# What is Irritable Bowel Syndrome?



### What is Irritable Bowel Syndrome?

Irritable Bowel Syndrome or IBS is the name doctors have given to a collection of otherwise unexplained symptoms relating to a disturbance of the large bowel.

These may include:

- Crampy abdominal pain, often relieved by defecation
- An alteration in bowel habit (diarrhoea, constipation or alternating diarrhoea and constipation)
- Bloating and swelling of the abdomen
- · Rumbling noises and excessive passage of wind
- Urgency a need to rush to the toilet and incontinence (if a toilet is not nearby)
- A sharp pain felt low down inside the rectum
- Sensation of incomplete bowel movement

When X-rays, blood tests, examination of the stool, endoscopy and other diagnostic tests are carried out, the results do not reveal any obvious abnormality. For that reason, IBS is often called 'a functional disorder' of the bowel; in other words, an illness associated with a disturbance of bowel function without any change in structure or obvious cause.

Symptoms frequently occur in other parts of the body. These may include; headaches, dizziness, backache, passing urine frequently, tiredness, muscle and joint pains, ringing in the ears, indigestion, belching, nausea, shortness of breath, anxiety and depression. A similar range of symptoms is reported by patients with other medically unexplained illnesses, such as Chronic Fatigue Syndrome, Fibromyalgia, Food Intolerance and Functional Dyspepsia, raising questions as to whether they are different expressions of the same type of illness.

### How is Irritable Bowel Syndrome diagnosed?

Irritable Bowel Syndrome should always be diagnosed by a qualified medical professional. Please do not attempt to self-diagnose.

A qualified medical practitioner should always diagnose IBS, since some of the symptoms of other bowel diseases can resemble those of Irritable Bowel Syndrome. Nevertheless, doctors are usually quite confident at diagnosing IBS by the pattern of symptoms alone without recourse to tests to rule out every possible cause.

According to the most recent Rome criteria, set out by an international concensus of specialists, a diagnosis of IBS

can only be made if you have frequent abdominal discomfort that is either relieved by going to the loo or associated with changes in the frequency or form of stool (a tendency to diarrhoea or constipation). The diagnosis is supported if you experience difficulty passing motions, you pass mucus, or you have bloating and feelings of abdominal distension.

Our bowels are not always as regular as clockwork and bloating and abdominal pain are very common complaints. At any one time between 10% and 20% of people living in the western world fulfil the diagnostic criteria for IBS.

Irritable Bowel Syndrome is a condition that can occur at any stage in life, but frequently begins in early adulthood and comes and goes over the course of many years. That fact alone is an important diagnostic pointer, but you should always seek further advice if your symptoms change.

#### When should tests be carried out?

You may well need to undergo specific tests such as an endoscopy, a scan or an X-ray to exclude other conditions if any of the following red warning flags are present:

- Recent weight loss
- · Passage of blood in the stools
- Fever
- A rapid and persistent unexplained change in bowel habit in somebody above the age of 40

# Who gets Irritable Bowel Syndrome?

The quick answer to that is 'we all do', though some people get it more severely than others. Our bowels are not always as regular as clockwork and bloating and abdominal pain are very common complaints. At any one time between 10% and 20% of people living in western countries fulfil the diagnostic criteria for Irrtiable Bowel Syndrome. In common with other medically unexplained illnesses,

Irrtiable Bowel Syndrome is more frequently diagnosed in women compared with men, in young people compared with old and in western countries compared with the developing world. It is commonly associated with emotional tension, is frequently triggered by life changes, difficult life situations or stressful life events.

# **Physiology**

Irritable Bowel Syndrome was originally thought to be a disorder of gastrointestinal contractions. Pressure recordings from the lower end of the bowel have revealed the presence of spasms and other parts of the gut often show more frequent contractions. More recent studies have discovered that the bowel is abnormally sensitive. This probably explains the alterations in contractions and disturbances in bowel function since a bowel that is more sensitive is also going to react more strongly to whatever it contains.

### What causes Iritable Bowel Syndrome?

We do not know for sure. Many specific causes have been suggested, including yeast infection, fluoride toxicity, and mercury poisoning, but there is no convincing evidence for them. In recent years, research in Irritable Bowel Syndrome has concentrated on factors that might make the gut more sensitive. These include food allergy, inflammation, stress and a chemical transmitter called serotonin.

Emotional tension can sensitise the gut, making it more reactive to whatever is inside it. We only have to think of how anxiety can give all of us diarrhoea, depression may make us constipated, fear can make us sick. It is therefore, always important to ask yourself what was going on in your life before the attack started...

### Food allergy and intolerance

Food allergy refers to a specific immune reaction to a particular protein in food, whereas food intolerance refers to any uncomfortable reaction to food. Since the symptoms of Irritable Bowel Syndrome are often triggered by eating a meal.

it is not surprising that many people believe that it is caused by an allergy to specific foods. Blood and skin tests for allergy, however are usually negative, but allergies that are confined to the gut can only be diagnosed for certain by testing reactions to foods concealed inside a dissolvable capsule which are swallowed by the patient.

