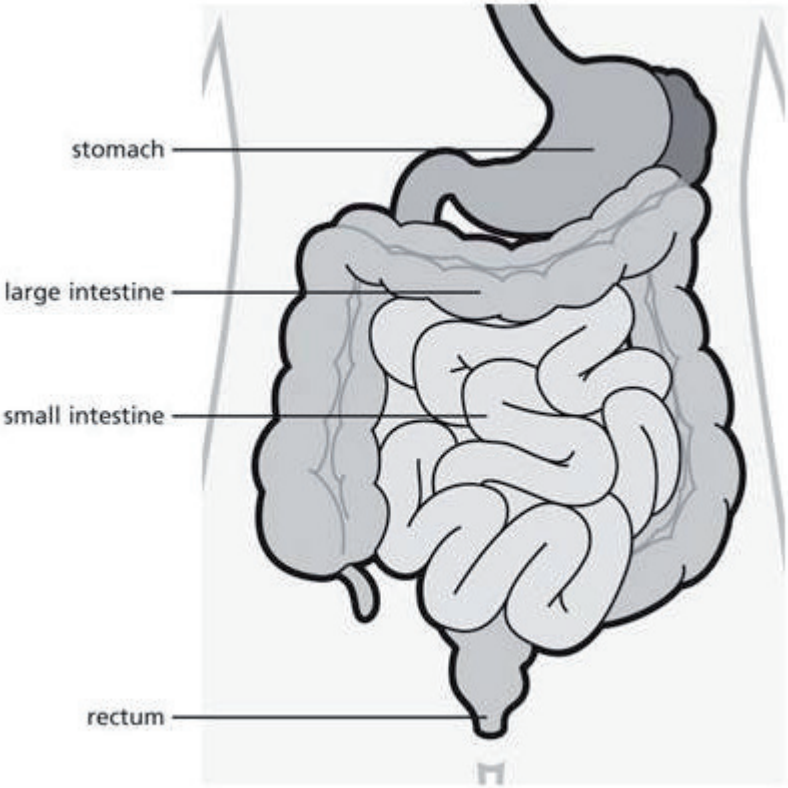
Royal United Hospital Bath NHS
NHS Trust

RUH Managing Short Bowel Syndrome and / or a High Output Stoma



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Welcome

This leaflet is provided for people who have been diagnosed with either short bowel syndrome, or who have a stoma with a high output. We hope it will help clarify how this is managed and why.

Our intestines (the small bowel) absorb the nutrition and fluids we need. When we eat or drink, digestive juices are added to allow us to absorb food and fluid; 7 - 9 litres of food, fluid and digestive juices enter the intestines daily. Most nutrition is absorbed within the first 150-200cms of the intestines (jejunum). The large bowel (colon) helps remove water, so only 100 - 200mls of food and fluid is passed as stool.

Short bowel syndrome

When our intestines fail to absorb enough nutrition or fluids, or both, this is called short bowel syndrome or intestinal failure. This can occur in a normal length bowel that isn't working properly (after infection, radiation, due to disease etc.,) or when the small bowel is actually shorter (after surgery). These changes can be temporary or permanent depending on the cause.

If the large bowel (colon) has been removed the intestines may empty so rapidly that there is not enough time to absorb nutrition, fluid, and digestive juices. The shorter the length of the intestines, the more food, fluid and digestive juice is lost after eating or drinking. People with short bowel syndrome can suffer from diarrhoea, weight loss, dehydration and malnutrition.

In short bowel syndrome, drinking low salt fluids can lead to a loss of fluid and salt, leading to dehydration. To stop this happening you may need to drink less not more. You may be advised to limit all liquids (including melted ice based products and gravy).

High output stoma

A stoma is an artificial opening of the bowel onto the abdominal wall; there are two main types of stoma:

- A colostomy: from the large bowel (colon) to the skin that usually produces stool
- An ileostomy: from the small bowel (intestines) to the skin that usually produces a liquid motion

When a stoma output is greater than 1 – 1.5 litres this is considered to be high, and is treated like short bowel syndrome.

Maintaining enough calories

You may need to eat either more or differently to maintain adequate nutrition. The dietitian's advice is critical. Sometimes, when eating alone is insufficient to provide adequate calories, supplements may be advised. Rarely, additional calories may be given via a tube into the nose (naso-gastric (NG) or naso-jejunal (NJ), or with nutrition into a vein (parenteral nutrition (PN).

Maintaining hydration

People with a short bowel may suffer from dehydration from diarrhoea or a high stoma output. Drinking lots of water (and other low salt drinks) may not help and could make the dehydration worse, as the fluid drunk is lost along with digestive juices the gut adds to absorb it. In short bowel syndrome, we often recommend limiting the amount of oral low salt fluids, to avoid losing fluid and salt. Drinks with a higher salt content (such as St Marks solution or WHO solution) are more easily absorbed and can help avoid dehydration.

Medications

Medication may be used to slow the gut down so that the intestines have sufficient time to absorb the nutrition and fluids e.g. Loperamide (Immodium®), Codeine Phosphate.

It is vital these are taken 30 minutes before meals to allow them to work at the right time.

Other medications are used to lower the amount of digestive juices produced e.g. Omeprazole (Losec®), Lansoprazole (Zoton®), octeotride.

St Marks solution

A high salt drink called St Marks solution can help rehydrate the body, and relieve thirst.

To make up the solution add to one litre of tap water:
Glucose 20g = 6 level 5ml spoonfuls
Sodium Chloride (salt) 3.5g = 1 level 5ml spoonful
Sodium Bicarbonate 2.5g = 1 heaped 2.5ml spoonful

Some people find the solution unpalatable. It is best served chilled but you may also add a small quantity of lemon or lime squash provided you only make a weak solution. Some people have also used a small amount of fruit juice, again as long as you make a weak solution. If this continues to be a problem, the sodium bicarbonate can be replaced by the same quantity of sodium citrate.

Complications

With long term short bowel syndrome there is an increased risk of gallstones, kidney stones and vitamin or mineral deficiencies such as B12.

Outcome

Short bowel syndrome and / or a high output stoma can be temporary or reversible; you can discuss this with your medical team. Most people are able to manage their hydration and nutrition over time; with the support of their dietitian and their medical team.

References

http://www.bsg.org.uk/clinical-guidelines/small-bowel-nutrition/guidelines-for-management-of-patients-with-a-short-bowel.html

http://www.stmarkshospital.org.uk/uploads/content/docs/patientinformationleaflets/Understanding%20IF.pdf

http://www.gosh.nhs.uk/EasysiteWeb/getresource.axd?AssetID=109095&type=full&servicetype=Inline

For more information contact:

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