

Patient information factsheet

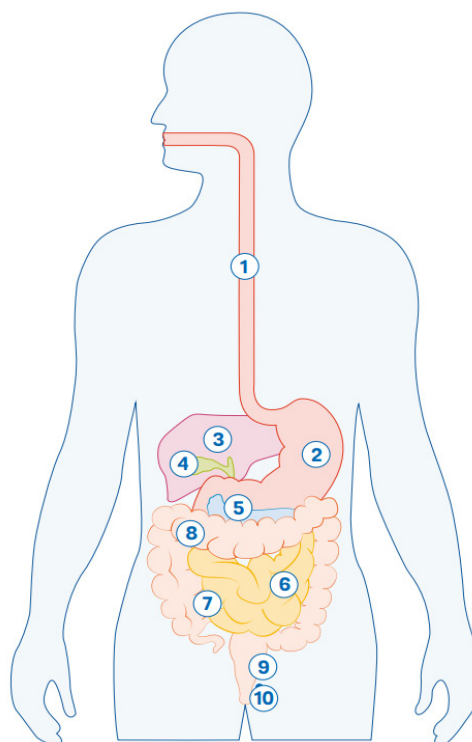
Dietary advice for jejunocolic anastomosis

We have given you this factsheet because you had surgery which resulted in jejunocolic anastomosis. This factsheet explains what jejunocolic anastomosis is and the dietary changes you may need to make. We hope it will answer any questions you may have. If you have any further questions, please contact a member of our team using the details at the end of the factsheet.

The digestive process

It is helpful to understand the digestive process when talking about jejunocolic anastomosis.

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



When food reaches the stomach, it is broken down. It then moves through the small bowel. The small bowel has three sections:

- the duodenum (the first part of the small bowel, which connects to the stomach)
- the jejunum (the middle part of the small bowel)
- the ileum (the last part of the small bowel, which connects to the large bowel)

When food moves through the small bowel, it is broken down further and nutrients are extracted. Any remaining food is moved through to the large bowel (also known as the colon).

Patient information factsheet

The large bowel:

- absorbs fluid and salt
- slows the movement of food through the bowel, allowing more time for nutrition to be absorbed
- absorbs energy from the breakdown of starchy foods

Any undigested food in the large bowel forms faeces (stools).

What is a jejunocolic anastomosis?

Jejunocolic anastomosis happens when the ileum (the last part of the small bowel, which connects to the large bowel) is removed during surgery. The jejunum (the middle part of the small bowel) is joined to the large bowel instead.

Shorter-term dietary changes

After surgery, you will initially be able to drink small amounts of water and clear fluids. You will then be able to drink all types of fluid. You will move on to being able to eat a low-fibre diet, before aiming to gradually increase your fibre intake four to six weeks after surgery. Your healthcare team/dietitian will discuss the timescales for adjusting your diet with you.

The first four weeks after surgery

Lower fibre diet

For the first four to six weeks after surgery, you will need to follow a lower fibre diet, with your fibre intake coming from the sources suggested in the table below. These foods are easier to digest while your bowel is healing and they may also help to reduce bowel frequency. At this stage, you may find that regularly eating small meals and snacks is helpful if you have a reduced appetite or are feeling uncomfortable.

The table below shows you what a lower fibre diet includes, and the higher fibre foods you can begin to reintroduce four to six weeks after surgery. Where possible, you should choose lower fat options.

	Lower fibre foods (recommended)	Higher fibre foods (to avoid)
Breakfast cereals	Puffed rice cereal (such as Sugar Puffs or Rice Krispies), cornflakes, frosted flakes, Special K (plain), and porridge	All-Bran, Shredded Wheat, Weetabix, fruit and fibre, muesli or granola with added nuts, seeds or dried fruit
Bread, pasta, rice and potatoes	White versions of these products, such as white bread, pasta, rice, tortilla wraps, couscous Potatoes without skins Chips and crisps	Brown versions of these products, such as wholegrain, seeded, wholemeal, 50:50, granary and rye bread, whole wheat pasta, brown or wild rice, and potato skins
Snacks	Any biscuits, cakes, crackers or sweets made with white flour that do not contain dried fruit, nuts or seeds	Biscuits, cakes, crackers or sweets made with whole meal flour and / or containing dried fruit, nuts or seeds

