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Nutrition and diet advice for adults with Crohn's disease

Dietetics and Nutrition Service

Information for Patients

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What is Crohn's disease?

Crohn's disease is a form of inflammatory bowel disease (IBD). It causes inflammation of the gastrointestinal (GI) tract. Crohn's disease is a life-long (chronic) condition, although it may come and go over time. You may have times with no or very mild symptoms (remission), followed by times where symptoms increase and become harder to manage (flare/active disease).

Crohn's disease can happen anywhere along the GI tract. Your GI tract includes the parts of the body involved in moving food; from the mouth through your stomach and bowels to the bottom (anus). Symptoms linked with active Crohn's disease can be different between people, depending on where in the GI tract is most affected.

The most common symptoms include:

- Diarrhoea
- Blood or mucus in your stool
- Tummy (abdominal) pain
- Not feeling hungry (loss of appetite)
- Weight loss
- Tiredness and fatigue
- mouth ulcers
- A reduced level of red blood cells (anemia)

Management of Crohn's disease

Currently there is no cure for Crohn's disease. The aim of all treatment options is to control inflammation and manage symptoms. Management of Crohn's disease can include medication, surgery and diet.

Medication

There is a range of medication to help manage Crohn's disease. It is important to check your weight so that you take the right amount of medication.

Commonly used drugs include:

- Steroids (corticosteroids) i.e. Prednisolone, Budesonide, Hydrocortisone
- Aminosalicyclic acids (5-ASAs) i.e. Sulphasalazine, Mesalazine, and Pentasa
- Immunosuppressants i.e. Azathioprine, 6-Mercaptopurine, Methotrexate and Ciclosporin
- Biologics i.e. Infliximab, Adalimumab, Vedolizumab, Ustekinimab
- Antibiotics i.e. Ciprofloxacin and Metronidazole

For more information on the different types of medications available please visit: www.crohnsandcolitis.org.uk

Surgery

Some people with Crohn's disease may need surgery to help manage the disease. This depends on the person, and will usually be considered after using medication treatments. You can discuss surgery with your Consultant.

If you do need surgery it is important to make sure you have a good level of nutrition before the operation. This can usually be done by adding nutrients (fortifying) to your food (see page 4) however oral nutritional supplements may be prescribed by your Consultant, IBD specialist nurse or Dietitian. If you are concerned about how much you eat or drink (nutritional intake) please ask for a referral to a Gastroenterology Dietitian.

Smoking

Smoking may make Crohn's disease worse. Smoking can also stop your treatments from working as well. If you would like to stop smoking we can put you in touch with a support service.

Fertility

Crohn's disease does not generally affect fertility. Some medications may not be safe to use during pregnancy/breastfeeding, therefore it is important to speak with your IBD specialist nurse or Consultant if you are thinking of starting a family or are pregnant.

Warning signs

Please seek urgent medical advice if you have any of the following:

- Severe tummy (abdominal) pain
- Being sick (vomiting)
- Passing stool more than 5 times a day (Increased bowel frequency)
- Not passing stool for more than 48 hours
- Fast unexpected weight loss (losing weight without trying)

