Introduction and Aim of work

Diarrhea is one of the major causes of childhood morbidity and mortality throughout the world (San and Marks, 1982). The serious disturbances in diarrhea are those occur in water and electrolytes metabolism (Khashaba et al., 1986). One of these disturbances is hypernatremic dehydration which is the most serious type of dehydration as it is a well recognized cause of permanent brain damage or deaths in infants with diarrheal diseases (Clark et al., 1979).

Oral Rehydration therapy (ORT) for diarrhea acclaimed as a major therapeutic advance, is currently estimated to be saving one million lives of children each year (UNICEF, 1987). It is actively promoted by the world Health organization (WHO).

Several countries have set up rational programs for oral rehydration and that of Egypt is widely recognized as the world's most successful health program (Scultz, 1977). WHO favoured a universal solution with a sodium content of 90 mEq per liter, for mounting a global program. Physicians in more developed counteries have tended to be concerned at this policy for the
following reasons:-

1- The infant is less able to deal with a sodium load and has a higher requirement of water **(Paneth, 1980)**.

2- Most mortality in children suffering from diarrhea is due to hypernatremia **(Paneth, 1980)**.

3- There is also controversy overwhether ORS-90 is appropriate for communities where childhood malnutrition is common **(Pizaro et al., 1980)**.

Aim of work

1- Detection of the role of ORS-90 in the production of hypernatremic dehydration among children suffering from diarrhea.

2- To study the different factors that may contribute to hypernatremia to conclude the measures which may lower the incidence of hypernatremia.