TRIAL OF A CEREAL BASED (RICE POWDER) ELECTROLYTE SOLUTION FOR SIMULTANEOUS REHYDRATION AND REHABILITATION IN DIARRHOEA

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In addition to hydration, an appropriate oral rehydration solution should provide calories to maintain nutrition during diarrhoea. Presently used oral rehydration solutions provide few calories. In order to provide more calories without compromising the effectiveness, a cereal based (rice powder) electrolyte solution was developed. In a preliminary study, this solution was tried in 200 adult patients admitted with diarrhoea. 84 percent of the patients had moderate to severe dehydration and the rest were mildly dehydrated. After correction of initial dehydration and the rest were mildly dehydrated. After correction of initial dehydration by the intravenous route, the patients were started on an oral rehydration solution containing 30g of rice powder in solution, added to 3.5g of sodium chloride, 2.5g sodicarb and 1.5g of potassium chloride. The solution was made up to a volume of one litre. In the first 24 hours, the mean purging rate was 47.2 mls, with a urine output of 1423 mls, and an oral intake of 4597 mls. The mean gain in weight was 1.69 kg. The rate of success, as defined by maintenance

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of hydration and electrolyte balance, was 86.4 percent and 100 percent in severe and moderate dehydration respectively.

Rice starch is a polymer of glucose and is hydrolysed by intraluminal enzymes. The slowly released glucose molecules do not produce the osmolar effect responsible for vomiting and thus provides scope for using a higher concentration of the rice powder in the oral solution without losing its property for rehydration. This preliminary study shows that a rice powder based electrolyte solution can correct dehydration and maincain hydration with adequate electrolyte balance.

FOOD AND NUTRITION MONITORING SYSTEM IN WATER DEVELOPMENT PROGRAMS

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In 1972, Migasena summarized the situation of nutrition and health status and also the impact of development in lower Mekong Basin. A few years later, The Food and Nutrition Monitoring System was established among the countries of the Mekong River Basin, in order to monitor trends of food, nutrition, and health status for the purpose of early detection of adverse nutritional effects and