosis). But if an emergency operation needs to happen, or if there are particular concerns regarding the location of the cancer, it may not be possible to join the bowel together straight away.

Staging

Once the bowel cancer and surrounding tissue have been removed, they will be examined under the microscope and only then will it be possible to figure out fully the stage of the cancer. If the cancer is restricted to the bowel wall, then surgical removal alone may be all that is needed. If there is any sign of spread to the local lymph glands, a course of chemotherapy post-operatively may well be advised. The staging of a cancer can certainly affect the chance of a cure and your specialist will be able to explain your specific diagnosis. Bowel cancer caught early has a greater than 90% chance of a cure.

Post (after)-surgery treatment

Soon after the operation, the MDT will meet again to review all the information from the operation including analysis of the tumour which will reveal the specific stage of the cancer (staging). Further treatment will be dependent on those results and the decisions made will be explained. If there is need for further treatment such as chemotherapy, then this will be arranged.

Will I need a colostomy (stoma)?

A cancer of the rectum very near the anal canal can be hard to remove completely in this situation. It may be necessary to remove the rectum as well as the anus and make a permanent opening of the bowel into the skin of the abdomen (called a colostomy or stoma). This is much rarer nowadays. Usually if a stoma is necessary, it will only be a temporary procedure to allow the bowel join (anastomosis) to heal properly. The stoma can then be reversed in a second operation, usually a few months later, so that the normal bowel flow is restored.

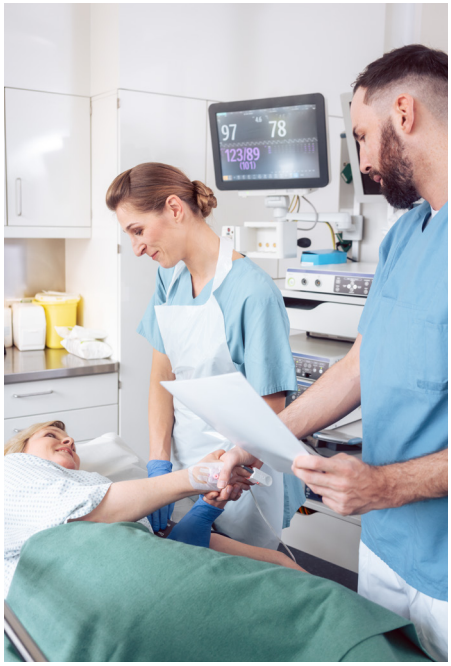
How will I be monitored over time?

If no further treatment is needed, patients will be followed up for a period of five years with a mixture of clinic appointments, blood tests, colonoscopies and scans. The follow up will be different if the patient has a hereditary cancer such as Lynch Syndrome. If the cancer does recur, which is rare, there are still many options for a positive outcome.

How can I prevent the cancer coming back?

A healthy lifestyle and a diet rich in fresh fruit and vegetables together with attendance at follow up programmes seem to be the best advice.

Experts also believe that exercise has a positive impact on lowering the risk of recurrent disease. People diagnosed with Lynch syndrome might be advised by their doctor to take aspirin as a preventative measure. Discuss this with your doctor.



What is secondary cancer?

As the tumour advances, it grows through the wall of the bowel to invade nearby tissues. Via the blood and lymphatic systems it can spread to other areas of the body.

The most common areas for secondary bowel cancer to spread to are the liver and the lungs. This may have already happened when the cancer is first diagnosed or may happen later. These are called 'secondaries' or, more technically, 'metastases'.

How is secondary cancer treated?

Recently there have been many highly effective advances in the treatment of secondary cancers including targeted therapy for liver and lungs, surgery and a technique called Radio Frequency Ablation (RFA).

Chemotherapy (drug treatment given as tablets or injections) is usually given and its effects can be measured by its ability to shrink the size of the secondary cancer deposits that have been seen on the scans. Your cancer team will provide much more information on the benefits as well as possible side effects of these medications.

What developments are being made in the treatment of bowel cancer?

New surgical techniques are being used to try and reduce the size of the abdominal wound and even remove cancers from within the bowel. Chemotherapy has certainly been increasingly successful over the last few years as several new drugs have become available. Vaccines against cancer and 'magic bullets' to target treatment specifically against tumours are in early stages of development. Better tests for population screening are being investigated so that in the future it will be easier to identify cancer at an early stage.

Guts UK is proud to fund Professor Colin Rees' COLO-COHORT study.

This project aims to develop a "risk stratification tool" to help determine which people are at higher risk of developing bowel cancer, or polyps.

Though screening programmes are already in place, these only consider age. The COLO-COHORT study will explore other factors, such as lifestyle and family history.

The aim is for this tool to be used in the future to better screen the population for bowel cancer. The aim is to determine who is at higher risk of developing bowel cancer, or polyps.

In addition to investigating the factors named above, the COLO-COHORT study aims to explore a novel and promising factor: the gut microbiome. The team will examine whether gut bacteria are different in people with and without adenomas or bowel cancer. If they identify useful differences, gut bacteria could then be incorporated into future risk models as another predictive factor.

What to ask your doctor

If you have bowel cancer you will be under the care of a multidisciplinary team (MDT) who will treat and monitor you over the long term. If you, or your carer, have any questions about your treatment or any aspect of your illness, don't be afraid to ask your doctor or the nurse who is looking after you. It often helps to make a list of questions for your doctor and to take a close friend or relative with you.

