INTRODUCTION

Our bodies are made up of about two-thirds water. We only need the total water level to drop by as little as a few percent for us to become dehydrated – that is, lacking in water. This can eventually lead to problems, such as kidney stones, damage to the liver, muscles and joints, and seizures.

Having Crohn's Disease or Ulcerative Colitis – the two main forms of Inflammatory Bowel Disease (IBD) - can sometimes increase the risk of becoming dehydrated. This information sheet looks at why this may happen and some ways to prevent and treat it.

WHAT IS DEHYDRATION?

We become dehydrated if our bodies do not have enough water. This can happen through a combination of causes, such as not drinking enough water or fluids, or losing too much body fluid (for example through vomiting or diarrhoea).

Dehydration is usually described as mild, moderate or severe according to how much body weight has been lost due to fluid loss.

- **Mild dehydration** is the loss of 3-5% of your body weight. It carries few risks and can usually be dealt with by replacing lost salts and fluids.
- **Moderate dehydration** is a loss of 5-9% of body weight and is more serious. Moderate dehydration that is chronic (ongoing) can affect kidney function and may lead to the development of kidney stones. This can also be dealt with by replacing lost salts and fluids.
- **Severe dehydration** - a decrease of more than 10% of body weight due to fluid loss - is very serious and needs immediate treatment as it can be fatal. You may need to go to hospital and be put on a drip to restore lost fluids.

Dehydration can be very serious in children and babies because their smaller size makes them more susceptible to fluid loss.

WHAT CAUSES DEHYDRATION?

Dehydration happens when we lose more fluid than we take in. We lose body fluid and salt throughout the day in sweat, tears, moisture in the breath, urine and stools (faeces). Usually, the water and salt content of what we eat and drink make up for this loss – but we become dehydrated if fluid loss exceeds fluid intake.
Our kidneys and intestines work together to control the level of fluid in the body. The intestines absorb salt and water, while the kidneys regulate how much of this is lost into the urine. If a large amount of fluid is lost through diarrhoea, then the kidneys may be unable to regulate the balance of salt and water. This means that you may need extra salt as well as extra water. For more information see What should I do if I become dehydrated?

WILL I BECOME DEHYDRATED?

Dehydration may not be a problem for everyone with IBD. However, you may be more likely to become dehydrated if:

- You suffer from frequent or watery diarrhoea
- You are not drinking enough water, because, for example, you are feeling nauseated or have lost your appetite through illness
- You are losing more than usual amounts of water and salt through your skin because you are sweating excessively. This might be, for example, during hot weather or exercise, or because you have a fever.
- Your urine output is too high. This can happen if you have uncontrolled diabetes, are drinking too much caffeine, or are taking diuretic drugs (‘water tablets’ which increase the amount of urine you pass).
- You have drunk too much alcohol. Alcohol is a diuretic, which increases the amount of urine you pass.
- You are suffering from gastroenteritis, a stomach or bowel infection that can be caused by a virus or bacterial infection, or by food poisoning.
- You have had your colon removed. This affects your body’s ability to absorb fluid and electrolytes (essential salts such as potassium and sodium) from your diet.
- You have an ileostomy (or stoma), because output from an ileostomy contains more water than normal stool. If your ileostomy has a high output - a loss of more than 1500ml per day - you are at greater risk of becoming dehydrated.
- You have a very short bowel as a result of extensive surgery.
- You have bile salt malabsorption. This can happen if you have Crohn’s in the ileum (the lower part of the small intestine), or you have had a resection in that area.

HOW WILL I KNOW IF I AM DEHYDRATED?

One of the first signs of dehydration is thirst. Mild dehydration can also cause a dry mouth, headaches, tiredness and a lack of energy. Feeling faint on standing up is another common symptom. If you have to pass urine fewer than three or four times a day, and can only pass small amounts, you are probably mildly dehydrated. Another early sign of dehydration is urine that is darker yellow in colour than usual. Dehydration can also cause constipation, which can be a problem for people with proctitis (inflammation in the rectum).

