Hydralyte™

Healthcare Professional Fact Sheet

Colonoscopy Bowel Preparation – Managing Dehydration

Colonoscopies

In the United States, colorectal cancer is the third most common cause of cancer across the population. Screening for colon cancer with a colonoscopy has been shown to be effective in reducing the incidence and mortality associated with colon cancer.

A colonoscopy is the standard method for imaging the mucosa of the entire colon to detect any unusual lesions or abnormal areas. Colonoscopies can also be useful in the broader assessment of gastrointestinal bleeding, diverticulitis, abdominal pain, anemia and other gastrointestinal signs and symptoms.

Bowel preparation – standard procedures

An ideal bowel preparation procedure involves emptying the colon of any fecal material to ensure clarity of the bowel upon scope. This allows for better visualization of the bowel mucosa and the detection of any suspicious lesions. The bowel preparation process should ideally occur rapidly, and should not result in any alteration of the colonic mucosa. An inadequately prepared bowel can result in poor visibility of the colon, and the colonoscopy will need to be repeated.

There are a number of different bowel preparation medicines available. The common feature of all bowel preparation medicines is that they cause diarrhea in order to remove the contents of the bowel completely. Through diarrhea there is the loss of both fluid and electrolytes. This can result in mild to moderate dehydration, and electrolyte imbalances.

As part of the bowel preparation process, patients are told to drink clear fluids to maintain their hydration status. It is very important that these clear fluids adequately replace lost fluid and electrolytes to prevent and relieve any dehydration or electrolyte imbalances that are likely to occur.

How to manage dehydration

Replacing lost fluid and electrolytes with an oral rehydration solution (ORS) is the most important aspect of managing dehydration. Hydralyte is a scientifically formulated ORS based on the World Health Organization criteria for oral rehydration therapy. The solutions contain the correct balance of glucose and electrolytes to allow for rapid and effective rehydration.

Common signs and symptoms of dehydration:

- Increased thirst
- Fatigue / Lethargy
- Dizziness
- Headaches
- Dark yellow urine, or decreased urine output
- Sticky or dry mouth
- Loss of skin elasticity
- Irritability



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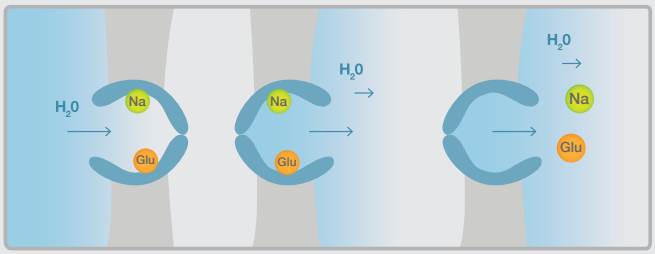
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Oral rehydration solutions (Hydralyte) – The science

The most important physiological features are:

1. Correct balance of sodium and glucose leads to the activation of the sodium-glucose co-transporter in the small intestinal lumen – this allows for rapid absorption. Sodium and glucose bind to the transporter protein – driven by high sodium concentrations in the small intestine. This dual binding causes the transport protein to change shape, delivering sodium and glucose to cell internals. At the same time, water moves into the cell internals by osmosis.

   Sodium and glucose are both actively transported out of the cell into the blood, along with water.



2. The solution is hypotonic – this allows for effective rehydration while minimizing potential side effects such as unnecessary calories or a feeling of fullness/bloating.

It is important to know that water alone or sugary drinks (i.e. soda or sports drinks) do not contain the correct balance of sodium or glucose to allow for rapid hydration.

Hydralyte formulation

Ingredient	Function	Hydralyte per Liter (1.1 QT)	Sports drink (per Liter – approximate values)
Sodium	Helps body to retain fluid	45–60 mEq	12–23 mEq
Potassium	Essential for nerve and muscle function	20 mEq	4–9 mEq
Chloride	Helps body to retain fluid	35–45 mEq	NA
Primary sugar	Assists with absorption of fluid and electrolytes	0.6 oz (glucose)	2.1–2.6 oz (glucose/ fructose/ sucrose)
Osmolality	WHO recommendation = 245 mOsmol/L	245 mOsm/L	Variable – not standardized
Calories per Liter (1.1 QT)		80 (powder, solution) –110 (effervescent tablets)	260–320

Hydralyte is available as a color-free lemonade flavor.

Adult patients may consume up to 1.5 L of Hydralyte color-free as a clear fluid, during a bowel preparation procedure. This is at the discretion of the healthcare professional.

To join our healthcare professional network and access professional and patient resources please visit **www.hydralyte.com/healthprofessionals**



QUESTIONS? Email us at **education@hydralyte.com**

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American Society for Gastrointestinal Endoscopy. Bowel preparation before colonoscopy.
Medscape. Effectiveness, Training and Quality Assurance of Colonoscopy Screening for Colorectal Cancer
World Health Organization. Oral Rehydration Salts – Production of the new ORS. 2006. Available at: http://whqlibdoc.who.int/hq/2006/WHO_FCH_CAH_06.1.pdf

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