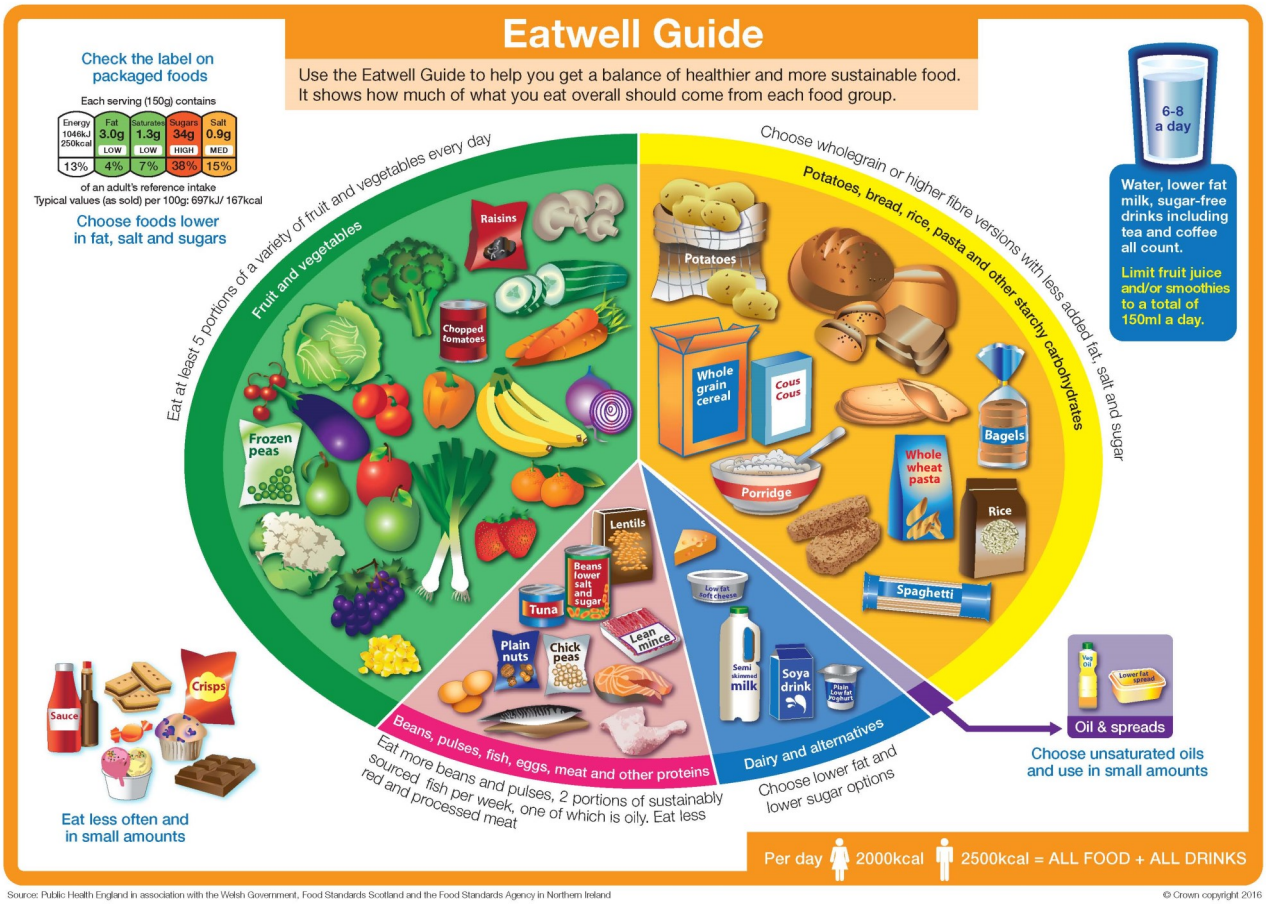
Contact the IBD specialist nurse helpline (number found on your clinic letters) or your GP. For out of hours call NHS 111.

Diet

Currently, there is no clinical evidence that any particular food directly causes a flare-up of Crohn's disease.

Changes in diet can be useful to think about during periods of active Crohn's disease to help manage symptoms. It is important to note that too many restrictions can lead to increased risk of malnutrition, reduced levels of vitamins, minerals and trace elements (micronutrient deficiencies) and reduced energy levels. These may affect response to treatment.

When symptoms are settled or inactive (disease remission) it is important to focus on reintroducing any foods previously avoided and to aim for a healthy diet in line with the 'Eatwell Guide'. Include a variety of carbohydrates (e.g. bread, pasta, cereals), protein (e.g. fish, eggs, beans), dairy (e.g. milk) as well as fruits and vegetables.



What to eat during active Crohn's disease

Symptoms from active disease can have a negative effect on what you eat and drink. This may lead to weight loss and a decline in your body's nutritional health (nutritional status). As symptoms get worse, food is often blamed and unnecessary dietary restrictions are made. It is important to keep in mind that the symptoms are due to the inflammation of the GI tract, rather than the foods eaten.

Food fortification

As said earlier loss of appetite and weight loss are common symptoms during active Crohn's disease. Fortifying foods increases calorie and protein in the diet, prevents weight loss and prevents low nutrient levels (nutrient deficiencies). The best way to achieve this is by following a high calorie and high protein diet.