This is rarely carried out. People with Irritable Bowel Syndrome are often intolerant to a whole range of common foods. This suggests that it is not so much the food that is causing the problem but the sensitive gut that is

overreacting to its contents. And since emotional tension can make the bowel more sensitive, it is not surprising that intolerances can come and go according to how a person feels.

A sensitive gut tends to be more 'leaky', which means that food proteins are more likely to penetrate the gut wall and stimulate an immune reaction. This explains why the detection of IgG antibodies to food proteins has been advocated as a useful guide to dietary management of Irritable Bowel Syndrome. Allergies and intolerances can be unmasked by emotional upset and so dietary management of Irritable Bowel Syndrome often needs to be combined with counselling.

#### Inflammation

A small proportion of people develop IBS for the first time after a bout of gastroenteritis, raising speculation that gastroenteritis might make the gut more sensitive. These same people also tend to have a more inflamed gut, though there is no evidence of continuing infection.

Recent research has shown that post-infectious Irritable Bowel Syndrome is much more likely if the person was anxious, depressed and was experiencing difficult life situations at the time of the original illness. Normally inhibitory signals down the spinal cord promote a healing response. Ongoing emotional upset can prevent this from taking place.

Recent research suggests that many people with Irritable Bowel Syndrome have a chronic low grade inflammation of the small and the large intestine. An attack of gastroenteritis or the antibiotics given to treat it can alter the balance of the bacteria in the colon, reducing populations of beneficial anaerobic bacteria and encouraging the overgrowth of more malign species. Although it is not established whether this mechanism can result in chronic symptoms of Irritable Bowel Syndrome, restoring beneficial populations of colonic bacteria with probiotics or live yoghurts has become a popular treatment of Irritable Bowel Syndrome.

### **Stress**

There is a strong association between emotional upset and Irritable Bowel Syndrome. Not only do patients with moderate to severe IBS have more emotional upset than healthy people or patients with other gastrointestinal diseases caused by inflammation or cancer, but they also have experienced more traumatic life events and difficult life situations both in adulthood and childhood.

Emotional tension can sensitise the gut, making it more reactive to whatever is inside it. We only have to think of how anxiety can give all of us diarrhoea, depression may make us constipated, fear can make us sick. It is therefore, always important to ask yourself what was going on in your life before the attack started, what is associated with relapses and remissions of symptoms or whether the symptoms remind you of any particular event.

#### Serotonin

Serotonin is released from specific reactive cells in the gut wall, such as mast cells and enterochromaffin cells, in response to any factor that irritates, injures or stimulates the gut. It appears to play a key role in making the gut more sensitive and more reactive.

in recent years, pharmaceutical companies have spent huge amounts of time and money in trying to develop drugs that will either block the action of serotonin to treat diarrhoea or to enhance its action in order to treat constipation. As a result of this research a number of drugs have been produced, but they are not, as yet, generally available in the UK to treat IBS.

#### How can IBS be treated?

There is no cure for Irritable Bowel Syndrome. It is one of those illnesses that may come and go according to what is going on your life, but that doesn't mean it cannot be treated. Your doctor will often prescribe drugs, but it is important to realize that although these may help to control certain symptoms, they may do nothing at all to others and may even make some worse. So you will need to work with your doctor to find out what suits you.

Some drugs are designed to relieve the spasm and pain of IBS. These are called antispasmodics. Mebeverine (*Colofac*) and Alverine (*Spasmonal*) can be obtained over the counter and are relatively free of side effects. Peppermint oil (*Colpermin, Mintec*) can also be useful. Hyoscine (*Buscopan*) and Dicyclomine (*Merbentyl*) can also be used for abdominal pain but can cause dizziness, blurred vision and problems with passing urine.

For diarrhoea and incontinence, there are several very effective drugs. They all restore a sense of control and will permit you to be more socially active. Loperamide (*Imodium*) is the most powerful and has the least side effects because it acts directly on the gut. Codeine phosphate is also effective but causes drowsiness and nausea. Some people prefer it because of its calming effect. Diphenoxylate (Lomotil) has similar side effects.

IBS diarrhoea is often related to food and digestive juices passing very quickly through the gut. Cholestyramine (*Questran*) can be particularly useful especially for urgency and incontinence because it binds the bile acids that are incompletely absorbed from the small intestine and stops them irritating the colon, but this treatment may make the pain worse in some people.

For constipation, bulk laxatives tend to be tried first. These include plant fibre extracts such as bran, ispaghula husk (*Fybogel*, *Regulan*) and cellulose derivatives (*Celevac*). They work by absorbing water. This makes the bowel contents more bulky and stimulates peristalsis. Lactulose (*Duphalac*) is an osmotic laxative. It comes as a syrup that draws water into the gut and helps to soften and lubricate the stool.

