

**CROHN'S &
COLITIS UK**

**FIGHTING
INFLAMMATORY
BOWEL DISEASE
TOGETHER**

FOOD AND IBD

YOUR GUIDE





ABOUT THIS BOOKLET

If you have Ulcerative Colitis (UC) or Crohn's Disease (the two main forms of Inflammatory Bowel Disease - IBD) you may wonder whether food or diet plays a role in causing your illness or treating your symptoms. This booklet looks at some of the most frequently asked questions about food and IBD, and provides background information on digestion and healthy eating for people with IBD. We hope you will find it helpful.

All our publications are research based and produced in consultation with patients, medical advisers and other health or associated professionals. However, they are prepared as general information and are not intended to replace specific advice from your own doctor or any other professional. Crohn's and Colitis UK does not endorse or recommend any products mentioned.

If you would like more information about the sources of evidence on which this booklet is based, or details of any conflicts of interest, or if you have any feedback on our publications, please visit our website.

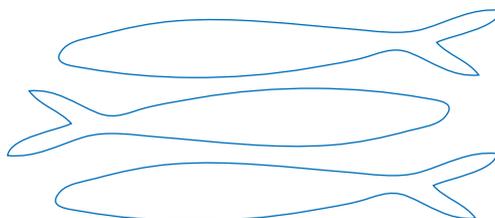
About Crohn's and Colitis UK

We are a national charity established in 1979. Our aim is to improve life for anyone affected by Inflammatory Bowel Diseases. We have over 28,000 members and 50 local groups throughout the UK. Membership costs from £15 per year with concessionary rates for anyone experiencing financial hardship or on a low income.

This publication is available free of charge, but we would not be able to do this without our supporters and members. Please consider making a donation or becoming a member of Crohn's and Colitis UK. To find out how call **01727 734465** or visit **www.crohnsandcolitis.org.uk**.

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Food is essential for everybody and is usually one of life's pleasures. If you have Crohn's Disease or Ulcerative Colitis (the two main forms of Inflammatory Bowel Disease - IBD), you may find that certain foods affect your symptoms, or that digesting some foods may be difficult. However, the importance of good nutrition remains the same. Some people may find it helpful to alter their diet slightly, but do remember that everyone is different - IBD is a very individual condition and what works for others may not suit you.

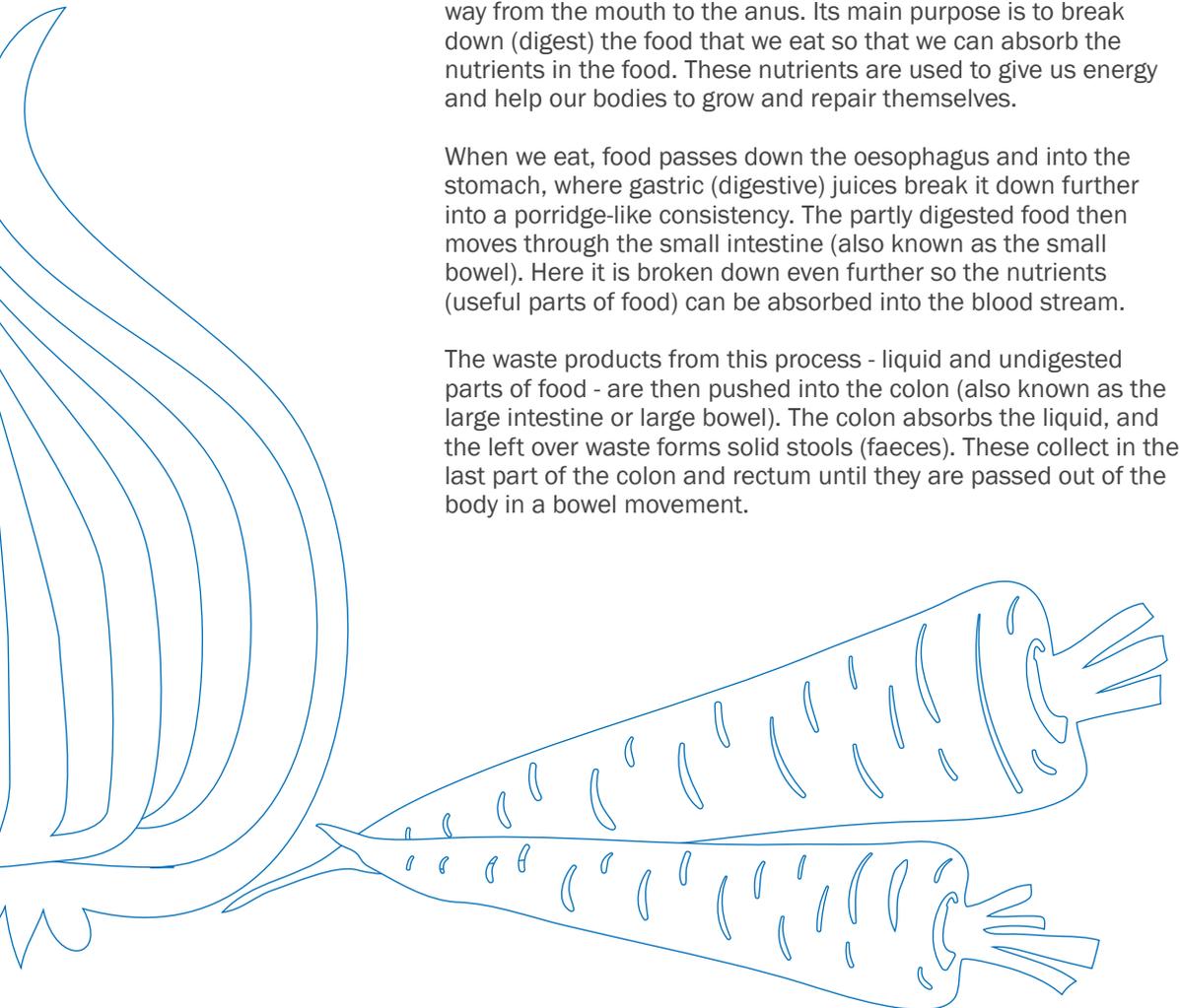
WHAT HAPPENS WHEN WE EAT FOOD?

To understand the effect that food has on the gastrointestinal (digestive) system, it can be helpful to know the main features of the system and what happens when we eat.

The gastrointestinal tract (gut) is like a long tube running all the way from the mouth to the anus. Its main purpose is to break down (digest) the food that we eat so that we can absorb the nutrients in the food. These nutrients are used to give us energy and help our bodies to grow and repair themselves.

When we eat, food passes down the oesophagus and into the stomach, where gastric (digestive) juices break it down further into a porridge-like consistency. The partly digested food then moves through the small intestine (also known as the small bowel). Here it is broken down even further so the nutrients (useful parts of food) can be absorbed into the blood stream.

The waste products from this process - liquid and undigested parts of food - are then pushed into the colon (also known as the large intestine or large bowel). The colon absorbs the liquid, and the left over waste forms solid stools (faeces). These collect in the last part of the colon and rectum until they are passed out of the body in a bowel movement.



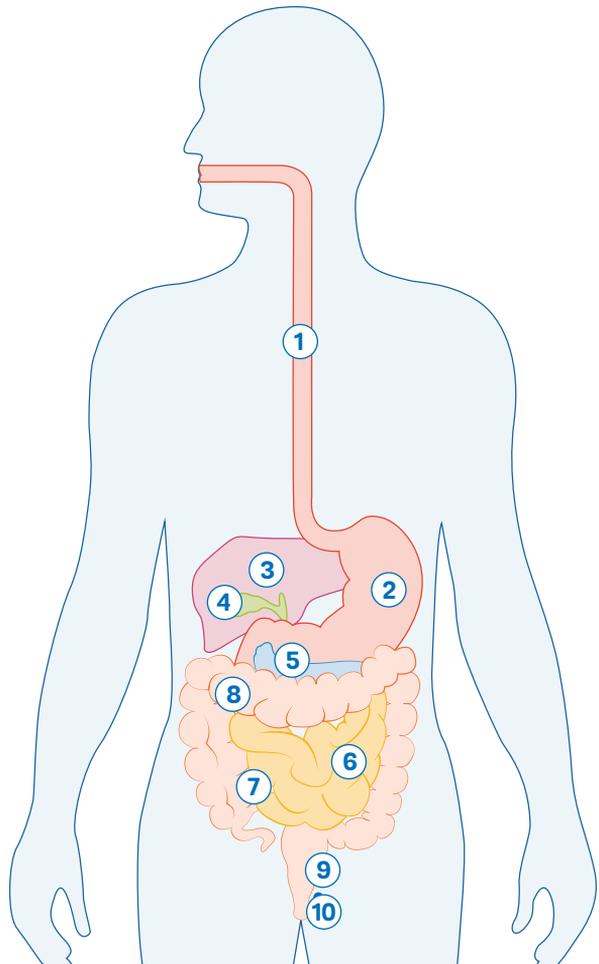
WHAT IS THE EFFECT OF IBD ON THE GUT?

Crohn's Disease and Ulcerative Colitis both cause inflammation of the digestive system.

