Nutrition and neuroendocrine tumours: bowel surgery

Nutrition and dietetics Patient information

Types of bowel surgery for NETs

The most common types of bowel surgery are:

- Right hemicolectomy - the end of the small bowel and beginning of the large bowel are removed. The appendix is also taken out.
- Ileal resection some of the small bowel is removed.

Please speak to your NET nurse or dietitian for advice if you are not sure what surgery you had, or if you had a different type of bowel surgery.

General dietary advice after leaving hospital

- Drink fluids often. Sip water or other drinks through the day.
- Eat little and often
- Eat a protein rich food at every meal. Protein rich foods include eggs, meat, fish, dairy foods, silken tofu, Quorn®, smooth hummus, and smooth nut butter.
- If you are losing weight then include snacks, puddings, and milky drinks. Also speak to your nurse or dietitian.

Low fibre diet

You will usually be asked to follow a low fibre diet for 4-6 weeks after your surgery. This is while your bowel heals. The table below gives you an idea of foods to eat and those to avoid. After 4-6 weeks you should be able to gradually increase the fibre in your diet. Your NET team will support you with this. Ask your dietitian or nurse you are unsure if or when to reintroduce fibre.

Category	Food to eat	Foods to avoid
Fruit	• Fruits with skins, seeds, or pips • All berries • Citrus fruits • Dried fruit (including raisins, sultanas, prunes, apricots, figs, dates) • Pineapple • Grapes • Rhubarb • Kiwi	• Tinned fruit (peaches, pears) • Peeled and stewed fruit, except rhubarb • Small amounts of melon, mango, banana, and peeled apple, pear, nectarine, plum • Fruit juices without pulp
Vegetables	• Vegetables with skin, seeds, pips • Spinach, kale, cabbage, sprouts, broccoli • Peas, sweetcorn, celery, asparagus, mushrooms, leeks • Soups with vegetable pieces • Large amounts of salad items including tomato (whole), lettuce, peppers, avocado, cucumber	• Well cooked, peeled carrots, parsnips, squash, turnip, swede • Potato without skin • Small amounts of well-cooked onion and garlic • Clear vegetable broth • Tomato sauce without seeds/skin e.g. passata • Small amounts of avocado, lettuce and cucumber (peeled) • Cauliflower without stalks
Carbohydrates	• Wholegrain/multigrain/granary/ seeded/rye bread/rolls/wraps • Wholemeal/brown pasta • Brown/wild rice • Bran cereals • Cereals containing nuts or dried fruit e.g. granola, muesli • Potatoes with skins • Wholegrain crackers or crispbreads	• White bread/rolls/Wraps • White pasta • White rice • Cornflakes, rice krispies • Small portions of ready brek or rolled oats/porridge • Cream crackers, plain scones, crumpets, croissants • Potatoes without skins • Plain pastry, pancake, Yorkshire pudding
Protein	• All beans, lentils, chickpeas • Nuts or nut butters • Soya mince	• All meat and fish • Eggs • Silken tofu • Quorn® • Smooth hummus • Smooth nut butter

Category	Food to eat	Foods to avoid
Dairy or dairy alternatives	• Yoghurt/cheese/ice cream with fruit pieces or nuts	• Cheese • Milk • Yoghurt (smooth) • Ice cream • Custard/rice pudding • Butter/margarine • Cream
Nuts, Seeds and Snacks	• Whole nuts • All seeds • Cakes or biscuits with nuts/seeds/ dried fruit • Popcorn • Cereal bars	• Smooth nut butters • Potato crisps • Breadsticks/plain pretzels • Rice cakes • Cakes/biscuits without nuts/seeds/ dried fruit • Boiled/jelly sweets, plain chocolate, fudge, toffee
Drinks	• Fruit juice with pulp • Prune juice	• Tea/coffee • Squash • Fizzy drinks • Smooth fruit juice • Oxo, Bovril • Hot chocolate or malt drinks
Other items	• Marmalade • Chutneys • Jam with seeds • Wholegrain mustard, pickles, relish, coleslaw • Stalks and leaves of herbs	• Marmite • Chocolate spread • Sugar, honey, syrup • Smooth jam or marmalade • Oils, salad dressings, ketchup, gravy, soy sauce, pepper, salt. • Herbs and spices if powdered

Common problems after bowel surgery

Your bowel will take a while to adjust to how it absorbs nutrients and fluid. This can cause some problems. These vary from person to person. It can take weeks or months to improve. Contact your NET nurse or dietitian if you are struggling.

Diarrhoea

Diarrhoea is common after bowel surgery and there can be many causes. It may take a while for you and your NET team to find out the cause and treat it. Usually it will get much better once treated.

You can try:

- eating little and often
- following a low fibre diet. Use the table above
- reducing alcohol
- reducing tea, coffee, and energy drinks. These can all contain caffeine.
- avoiding spicy and fatty foods
- avoiding sugar-free sweets, gum, mints, and drinks containing sorbitol, xylitol and mannitol.

