



First study period was begun after the first week of life and usually during the second week of life. Second study period followed immediately the first study period. Each study period lasted for eight days; the first four days were for adaptation followed by three days of balance study. Caloric intake was set at approximately 110 Kcal/Kg/day.

During the two three day balance study periods, stool was completely collected and analyzed for fat and fatty acid pattern. Study of absorption of vitamins A and E was carried out in the middle of each study period at a dosage of 10,000 IU of retinol acetate per kg and at a dosage of 40 mg of dl- $\alpha$ -tocopherol per kg dissolved in respective formulas and given via an orogastric tube. Blood samples were obtained at 0, 3, 6, 9, 12, 24 and 48 hour after orogastric administration of the two vitamins and were analyzed for vitamins A and E. Areas under the curve above baseline values were calculated. Weight gain was expressed per kg body weight per 100 Kcal intake per day.

The results of the study show that weight gain and absorption of fat can be improved in premature infants by administration of MCT-containing formula. However MCT incorporated in the premature infant formula does not confer better absorption of vitamins A and E than LCT.