

Department of Nutrition and Dietetics

Nutrition Team: Dietary advice for people with a high output stoma

This information is for people with a chronic high output jejunostomy or ileostomy. It is not intended for people with a normal functioning ileostomy or those where a high output is temporary. This advice should only be followed with supervision from the Nutrition Team Dietitian

When a large amount of your bowel is surgically removed or is not functioning correctly, a stoma may be formed. A stoma is an opening from the gut to the outside of the body and allows waste products from the body to be removed. Stomas have different names according to where in the gut they are formed. A jejunostomy is an opening from the jejunum, an ileostomy is an opening from the ileum, and these are both parts of the small bowel.

A stoma may be formed due to conditions including:

- Blood clots
- Radiation
- Crohn's disease
- Tumour removal

When part of the bowel has been removed or is not working correctly your gut cannot properly absorb nutrients, electrolytes (salts), fluid and your body's own secretions. They pass through the bowel quickly; this produces the high output from your stoma.

High volumes of fluid from your stoma can lead to severe dehydration and



Patient Information

electrolyte (salt) disturbance. You may require a strict plan involving precise timing and amounts of food, medication and fluid. An oral rehydration drink may replace some of your fluid. Depending on how much available bowel you have for absorption you may require intravenous (parenteral) fluid and nutrition in order to prevent dehydration and to maintain your weight, you will be given additional information about this if it is required.

Signs of dehydration include:

- Dry mouth
- Increased thirst
- Reduction in amount of urine produced
- Urine that is dark in colour and smells strongly
- Tiredness
- Dizziness
- Muscle cramps
- Headache

Urine that is clear and pale yellow in colour indicates a good level of hydration.

Fluid

As part of your treatment you may be given a fluid restriction to follow. This is because drinking ordinary fluid e.g. squash, tea, coffee, water, fizzy pop, will increase your stoma output. When this happens people become dehydrated, thirstier and this often results in more ordinary fluid being drunk to try and quench the feeling of thirst. This then exacerbates the stoma output resulting in a vicious cycle of excessive drinking 'driving' the stoma to become more active.

An oral rehydration solution e.g. dioralyte, may be recommended to help your bowel absorb more fluid and salt, which will reduce your stoma output. It can be strange to drink salty solutions such as these regularly, but most people find that if they persevere with the recommended amount of rehydration solution their taste buds adjust within a few days and they can see the benefits of having a reduced stoma output, and by feeling more hydrated. A small amount of squash can be added to the rehydration solution to improve its taste and it is recommended that it is chilled where possible.

Patient Information

The nutrition team can provide further advice and tips on how to manage your fluid restriction and to improve the tolerance of oral rehydration solutions.

Food and eating

When a person has a high output stoma it is difficult to get all the nutrients you require from food, due to the goodness being washed out through the stoma before it has chance to be absorbed by the body. Through a combination of medication, fluid restriction and choosing the right types of food the absorption of nutrients can be maximised.

The best diet to follow when you have a high output stoma is one that is **high in calories, protein and salt with a reduced amount of fibre initially**. This can be difficult if you have previously followed a different type of diet, discuss this with your Dietitian who will offer support and advice during the transition onto your new diet. You may require nutritional drinks in addition to your diet; your Dietitian will advise you on whether this is appropriate and which products to try according to your condition and bowel anatomy.

Whilst the experience of others may serve as a guide, remember that as an individual you may respond differently to food, both before and after surgery and therefore you should base your food choices on your personal tolerance and the advice given by your Dietitian.

- Try to develop a regular eating pattern; this will make your stoma output more manageable.
- Choose **starchy carbohydrates** such as white bread, chapattis, low fibre cereals like rice krispies and cornflakes, ready brek, potatoes (no skins), green bananas, sweet potato, yam, dishes made with maize, millet or cornmeal and white pasta or rice for energy. These foods may also thicken your stoma output. Make these types of foods the main part of all your meals.
- Include at least two portions of **protein** each day e.g. beef, pork, bacon, lamb, liver, kidney, chicken, turkey, fish, eggs, peanut butter (smooth), textured vegetable protein, Quorn, tofu, tempeh. Cook these foods with additional fat to boost their calorie content.
- Eat **salty foods** such as cheese, bacon, ham, sausages, smoked fish (kippers), shell fish, canned fish (tuna, sardines, salmon), meat and fish pastes, tinned foods such as spaghetti and ravioli, meat extracts (Oxo,

Patient Information

Bovril), yeast extracts (Marmite) salted crisps, savoury or salty biscuits. Salty foods help your body to absorb more fluid from the gut and reduce the stoma output.