Patient information factsheet

<p>Fruit and vegetables</p>	<p>Well-cooked vegetables without skins or stems, such as broccoli, cauliflower, peeled root vegetables, courgettes, aubergines or squash</p> <p>Fruits without skins, such as bananas, melons, peeled apples or pears, tinned or pureed fruit</p> <p>Soft salad products, such as peeled cucumber, round lettuce, baby spinach and deseeded tomatoes</p> <p>Smooth fruit juice - maximum one small glass (150ml) per day</p>	<p>Raw vegetables</p> <p>Fruit and vegetables for which the skin cannot be removed, such as peas and sweetcorn</p> <p>Fruit and vegetables that are stringy, such as celery, green beans, mushrooms, pineapple, oranges and rhubarb</p> <p>Fruits, juice or smoothies containing pips or seeds, such as strawberries and raspberries.</p> <p>Dried fruit</p>
<p>Protein sources (if you are vegetarian, you can eat one portion of well-cooked lentils, pulses or hummus each day)</p>	<p>Tender meat and fish</p> <p>Eggs</p> <p>All dairy and dairy alternative products that do not contain nuts, dried fruit or seeds</p>	<p>Tough or gristly meat, fish bones, beans (such as kidney beans, haricot beans, borlotti beans, chickpeas, soya beans, lentils), Quorn and tofu</p> <p>Dairy and dairy alternative products that contain fruit, nuts, seeds or cereals</p>
<p>Miscellaneous</p>	<p>Seedless, rindless or jelly varieties of jam, marmalade and jelly</p> <p>Sugar, honey, syrup, ketchup and bottled sauces, meat and yeast extracts, Marmite, vinegar</p>	<p>Jam and marmalade with seeds or rind</p> <p>Chutney and pickles</p> <p>Popcorn</p>

Increase fibre gradually after four to six weeks

After four to six weeks, you can gradually introduce higher fibre foods into your diet, one new item at a time. However, you should only start to do this once your stools are formed. Monitor any changes to your bowel patterns (such as frequency or consistency of your stool) when increasing your fibre intake.

Longer-term dietary changes to consider

When part of the small bowel is removed, your body may not absorb all the nutrition you eat. Therefore, you may need to eat more food than you expect in order to help ensure your body's nutritional needs are being met.

Patient information factsheet

It is recommended that your long-term diet is:

- moderate in fat
- low in oxalate
- moderate in calcium
- high in carbohydrate
- high in protein

You should also make sure you are drinking enough liquids to stay well hydrated (see page 5).

Fat

Fat is a good source of energy and calories. However, you may have difficulty absorbing fat because the ileum, which is important for fat absorption, has been removed.

You may need to reduce your fat intake if you experience:

- loose or runny stools
- stools which are pale in colour
- oily stools
- stools that float on the surface of the toilet and are difficult to flush away

If you are concerned about your stools, please speak to your dietitian. You may need medications to help with your symptoms.

How to reduce your fat intake

Below are some ways you can reduce your fat intake.

- Use a low-fat spread instead of butter or margarine, and spread it thinly.
- Use semi-skimmed milk rather than whole milk.
- Choose half-fat hard cheese instead of full-fat varieties. If you decide to eat full-fat cheese, have a smaller portion.
- Choose low-fat cottage cheese or low-fat soft cheese instead of regular varieties.
- Choose coconut milk, coconut cream and coconut yoghurt (the type of fat found in coconut products can be absorbed well by your large bowel).
- Choose low-fat yoghurt, salad cream, mayonnaise and dressings.
- Limit takeaways, chocolate, pastries and cream.
- Limit crisps, cakes and biscuits, or choose lower fat options such as jaffa cakes or baked/popped crisps.
- Buy lean cuts of meat and trim off any visible fat.
- If you choose to fry food, use small amounts of cooking oil or use a spray cooking oil.

However, instead of frying food, try:

- microwaving
- oven cooking
- steaming
- poaching
- boiling
- grilling

Food labelling (content per 100 grams [g])

You can use food labels to help guide your choices. Foods low in fat will have a green label, and foods high in fat will have a red label.

High fat Over 17.5g	Medium fat Between 3g and 17.5g	Low fat 3g and below
------------------------	------------------------------------	-------------------------

Patient information factsheet

Oxalate

Oxalate is found naturally in some foods. It is normally passed out of the body in stool, but it can pass in urine when the ileum has been removed. This increases your risk of developing kidney stones.

