

Beet-root oral rehydration salts and carrot oral rehydration salts formula in stopping diarrhea and enhancing hydration status

ABSTRACT

Introduction: Cholera is an infection caused by the bacterium *Vibrio cholerae* that causes severe watery diarrhoea, which can lead to dehydration. Beet-root has been shown to induce favourable outcomes and holds promise as an economic, practical natural dietary intervention in cholera.

Methods: Systematic search of peer-reviewed literature on beet-root ORS and carrot ORS use for acute diarrhoea in below 6-year-old. We identified 3 studies for abstraction. **Results:** A study had compared a commercial carrot/rice-based ORS A (Na 52 mmol/L) and two glucose-based ORS B (Na 55 mmol/L) and C (Na 90 mmol/L). Fluid intake, faecal and urine output and absorption of fluid was measured in 161 infants and children (3-48 months old) during the first 48 hours after admission. The number of stools ($p < 0.01$) and the mean faecal output ($p < 0.05$) per kg body weight were significantly lower in group A. Children in group A also had significantly ($p < 0.01$) greater fluid absorption (mean 464 ml/kg) than in groups C (312 ml/kg) and B (140 ml/kg).

Conclusions: While there are some promising results, this analysis indicates that the need for further investigation into approaches to increasing beet-root ORS and carrot ORS use.