- Milk, cheese and yoghurt are good sources of **calcium** which is important for healthy bones. Include 1 pint of milk or the equivalent alternative per day. Use **full fat** dairy products rather than low fat alternatives. One cup of milk (1/3 pint or 200ml) contains the same amount of calcium as one small carton of yoghurt (150 ml) or 1oz/30g of cheese, so these may be taken as alternatives to milk.
- Plainly cooked foods are often better tolerated than spicy or highly seasoned dishes.
- Add plenty of **salt** whilst cooking and sprinkle salt onto your meals.
- Avoid alcohol and caffeine drinks before bedtime i.e. coffee, cola and tea as they may make your stoma more active during the night. See below for further information on alcohol.
- Eat slowly and chew well.

Fruit and vegetables provide fibre and a range of vitamins and minerals that are essential for good health. A portion is equal to, 2-3 tablespoons of vegetables, a small salad, and a piece of fruit like an apple or banana, 2-3 tablespoons of stewed/tinned fruit or a small glass (150ml) of fruit juice. Fibrous foods can be difficult to digest and may cause a blockage if not chewed properly or eaten in a large quantity. **For the first six to eight weeks after surgery you should avoid:**

Beans	Mushrooms	Raw vegetables
Celery	Nuts	Salad
Coconut	Peas	Seeds
Dried fruit	Pineapple	Sweetcorn
Fruit skins	Pips	Vegetable skins
Mango	Pith	

When your stoma has settled (after six to eight weeks) you may want to reintroduce fibre. This should be done in small quantities, one food at a time, ensuring that the foods are cooked until they are soft and chewed well.

Patient Information

Most people are able to tolerate a good variety of fruits and vegetables in their diet once their stoma has settled. However, everyone is individual and you will need to find your own tolerance level based on trial and error. Fruits and vegetables that tend to be better tolerated include:

- Peeled fruits
- Tinned fruits in natural juice
- Stewed, baked or pureed fruits
- Fruit juices (unsweetened)
- Well cooked or pureed vegetables
- Vegetables in soup or casseroles, pureed if necessary

Add custard, cream, yoghurt, crème fraiche, sugar or ice-cream to fruits to increase the calorie content.

- **Fats and oils** e.g. butter, margarine, cooking oil, mayonnaise, salad dressings, provide calories, essential fats and vitamins. Ensure that you add plenty of fats to your food to increase the calorie content e.g. spread butter thickly on bread, biscuits or scones or add it on to potatoes or rice; add plenty of oil when cooking.
- The following foods contain **fats and sugars** and are high in calories. It is normally recommended that they are eaten in small quantities for healthy eating. However, as you are not able to absorb nutrients sufficiently, you need to consume these types of foods and drinks in larger portions in order to maximise your calorie intake from food:
 - Pasties, pies, sausage rolls
 - Cakes, biscuits, pastries
 - Puddings, ice cream, cream (all varieties)
 - Chocolate, sweets
 - Crisps
 - Sugar, sweetened drinks
 - Jam, marmalade, honey and syrup can also be added on to bread, biscuits, scones or in rice puddings or porridge
- Excessive amounts of **alcohol** are not good for health. Some types, such as beer may increase your stoma output. Seek the advice of your doctor prior to drinking alcohol. If you drink alcohol, take it in moderation: 3 or 4 units/day or less for men and 2 or 3 units per day for women, with two alcohol-free days per week.

Patient Information

- 1 unit is equal to:
 - ½ pint of beer, lager or cider
 - A single pub measure of spirit (25ml). such as vodka or whisky
 - A small glass of sherry or a small 125ml glass of wine (approx half a pub measure of wine)

Common questions about food and a high output stoma

Can I eat spicy foods?

Spicy foods such as chilli and curry may upset your stoma function so we recommend that in the first 6-8 weeks you should choose mild food. After this time you may introduce more spicy food if you wish according to your own tolerance.

I'm experiencing a lot of wind. What causes this?

At first your stoma may pass more wind (flatus) than usual, but this soon reduces, especially once you begin to eat a more varied and regular diet. Wind is a normal by-product of digestion, but it may be increased by swallowing air whilst eating or by eating fibrous foods.

