



formulas are identical in all respects except for the type of protein. Intake of energy was fixed at 110 kcal/kg/day and that of protein was maintained at 1.30, 1.60 and 2.0 g/kg/day.

Each infant underwent two periods of study control vs experimental or vice versa at one level of protein intake. Each period encompassed ten days, seven days for adaptation followed by three days of balance study during which complete stool and urine collections were made. Blood was collected at the beginning and the end of each study period. The following parameters were used for evaluation (1) nitrogen balance: protein absorption, digestibility and retention. (2) serum proteins: total protein, albumin, transferrin, prealbumin and retinol-binding protein; and serum urea nitrogen. (3) anthropometric measurements. (4) hematocrit, renal and liver functions and CO<sub>2</sub> content of serum.

The results are as followed (1) clinical course was uneventful. (2) feeding of plasma proteins containing formula did not effect hematocrit, serum concentrations of creatinine, GOT, GPT and CO<sub>2</sub> content. (3) plasma proteins are inferior to casein in quality by approximately 17 percent. (4) To support nitrogen retention that meets criteria of adequacy for infants age 4 to 17 months an intake of 1.74 g casein was required. To support similar nitrogen retention 2.0 gram of plasma proteins were needed.