- Adopt a 'little and often' approach towards dietary intake. Aim to include a small snack between meals and/or a dessert.
- Try to avoid drinks just before meals as to avoid feeling too full.
- Avoid low fat/diet versions of foods.
- Choose meals you enjoy and are easy to prepare.
- Adding extra energy by adding high calorie ingredients to meals and drinks i.e. adding cheese to sauces/eggs/potatoes; adding sugar to cereals/puddings/hot drinks.
- Aim to include 1 pint of milk a day in drinks and meals; fortify this by mixing with 4 tablespoons of skimmed milk powder.

Oral nutritional supplements

Oral nutritional supplements (ONS) are high calorie and high protein products available either at your pharmacy, online or via GP prescription. Although ONS can be useful during active disease, they may not be needed for everyone.

If you would like more information, please speak with your Consultant or IBD specialist nurse who can refer you to a Gastroenterology Dietitian to assess your nutrition level and recommend an appropriate prescription if indicated.

Fibre

Fibre refers to the edible parts of plants that are not affected by digestion and absorption in the small bowel but are completely or partially broken down by bacteria in the large bowel. There is no strong scientific evidence that suggests a low or high fibre diet is beneficial in active disease or remission.

Fibre manipulation is the increasing or decreasing of the amount of fibre in the diet, and can be used to manage symptoms.

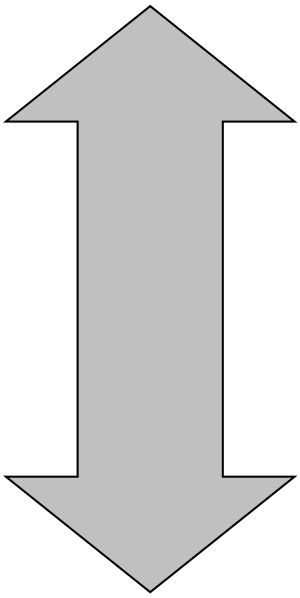
A low fibre diet is usually only recommended for a short amount of time and only if it benefits symptoms, this will be different for each person. You can discuss this with your Gastroenterology Dietitian.

In stricturing (narrowing of the bowel) Crohn's Disease, a longer-term low fibre diet may be required.

You may benefit from taking a multivitamin and mineral supplement during this restriction.

Sources of fibre in foods

HIGH



LOW

All-Bran/ Wheat biscuit cereal/ Popcorn/ Sev/ Bombay mix/ Wholemeal Chapati/ Dates/ Quinoa/ Seeded or Wholemeal bread
Red kidney beans/ Chickpeas/ Peanut butter
Peas/Baked beans/ Brown bread/ Digestive biscuits/ Crunchy nut cornflakes/ White chapatti/ Chips
Malt loaf/ Puri
Lentils/ Dhals/ Onion
Chocolate chip cookies/ Plain naan bread
Carrots (peeled)/ Broccoli (no stalks)
Potato shapes/ Roast potatoes
Rich tea biscuits/ Cornflakes/ White bread/ English muffin/ White pasta
Green cabbage/ Cauliflower/ Couscous/ New potatoes (no skins)
Oranges/ Grapes/ Pears/ Peaches (peeled)/ Coleslaw
Brown basmati rice/ Jaffa cakes/ Rice noodles/ Porridge/ Tinned tomatoes
Smooth fruit juice/ White basmati or Pilau rice

Soft very low fibre diet

Some people with Crohn's disease can develop narrowing in the bowel, called strictures and/or adhesions. If you develop strictures and/or adhesions, the role of dietary changes is to avoid having a blockage in the narrowing. This can be avoided by having a soft textured, very low fibre diet. It is also recommended to ensure time is taken to eat, chewing food thoroughly, and including smaller meals. Depending on the severity of the strictures and/or adhesions you may need to avoid all solid foods and follow a liquid diet.

A referral to a Gastroenterology Dietitian can be requested via your Consultant or IBD specialist nurse.

Liquid diet / Exclusive enteral nutrition (EEN)

There are people with Crohn's disease who may be advised to have a liquid diet. This can also sometimes be referred to as an 'elemental' diet or exclusive enteral nutrition (EEN). The aim of EEN is to start remission. It can be used by itself or with medications. EEN is usually given/taken orally but in some cases can be given through feeding tubes.

