SUMMARY AND CONCLUSION

Diarrheal disease is known to be one of the most important cause of child morbidity and mortality in Egypt.

The aim of this work is to estimate IgA in stool and serum of the infants complaining acute and persistant diarrhea and to compare results of breast-fed and bottle-fed infants.

The study was carried out in Benha University Hospital pediatric outpatient clinic during August 1991-August 1992.

This study included one hundred infants suffering from diarrhea 80 of them with acute diarrhea, 40 of breast-fed and 40 of bottle-fed. The remaining 20 cases are with persistant diarrhea, 10 of them are breast-fed and 10 with bottle-fed. The inclusion critaria were, age 0-2 years for all groups and duration of diarrhea less than 5 days in acute cases and more than 2 weeks in persistant cases.

All cases were subjected to the following :

1- Full clinical examination with special interest to G.I.T. system.
2- Laboratory investigations including; complete blood picture, serum IgA and stool IgA.

- Clinically presentation of diarrhea and vomiting in breast-fed infants was less than bottle-fed infants.
- Dehydration was lower in breast-fed than bottle-fed infants.
- The number of previous attacks of diarrhea was lower in breast-fed than artificially-fed infants.

The hemoglobin, hematocrit value and red cell count was significantly higher in acute and persistant diarrhea of breast-fed than those of acute and persistant diarrhea of artificial-fed infants respectively ($P > 0.05$).

Serum IgA was not significantly different in all groups. Its mean in cases with acute diarrhea of breast-fed and bottle-fed was (72.02 $\pm$23.01 mg/dl) and (80.30 $\pm$44.65 mg/dl) respectively, while its mean in cases with persistant diarrhea of breast-fed and bottle-fed was (63.70 $\pm$22.28 mg/dl) and (75.10$\pm$33.38 mg/dl) respectively.

On the other hand, as regard stool IgA, it was significantly higher in cases with acute and persistant diarrhea of breast-fed, its mean was (4.84 $\pm$ 4.58 mg/dl) and (2.31 $\pm$0.95 mg/dl) respectively, than those of acute and persistant diarrhea of artificial-fed infants (2.31 $\pm$0.95 mg/dl) and (1.18 $\pm$1.02 mg/dl). But its concentration was higher in cases with acute diarrhea than cases with persistant diarrhea of breast-fed and also artificial fed.

Thus breast-fed infants with diarrhea, SIgA is higher accordingly; the incidence of vomiting, dehydration and repeated episodes of diarrhea become less than in bottle-fed infants.

Breast-fed infants are less susceptible to diarrhea, even those with diarrhea are less susceptible to complication than artificially-fed infants.So promotion or breast-feeding is important.