

## Low Na, Low Glc Oral Rehydration Solution

ORS with lower sodium and glucose content has improved clinical benefits, including:

- Reducing stool output or stool volume by about 25 percent when compared to the original solution.
- Reducing vomiting by almost 30 percent.
- Reducing the need for unscheduled IV therapy by 33 percent.

Many clinics may still have large stocks of the “old” WHO 1975 formula. It can be used to make a lower osmolarity solution that still meets WHO parameters for potassium and buffer, by mixing it in 1.2 liters of water rather than 1 liter (see below).

Mixing the "old" WHO ORS in 1.2 liters, rather than 1 liter, results in a solution closer to the new low Na, low Glc ORS formula

	WHO 1975 ORS	WHO 1975 ORS mixed in 1.2 liters	WHO 2002 Low Na, Low Glc	WHO UNICEF acceptable parameters		WHO 1975 ORS	WHO 1975 ORS mixed in 1.2 liters	WHO 2002 low Na, Low Glc
	mmol/liter	mmol/liter	mmol/liter			gms/liter	gms/liter	grams/liter
Sodium	90	75.0	75	60-90	NaCl	3.5	2.9	2.6
Chloride	80	66.7	65	50-80	Glucose	20	16.7	13.5
Glucose	111	92.5	75	60-111	KCl	1.5	1.3	1.5
Potassium	20	16.7	20	15-25	Na3Citrate	2.9	2.4	2.9
Base	10	8.3	10	8-12	Total grams	27.9	23.25	20.5
Total Osmolarity	311	259.2	245	200-310				

## ZINC

Studies have shown that zinc treatment results in a 25- percent reduction in duration of acute diarrhea and a 40- percent reduction in treatment failure or death in persistent diarrhea.<sup>1</sup> The studies determined that a 10-day therapy of zinc treatment can considerably reduce the duration and severity of diarrheal episodes, decrease stool output, and lessen the need for hospitalization. Zinc may also prevent future diarrhea episodes for up to three months.

WHO and UNICEF specifically recommend daily 20 mg zinc supplements for 10 days for children with acute diarrhea and 10 mg per day for infants under six months old to curtail the severity of the episode and prevent further occurrences in the ensuing two to three months. Zinc can be administered to young children either as syrup or dispersible tablets, which dissolve easily in a tablespoon of clean water or breast milk.