- In Crohn's, this inflammation can be anywhere from the mouth to the anus - it is most common in the small intestine or colon. All layers of the lining of the bowel may become inflamed.
- In UC, the inflammation is restricted to the colon (large intestine) and rectum. Usually only the inner lining of the bowel is inflamed.

IBD can cause symptoms such as diarrhoea, abdominal pain and bloating. If the small intestine is affected, the inflammation can also hinder the body's ability to digest food and absorb nutrients.

- 1 OESOPHAGUS
- 2 STOMACH
- 3 LIVER
- 4 GALL BLADDER
- 5 PANCREAS
- 6 SMALL INTESTINE
- 7 ILEUM
- 8 LARGE INTESTINE (COLON)
- 9 RECTUM
- 10 ANUS



CAN FOOD CAUSE IBD?

As IBD affects the digestive system, many people naturally wonder if there is a possible link between diet and IBD. A considerable amount of research has been undertaken to look for a connection, and scientists have investigated a wide range of food and nutrients to see if they play a role in the development of the disease.

Researchers now believe that IBD is caused by a combination of factors: the genes a person has inherited, alongside an abnormal reaction of the immune system (the body's protection system against harmful substances) to certain bacteria in the intestines, probably triggered by something in the environment.

Viruses, bacteria, smoking and stress, as well as diet, have all been suggested as possible environmental triggers for IBD, but there is no definite evidence that any one of these is the cause of IBD.

Currently, there is no clear evidence that any particular food or food additive directly causes IBD.

However, some researchers think that there may be some sort of link between diet and IBD. One suggested link is with a diet high in fats and sugars and low in fruit and vegetables. Researchers have noted that in the past, IBD rates have been lower in non-Western countries such as Japan than in Western Europe and North America. However, over the past few decades, the number of people with IBD in Japan has been rapidly increasing. As many Japanese people now eat a more Westernised diet (a diet typically high in fats and sugars), the suggestion is that it could be this change in diet which has led to the increase in IBD.

There have been other research studies which have come to similar conclusions about diets high in sweets, cakes and/or red meat. Researchers have also found a possible link between UC and some types of fat, such as trans-unsaturated fats like linoleic acid (found in oils such as corn and sunflower oil). Lack of dietary fibre may also play a role - another study found that women whose diets contained a lot of fruit were less likely to develop Crohn's Disease, but not UC.

Nevertheless, the overall picture is still not clear - some research findings contradict each other, and scientists continue to debate exactly whether and how food may play a part in causing IBD.

Currently, there is no clear evidence that any particular food or food additive directly causes IBD.

CAN FOOD CURE IBD?

While you may come across a number of diets claiming to cure IBD, the majority of these do not have sufficient evidence to support their claims. But there is considerable evidence that specific aspects of nutrition are important in IBD, and that, as with any ongoing health condition, it is vital to keep well nourished. So, it is important to eat as healthy and balanced a diet as possible.



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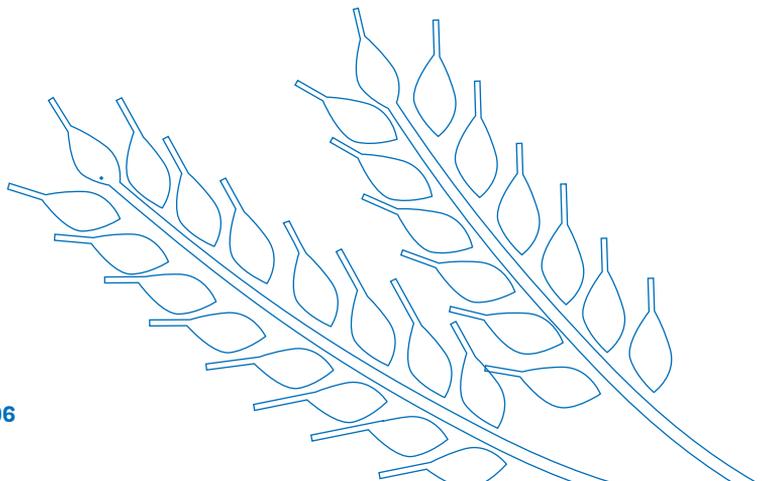
I've tried just about all the different diets for Ulcerative Colitis and just gone round in a complete circle, not finding any success, only causing problems and stress! I now realise the most important thing is to eat a balanced diet and enjoy my food! ”

Trevor, age 66,
diagnosed with Ulcerative
Colitis in 2010

Although diet may not cure IBD, some people may find that it helps to make small alterations to their diet. For example, some people have found that certain foods, for example spicy foods or dairy products, seem to trigger their symptoms or make them worse. On the other hand, some people may find they have no particular triggers - it varies from person to person. It may help to keep a food diary in order to keep track of what you eat and when your symptoms occur. However, if you find that cutting out foods makes no difference, you should add them back into your diet, because you do not want to miss out on important nutrients. It is important to get advice from your doctor or from a qualified dietitian before you make any significant changes. For more information on food diaries, see the section on **Food diaries and food reintroduction plans**.

In some cases, particularly after surgery, or if you have a stricture (narrowing) in your small intestine, you may need to go on a special diet, or avoid certain foods - for more information see the sections on **Eating with a stricture** and **Eating after surgery**.

For some people, particularly children and those with Crohn's Disease, it may be helpful to go on a liquid diet - this is called 'exclusive enteral nutrition'. For more information on this, see the section on **Nutritional treatment**.



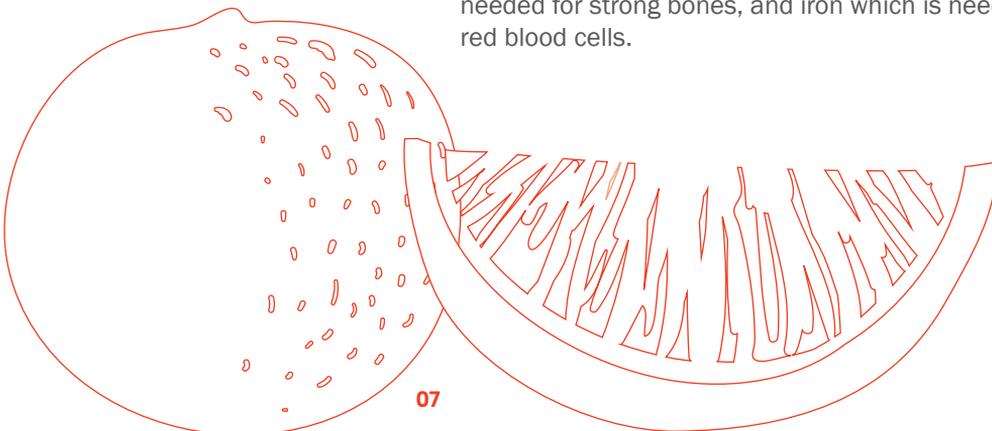
HEALTHY EATING WITH IBD

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Food provides us with nutrients that give us the energy to go about our daily lives, and to help our bodies grow and repair themselves. It is important that we eat a healthy balanced diet in order to receive all the nutrients our bodies require.

There are five main groups of nutrients:

- **Carbohydrates** - a major source of energy. There are two main types of carbohydrates - simple and complex. Simple carbohydrates are sugars, and can be found in fruit, vegetables and milk, as well as in confectionery, cakes and biscuits. Complex carbohydrates include starch and fibre, and are found in foods such as pasta, potatoes and bread.
- **Protein** - important for the growth and repair of body tissues, as well as being used to make enzymes, hormones and muscle. Protein can be found in meat, poultry, eggs, cheese, beans, nuts and pulses.
- **Fat** - a concentrated energy source. It also helps protect our internal organs, and is required for our glandular and immune systems, and to help absorb certain vitamins. Fat can be found in foods such as meat and dairy products.
- **Vitamins** - a group of nutrients found in very small amounts in food. They are important for cell function, growth and development. There are 13 essential vitamins, each vitamin has an important job in the body. An example is vitamin C, which is important for healthy teeth and gums. It also helps the body to absorb iron, and helps with wound healing.
- **Minerals** - chemical elements found in food. They are needed in small amounts to help the body stay strong and function properly. Examples include calcium which is needed for strong bones, and iron which is needed for red blood cells.