There are several options of EEN, depending on each persons nutritional needs and taste preference. EEN removes all food from your diet for 6 to 8 weeks (depending on the style of liquid diet chosen) and prescribed liquid nutritional supplements are taken. For EEN to be effective you need to be 100% committed and motivated to follow a liquid only diet, otherwise you may not receive any improvement from it.

Following EEN you will then reintroduce food, slowly in line with a basic LOFFLEX (low fat/fibre limited exclusion) diet. During this time you will need close monitoring from your Gastroenterology Dietitian and weaning off liquid nutritional supplements.

Lactose intolerance

For those with small bowel Crohn's disease, damage to this area of the GI tract can reduce the production of lactase, the enzyme that breaks down lactose (the sugar in dairy products e.g. milk, yoghurt, cheese). Not enough lactase can cause symptoms such as tummy (abdominal) cramps, bloating, loose stool and flatulence/gas. This is known as secondary lactose intolerance.

Changing your diet to one that is low in lactose should improve symptoms quickly. As lactose intolerance occurs following inflammation of the small bowel, a low lactose diet will usually only need to be followed until the GI tract has recovered. Lactose free dairy options include; lactofree dairy products and dairy from a plant-based source such as soya milk/yoghurt.

If you are concerned that you may have secondary lactose intolerance, please speak with your Consultant or IBD specialist nurse who can refer you to a Gastroenterology Dietitian for further advice.

Bone health

Loss of bone thickness (density) occurs naturally as we age. People with Crohn's disease are at higher risk of developing weaker bones and fractures. Several factors have been highlighted to increase these risks including:

- **Corticosteroids:** steroids can reduce the rate of bone formation, alongside reducing the amount of calcium absorbed from food, increasing the calcium lost in urine.
- **Avoidance of dairy foods:** restriction of calcium in the diet can slow down bone formation. If following a low lactose diet, it is importance to replace foods avoided, with calcium-enriched alternatives (listed on next page).
- **Reduced uptake of calcium and vitamin D:** particularly in Crohn's disease affecting the small bowel. Calcium and vitamin D are important nutrients for bone formation.

If you are concerned about bone health please talk to your Consultant, GP, IBD specialist nurse or Gastroenterology Dietitian who can ask for tests including blood vitamin D, calcium and phosphorus levels, to asses for bone health.

If you are found to have several risk factors you may be offered a dual energy x-ray absorptiometry (DEXA) scan to measure bone health. This needs to be discussed with your Consultant or GP, who can order this using the ICE electronic system.

Brittle bones (osteopenia and osteoporosis)

It is important to aim for 1000mg of calcium a day (1200mg for women post-menopause and men over 55 years of age). If you do not have dairy foods in your diet it is important to try and find alternatives (listed below).

To help increase the intake of calcium it is important to make sure you are not lacking in vitamin D, as this can reduce calcium uptake. A good source of vitamin D is sunlight (please follow sun safe

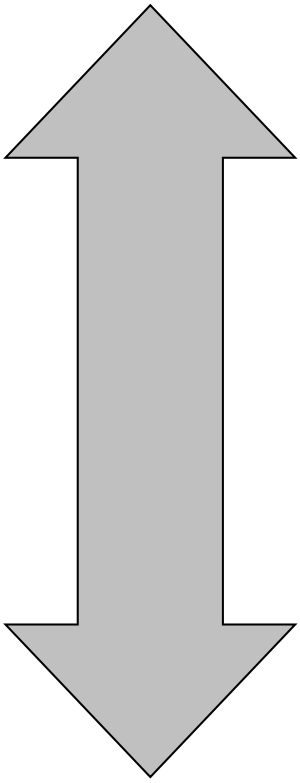
advice), but you can also find it in foods such as oily fish, meat, eggs and fortified products such as margarine and some breakfast cereals.

Your GP can check your calcium and vitamin D levels from a blood test. If you feel you are struggling to have enough calcium and/or vitamin D please speak with your Consultant, GP, IBD specialist nurse or Consultant as you may need to take a supplement.

If you are on steroids, you should be prescribed a calcium and vitamin D supplement. It is still important to ensure a good intake of calcium and vitamin D from your diet.

