INTRODUCTION

The high risk infants are particularly dependent on the physician to provide the ideal "external milieu" in order to ensure optimal neurologic and physical development (Klaus et al., 1979).

The survival rate of infants under 30 weeks gestation has improved dramatically in recent years from below 10% to between 40 and 60% (Stewart et al., 1981 and Orgill et al., 1982).

Undoubtedly, the skillful application of new techniques in respiratory and nutritional support has made considerable contribution. Increased awareness of and responsiveness to the nature and special environmental requirements of very preterm infants contribute to the imporvement (Wheldon and Hull, 1983).

Current policy is to nurse preterm infants in incubators or under radiant warmers. The aim is to provide an appropriate ambient temperature and humidity while protecting the infant from infection and other environmental hazards (Wheldon and Hull, 1983).

Optimal nutrition is critical in the management of the over-increasing number of surviving small premature infants. Although the most appropriate goal of nutrition of the low birth-weight infants is not definitively known, achieving a postnatal growth that approximates the in utero growth of normal fetus at the same post conception age appears to be the most logical approach at present (American Academy of Pediatrics, 1985).

The primary objective of assisted ventilation is to support ventilation until the patient can adequately do so for himself. Ventilation may be required during immediate care of asphyxiated or apneic infant, prior to evaluation and disposition, or for prolonged periods for treatment of respiratory failure (Brady and Gregory, 1979).

Sudden unexpected changes in the status of sick infants are frequently encountered. Monitoring of the sick neonate is, therefore, a vital aspect of neonatal care. Good clinical acumen, aided by various monitoring devices, is crucial for the recognition and management of medical emergencies (Vidysagar and Raju, 1977).