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VIII. APPENDIX

A. Solutions and Reagents Required

1. For preparation of dye

   a. Sodium 2,6-dichlorobenzenoneindophenol (Eastman). Stock solution: 0.1 gm. per 200 ml. buffer solution.

   b. Sorenson's phosphate buffer. Buffer solution is made up as required by combining 38.9 parts of KH_2PO_4 solution (9.08 gm. in one liter of redistilled water) and 61.1 parts of $Na_2HPO_4 \cdot H_2O$ (23.887 gm. in one liter of redistilled water).

2. For standardization of dye

   a. Ascorbic Acid (Merck-Cebione). Standard ascorbic acid solutions are made up by dissolving 10 mg. of crystalline ascorbic acid in one-per cent metaphosphoric acid and making up to a volume of 200 ml. with metaphosphoric acid.

   b. Dye. Stock solution is used for visual standardization and a dilution of 10 ml. of dye in 100 ml. is used for standardization of dye with the photoelectric colorimeter.

3. For analysis of plasma ascorbic acid

   a. Five-per cent metaphosphoric acid solution.

   b. Lithium oxalate (2 per cent solution).

   c. Stock dye. Five ml. diluted to 100 ml. with redistilled water.

4. For analysis of urinary ascorbic acid

   a. One-per cent metaphosphoric acid. Metaphosphoric acid is made up as a 10-per cent solution and diluted as needed.

   b. Sulfuric acid (5N).

c. 8-hydroxy-quinoline (1.50 per cent)

d. Stock dye. Ten ml. diluted to 100 ml tilled water.

5. For analysis of food ascorbic acid

a. One-per cent metaphosphoric acid.

b. 8-hydroxy-quinoline (1.50 per cent).

c. Stock dye. Ten ml. diluted to 100 ml tilled water.