SUMMARY

A cross-sectional study was undertaken in rural Jamaica of 20 index children aged 3 months to 2 years who had been admitted to hospital for treatment of gastro-enteritis. They were compared to 20 healthy controls from the same neighbourhoods to determine whether:

1. specific environmental factors namely housing or sanitation were associated with gastro-enteritis;

2. any association existed between feeding practices, hygiene of feed preparation, storage and personal hygiene and severe gastro-enteritis, and

3. children who had had severe gastro-enteritis differed in nutritional status from controls.

The children were visited once in their homes, soon after discharge and a questionnaire administered to the caretaker of each child. Anthropometric measurements were done and observations made of certain factors in the environment. The results showed that index and control children were from poor backgrounds, with similar environments, socio-economic backgrounds and feeding patterns. Individual items which comprised the hygiene rating were not significantly different in index and control groups, but when these were compared to give an overall rating of "maternal technology", there was a significant difference between the groups, the controls having a better "maternal technology". Significantly more control children were breast-fed at the time of study, and controls had
had significantly better nutritional status as measured by all indices except weight for height. It appeared that gastro-enteritis was associated with poor nutritional status, loss of passive immunity conferred on the infant by breast-milk and decreased resistance to infection under conditions of poor hygiene.