

St Mark's solution (oral rehydration / WHO solution)

Information for patients and carers



Outstanding
Care for One+All

Introduction

This leaflet provides information about a type of oral rehydration solution called St Mark's solution. It explains why you have been advised to take it, how it works, and how to prepare and take it safely.

If you or those caring for you have any questions, please speak to your doctor, dietitian, or pharmacist.

What is St Mark's solution?

St Mark's solution is an oral rehydration solution that helps prevent dehydration.

It contains carefully measured amounts of:

- glucose
- sodium (salt)
- bicarbonate.

These ingredients help your bowel absorb fluid more effectively. St Mark's solution is based on the original World Health Organisation (WHO) oral rehydration formula, but does not contain potassium. This makes it suitable for people with high stoma output or short bowel syndrome.

What is St Mark's solution used for?

It is often used to manage:

- **short bowel syndrome** – a condition where part of the small intestine has been removed or damaged, reducing fluid absorption
- **high stoma output** – usually 1500 ml or more in 24 hours.

Why have I been advised to take this?

Your bowel does not absorb ordinary drinks well. Drinking plain fluids (such as water, tea, coffee, or juice) can actually increase fluid and salt losses, making dehydration worse.

St Mark's solution replaces both fluid and electrolytes (salts) more effectively, helping you stay hydrated.

How does it work?

Glucose helps sodium and water to be absorbed together in the gut. This process improves hydration and helps prevent further salt and fluid loss.

How to make St Mark's solution

You will need to make 1 litre of solution each day.

Ingredients for one litre:

- **Glucose powder**
 - 20 g (6 level teaspoons)
 - buy from online retailers (like Amazon) or online or high street pharmacies
 - high street pharmacies can order for you if not in stock
- **Table salt (sodium chloride)**
 - 3.5 g (1 level teaspoon)
 - buy from supermarkets
- **Baking soda (sodium bicarbonate/bicarbonate of soda)**
 - 2.5 g (½ heaped teaspoon of powder OR the contents of 5 x 500 mg sodium bicarbonate capsules)
 - buy from supermarkets (baking aisle)
- **Cold water**
 - 1 litre (1000 ml or 1¾ pints).

All ingredients can usually be bought for less than the cost of one prescription.

Note: Glucose powder is NOT the same as sugar.

Method:

1. Obtain a supply of the ingredients above from your local supermarkets, pharmacy or online.
2. Measure out all the ingredients carefully into a large jug.
3. Add one litre of cold water.
4. Stir well until everything has dissolved.
5. Store the solution in the fridge.
6. Sip on it throughout the day.
7. Discard any remaining solution after 24 hours.
8. Make a fresh solution every day.

How much should I drink?

You have been advised to drink:

ml of St Mark's solution per day

If you are advised to drink more than 1 litre per day, increase the water and all ingredients in the same proportion.

Example: If advised to drink 2 litres per day, double all ingredient amounts.

Improving the taste

The solution may taste salty.

Tips to mask the taste:

- store it in the fridge and drink it chilled
- sip it through a straw
- add a little 'sugar free' squash to the solution. Lime, grapefruit or blackcurrant work best.
- squeeze a little bit of fresh lemon or lime to the solution.

Any flavouring must be added before topping up to 1 litre, so the total volume stays correct.

Limiting other drinks

Your doctor or dietitian may advise you to limit ordinary drinks such as water, tea, coffee, juice, or fizzy drinks.

These drinks contain very little salt and can increase fluid loss from your bowel.

Many patients are advised to limit ordinary fluids to 0.5 to 1 litre per day, in addition to St Mark's solution. This will be individual to you.

Your advised ordinary fluid allowance is:

per day

When should I seek advice?

Contact your healthcare team if you notice:

- increasing thirst
- dizziness or light-headedness
- passing less urine or dark urine
- muscle cramps or weakness
- worsening stoma output.

You may need blood or urine tests from time to time to check hydration and salt levels.

Further information

If you have any questions or concerns, please contact your doctor, dietitian, or stoma team.



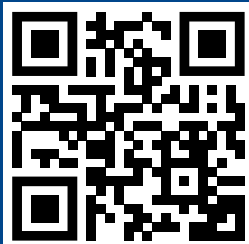
**To get this information in a different format
call 01872 252690**

**Royal Cornwall Hospitals NHS Trust
Treliske, Truro, Cornwall, TR1 3LJ.
Switchboard: 01872 250000**

Reference RCHT2194
Printed 06/2026
Version 1.0
Review due 06/2029

© Royal Cornwall Hospitals NHS Trust
Patient Information 2026

For an online version of this
leaflet please scan this QR code



**Outstanding
Care for One+All**