



Why are people with inflammatory bowel disease (IBD) at risk of iron deficiency?

If you have inflammatory bowel disease (IBD) your risks increase of also having iron deficiency and iron deficiency anaemia.

IBD is the name for a group of conditions where your gastrointestinal tract (your small and large intestines) becomes inflamed. The two most common forms of IBD are Crohn's disease and ulcerative colitis (UC).¹ In the UK and the USA, around 1 in 250 people have IBD.^{2,3} The exact cause of IBD is unknown but it is thought that many factors are involved, including smoking, previous infections, and genetics.⁴

Anaemia is the most common non-intestinal symptom of IBD.⁵ Anaemia is where the number of red blood cells in your body, or the amount of oxygen that they can carry, is too low for your body's needs. Anaemia can occur for many reasons, however the most common reason for anaemia in IBD is iron deficiency.⁵

If you have IBD of any kind you are at risk of iron deficiency and iron deficiency anaemia (IDA).⁶ Different studies have calculated the number of people with IBD and iron deficiency anaemia differently, but they suggest that 36%–76% of people with IBD experience iron deficiency anaemia.⁷ The main reasons why you may experience iron deficiency or iron deficiency anaemia with IBD are:

- Long term internal bleeding within the intestines.
- Reduced iron absorption from your diet due to inflammation in your intestines.
- Reduced dietary intake of iron, if you avoid eating certain foods such as leafy greens because they increase your IBD symptoms.¹

Although iron deficiency is the most common cause of anaemia in IBD,⁵ there are also other reasons that you might become anaemic such as:

- **Anaemia of chronic disease (also called anaemia of inflammation).**¹ This type of anaemia is caused by your body's immune system.⁸ With this type of anaemia, some of the iron that is present in your body is not available for the production of haemoglobin for your red blood cells.⁸ This means that fewer red blood cells are produced. Also, the life span of your red blood cells can be reduced.⁸
- **Anaemia of vitamin deficiencies, for example due to decreased absorption of vitamin B12 or folic acid.**¹ Anaemia from vitamin deficiencies occurs if you do not eat enough food containing vitamin B12 and folic acid, or if you have not absorbed these nutrients from your food in your intestines. This type of anaemia may be more likely if you have Crohn's disease as the sections

of the small intestine where these nutrients are usually absorbed may be inflamed, or may have been surgically removed.⁸

- **Drug-induced anaemia**, for example anaemia caused by IBD treatments, such as sulphasalazine and azathioprine,⁸ that suppress the production of blood cells.¹

It is important to treat your anaemia, whether this is due to iron deficiency or any of the other reasons mentioned above.

Iron deficiency can lead to a reduced ability to work, and if symptoms are severe, can cause an extended hospital stay.⁵ Treating iron deficiency or iron deficiency anaemia with extra iron can improve your mental and physical function, making you feel more energetic and generally improving your quality of life.

If you think that you might be iron deficient or you are concerned about your health in any way, it is important that you talk to your doctor. Your doctor will be able to find out whether you are anaemic and, if you are, what the causes behind it are and how it can be treated.

Warning signs of iron deficiency in IBD

One of the main symptoms of iron deficiency and iron deficiency anaemia is fatigue, a more extreme version of tiredness. If you are experiencing fatigue, you may feel physically and mentally exhausted and lack energy for a number of days each week, even if you have not been doing any physical activities that are particularly tiring.¹ You may be too exhausted to complete normal daily tasks such as getting dressed or going shopping, and you may often feel too tired to spend time with friends or family.

Tiredness and fatigue are well known symptoms of IBD,² and anaemia. If you are experiencing fatigue it is important to speak to your doctor so that they can find out what the most likely cause may be.

There are also many other signs that may indicate that you have iron deficiency or iron deficiency anaemia. These include:

- Dizziness,³ irritability,⁴ and loss of concentration.⁵
- Looking pale.⁶
- Shortness of breath and a racing heart.⁷
- Sore tongue or dry mouth.^{8,9}
- Cold intolerance or cold hands and feet.¹⁰
- Headache.¹¹
- Restless leg syndrome (RLS).^{12,13}
- Hair loss.¹⁴
- Brittle or spoon-shaped nails.¹⁵
- Increased susceptibility to infections.¹⁶



Use our Symptom Browser to see the complete list of symptoms that iron deficiency can cause and to understand what each of these symptoms involves.

If you are iron deficient, treating your condition with extra iron can improve your quality of life on a daily basis. It could improve your concentration and productivity at work and give you more energy to exercise and socialize. You don't have to get used to feeling tired all of the time.

Because there could be many underlying conditions causing your symptoms, it is important that you discuss all of your symptoms with your doctor.

Talking to your doctor

It is likely that if you have been diagnosed with IBD that you will have regular follow-up appointments with your doctor to check how you are feeling and to monitor the progress of your symptoms. If you have been feeling fatigued or have any of the symptoms of iron deficiency such as paleness, faintness or a racing heart, you may want to make an extra appointment or speak to your doctor about your symptoms at your next scheduled visit.

To get the most out of your visit, think in advance about the information that the doctor might need in order to work out what is causing your symptoms. You should also prepare any questions that you want to ask. For example, it may be useful for the doctor to know^{1,2}:

- How your IBD symptoms currently are.
- What medications you are on.
- How well you have been sleeping.
- How much exercise you have been doing, and
- If there is any life situation that is currently making you stressed.

Questions that you might want to ask your doctor include:

- I feel tired most of the time. Do you think I have anaemia?
- Has my haemoglobin/ ferritin level been checked recently? If so, what did the results show?
- If I have anaemia, which treatment would suit me best?
- How can I avoid getting anaemia again?

References

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