MYTH 4: Everyone needs the same amount of fluid

Home Artificial Nutrition 2021 Awareness Week 2 - 8 August 2021 PINNT

FALSE

There's a lot of different factors for how much fluid an individual needs, including how much fluid is lost through urine, stool or stoma output, or how warm the weather is.

Some individuals may have issues with their heart or kidneys which means that they cannot have large amounts of fluid infused.

Some individuals may have large volume nutrition bags or extra fluid every day.

Some individuals may need to 'top up' their fluid intake with an extra fluid bag every now and again, for example during hot weather.

1 FLUIDS - INS AND OUTS

- Fluid balance can be difficult to manage when parts of the GI tract are missing or affected by disease.
- Drinking lots of water or eating foods that increase fluid secretion into the GI tract can sometimes make fluid losses worse, especially in patients that do not have the parts of the GI tract that absorb fluid such as the lower part of the small intestine or the colon.
- Some individuals have a maximum allowance for oral fluid intake to ensure that fluid losses are not made worse by oral fluid intake.
- Some patients need large volume nutrition bags or additional bags of i.v. fluid and electrolytes to compensate for their losses.

2 THE IMPORTANCE OF SODIUM IN SHORT BOWEL SYNDROME

- Tonicity is a term that is used to describe the concentration of molecules in relation to those found within cells. Sodium (salt) is the main electrolyte that is used to control tonicity. Isotonic means that the solution has the same concentrations as the cells.
- Normally the body will maintain the salt and fluid in the body by either absorbing or secreting salt. To bring level back up, salt is given up from around our cells and pushed back into lumen of the gut. In a complete and healthy bowel, there are metres of gut to reabsorb the salt so that there is no net loss.
- The upper part of the GI tract, the jejunum and upper ileum, are sensitive to the amount of sodium in the fluid. If the sodium is low the GI tract will secrete sodium to try and equalise the tonicity, this drives additional fluid into the GI tract. If the tonicity of fluid in the GI tract is high the jejunum and ileum will absorb sodium to equalise the tonicity, this also helps to absorb fluid from the GI tract.
- Patients who have short bowel syndrome (SBS) due to surgery or malabsorption, may lose the ability to absorb fluid in the lower part of the GI tract. In these individuals, drinking hypotonic, low salt fluids, such as dilute squash, water or tea can make the stoma output worse and lead to an increased loss of fluid and sodium, leading to dehydration. To stop this happening, the individual will need to drink less not more.
- For this reason, some individuals will have a guide for the maximum volume of oral hypotonic fluids they can drink per day. Instead, short bowel syndrome patients can sip on hydrating drinks like oral rehydration solutions. These drinks include ideal proportions of both sugar and salt to reduce the loss of salt and fluid.

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