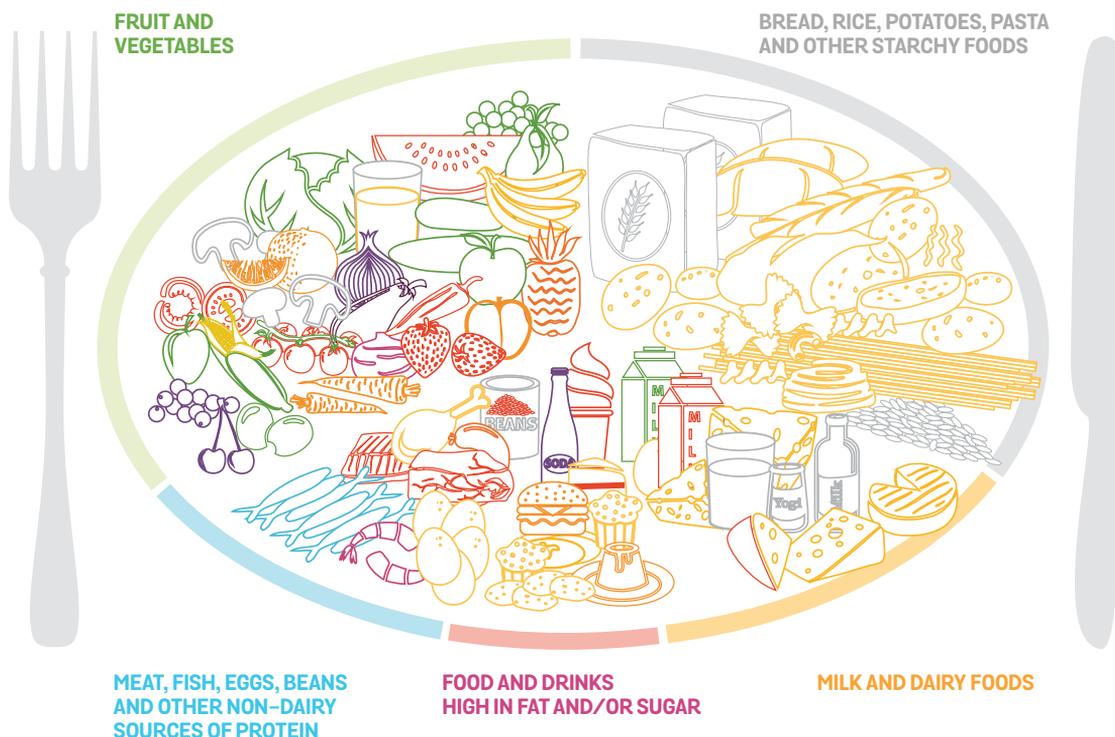
HEALTHY EATING WITH IBD

THE EATWELL PLATE

The 'Eatwell Plate' shows how to manage a healthy diet which includes the correct amounts of nutrients. It includes:

- fruit and vegetables
- starchy foods (such as cereals, potatoes, rice, bread or pasta)
- some milk and dairy products (or alternatives such as soya milk with added calcium)
- some protein foods (such as meat, fish, eggs and pulses)
- a small amount of foods high in fat and/or sugar.

You could talk to your IBD team if you are finding it hard to manage foods from all five groups.



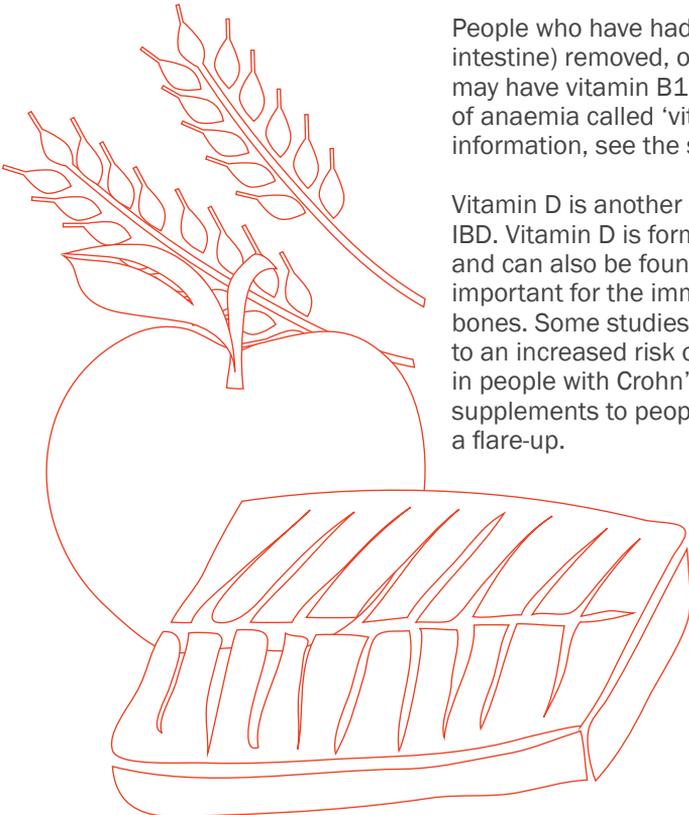
VITAMINS AND MINERALS

People with IBD are at risk of vitamin deficiencies, particularly if they have Crohn's Disease and have trouble absorbing nutrients due to inflammation in the small intestine. It may be necessary to take a vitamin supplement - your doctor or IBD nurse will tell you if this is the case.

Iron deficiency is common among people with IBD. This can be caused by a number of factors - such as lack of iron in the diet, blood loss, or difficulties absorbing iron. Lack of iron can lead to anaemia - where there are fewer red blood cells to carry oxygen around the body. Anaemia can cause tiredness and fatigue, shortness of breath, headaches and general weakness. It can be treated by iron supplements, either as tablets, or as intravenous iron which is given by an injection or by infusion through a drip. Intravenous iron is often better tolerated than oral iron in people with IBD. It may also help to eat iron rich foods such as red meat, eggs, dark green vegetables such as spinach and broccoli, pulses such as peas, beans and lentils, and fortified breakfast cereals. Iron from non-meat sources is absorbed more easily when it is taken with vitamin C. Try, for example, having a glass of orange juice with your fortified breakfast cereals.

People who have had their ileum (the last part of the small intestine) removed, or who have inflammation in that area, may have vitamin B12 deficiency. This can also lead to a form of anaemia called 'vitamin B12 deficiency anaemia'. For more information, see the section on **Eating after surgery**.

Vitamin D is another common deficiency amongst people with IBD. Vitamin D is formed by the action of sunlight on the skin, and can also be found in foods such as eggs and oily fish. It is important for the immune system, and is also needed for healthy bones. Some studies suggest that low vitamin D levels may lead to an increased risk of surgery and hospitalisations, particularly in people with Crohn's. Another study found that giving vitamin D supplements to people with Crohn's reduced the risk of having a flare-up.



HEALTHY EATING WITH IBD

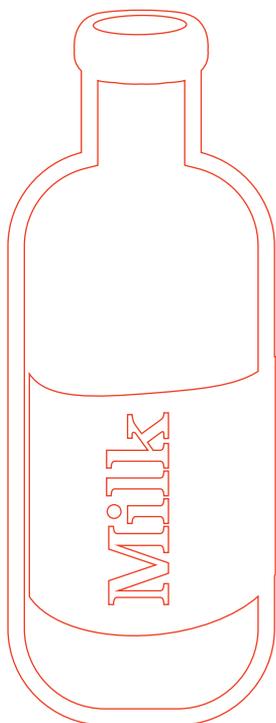
Some people with IBD may be calcium deficient. This may be due to inflammation in the small intestine reducing absorption, but may also be down to lack of calcium in the diet. Calcium is important to maintain healthy strong bones and is found in foods such as dairy products, fortified breakfast cereals and some green leafy vegetables, such as spinach. However, some people with IBD cannot tolerate dairy products (for more information see **Lactose intolerance** below). If this is the case with you, your doctor may suggest you take a calcium supplement. Your doctor may also suggest calcium supplements if you are on steroid medication, because steroids can increase the risk of having weak bones. See our information sheet **Bones and IBD** for more information.

LACTOSE INTOLERANCE

Some people can develop an intolerance to lactose. Lactose is a sugar found in dairy products such as milk, cream and cheese. People who are lactose intolerant lack an enzyme called lactase which breaks down the lactose into a form which their body can absorb. If you have found that drinking milk or eating dairy products gives you diarrhoea, it is possible that you are intolerant to lactose.

Research has shown that people with Crohn's Disease in their small intestine are more likely to be lactose intolerant than people in the general population, but also that people with UC have the same chance as the general population of being lactose intolerant. Lactose intolerance can be managed by following a low lactose or lactose free diet. Lactose free milks include soya, rice, oat and lactose free cow's milk. Do bear in mind that avoiding milk and other dairy products could reduce the amount of calcium in your diet, which is important for bone health. (For more information, see our information sheet **Bones and IBD**.)

Your IBD team or your dietitian can help you discover if you are lactose intolerant. Because milk and dairy products are an important food group, it is better not to give them up until you have discussed your symptoms with your IBD team or dietitian. Some people may find that they develop a temporary intolerance during a flare-up.



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FOOD DIARIES AND FOOD REINTRODUCTION PLANS

As discussed, some people with IBD may find that certain foods or excess alcohol can make their symptoms worse.

One good way of working out if particular foods are causing problems is to start keeping a 'food diary'. Make a note of everything you eat for each meal, and then record any symptoms you may have afterwards, such as diarrhoea or bloating and wind.

You could use a table like the one below:

Date and time	Food	Symptoms include diarrhoea, bloating, wind, pain
Breakfast		
Mid-morning snack		
Lunch		
Dinner		



“ I find keeping a diary of the food I eat and how my symptoms are affected really helpful. ”

Melissa, age 44, diagnosed with Crohn's Disease in 2000

Once you have identified your 'triggers', you can then think about how to avoid your 'problem foods' - but do remember how important it is to keep your diet well balanced.