You may reduce wind caused by swallowed air by:

- Eating regular meals in a relaxed environment
- Eating slowly and chewing food carefully
- Avoiding fizzy drinks or try pouring them into a glass, stirring and leaving to stand for 10 minutes before drinking if you wish to continue to consume

You should also try avoiding:

- Taking drinks through a straw
- Chewing gum
- Long periods without food
- Smoking
- Talking or drinking when eating

Patient Information

Foods and drinks that can increase the wind passed by your stoma include beans, beer, broccoli, brussel sprouts, cabbage, carbonated drinks, cauliflower, cucumber, eggs, fruit, green vegetables, mushrooms, nuts, onions, peas, spinach, sweet corn, fatty foods (pan-fried or deep-fried foods) and rich creamy foods.

Most high output stoma patients do not suffer long term with wind problems as the food is not sitting in the gut long enough to ferment and for bacteria to produce gas.

You may reduce wind caused by fibrous foods by:

- Using low fibre alternatives such as white bread, white rice and pasta, refined cereals such as cornflakes and rice krispies
- Reducing your intake of pulses (e.g. peas, beans, lentils), vegetables (e.g. cabbage, broccoli, cauliflower, sprouts, onions, leeks, asparagus), fruits, especially skins, pith, hard or dried fruit, nuts and seeds
- Peppermint water, peppermint tea or capsules may assist in reducing wind and may alleviate pain associated with wind.

I sometimes experience a more liquid output. Which foods may cause this?

Certain foods may make your stoma output more liquid especially if eaten in large quantities e.g. fibrous foods (wholemeal bread, wholegrain cereals, pulses, leafy green vegetables, raw vegetables, sweet corn, fruits and nuts), spicy foods, alcohol, drinks containing caffeine (e.g. coffee, tea, cola), fruit juices and fried foods. If you eat any of these foods in large quantities, you may wish to try reducing the quantity that you eat to see if this thickens your stoma output.

What should I do if my output increases?

An increased output can be a result of a variety of things, such as a stomach bug, stress, antibiotics or spicy foods. If you experience an increase in your output it is important to continue to take fluids as usual with added salt replacements as advised by your doctor or Nutrition Team. If you are unable to have meals, try taking salt in the form of meat extract drinks such as Oxo or Bovril and eat dry savoury crackers. If your condition persists for more than two days, and your urine looks dark in colour and has a strong smell then seek advice from your Nutrition Team. They may advise you to increase your

Patient Information

anti diarrhoeal medication or ask you to provide a sample of the liquid produced for testing. Foods that are reported to help thicken the stoma output include apple sauce, bananas, buttermilk, cheese, marshmallows, jelly babies, (boiled) milk, noodles, smooth creamy peanut butter, rice, tapioca pudding, toast, potatoes and yoghurt. However if your bowel is particularly short these types of foods are very unlikely to make a difference.

I sometimes see food particles in my bag. Is this normal?

Yes, some food will pass through unaltered, particularly foods such as sweetcorn and some medication. Chew your food well. Coloured drinks such as blackcurrant drinks may make your output purple.

What happens if I get constipated?

Constipation does not occur in the patient with a high output stoma. If your output stops or slows down considerably you may have a blockage and should seek medical attention immediately.

My stoma output is offensive smelling. Is there anything I can do to prevent this?

Certain foods can cause more odour than others. Foods such as asparagus, baked beans, broccoli, brussel sprouts, cabbage, cauliflower, cucumber, eggs, fish, garlic, green vegetables, onions, peanut butter, some spices and strong cheeses may cause a problem for some people. You may wish to try omitting these foods to see if this reduces the problem, but try not to over restrict your diet. Vinegar added to fish dishes helps to eliminate the traditional fishy odour and also helps to get rid of fish smells when the bag is changed or emptied. Parsley is a natural odour eater. Alternately, you could try ostomy deodorant sprays and drops that can help mask or eliminate odours. Ask your stoma care nurse for advice about these.

Will my stoma increase my risk of food poisoning whilst on holiday abroad?

You are at no greater risk of food poisoning than a person who does not have a stoma. However, you are more at risk of becoming severely dehydrated if you do experience food poisoning. You should follow the guidelines on food hygiene for the country you are visiting and it is always advisable to drink bottled water whilst abroad. If your stoma output increases whilst on holiday it

Patient Information

is important to ensure you stay hydrated, ask your Nutrition Team or Doctor for advice prior to travelling.

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