If you think you may have an ongoing mild dehydration problem, one way to check is to measure how much urine you pass over 24 hours; it should be at least a litre.

Signs of more serious dehydration (‘moderate’ rather than ‘mild’) include dizziness, muscle cramps, pale and dry skin, and sunken eyes. Seek medical advice if you have symptoms like these.

You could be severely dehydrated if, in addition to any of these symptoms, you become confused or disorientated, are difficult to rouse, your lips turn blue or your breathing or pulse becomes rapid. You may also feel irritable or lethargic. Severe dehydration is dangerous and you will need urgent medical treatment.
DEHYDRATION

WHAT SHOULD I DO IF I BECOME DEHYDRATED?

To treat dehydration you have to rehydrate the body. But just drinking plain water may not be enough, because you will have lost sugars and essential salts as well as water.

For mild or moderate dehydration you will need to increase your fluid intake and the level of salt in your body. One way to do this is to drink a commercial rehydration solution such as Dioralyte, or Electrolade, which are available from pharmacies without a prescription. However as a short-term measure, it can be as effective to drink water or a flat cola drink, and eat a salty snack such as a packet of crisps. If this doesn’t help, or you find you keep feeling dehydrated, talk to your doctor. They may suggest that you make up and drink an Oral Rehydration Solution (ORS) to a recipe like that given on the next page.

For more serious dehydration, or if you have a high output ileostomy or short bowel after surgery, you are more likely to need more salt than most commercial rehydration solutions provide. So, your doctor or IBD team may recommend drinking an Oral Rehydration Solution with a higher sodium (salt) level.

One recipe for a homemade version of this type of ORS is as follows:

Oral Rehydration Solution (ORS)

- Table salt - 3.5g (approx one level 5ml teaspoon)
- Sodium bicarbonate (baking soda) - 2.5g (one heaped 2.5ml teaspoon)
- Glucose or sugar - 20g (6 level 5ml teaspoons) glucose or sugar

Make up to 1 litre with water. If preferred, use carbonated water and/or flavour with low sugar fruit squash. Refrigerate and drink chilled.

This ORS tastes both salty and sweet and some people find it unpalatable unless they add quite a lot of flavouring. The usual recommendation is to drink the full litre in one day, sipping it slowly to maximise the rehydrating effect.

It was developed for people with a short bowel, and may not be as useful for people with diarrhoea caused by other forms of IBD.

A similar rehydration solution can be made by dissolving eight sachets of Dioralyte in one litre of water (instead of one per 200ml). This solution will also contain potassium (an essential mineral), unlike the ORS above.

It is particularly important to check with your doctor before taking an ORS if you are diabetic. This is because both of these solutions have a high sugar content and can increase blood sugar levels if drunk very rapidly or in large amounts of more than one litre a day. Your doctor may suggest you see a dietician. You should also talk to your doctor before taking an ORS if:

- your ankles are swollen
- you are taking diuretic tablets that encourage urine production
- you are known to have kidney problems
- you are taking tablets for heart or blood pressure problems.

Seek medical help immediately if you think you have become severely dehydrated.

HOW CAN I AVOID BECOMING DEHYDRATED?

- The easiest way to avoid dehydration is to make sure that you drink enough water. To keep well-hydrated, the recommended fluid intake in the UK is two litres a day for women, and two and a half litres for men. Water, other drinks,
and moisture from food can all contribute to this total. However the ideal amount will vary from person to person depending on age, activity levels and sweat rates. As a guide, aim for eight to ten average size glasses of water a day. Passing urine that is pale yellow in colour is a good sign that you’re well-hydrated.

• Be aware of situations when you may be more susceptible to dehydration - for example when it is very hot or you are active, as you will lose more salt and water through your skin. Don’t wait until you feel thirsty before you start drinking extra water.

• Drinks such as tea, coffee and cola will also help, but because these contain caffeine they are mild diuretics and will make you urinate more. So, such drinks are slightly less effective at rehydration.

• Sip your drinks rather than gulping them down. This will help you to avoid getting too much air into your system, which can cause discomfort.