A food diary is also very useful if you have been recommended an exclusion and reintroduction plan or diet such as those described below.

There are several different ways of eliminating and then reintroducing foods into your diet. Two of the most common ones include:

- Elimination (or exclusion) diets. This is the most time-consuming food exclusion and reintroduction diet. Some people (particularly those with active Crohn's) may be advised to go on a liquid only diet (enteral nutrition) for a while before they start reintroducing foods. Foods are then reintroduced into the diet one by one every few days in a specific order, to see whether any particular foods cause a reaction.
- The LOFFLEX (LOW Fibre, Fat Limited, EXclusion) diet. This is specifically tailored for people with Crohn's Disease. It is less restrictive than an elimination diet, only excluding foods high in fat and fibre.

It is important to talk to your doctor or dietitian before you try any of these diets, because it is very easy to miss out on important nutrients.

COMMON SYMPTOMS AND DIETARY ALTERATIONS

This section looks at some of the more common symptoms of IBD and how altering your diet may help you manage or reduce them.

- **Diarrhoea:**

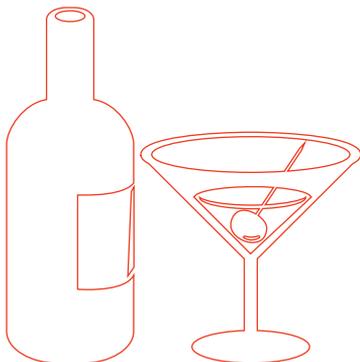
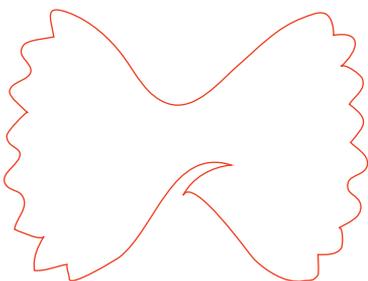
Diarrhoea is one of the main symptoms of IBD. If you have a lot of diarrhoea and pain you may find it tempting to stop eating. However, it is important to continue eating and drinking enough in order to stay nourished and hydrated. Some people find that certain foods, such as those containing a lot of fibre, can make their diarrhoea worse. It may help to avoid these foods during a flare-up. Spicy and fatty foods, alcohol and caffeine can also increase diarrhoea. For more information about diarrhoea, and suggestions on how to deal with it, see our information sheet **Diarrhoea and Constipation**.

- **Dehydration:**

Dehydration can be a particular worry for people with IBD, especially if you suffer from diarrhoea. Once you have become dehydrated however, just drinking plain water may not be enough, because you will have lost sugars and essential salts as well as water. If your diarrhoea is severe, then fluid loss may be replaced by taking an electrolyte mixture such as Dioralyte rather than water alone. Or, it can be effective to drink water or a flat cola drink, and eat a salty snack such as a packet of crisps. For more information about dehydration, and ways to avoid and treat it, see our information sheet **Dehydration**.

- **Bloating and Wind:**

Many people with IBD are concerned about the effects of bloating and wind, such as such as tummy gurgles and flatulence (breaking wind). Bloating and wind may come from swallowing too much air when eating or talking. It can also be caused by over-production of gas by bacteria in the colon. If you want to reduce the amount of gas you are passing, you could try cutting down on foods that are known to be more gas producing. Common examples include spicy foods, legumes (peas, beans), and brassica vegetables (cabbages, cauliflower, broccoli). Fizzy drinks, caffeine and foods containing sorbitol (an artificial sweetener) have also been found to increase bloating and wind. For more information, see our information sheet **Bloating and Wind**.



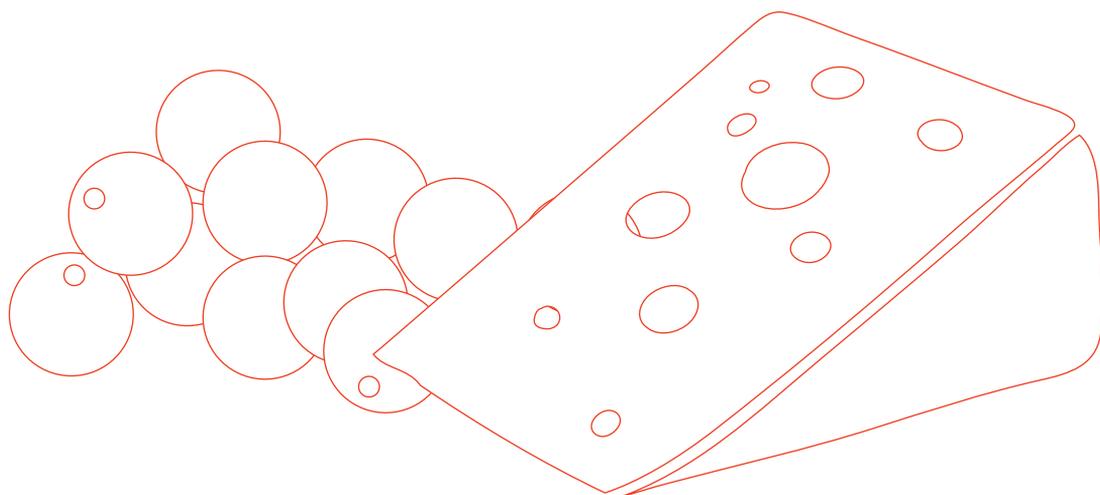
EATING PLANS FOR PEOPLE WITH IBD

- **Constipation:**

Some people with IBD have constipation, particularly if they have proctitis (inflammation of the rectum). Constipation can be defined as opening the bowels fewer than three times a week, needing to strain, or passing hard pellet-like stools (faeces). You may find a stool passing through an area of inflammation in the colon particularly painful. Drinking plenty of fluids may help form softer stools which are easy to pass. It may also help to increase the amount of fibre in your diet, although this is not suitable for all people. If you are worried about constipation, speak to your IBD team or doctor. Some people may find oral fibre supplements or a stool softening laxative help to form easily passed stools - but you should talk to your IBD team first. For more information, see our information sheet **Diarrhoea and Constipation**.

- **Under-nutrition and weight loss:**

Fluctuating weight is commonly seen in people with IBD, reflecting flare-ups and periods of remission. Weight loss can be a good indicator that you are not getting enough nutrients, and you should tell your IBD team if you have lost weight unintentionally. During a flare-up it is important to try and maintain your weight. Ways to put on weight could include eating little and often through the day, eating plenty of protein and energy rich foods, and simple alterations such as drinking soups and juices rather than just tea and coffee. Diets to increase or gain weight should be discussed with your IBD team to ensure that you are maintaining a healthy balance.

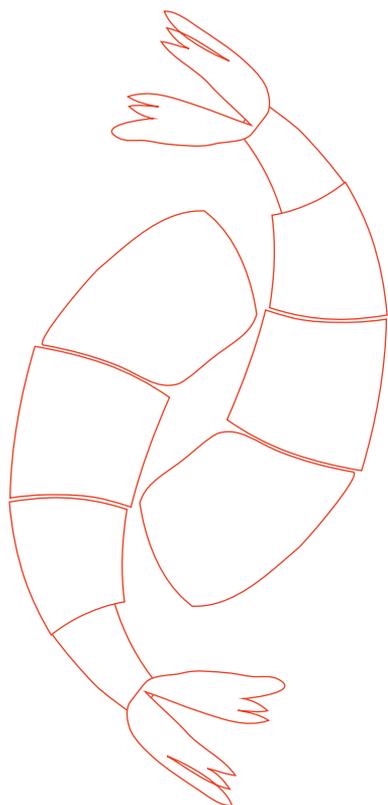


LOW FIBRE DIET

Many people with IBD may need to be careful about the amount of fibre that they eat. Fibre is a type of carbohydrate found in plants, which we cannot digest. However, it helps the gut to function normally. It softens stools and makes them bulkier and easier to pass. It can also encourage the growth of 'friendly' bacteria in the colon and slow down carbohydrate breakdown - which helps control blood sugar levels.

There are two different types of fibre - soluble and insoluble.

- Soluble fibre (which includes peeled fruit and vegetables without seeds and stalks, oats, barley and pulses) is completely broken down by bacteria in the gut to form a gel like substance. Soluble fibre can slow down the movement of food through the digestive system, which may in turn reduce diarrhoea. It is useful in lowering cholesterol levels and slowing down the entry of glucose into the blood which improves blood sugar levels.
- Insoluble fibre (such as seeds, pips and wheat bran) cannot be fully broken down by the digestive system. It adds bulk to stools, which helps them to pass through the gut more easily, although it may also cause bloating and abdominal pain. Reducing the amount of insoluble fibre in your diet may help to improve these symptoms.



Fibre can affect people with Crohn's and UC differently. If you have Crohn's Disease, you may develop strictures (narrowings), meaning that you will have to be careful about the amount of insoluble fibre you eat - for more information see the section on **Eating with a stricture.**

If you have UC, you may have found that eating too much insoluble fibre can increase the urge to go to the toilet (and associated fears of having an 'accident'). The urge to open the bowels is usually caused by inflammation in the lower colon, but, as fibre adds bulk to faeces, it can act as a trigger and make the urgency worse. During flare-ups it may be helpful to reduce the amount of insoluble fibre you eat. However, do talk to your IBD team before trying this. Once the flare-up is over, it is important to increase your intake of fibre again. Fibre is useful because it keeps the colon healthier as well as providing fuel for beneficial bacteria.

