

DRUG REACTORS Groups of reactors and nonreactors, as determined by their responses to drug administration in the laboratory, also have characteristically different scores on external tests unrelated to the responses occurring in the laboratory. These test scores can be used to predict future responses with more accuracy than chance would allow. (Joyce, C. R. B.: *Consistent Differences in Individual Reactions to Drugs and Dummies*, *Brit. J. Pharmacol.* 14: 512 (Dec.) 1959.)

TRANQUILIZERS A dramatic and frightening extrapyramidal convulsive syndrome characterized by opisthotonus, oculogyric crisis, torticollis, and trismus is being seen in infants and children given penothiazine tranquilizers for anti-emesis. The particular drugs in question are prochlorperazine (Compazine) chlorpromazine (Thorazine) promazine (Sparine) and perphenazine (Trilafon). Such seizures are sudden in onset, generally subside only to recur several times over a 12-hour period. Emphasis is placed on the proper use of these drugs as anti-emetics in children. (Cohlan, S. Q.: *Convulsive Seizures Caused by Phenothiazine Tranquilizers*, *G. P.* 21: 136 (Feb.) 1960.)

NEWBORN INFANT Newborn infants have instability of temperature regulation, respiratory and cardiac reserve, low concentration of plasma protein and transient hypothermia. Hypothermia as low as 32.2 to 35 C. does not have any untoward effect on the recovery of the newborn but may allow the development of sclerema with its attendant high mortality in the premature infant. The full-term infant requires 45 cc. of intravenous fluids per pound of body weight except in instances of severe dehydration while the premature infant requires only a total of 25 to 30 cc. of parenteral fluids per pound of body weight per day. The newborn infant undergoing a surgical operation should be on the "dry side" as far as parenteral fluids are concerned. Five per cent glucose meets the usual needs well but parenteral saline should not be given to the premature surgical patient except when severe electrolyte deficiency exists. The energy requirement of a premature infant is 80 calories and of a full-term

infant is 50 calories per pound of body weight per day. Minimal handling of the premature is essential to his recovery. (Benson, C. D., and Martner, E. E.: *Pre-operative and Post-operative Care of the Newborn*, *Surgical Clinics of N. America* 39: 1569 (Dec.) 1959.)

PARENTERAL NUTRITION Since emulsions are comprised of heterogeneous phases, they present problems not encountered with amino acid or carbohydrate solutions. No conclusive evidence exists as to optimum particle size distribution in these emulsions, either from the standpoint of physical stability or physiological suitability. An emulsion which of itself is stable may form large oil droplets *in vivo*. These are then filtered out by various tissues. With the exception of phosphatide-stabilized emulsions, none has been satisfactory for extensive clinical use to date. A moderate incidence of reactions has occurred: fever, nausea and vomiting, chills, and the "colloid reaction." In its severe form, the "colloid reaction" is characterized by chest or back pain, cyanosis, flush, apprehension and dyspnea. It can occur with the infusion of as little as a few milliliters of fat emulsion. Within 10 to 20 minutes of such a reaction, an infusion can be continued without recurrence. This reaction has been prevented by pre-infusion of diluted emulsion or stabilizer without the fat. Febrile reactions have been thought to be related to excessive fat oxidation, impaired heat regulation, pyrogens, hemolysis, or the particulate nature of the emulsion. None has been proved. The daily protein requirements for the average man is at least 0.5 Gm. of protein per kilogram. Protein depletion may result in decreased urine output, edema, weakness, asthenia, lassitude, delayed wound healing, decreased liver resistance, and increased susceptibility to trauma. Parenterally administered nitrogen can be given effectively in the form of protein hydrolysates, amino acid mixtures, plasma and whole blood; but hydrolysates have advantages of low cost and adequate supply. For best utilization, all essential amino acids should be given simultaneously and at moderate infusion rates. Prior or simultaneous infusion of carbohydrate decreases urinary nitrogen loss. Positive nitrogen balance can usually be ob-