

## ELECTROSUBS

Sachet

### Composition

Each sachet contains:

Sodium chloride	2.6 grams
Potassium chloride	1.5 grams
Sodium citrate dihydrate	2.9 grams
Dextrose anhydrous	13.5 grams
Flavouring agent	

### Action

One of the important factors in the maintenance of normal body functions is fluid and electrolyte medium in which all cells are bathed and which constitutes the body's transport system.

Homeostasis, a term applied to systems regulation in the body, has particular relevance to fluids.

Chloride ion is the principal anion of plasma and it is readily exchangeable for other anions, particularly bicarbonate. An adequate supply of chloride is therefore essential in treating alkalosis. Bicarbonate is the second most plentiful anion in plasma. It is the principal anion involved in acid-base balance. Sodium is the principal ion in the extracellular space, where, the anion chloride mainly complements it. In the ionic form, it is the main osmotic component of the extracellular space, the blood plasma fluids in the tissues around the cells. Sodium deficit occurs in the body usually by an external route such as by vomiting or diarrhea; fistula, or gastro-intestinal suction. Potassium is essential for the carbohydrate metabolism, glycogen storage and for protein synthesis. It is also intimately involved in transmembrane potential and has profound effect on muscles, including heart muscle. Potassium loss or hypokalemia may cause acute muscular weakness, absent reflexes, paralysis, paraesthesia, mental clouding, respiratory failure, hypotension, cardiac dilation, cardiac arrhythmias and coma. Dextrose helps preserve carbohydrate energy thus correcting the extracellular/intracellular distribution of the water and so raise plasma sodium concentrations.

### Indications

Oral correction of fluid and electrolyte loss in infants, children, and adults. The product has been formulated to treat fluid and electrolyte loss associated with acute dehydration in infantile diarrhoea, but is also appropriate for the treatment of older children and adults.

Electrosubs is also indicated for the correction of dehydration due to vigorous and prolonged exercise.

### Warnings

Use water ONLY to mix Electrosubs powder. Never dilute with lemonade, soft drinks, cordials or any other fluid than water. After dissolving the powder in water, the solution should not be boiled.

### Precautions

Electrosubs should be used with caution in patients with cardiac failure, hypertension, impaired renal function, and in peripheral and pulmonary edema.

### Dosage and Administration

For oral administration only.

Reconstitution: The contents of *one* sachet should be made up to 1000 ml (1 Liter) with fresh drinking water. (For infants, the water should be freshly boiled and cooled before mixing with Electrosubs). An infant's feeding bottle is a convenient measure of this volume. The solution should be made up immediately prior to feeding and any solution remaining an hour after reconstitution should be discarded. However, the solution may be used for up to 24 hours if stored in a refrigerator immediately after reconstitution. The reconstituted solution must not be boiled.

### Infants

*Mild Cases (no dehydration):* During the first 24-48 hours, the infant is offered Electrosubs solution in the same quantities as are used for the usual feeds. For the next 12 to 24 hours, the infant can be given half strength feeds of the usual formula mixed with an equal volume of water. Following this, full strength feeds should be recommenced. Ordinary solid feeds should be continued throughout.

**DOSAGE: VOLUME OF FLUID REQUIRED OVER 6 HOURS FOR THE PREVENTION OF DEHYDRATION**

Patient's weight (kg)	Volume of Electrosubs (ml) in 6 hours
5	150 - 210
10	300 - 420
15	450 - 630
20	600 - 840
30	900 - 1260

For patients over 30 kg, fluid replacement should be 5-7 mL/kg/hr plus replacement of any additional losses.

*More Severe Cases (dehydration):* Prompt medical attention should be sought if dehydration is suspected. Signs of dehydration include documented weight loss, reduced urine output, and diminished skin turgor. A suggested regimen for the treatment of infantile diarrhoea with marked dehydration based on bodyweight in kilograms is given.

**DOSAGE: VOLUME OF FLUID REQUIRED OVER 6 HOURS FOR THE TREATMENT OF DEHYDRATION**

Patient's weight (kg)	Volume of Electrosubs (ml) in 6 hours
5	200 - 400
10	400 - 800
15	800 - 1000
20	900 - 1500
30	1000 - 2000

After 6 hours, fluid replacement should be 5 - 7 mL/kg/hour plus replacement of any additional losses.

If the condition worsens, or the diarrhoea has not stopped within 6 hours in infants under 6 months, within 12 hours for children under 3 years, 24 hours in children 3-6 years of age or 48 hours in children over 6 years of age, or the child has decreased urinary output, the clinician should ensure patients and parents are aware of the risk and early warning signs of dehydration in young children and infants.

If the condition further worsens or fails to improve, IV fluid replacement is required.

**Adults and children**

Electrosubs may be given freely until their thirst is satisfied or frequently while diarrhoea persists.

**DOSAGE: TREATMENT OF DEHYDRATION IN OLDER CHILDREN AND ADULTS**

	Child	Adult
	200 ml after each loose motion.	200-400 ml after each loose motion
Diet Day 1	Limited food if desired	
Diet Day 2	Gradually return to normal diet by slowly reducing the amount of Electrosubs and increasing the amount of food (Light solids at first, e.g. cereals, toast, etc.)	

*Note :* To improve absorption of the electrolytes, the solution should be given slowly at intervals.

**Presentation**

Box of 3 Sachets of 27.5 grams each.