APPENDIX III

DETAILS OF Hb ANALYSIS

Haemoglobin was measured using the Cyanmethaemoglobin method (Dacie and Lewis, 1977) using the filter paper technique (NIN, 1974). A finger (other than the little finger and thumb) was wiped with alcohol and allowed to dry. A bold prick was made with a sterile disposable lancet. The first drop of the blood was wiped and then 0.02 ml of the blood was delivered onto a Whatman No. 1 filter paper quickly. The filter paper strips were air dried and stored between folds of butter paper. The samples were transported to the laboratory within a week and eluted for half an hour in Drabkin's reagent (containing 1.0 g Na₂CO₃, 0.2 g potassium ferricyanide and 0.05 g potassium cyanide in one litre). The readings were then taken using filter no. 54 in the Klett Summerson Photoelectric Colorimeter, setting the instrument to zero using a reagent blank. The Hb concentrations were calculated by multiplying the instrument reading with the factor obtained for Klett Summerson Photoelectric Colorimeter by using reference standard for cyanmethaemoglobin obtained from CSIR laboratories, VP Chest Institute of Bio-chemistry, Delhi.

The correction factor suggested for filter paper technique was added to obtain the final value for Hb. The correction factor was 4.4% of the calculated Hb value.