EATING WITH A STRICTURE

If you have Crohn's Disease, you may develop strictures (narrowings) in your small intestine. If you have a stricture, you may need to modify your diet to try and avoid having a blockage in the narrowing. Small frequent meals and snacks instead of large meals, and taking your time to eat and chew food thoroughly may help. Soft 'mashable' foods are often easier to tolerate.

You may also need to avoid foods which are more difficult to digest, such as fruit and vegetable skins, seeds, nuts, sweet corn, beans and gristly meats, or you may need to follow a temporary liquid diet. How much you may need to modify your diet will depend on the nature of your stricture. Ask your IBD nurse, doctor, or dietitian for more advice about this.

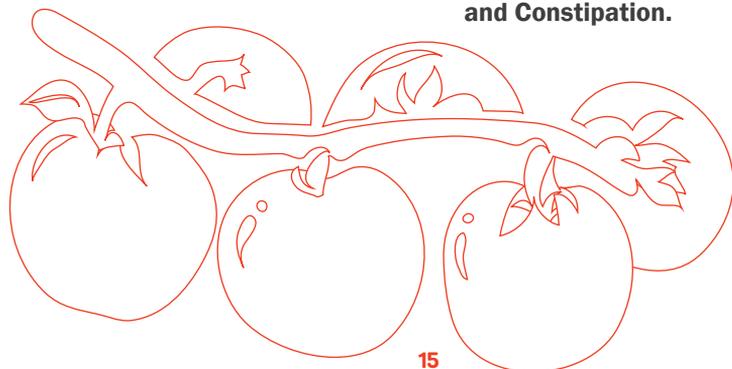
EATING AFTER SURGERY

Surgery should not make a major difference to what you eat - but there are some points to bear in mind, depending on the type of surgery involved.

- **Removal of the ileum**

The ileum is the last part of the small intestine, before it joins the colon. Some people with Crohn's may have all or part of their ileum removed. The last part of the ileum is responsible for absorbing vitamin B12 - so you may not be absorbing enough. Vitamin B12 deficiency can be harmful, and may result in anaemia. Your doctor can check this with a simple blood test, and may suggest that you receive a vitamin B12 supplement by injection.

The ileum also absorbs bile salts. These salts (which come from your liver) are used to transport and absorb fat. If you do not have enough ileum left to absorb the bile salts, they may spill over into your colon and cause watery diarrhoea. Your doctor may prescribe medication for this. For more details, see our information sheet **Diarrhoea and Constipation**.



EATING PLANS FOR PEOPLE WITH IBD

- **Short Bowel Syndrome**

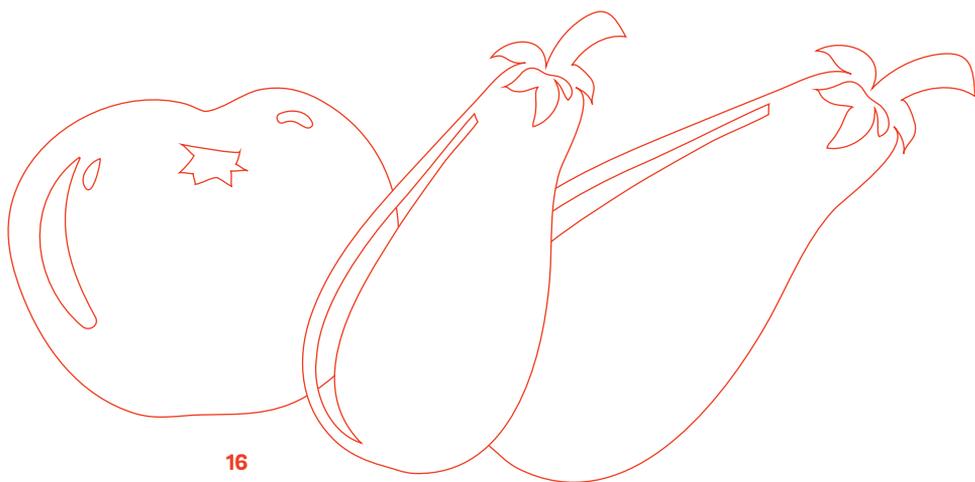
The length of a normal adult small intestine is approximately 600cm. Anyone with less than 200cm of small intestine as a consequence of surgery is said to have a short bowel. This means that there is a reduced area available to absorb nutrients and you may have to go on a specialist diet in order to maintain a healthy weight. A few people have an extremely short bowel and in these circumstances, long term parenteral nutrition (nutrients passed directly into the blood stream through an intravenous drip) may be recommended. For more information, see the section on **Nutritional treatment**.

- **Ileostomy**

Having an ileostomy (where the colon has been removed and the small intestine ends in an artificial opening through the abdominal wall) should not mean you have to make drastic changes to your diet. This may seem unlikely in the weeks following your operation, but things should settle down over time. You may find that it takes you a little while to get used to your ileostomy, and that it helps to add foods to your diet one at a time in order to judge their effect on your digestive system.

More salt and water will be lost through an ileostomy than in someone with a functioning colon, because the colon absorbs water and minerals. This means that you may need extra fluid and salt to avoid dehydration, especially in hot weather.

On the other hand, if you have a high output ileostomy you may actually need to restrict your fluid intake to avoid dehydration. Your IBD team will tell you if you have a high output ileostomy, and can also help you manage your general diet and fluid intake.



EATING PLANS FOR PEOPLE WITH IBD

Ileostomy continued

Although there is generally no need to follow a special diet unless you are advised to by your doctor, there are certain foods which you may find helpful to avoid. For example:

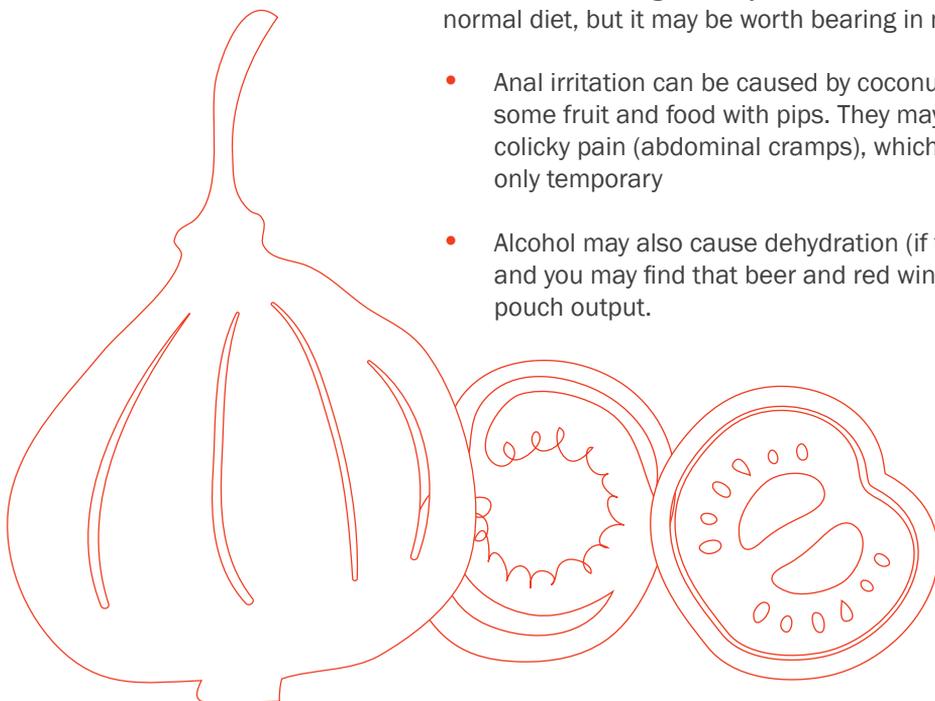
- Nuts, fruit skins and some vegetables which may cause blockages
- Fizzy drinks and ‘windy’ vegetables such as cabbages and beans which may cause gas
- Beer, chocolate and some fruit which may cause diarrhoea
- Eggs and some types of fish as these can cause strong odours.

Your stoma nurse or dietitian should be able to help you with dietary advice. The Colostomy Association and the IA (Ileostomy and Internal Pouch Support Group) also provide useful information on food and diet for people with ileostomies. See **Other useful organisations** for more information.

- **Internal Pouch**

People with UC may have surgery to form an internal pouch (also known as an ileal-anal pouch) if they have had their colon removed. In general, you should be able to eat a normal diet, but it may be worth bearing in mind the following:

- Anal irritation can be caused by coconut, spicy foods, some fruit and food with pips. They may also cause colicky pain (abdominal cramps), which is usually only temporary
- Alcohol may also cause dehydration (if taken in excess) and you may find that beer and red wine increase pouch output.



