

## **Chinook Medical Gear, Inc.**

### **Oral Electrolyte Solution (ORS) Product Information**

**“What is Oral Rehydration Therapy and What is the difference between Oral Electrolyte Solutions and other products on the market such as ‘Gatorade’, ‘Pedialyte’, juices, soft drinks...?”**

Dehydration can be dangerous. Dehydration can be prevented if fluids are replaced early and with a proper replacement fluid: oral rehydration therapy consists of an oral electrolyte solution (ORS) and feeding; foods recommended include cereals and starches with high complex carbohydrates. Correctly balanced fluids need to have a specific ratio of sodium and potassium and carbohydrates. Osmolarity should be low to facilitate water diffusion across the intestinal lining; sugary drinks or foods can increase losses due to their high osmolarity in spite of their lower substrate concentration. Solutions that have too little or too much salt also can be dangerous, leading to hypo or hypernatremia.

#### **ORAL REHYDRATION THERAPY FACT SHEET**

Product: **CeraLyte** (Rice based)

Good For: All levels of rehydration as well as mild to severe diarrhea

Benefits/Disadvantages: Low osmolarity (high absorption rate); reduces stool output and prolongation of diarrhea; low cost; powder; small packets; natural flavors; reconstitutes with water

Product: **Oral Rehydration Salts** (ORS) (Glucose based)

Good For: All levels of rehydration

Benefits/Disadvantages: Low osmolarity; low cost; powder; small packets; can be hard to find

Product: **Ready to Drink Glucose-based Oral Electrolyte Solutions** (Glucose, Fructose, Dextrose, Aspartame)

Good For: Mild diarrhea and maintenance

Benefits/Disadvantages: Low osmolarity; bulky, plastic bottles; expensive; neither fructose NOR aspartame are effective sodium carriers

Product: **Colas and Sweet Drinks** (Sugars)

Good For: Not correct for replacing fluids lost from diarrhea

Benefits/Disadvantages: Too much sugar; actually increases dehydration; can increase diarrhea; not enough sodium or potassium; dangerously high osmolarity

Product: **Sports Drinks** (Sugars)

Good For: Not correct for replacing fluids lost from diarrhea

Benefits/Disadvantages: Not enough sodium or potassium; high osmolarity

Product: **Tea/Water**

Good For: Not correct for replacing fluids lost from diarrhea (or to use alone for sweat loss)

Benefits/Disadvantages: No sodium or potassium; dangerously low osmolarity

*References: 1. Roper, WI: The management of acute diarrhea in children 1992. 2. Gore, SM Fontaine O and Pierce NF: Impact of rice-based oral rehydration solutions on stool output and duration of diarrhea 1992. 3. Greenough, WB III: Oral Rehydration 1998.*

*©Copyright 2003 – Cera Products, Inc. More information is available at [www.diarrhoea.org](http://www.diarrhoea.org), [www.ceralyte.com](http://www.ceralyte.com), <http://www.cdc.gov/travel/diarrhea.htm>*