Bulk and osmotic laxatives must be taken with plenty of water and they all have the disadvantage of causing more wind, bloating and abdominal pain, though these symptoms may lessen with time. More powerful laxatives, such as senna, bisocodyl (*Dulcolax*) stimulate gastrointestinal peristalsis.

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They are not generally used for IBS because the powerful contractions can cause severe cramping. Movicol is a saline purgative. It contains a balanced mixture of salts and polyethylene glycol. When made up as directed and drunk, it flushes the bowel without depleting the body of salt and water. It is often prescribed to remove impacted faeces from the bowel, but should not be taken as a regular medication or by patients with heart disease.

Low doses of antidepressants can be effective in some IBS patients, especially when pain is the main feature. They can of course work on the brain to relieve underlying emotional tension and induce a sense of well being, but they also work directly on the gut to reduce spasm. Some, such as Amitryptyline, Notriptyline, Doxepin and Dothiepin, are more useful in people who have diarrhoea because they tend to be constipating. The newer drugs such as Prozac and Seroxat are better for people who are constipated because they cause some looseness of the bowel.

Diet may help. A diet rich in fibre can help constipation. Food intolerance may be treated by judicious avoidance of troublesome foods, but do not cut out too many foods because you will run the risk of nutritional deficiency. Do request to see a dietitian if you are unsure. Remember that it may be your tense and sensitive gut that is making you intolerant of food.

Unfortunately, many people with Irritable Bowel Syndrome find diet and drugs rather disappointing. It is therefore vital to think about what might have brought on your symptoms. Is there anything bothering you, making you anxious, frustrated or depressed? Can you manage your illness by adjusting your life style or life situation? Some sessions with a counsellor or therapist may be invaluable to help to give you insight into what is frustrating you or making you so afraid.

A sympathetic partner or friend may also be able to help you see what is going on. Complementary therapies from properly registered practitioners can be of great help in Irritable Bowel Syndrome. They include relaxation techniques, meditation, gut-directed hypnotherapy, touch therapies (massage, chiropraxy, reflexology and healing) and other holistic therapies such as acupuncture and homeopathy.

These therapies are healing techniques; they treat the person rather than the illness and they work to restore a sense of confidence and harmony, while providing a strong focus of belief and expectation. This reduces the nervous tension on the gut. Lead a balanced life. Eat regular meals but not too much, cut down on fat, don't drink too much coffee, don't skip breakfast, keep yourself active, don't work too hard, allow yourself space to do the things you enjoy and do try to deal with the things that bother you.

#### You're worth it!

# And finally, join The Gut Trust

Do get advice and support. If you feel more in control of your symptoms, they will be less trouble. Your pharmacist or GP can help you with advice on medications. But most important, join The Gut Trust!

We can offer you information, advice and support on a whole range of issues to do with Irritable Bowel Syndrome. Members of the The Gut Trust receive free the journal Gut Reaction, factsheets, a Can't Wait card, access to a comprehensive self management programme and a whole range of support services from Health professionals and others with IBS, an e-mail discussion forum, website, and exclusive members offers.

You can also speak to an IBS specialist nurse by telephoning The Gut Trust Helpline:

0114 272 32 53

Monday to Friday from 6 pm to 8pm and Saturday morning 10 to 12 noon. This line is funded through donations and subscriptions.

## Join The Gut Trust Today

You can Join today on line at www.theguttrust.org or for further information write, enclosing sae, to The Gut Trust, at Unit 5, 53 Mowbray Street, Sheffield. S3 8EN.

### **Further Reading**

IBS. A complete guide to relief from Irritable Bowel Syndrome by Christine Dancey and Susan Backhouse Robinson 1997 £7.99

Sick and Tired; Healing the Illnesses Doctors Cannot Cure by Dr Nick Read. Weidenfeld and Nicholson. 2005 pp 176-1981

The First Year IBS: A Patient-Expert Guide for the Newly Diagnosed.Robinson 2004 at £9.99

Guidelines for the management of the irritable Bowel Syndrome by J Jones, J Boorman, P Cann, A Forbes, J Gomborone, K Heaton, P Hungin, D Kumar, G Libby, R Spiller, N Read, D Silk, P Whorwell.

### More information online

You can find further information about Irritable Bowel Syndrome online at the following websites:

The Gut Trust

Website: www.theguttrust.org

British Society for Gastroenterolgoty

Website: bsg.org.uk/clinical\_prac/guidelines/man\_ibs.htm

### **About this Factsheet**

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It is published as a service to those with Irritable Bowel Syndrome, and healthcare professionals, by The Gut Trust, the national charity for Irritable Bowel Syndrome.

The Gut Trust provide the only dedicated support in the UK to people with IBS, helping them and their families and carers to manage their IBS and achieve an improved quality of life.

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