NUTRITIONAL TREATMENT

Nutritional treatment, such as exclusive enteral nutrition, is the only form of dietary treatment scientifically proven to help people with IBD, in particular those with Crohn's. Your healthcare team will tell you if they think this will help you.

ENTERAL NUTRITION

Some people with IBD may be prescribed exclusive enteral nutrition (a special liquid-only diet), which usually lasts for 2-8 weeks. People on this diet do not need to eat ordinary food or drink because the liquid diet provides them with all necessary nutrients that they need.

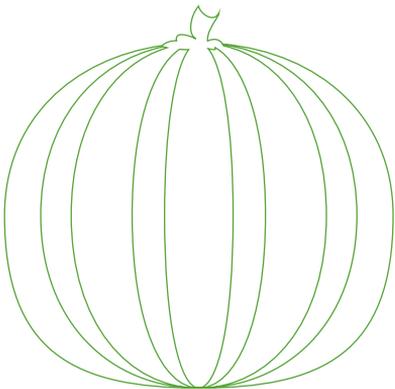
Exclusive enteral nutrition is most effective for people with Crohn's, and is rarely used for UC. It is commonly used in children because it can improve growth by providing easily digested nutrients. It can also make it less likely that steroids may be needed, by helping to 'rest' the bowel and allow it to heal. Adults are less likely to need exclusive enteral nutrition, but may find it helpful to have supplemental drinks alongside normal food in order to obtain more nutrients - this is also sometimes useful for children.

The drinks used in exclusive enteral nutrition are made up of very small simple easily digested molecules. The type of drink depends on the sizes of the molecules used in them. For example, elemental drinks (such as Elemental E028) contain single amino acids (molecules which link together to make up proteins), while polymeric drinks (such as Modulen IBD) contain whole proteins.

These different types of drinks have been found to be equally effective. You may be able to try them in different flavours to see which you like best. Some people, particularly children, may prefer to have the liquid via a naso-gastric feeding tube through their nose into their stomach - meaning that they do not need to drink the liquid. Some people may gradually reintroduce foods back into their diet once they have been on exclusive enteral nutrition. For more information see **Food diaries and food reintroduction plans**.

PARENTERAL NUTRITION

A few people with Crohn's may find it impossible to absorb enough nutrients through their small bowel. In this rare situation, it may be necessary to provide nutrients directly into the blood stream. A thin intravenous (IV) tube is inserted into a vein in the chest, arm or neck, providing nutrients directly into the blood stream, without using the digestive system.



OTHER DIETS OR SUPPLEMENTS

Some people with IBD may find it helps them to follow a special diet - but if you decide to do this, discuss it carefully with your IBD team. Many diets require supervision from a dietitian - your GP, IBD nurse, or consultant may be able to refer you to an NHS dietitian if one is available, or you may wish to see a private dietitian. Two of the most well known diets are the low FODMAP diet and the Specific Carbohydrate Diet.

THE LOW FODMAP DIET

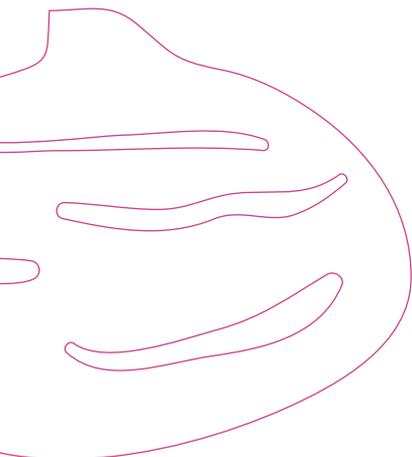
FODMAP is an abbreviation for a group of molecules found in food called 'short chain fermentable carbohydrates'. FODMAP stands for 'Fermentable Oligosaccharides, Disaccharides, Monosaccharides and Polyols'. These molecules are difficult to digest properly, so the undigested molecules pass into the colon where they act as a food source for bacteria. The bacteria digest the FODMAPs, and in doing so can cause symptoms such as bloating and wind and diarrhoea. Cutting out FODMAPs is thought to relieve these symptoms, and many people with Irritable Bowel Syndrome (IBS) have found low FODMAP diets especially helpful.

Most of the research on FODMAPs has been on people with IBS, not IBD. However, as some research has suggested that some people with inactive IBD may also have IBS or IBS-like symptoms, it has been proposed that a low FODMAP diet may be beneficial for some of these people too. So far however, direct research into the effect of a low FODMAP diet on IBD, has not shown it to be useful to people with active disease.

In another study, a low FODMAP diet was found to help reduce excessive output for people with ileostomies.

Keeping to a low FODMAP diet is quite difficult because it is complicated and restricts a large number of foods. For example, it excludes foods containing:

- Fructose (found in fruit)
- Fructans (found in onions, garlic, wheat)
- Lactose (found in dairy products)
- Galacto-Oligosaccharides (found in beans and pulses)
- Polyols (found in artificial sweeteners and some fruits)



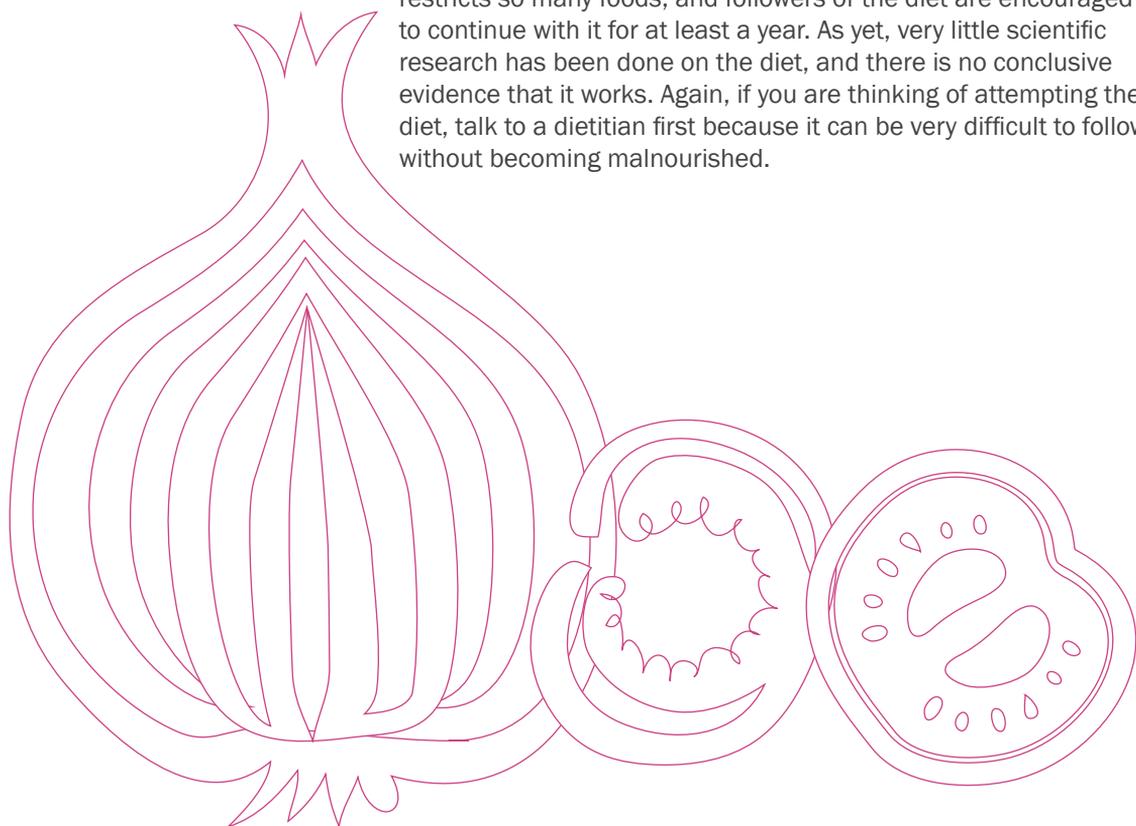
OTHER DIETS OR SUPPLEMENTS

Depending on your symptoms and diet, it may not be necessary to restrict all FODMAPs - or it may be possible to reintroduce certain foods. That said, in general the FODMAP diet is very restrictive and difficult to follow, and should only be used for 4-8 weeks before foods are re-introduced. If you want to try following the low FODMAP diet, then you should get the help of a dietitian because you may miss out on important nutrients.

THE SPECIFIC CARBOHYDRATE DIET (SCD)

This is an extreme form of low carbohydrate diet which restricts sucrose (sugar), lactose, and all grain products (including corn, wheat, barley, oats and rice), as well as starchy foods such as potatoes and parsnips. The theory behind this is that carbohydrates are harder to digest and end up in the colon. The bacteria in the colon then digest the carbohydrates, producing gas and toxins, which can cause symptoms such as bloating and diarrhoea. It is argued that cutting out the carbohydrates will starve these 'bad bacteria' in order to reduce their number and prevent them causing harm.

This diet is also extremely difficult to keep to because it restricts so many foods, and followers of the diet are encouraged to continue with it for at least a year. As yet, very little scientific research has been done on the diet, and there is no conclusive evidence that it works. Again, if you are thinking of attempting the diet, talk to a dietitian first because it can be very difficult to follow without becoming malnourished.



