

# Rice ORS<sup>®</sup>

Rice based Oral Rehydration Saline

## Composition

**Rice ORS<sup>®</sup> 250 ml Saline:** Each sachet contains:

|                             |              |           |
|-----------------------------|--------------|-----------|
| Sodium Chloride             | BP           | 0.650 gm  |
| Potassium Chloride          | BP           | 0.375 gm  |
| Trisodium Citrate Dihydrate | BP           | 0.725 gm  |
| Processed Rice Powder       | Pharma Grade | 12.500 gm |

**Rice ORS<sup>®</sup> 500 ml Saline:** Each sachet contains:

|                             |              |          |
|-----------------------------|--------------|----------|
| Sodium Chloride             | BP           | 1.30 gm  |
| Potassium Chloride          | BP           | 0.75 gm  |
| Trisodium Citrate Dihydrate | BP           | 1.45 gm  |
| Processed Rice Powder       | Pharma Grade | 25.00 gm |

## Pharmacology

**Rice ORS<sup>®</sup>** contains essential electrolytes & carbohydrate (in the form of processed rice) which are vital for a dehydrating patient in conditions such as cholera, acute diarrhoea, vomiting & excessive sweating.

In the normal healthy intestine, there is a continuous exchange of water through the intestinal wall - up to 20 liters of water is secreted and very nearly as much is reabsorbed every 24 hours - this mechanism allows the absorption of soluble metabolites from digested food into the bloodstream.

In a state of diarrheal disease the balance is upset and much more water is secreted than is reabsorbed causing a net loss to the body which can be as high as several liters a day. In addition to water, chloride ion (Cl<sup>-</sup>), extracellular sodium ion (Na<sup>+</sup>) & intracellular potassium ion (K<sup>+</sup>) are also lost. **Rice ORS<sup>®</sup>** effectively replenishes the lost electrolytes & water in the body.

The pharmacokinetics and therapeutic values of the substances of **Rice ORS<sup>®</sup>** are as follows:

- Glucose (comes from rice) facilitates the absorption of sodium (and hence water) on a 1:1 molar basis in the small intestine;
- Sodium and potassium are needed to replace the body losses of these essential ions during diarrhoea and vomiting;
- Citrate corrects the acidosis that occurs as a result of diarrhoea and dehydration

Rice, a carbohydrate is converted to glucose through digestion. Glucose is then absorbed through intestinal wall with salt. Addition of rice (instead of pure glucose) to this formula reduces the osmolarity of the solution, thus preventing additional loss of fluid through stools.

## Indication

**Rice ORS<sup>®</sup>** is indicated in -

- Acute fluid and electrolyte loss conditions such as cholera, acute diarrhoea & vomiting
- Dehydration
- Severely low concentrations of salts in the blood (severe electrolyte depletion)

## Reconstitution Procedure

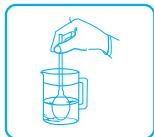
*Preparation of 250 ml Saline:* Wash both hands with soap before preparing the saline.



Add 250ml hot boiled water (1 glassful) into a jar



Add full packet of saline into the jar while stirring



Mix the saline well with a spoon



Give the solution to the patient as per the dose

*Preparation of 500 ml Saline:* Follow the above procedure by taking 500 ml hot boiled water.

Administer the saline after some cooling.

## Dosage and Administration

Dose of **Rice ORS<sup>®</sup>** depends on the severity of the dehydrating conditions of the patients. The following is a guideline:

| Age                 | Recommended dose after each watery stool   |
|---------------------|--|
| 6 months to 2 years | : 50 ml to 100 ml (10 to 20 Teaspoonfuls)  |
| 2 years to 10 years | : 100 ml to 200 ml (20 to 40 teaspoonfuls) |
| 10 years and above  | : 250 ml to 500 ml (1 to 2 glassfuls)      |

## Use in Pregnancy and Lactation

**Rice ORS<sup>®</sup>** is recommended in pregnancy & lactation, as there is no known harmful effects when this medicine is used.

## Advice

- Discard any unused reconstituted saline after 5 hours of preparation
- After preparing the saline further heating or boiling is not necessary
- Feeding-bottle should not be used
- Mix the solution with a clean spoon each time before administration
- Syringe without needle may be used to put small amount of saline into babies' mouth

## Precautions

Precautions should be taken in case of significant overdose, especially for the following patients -

- Children less than 1 year of age
- Patients with imbalance of salt concentrations in the blood (electrolyte imbalance)
- Patients with severely decreased kidney and liver function

## Drug interaction

There is no known drug interaction reported.

## Contraindication

Not to be used in -

- Kidney failure resulting in diminished production of urine (oliguria)
- Kidney failure, preventing production of urine (anuria)
- Obstruction of the stomach or intestines
- Reduced blood flow to vital internal organs (shock)
- Severe and continuous vomiting (intractable vomiting)
- Severe dehydration
- Severe diarrhoea in infants

## Storage

Store in a cool & dry place, protected from light.

## How supplied

**Rice ORS<sup>®</sup> 250 ml Saline:** Each box contains 10 packets.

**Rice ORS<sup>®</sup> 500 ml Saline:** Each box contains 10 packets.

Manufactured by



**SQUARE**  
**PHARMACEUTICALS LTD.**  
Bangladesh