Support

The National Institute of Health and Care Excellence (NICE) develop guidance on the treatment you might expect with a diagnosis of bowel cancer and you can read their latest guidance here:
www.nice.org.uk/guidance/ng151

and you can also read their quality standards of care here:
www.nice.org.uk/guidance/qs20

You can also find other information from MacMillan Cancer support:
www.macmillan.org.uk

Guts UK

The charity for the digestive system

Our guts have been underfunded, undervalued and underrepresented for decades.

"I chose to fundraise for Guts UK because when I was in hospital, I was amongst others with various digestive diseases. It was there that I realised there needs to be so much more awareness for these invisible illness. We must raise much needed funds for this important research!"
Abi, Guts UK fundraiser.

Join our community

It's time the UK got to grips with guts.

With new knowledge, we will end the pain and suffering for the millions affected by digestive diseases. Guts UK's research leads to earlier diagnoses, kinder treatments and ultimately a cure.

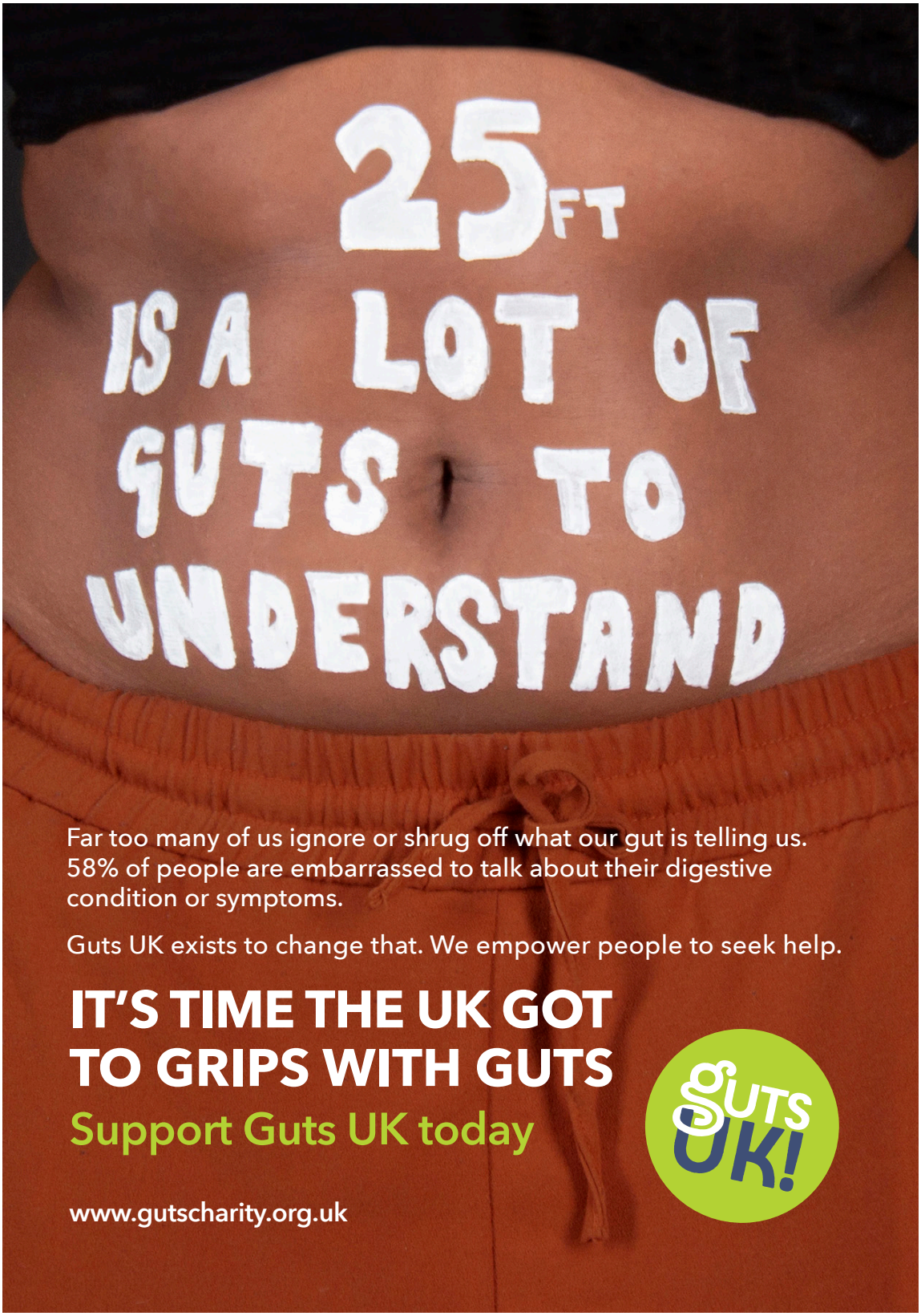
Let's get to grips with our guts, and save lives.

Discover more about our fascinating digestive system at

gutscharity.org.uk

020 7486 0341
info@gutscharity.org.uk

@GutsCharityUK



Far too many of us ignore or shrug off what our gut is telling us. 58% of people are embarrassed to talk about their digestive condition or symptoms.

Guts UK exists to change that. We empower people to seek help.

IT'S TIME THE UK GOT TO GRIPS WITH GUTS

Support Guts UK today

www.gutscharity.org.uk

GUTS UK!

Donation Form

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