OTHER DIETS OR SUPPLEMENTS

PROBIOTICS AND PREBIOTICS

Probiotics are a mixture of live 'friendly' (beneficial) bacteria taken by mouth. The aim of taking probiotics is to increase the number of beneficial bacteria in the colon. Probiotics can be found in special fermented milk drinks and yogurts, or be taken in tablet or powder form.

There is some evidence that probiotics such as VSL#3 can be used to help prevent pouchitis (inflammation of an ileo-anal pouch). Research also suggests that some probiotics may have a use in maintaining remission in people with UC. As yet, there is no clear evidence that probiotics can help induce or maintain remission in people with Crohn's Disease.

Prebiotics are dietary substances, mainly consisting of non-starch polysaccharides and oligosaccharides (types of carbohydrates), which are poorly digested in the small intestine of humans. They provide a food source for beneficial bacteria in the gut, and encourage them to breed. Prebiotics favour the growth of beneficial bacteria over harmful bacteria. Examples of foods containing naturally occurring prebiotics include wheat, onions, bananas, garlic, leeks and honey. However, the role of prebiotics in IBD is not fully understood and as yet there is no evidence that taking prebiotics will help people with IBD.

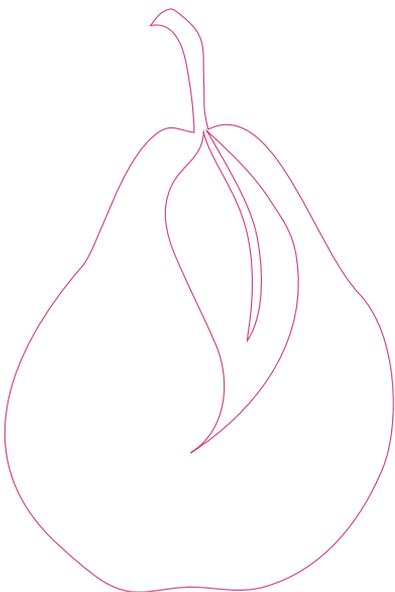


OTHER DIETS OR SUPPLEMENTS

OTHER DIETS YOU MAY COME ACROSS

There are many other diets that you may come across, particularly on the internet. However, there has been very little research undertaken on many of these diets, and there is no conclusive evidence that they are of any benefit for people with IBD. You should always talk to your IBD team or dietitian before you try one of these diets. Examples of commonly found diets include:

- **The Anti-Inflammatory Diet (IBD-AID):** This is loosely based on the Specific Carbohydrate Diet, but is not as restrictive. It limits some carbohydrates such as refined sugar, gluten based grains, and certain starches which are thought to increase the growth of inflammatory bacteria in the digestive system. It also adds probiotics and foods that contain prebiotics in order to encourage the growth of 'good' bacteria with the aim of restoring an anti-inflammatory environment. However, this is a new diet, and very little research has been done so far.
- **Paleolithic Diet:** This diet is often used for weight loss and general health promotion. It is based on the premise that human genetics have hardly changed over the past few thousand years, and modern humans are genetically adapted to the diet of their ancestors - which was based on meat, fish, vegetables and fruit. Advocates of the diet believe that dietary changes from the agricultural revolution (such as an increase in grains and refined sugars) are the root of chronic diseases such as Crohn's. Again, this is an extremely restrictive diet, and there is a high risk of vitamin deficiencies with it.
- **Omega 3 Enriched Diets:** Omega 3 is thought to reduce and regulate inflammation. It can be found in foods such as canola (rape seed oil), flax and fish. Western diets tend to be very low in omega 3, but high in pro-inflammatory omega 6 (found in corn, cereals and eggs). It is thought that a diet that is high in omega 3 but low in omega 6 may be helpful to people with IBD. But, research in this area is conflicting, and as yet there is little evidence that omega 3 supplements are beneficial to people with IBD.
- **Vegetarian or Semi-Vegetarian Diet:** Some research suggests that eating animal fat may increase the risk of developing IBD. Some hospitals in Japan are carrying out studies into 'semi-vegetarian diets', but at present insufficient evidence to suggest that eliminating meat from the diet is a way of controlling the disease. If you do want to try a vegetarian diet, care may be needed to make sure that you include all the essential food groups.



OTHER DIETS OR SUPPLEMENTS

WHAT ABOUT HERBAL REMEDIES AND OTHER SUPPLEMENTS?

There are plenty of supplements that claim to treat IBD. Some people with IBD have found that particular herbal remedies, such as aloe vera or curcumin, do help relieve their symptoms. However, many of these supplements are still being researched, and although they may help some people, there is no conclusive evidence about when or how they will work. It is difficult to know, with confidence, whether there is a direct physical effect, or a general psychological benefit (placebo). Also, everyone is different, and what may help one person may not have any effect on another.

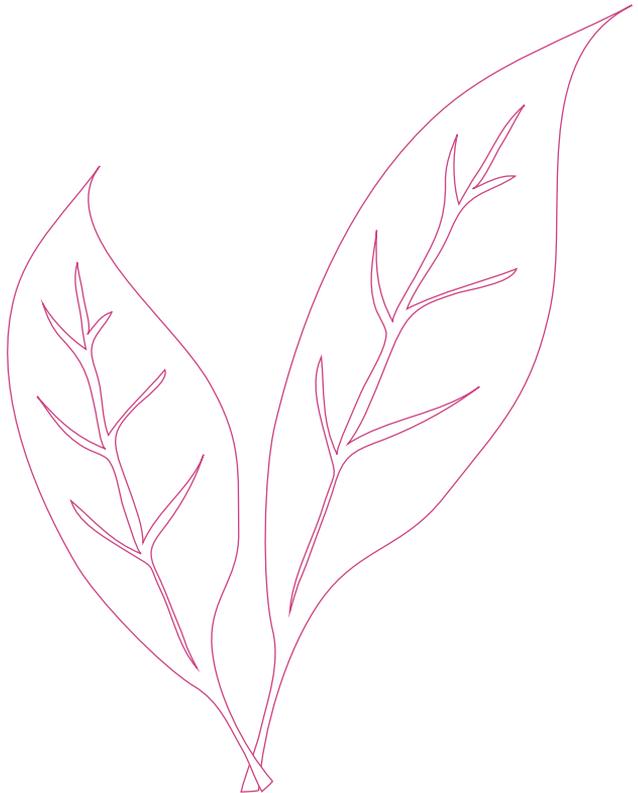
If you do want to take a complementary or alternative product, consult your doctor first and do not stop any prescribed medication without discussion, even if your symptoms improve. Herbal remedies are not as carefully regulated as conventional prescribed medications, and may have serious side effects.



“

I've found that you have to be very careful on the internet as there are many websites claiming to cure IBD through untested diets and supplements – which are not properly regulated and could be harmful and also expensive.”

Zaineb, age 23,
diagnosed with Crohn's
Disease in 2010



CHILDREN WITH IBD

Children and adolescents should still be growing and so will need extra nutrition to support their growth and development. This is especially important during the growth spurt which occurs during puberty. Some children, in particular those with Crohn's Disease, may have a delay in the onset of puberty. This could mean that your child's height is lower than that of their classmates, although they may eventually catch up. Controlling inflammation is important in helping to maintain adequate growth in children.

Some children may be put on exclusive enteral nutrition (see the section on **Enteral nutrition**). This is a particularly good way of treating Crohn's Disease in children because, unlike steroids, it tends to stimulate growth rather than suppress it.

There is some evidence that avoiding cinnamon and benzoates (for example, found in carbonated drinks) may help children with Oral Crohn's.

For more information about children and IBD, see our booklet **IBD in Children: a parent's guide**.

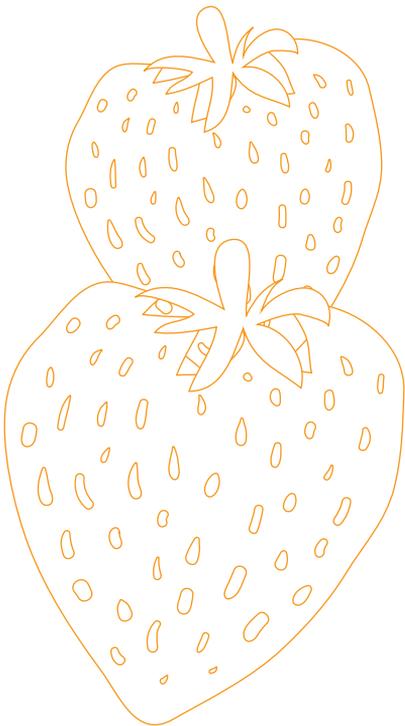
EATING WHILE PREGNANT

You may have additional concerns about your diet if you are pregnant, or trying to conceive. It is recommended that you talk to your doctor or IBD team if you are thinking of having a baby.