Dietary sources of calcium

HIGH



LOW

Malted milk drink
Lacto-free cow's milk
Skimmed, semi-skimmed and whole cows' milk
Fortified milk e.g. soya/ oat / Koko/
almond/ rice/ hazelnut/ cashew
Hemp milk
Cheddar cheese
Paneer cheese/ Tofu
Sardines (canned with bones)
Custard/ Rice pudding
Calcium fortified juice
Soya/ Greek yoghurt/ Lassi
Okra/ Spinach/ Curly kale
Poppy seeds
Calcium fortified cereals
White bread/ Gluten-free roll
Red kidney beans
Plain scone/ Wholemeal bread/
Cottage cheese/ Chocolate mousse
White pitta bread/ Chapati/ Baked Beans/
Sesame seeds/ Tahini/
Almonds
Figs
Prawns/ Eggs

Low levels of red blood cells (anaemia)

There is an increased risk of anaemia in people diagnosed with Crohn's disease. This can be due to loss of blood from the GI tract, reduced intake of iron containing foods or reduced nutrition uptake due to bowel inflammation.

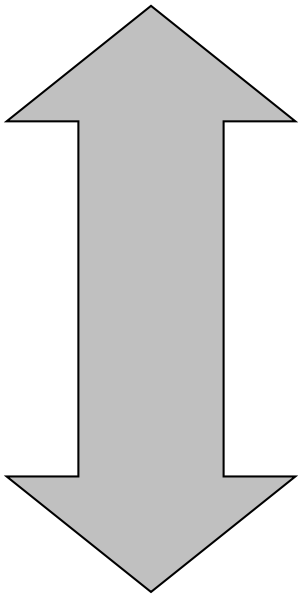
Symptoms may include fatigue, pale complexion (skin), breathlessness, feeling faint and lacking in energy. Anaemia can be caused by low levels of iron, folic acid or vitamin B12. These levels can be checked by having a blood test.

Iron uptake is increased when vitamin C is included with meals. Ensure that you have vegetables and fruit at mealtimes. Avoid drinking tea or coffee with your meal, as this decreases iron absorption. Try to avoid having tea or coffee within 30 minutes of a meal.

If you are anaemic, your doctor may start you on vitamin/mineral supplements and/or refer you to see a Gastroenterology Dietitian to discuss your diet.

Dietary sources of iron

HIGH



LOW

Offal (Liver, Kidney, Heart, Tongue)
Liver pate
Beef
Sesame seeds
Eggs
Baked beans/ Chickpeas/ Kidney beans
Sunflower seeds
Lamb
Sausages (pork)
Figs/ Apricots/ Hazelnuts/ Almonds/
Brazil nuts
Butter beans/ Tofu
Spinach/ Dark green leafy vegetables/ Broccoli
Tuna/ Prawns/ Peanut butter
Fortified breakfast cereals/ Chicken/ Mackerel/
Dried dates/
Oranges
Bacon
Salmon/ Cod/ Haddock

Probiotics

The bowel naturally contains a variety of bacteria which helps the gut to work. Sometimes the natural bacteria become unbalanced i.e. during or after an infection or after a course of antibiotics; this can lead to a change in bowel habits, bloating and gas production.

Probiotics are designed to rebalance the natural bacteria, and can be found in a number of forms such as fermentable yoghurt style drinks, live yoghurts and capsules.

If you would like to try probiotics, we would encourage a multi-strain preparation (more than one bacteria) for at least 4 weeks. This will help see if it is helpful. If there is no response i.e. no improvement in symptoms, try a different brand or stop.

Please speak to your local Pharmacist or Consultant for the different multi-strain probiotics available.

Weight monitoring

Your weight should be checked at every clinic appointment. Please track your weight and note any changes. We would not suggest you monitor your weight any more than weekly. If there is a decrease in your weight please speak to your Consultant or IBD specialist nurse about a referral to a Gastroenterology Dietitian.

Date	Weight (kg)	Change	Date	Weight (kg)	Change

Contact Details

Dietitian …….. **Contact number 0116 258 5400**

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہِ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
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Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

Previous reference:

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email equality@uhl-tr.nhs.uk

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