To reduce the risk of developing kidney stones, you can:

- limit your intake of foods containing oxalate
- consume a moderate fat diet
- increase your calcium intake
- aim to be well hydrated (drink six to eight glasses of water each day)

To reduce the amount of oxalate in your diet, you should avoid eating:

- berries (such as strawberries, gooseberries, blueberries, raspberries, cranberries)
- tangerines
- stringy fruit and vegetables (such as rhubarb, leeks and celery)
- beetroot
- spinach
- parsley
- nuts and nut butters (including peanut butter)
- soybeans and soy products (such as tofu, soy milk, soy cheese)
- sesame seeds
- chocolate, cocoa, hot chocolate, chocolate milk, malt drink (such as Horlicks)
- strong tea and coffee (you should drink no more than two to three milky cups of tea or coffee daily)

Increasing your calcium intake

Calcium is a mineral that has several important functions, including:

- helping build bones and keep teeth healthy
- regulating muscle contractions, including your heartbeat
- making sure blood clots normally

The recommended intake of calcium is around 800 milligrams (mg) per day. A portion of each of the following foods contains 250mg of calcium:

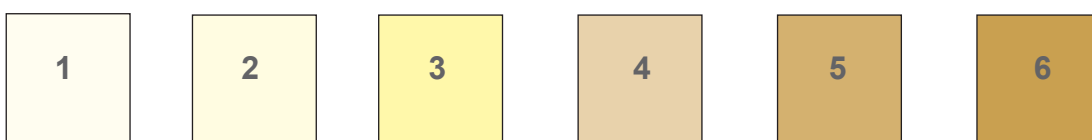
- one glass of milk
- one pot of yoghurt
- 25g of cheese (matchbox size)

You should aim for three to four portions of food containing calcium each day, choosing lower fat options whenever you can.

Hydration

You should aim to be well hydrated. Please remember that you may need to drink more fluids in the warm weather or if you are exercising.

The guide below can help you see how hydrated you are.



If your urine matches 1 to 3, you are well hydrated. If your urine matches 4 to 6, you may need to drink more.

Signs of dehydration (needing to drink more) include:

- feeling thirsty
- having a dry mouth
- having muscle cramps
- having dry skin
- feeling dizzy or lightheaded
- passing less urine than usual
- having dark coloured urine

Carbohydrates

Carbohydrates, or starchy foods, are a good source of energy. Your large bowel makes energy by breaking down carbohydrates, so these foods may help you gain or maintain your weight.

Below are some tips for how to increase your carbohydrate intake:

- Include starchy food (such as bread, sourdough, potatoes, rice, noodles, pasta, or cereal) at each meal.
- Between meals, snack on starchy foods (such as sandwiches, breakfast cereals, crackers, toast or crumpets).
- To add extra calories, you could try adding a thick spread of jam, marmalade, honey or syrup to bread/toast, or add to milk puddings or porridge (you should discuss this with your team if you have diabetes).

Protein

Eating foods high in protein will help you recover from surgery. It will also help to maintain your weight.

You should include a portion of protein at each mealtime, but you may need to cook foods without adding too much extra fat.

Sources of protein include:

- meat and poultry (such as beef, pork, ham, chicken or turkey)
- fish
- eggs
- milk, dairy products and milky puddings (such as yogurts, custard and rice pudding)

If you follow a vegan diet, please discuss this with your dietitian.

If you have diarrhoea

It can take time for your bowel to recover after surgery, and you may experience frequent loose stools at first.

Some food and drinks can make diarrhoea worse. To help improve your symptoms, try avoiding or reducing your intake of:

- fizzy drinks and alcohol
- sugar-free drinks and sweets containing sorbitol
- fruit juice and smoothies to a small 150ml glass per day
- high fat foods such as takeaways or fried foods
- spicy foods

Patient information factsheet

Weight loss

If you are losing weight, try increasing the amount of carbohydrates and lower-fat proteins you eat. You can also talk to your dietitian or your GP.

Vitamins and minerals

B12 injections

After your ileum is removed, you will need vitamin B12 injections every three months for the rest of your life to prevent deficiencies.

Supplements

It is important that you talk to your healthcare team before taking any vitamin and mineral supplements. This is because high doses of some vitamins are not recommended. For example, vitamin C is converted to oxalate when it is taken at very high doses.

However, if you are prescribed any supplements (such as a balanced multivitamin and mineral supplement or fat-soluble vitamins), you should keep taking these unless your healthcare team tells you otherwise.

Medications

Your healthcare team will fill in the below table with you before you go home.

Medication	Dose	How often to take	How to take

Contact us

Dietetics department

Telephone: **023 8120 6072** (Monday to Friday, 9am to 4pm)

You can leave a message on the voicemail outside of these times.

Image reproduced with permission from Crohn's and Colitis UK.

For a translation of this document, or a version in another format such as easy read, large print, Braille or audio, please telephone **0800 484 0135** or email **patientsupporthub@uhs.nhs.uk**

For help preparing for your visit, arranging an interpreter or accessing the hospital, please visit **www.uhs.nhs.uk/additionalsupport**