• A balanced diet that includes foods rich in essential body salts (potassium and sodium), such as avocado, bananas and Marmite, can also help to maintain the electrolyte balance in your body.

• Avoid drinking alcohol, which can make you dehydrated.

WILL INCREASING MY FLUID INTAKE MAKE MY DIARRHOEA WORSE?

If you have IBD but a normal or near normal bowel length, increasing the amount of water you drink should not worsen your diarrhoea. This is because the diarrhoea is more likely to be caused by the activity of your IBD rather than failure to absorb fluid from the bowel. For the same reason, restricting how much you drink will probably not lessen the diarrhoea and might still increase the likelihood of you becoming dehydrated.

If your diarrhoea is very troublesome, anti-diarrhoeals such as loperamide (Imodium) or codeine phosphate may help. However, they are not suitable if you have active UC or a stricture (narrowing) of the bowel. You should check with your doctor or IBD team before taking anti-diarrhoeals. For more details see our information sheet on Diarrhoea and Constipation.

MAINTAINING HYDRATION WITH A STOMA

If you have a stoma, it is particularly important to drink enough water to keep yourself well-hydrated. You may also need to add extra salt to your diet, and perhaps take an Oral Rehydration Solution. Check with your doctor first.

ORS drinks can be useful if you have a short bowel or a high-output ileostomy, but with these conditions you may also need to restrict your total intake of fluid to avoid dehydration. This is because drinking too much plain water can wash essential salts out of the small intestine and into the stoma bag. As water is best absorbed together with sugar and salt, loss of these salts through stoma output can lead to dehydration. Your IBD team will tell you if this is the case, and can help you to manage your general diet and fluid intake.

HYPONATREMIA (OVERHYDRATION)

Although far less common than dehydration, excessive intake of water can occasionally be harmful. If too much plain water is drunk over a short period of time, this can dilute the level of salt in the blood, disturbing the body’s balance of electrolytes. Symptoms of overhydration include nausea, vomiting and headache. In serious cases, the brain can swell, causing confusion and seizures.

Karen, age 55
diagnosed with Crohn’s Disease in 1990

When it is hotter I tend to get dehydrated much more quickly, especially if I have a flare-up of my Crohn’s. Now I try to avoid getting too hot by staying out of the sun, wearing a hat, using a fan and drinking water.
HELP AND SUPPORT FROM CROHN’S AND COLITIS UK

All our information sheets and booklets are available to download from our website: www.crohnsandcolitis.org.uk

If you would like a printed copy, please contact our helpline – details below. Our helpline is a confidential service providing information and support to anyone affected by Crohn’s Disease, Ulcerative Colitis and other forms of Inflammatory Bowel Disease.

Our team can:

• help you understand more about IBD, diagnosis and treatment options
• provide information to help you to live well with your condition
• help you understand and access disability benefits
• be there to listen if you need someone to talk to
• put you in touch with a trained support volunteer who has a personal experience of IBD

Contact us by phone on 0300 222 5700 or email info@crohnsandcolitis.org.uk

See our website for WebChat (Live Online)
www.crohnsandcolitis.org.uk/support/information-service

OTHER USEFUL ORGANISATIONS

IA (The Ileostomy and Internal Pouch Support Group)
www.iasupport.org

Colostomy Association
www.colostomyassociation.org.uk

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We hope that you have found this leaflet helpful and relevant. If you would like more information about the sources of evidence on which it is based, or details of any conflicts of interest, or if you have any comments or suggestions for improvements, please email the Publications Team at publications@crohnsandcolitis.org.uk. You can also write to us at Crohn’s and Colitis UK, 45 Grosvenor Road, St Albans, AL1 3AW or contact us through the Information Line: 01727 734 470.

ABOUT CROHN’S & COLITIS UK

We are a national charity established in 1979. Our aim is to improve life for anyone affected by Inflammatory Bowel Disease. We have over 33,000 members and 50 Local Networks throughout the UK. Membership costs start from £15 per year with concessionary rates for anyone experiencing financial hardship or on a low income.

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