You may need to take medication e.g. loperamide (Imodium®). This will depend on how much of your bowel has been removed. It will also depend on how much the diarrhoea is affecting your day-to-day life. These tablets are best taken around 30 minutes before a meal. Always speak to your dietitian, nurse, or doctor before starting these.

Wind and bloating

This is also a common symptom after bowel surgery. It can have many causes.

You can try:

- eating fewer gas-producing foods e.g. onions, garlic, cabbage, sprouts, beans, lentils, cauliflower, broccoli
- avoiding fizzy drinks and chewing gum
- eating slowly and chewing your food well
- including oats in your diet e.g. porridge
- peppermint oil capsules e.g. colpermin® or peppermint tea

Vitamin deficiencies

Vitamin B12 levels may become low if the end of your small bowel has been removed. Your levels should be checked by a blood test after surgery and then yearly. If they are found to be low, regular injections of vitamin B12 will be needed to increase your levels to normal. Oral tablets may not work. This is because you won't be able to absorb enough due to your surgery.

After bowel surgery there is a higher risk of vitamin A, D and E and calcium deficiency. Your levels should be checked by a blood test once a year. You should then take supplements if needed.

Bile acid malabsorption (BAM)

If the end of your small bowel has been removed, you are at risk of bile acid malabsorption. Bile is used to break down fats in your food when it is in the small bowel. If the bile cannot be reabsorbed at the end of the small bowel, it enters your large bowel and causes irritation.

This can cause a range of symptoms but most commonly:

- very loose and frequent diarrhoea, often soon after eating
- urgency to poo or not getting to the toilet in time to do so
- excessive wind and explosive poo
- waking at night to poo
- smelly, yellow or greasy poo
- bloating
- tummy cramps

BAM can be diagnosed by a SeHCAT scan which monitors how much bile is being lost from the bowel. A scan is not always needed for diagnosis. Sometimes medication is tried without the scan.

Medication is usually needed to treat BAM e.g. colesevelam or cholestyramine. Your NET dietitian or nurse will discuss the options, dosage, and timings of this medication. It can take a while to get right.

For milder cases, or with medication, following a low-fat diet may help to improve symptoms. This will need to be done with the support of a dietitian to make sure you are still having enough fat in your diet and are not losing weight.

It is recommended that if you are taking medication for BAM you take an ‘A-Z’ multivitamin and mineral. This is because you are at risk of low levels of some vitamins and minerals.

Your triglyceride (a type of fat in the blood) levels can be affected by taking BAM medications. Your levels should be checked yearly.

Small bowel/intestine bacterial overgrowth (SBBO/SIBO)

After some types of bowel surgery (particularly when the join between the small and large bowel is removed), bacteria from the large bowel can move up into your small bowel. This can cause a range of symptoms, including:

- wind
- bloating
- tummy pain or discomfort
- diarrhoea

It is difficult to test for SIBO. If you have symptoms, treatment with antibiotics is often tried to see if they improve. The most common antibiotic that is used is rifaximin. Antibiotics will be prescribed and monitored by your doctor, nurse, or dietitian. You may need to try more than one to help improve your symptoms.

Alternative diets

There are a lot of diets and/or foods in the newspapers or online that can claim to cure or improve cancer. Most of these diets are not proven to work and can even be unsafe. The safest approach is to follow a varied and balanced diet. This helps you to get all the energy, protein, vitamins, and minerals you need.

It is a good idea to speak to a dietitian before trying a new diet or supplement to check your diet will still be providing all the nutrients your body needs.

Useful contact details and resources

Ruth Lee

Neuroendocrine oncology dietitian
Wessex NET group

Tel: **07887 832343**
Email: **ruth.lee4@nhs.net**

Macmillan Cancer Support

www.macmillan.org.uk
or **0808 8080000**
National cancer charity

Neuroendocrine Cancer UK:

www.neuroendocrinecancer.org.uk
National charity for NET patients

PLANETS cancer charity

www.planetscharity.org
Local Wessex charity for NET patients

NHS
University Hospitals Dorset
NHS Foundation Trust

To read this leaflet in a different language,
please visit our website: **www.uhd.nhs.uk/visit/patient-information-leaflets**
and use the language and accessibility function available along the top of the site.

To ask for this leaflet in larger print, please contact the patient experience team on **0300 019 8499**
or email **uhd.patientexperienceteam@nhs.net**.

Poole Hospital, Longfleet Road, Poole, Dorset, BH15 2JB

Author: **Ruth Lee** Date: **July 2026** Version: **Two** Review date: **July 2029** Ref: **126/22**

t: 01202 665511 w: www.uhd.nhs.uk : @UHDTrust : @uhd_nhs