Vitamin B12 and folate deficiencies can cause fertility problems. All women planning for pregnancy, whether or not they have IBD, should take folic acid supplements to reduce the chance of neural tube (spine) defects in the baby. The usual recommendation is at least 400 micrograms per day before conception and during the first twelve weeks of pregnancy. Taking folic acid can be particularly important for women with Crohn's in the small intestine, because their condition can prevent its absorption. You may be recommended to increase your folic acid supplementation, especially if you have had surgery to remove part of the small intestine, or are on sulphasalazine. Your doctor will be able to advise you on the level of supplement you may need.

You may also need food supplements or dietetic advice to make sure your protein and energy intake is appropriate – particularly if you have Crohn's. But it is always a good idea to check with your doctor first. Some vitamin supplements are not recommended if you are pregnant. You should not take extra vitamin A, for example, because too much could harm your baby.

Further information can be found in our information sheets **Pregnancy and IBD** and **Fertility and IBD**. More advice on diet and food safety during pregnancy can be found on the NHS Choices website (www.nhs.uk).





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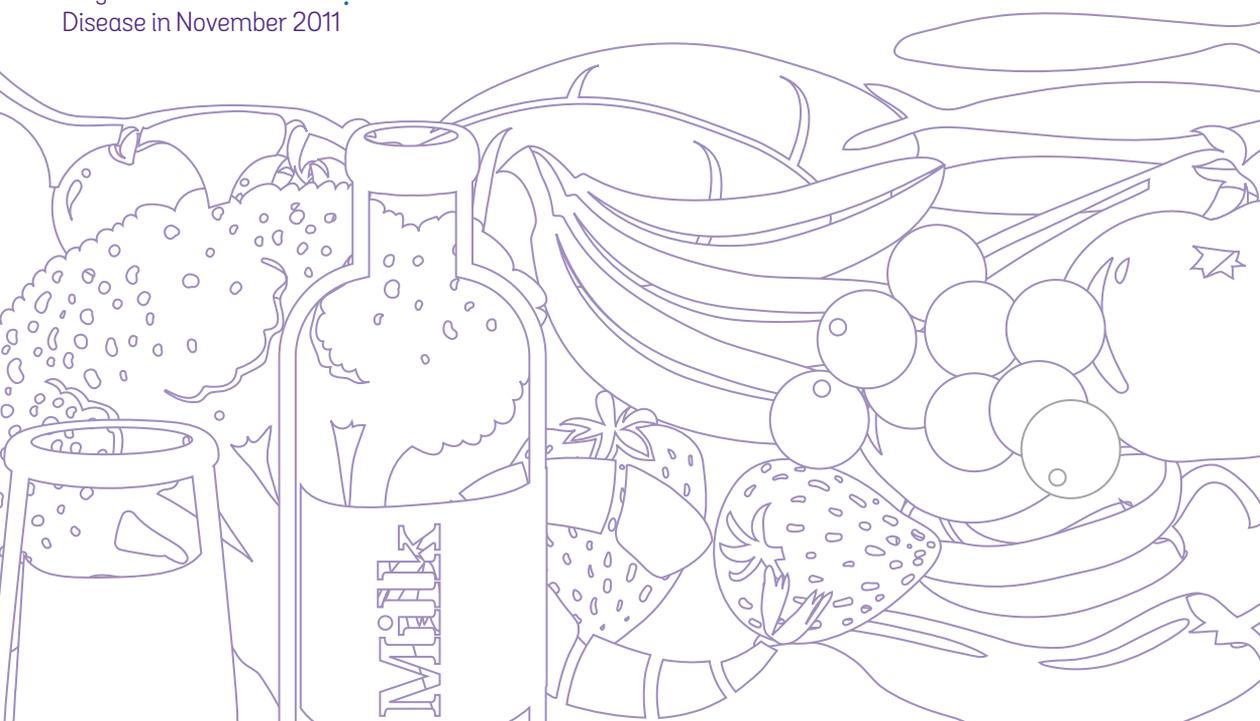
I think it is so important to remember that the relationship with food and IBD is so different for everyone! ”

Tom, age 28,
diagnosed with Crohn's
Disease in November 2011

CONCLUSION

We hope that the information in this booklet will help you develop a pattern of eating which will increase your chance of feeling better, as well as being enjoyable. If you are still having problems with your diet, or would like more information, do talk to your doctor or ask to speak to a dietitian.

You can ask your GP, IBD nurse, or IBD specialist, to refer you to a dietitian on the NHS. You may also be able to find a private dietitian in your area via the Freelance Dietitians Group (www.freelancedietitians.org). All dietitians are registered with the Health and Care Professionals Council (www.hcpc-uk.org.uk). If you choose to see a nutritionist, make sure they are appropriately qualified. More information is available from The Nutrition Society (www.nutritionistsociety.org).



HOW WE CAN HELP YOU

We produce **over 40 information sheets, booklets and guides** about all aspects of IBD which are available to download for free on our website: www.crohnsandcolitis.org.uk

We run confidential support services for anyone affected by Inflammatory Bowel Disease.

Our **Information Service** is staffed by a team of trained Information Officers and provides callers with clear and balanced information on a wide range of issues relating to IBD.

Call **0300 222 5700** or email info@crohnsandcolitis.org.uk

We also run the **Crohn's and Colitis Support Line**, a supportive listening service provided by trained volunteers who are skilled in providing emotional support to anyone who needs a safe place to talk about living with IBD. **Call 0121 7379 931.**

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OTHER USEFUL ORGANISATIONS

Food Standards Agency

www.food.gov.uk

Health and Care Professionals Council

www.hcpc-uk.org.uk

IA - (Ileostomy and Internal Pouch Support Group)

www.iasupport.org.uk

The British Dietetic Association (BDA)

www.bda.uk.com

The Nutrition Society

www.nutritionssociety.org

PINNT - Patients on Intravenous and Nasogastric Nutrition Therapy

www.pinnt.com

Freelance Dietitians Group

www.freelancedietitians.org

Colostomy Association

www.colostomyassociation.org.uk



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BECOME A MEMBER TO

RECEIVE SUPPORT & INFORMATION

Free of charge publications & guides accredited by health professionals, access to support & information helplines & our member magazine full of research news & features. Membership will help you to better manage your care, for example with our Can't Wait Card & through support groups, online advice & member only offers.

BELONG TO A COMMUNITY

Share experiences & support each other online, at events & through local group networks which are supported by health professionals & policy makers. Help us raise awareness and campaign for better health services & support life-changing research to increase the knowledge of causes & best treatments.

JOINING IS EASY

You can become a member if you are 16 years or over, are a parent or carer, a health professional or if you just want to support the charity.

If you have internet access, join faster online at www.crohnsandcolitis.org.uk

ABOUT YOU

Please return this form along with payment to Crohn's & Colitis UK, 45 Grosvenor Road, St Albans, Herts, AL1 3AW Contact the membership team on 01727 734465 if you have any queries.

Are you?

- A patient
 Crohn's Disease Ulcerative Colitis Other

Date of diagnosis

- A parent of a child under 16 years A relative of a patient
 Health professional General supporter

Name and date of birth of who you want to appear on the Can't Wait Card if not yourself (child/relative/friend)

.....

PERSONAL DETAILS

Please complete all fields and use BLOCK CAPITALS:

Surname Title

First name Gender Male/Female

Address

.....

..... Postcode

Email

Telephone number

Mobile number

Date of birth/...../..... Ethnic group

Occupation

PAYMENT DETAILS

Individual membership

- £15 per year Direct Debit
 £19 per year Cheque/Credit or Debit Card

If you are a student, are experiencing financial issues or on a low income due to health or employment issues then please contact the membership team on 01727 734465 to discuss joining at a reduced rate.

1. Please make cheques payable to Crohn's and Colitis UK.
2. If you would like to pay by credit card please call the membership team on 01727 734465 or join online at www.crohnsandcolitis.org.uk.
3. Direct debit is the most efficient way to pay. If you would like to pay by direct debit please Fill out the form below

Subscription £ Additional donation £ **TOTAL £**

By Direct Debit



Instructions to your Bank or Building to pay by Direct Debit

Amount to be taken £ Every month Every year

Name(s) of account holder(s)

Name of Bank/Building Society

Branch name

Bank Building society account number

Sort code

Date

Organisation ID

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OUR REFERENCE

Instructions to your Bank or Building

Please pay Crohns and Colitis 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 the Crohns and Colitis UK and, if so, details will be passed electronically to my Bank/Building Society.

Signed _____ Date _____

Gift aid your donation at no extra cost: I wish to gift aid my donation and any donations I make in the future or have made in the past 4 years to Crohn's and Colitis UK. I am a UK tax payer and I understand that if I pay less Income Tax and/or Capital Gains Tax in the current tax year than the amount of Gift Aid claimed on all my donations it is my responsibility to pay any difference.

Yes I am a UK tax payer and would like to gift aid *please tick* No, I am not a UK tax payer *please tick*

Data protection

Crohn's and Colitis UK will hold the information you have given on this form and will use it in connection with your membership and to keep you informed about the activities of the Charity. A copy of our Data Protection policy is available on request. At all times we comply with the Data Protection Act 1988.

From time to time we may want to contact you regarding the general work of the charity, tick here if you would not like to receive this information.

We could not do what we do without the support of our members so are always very grateful for any additional donations that you may be able to give