# Oral Rehydration Solutions

# **ORAL REHYDRATION SOLUTIONS (ORS)**

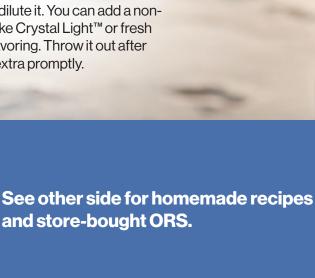
An ORS is an Isotonic Solution (similar concentration to body fluids), that is easily absorbed to aid hydration. ORS drinks contain sodium, are low in sugar, and can contain potassium, bicarbonate and other electrolytes. Commercially available ORS' like Gatorade™ or Pedialyte™ may have too much sugar or too little sodium and are not recommended for SBS.

# SHORT BOWEL SYNDROME (SBS) PATIENTS & HYDRATION

While juice & water seem like a good idea, neither are absorbed well by the GI tract because juice is a hypertonic (concentrated) and water a hypotonic (diluted) solution. When you have SBS, or severe fluid losses, an ORS can assist with maintaining adequate hydration or rehydration.

#### **RECOMMENDATIONS:**

Most people require 1-2L per day of ORS depending on weather, physical activity, or diarrhea. Sip slowly throughout the day, ~1 cup over one hour. ORS is best when chilled. Do not add ice as it will dilute it. You can add a non-caloric sweetener like Crystal Light™ or fresh fruit slices to add flavoring. Throw it out after 24 hours or freeze extra promptly.



### **HOMEMADE ORS RECIPES**

# World Health Organization (WHO) Reduced Osmolarity "Home Prepared" ORS (www.oley.org)

#### **INGREDIENTS:**

- ½ teaspoon salt
- · 7 teaspoons sugar
- ½ teaspoon salt substitute (Morton Salt Substitute® -Potassium Chloride)
- 11/4 teaspoons trisodium citrate dihydrate\*
- · Water (to make 1 liter)

#### **DIRECTIONS:**

- To a one-liter container, add about 1/2 the needed water.
- Add the dry ingredients, stir well, then add the remaining water to make a final volume of one liter.
- Add non-caloric sweetener like Crystal Light<sup>™</sup> or fresh fruit slices to add flavoring.

Total sodium = 70 mEq; Total potassium = 20 mEq: Total carbohydrate = 27 g: Osmolarity = 245 mOsm/L

The WHO recipe has ~70mEq sodium which is recommended for an ORS to be maximally effective.

#### **INGREDIENTS:**

- ½ teaspoon salt
- · 7 teaspoons sugar
- ½ teaspoon salt substitute (Morton Salt Substitute® -Potassium Chloride)
- 1½ teaspoons trisodium citrate dihydrate\*
- · Water (to make 1 liter)

 $Source-oley.org/resource/resmgr/ors\_recipes/ORS\_recipes\_hand-out.pdf$ 

\*Trisodium citrate dihydrate is available for purchase on Amazon or Prescribed for Life

## **BEVERAGE /JUICE BASED ORS RECIPES**

## **Gatorade Base**

2 Cups Gatorade™ any flavor 2 cups of water ½ tsp Salt

# **Apple Juice**

1 cup Juice 3 cups water ½ tsp salt

## **Grape or Cranberry Juice**

½ cup Juice 3½ cups of Water ½ tsp salt

# **COMMERCIALLY AVAILABLE ORS**

### Trioral®-1pkt

1L contains 74mEq Sodium, 13.5gm Carbs, 20 mEq Potassium. Available from Nutrishare

# **Jianas® Brothers – 1 pkt** 1L contains 90mEq

1L contains 90mEq Sodium, 20gm Carbs, 20mEq Potassium Available from Nutrishare

# \*PedialyteTM Abbott Nutrition

1L Contains 45mEq Sodium, 25gm Carbs. 20mEq Potassium (Add 1/4 tsp Salt to increase to 70mEq of Sodium)

## \*Liquid IV Hydration Multiplier® – 1 pkt

16oz Contains 22mEq Sodium, 12gm Carbs, ~3mEq Potassium with B and C vitamins added

## \*Hydralyte®-1pkt

7 oz Contains 12mEq Sodium, 5gm Carbs, ~2mEq Potassium

# \*Drip Drop® - 1 pkt

8oz Contains 14mEq of Sodium, 9gm Carbs, ~2mEq Potassium with Zinc, Vit C, Magnesium added

Carbs = carbohydrates Updated 2023

\* Lower Sodium content than recommended for patients with SBS or large fluid losses

# \*GatorlyteTM – 1 bottle

20oz Contains 21mEq Sodium, 21mEq Sodium, 9mEq Potassium with Magnesium and Calcium added

When in doubt, reach out to your Nutrishare Clinician if you are not sure which ORS is right for you.

