

protein better than any other foodstuff. For this reason Coleman supplies a large quantity of the energy of his diet in that form. Starches cannot be used in quantity because of their bulk and the consequent tax on the digestive organs. He prefers milk sugar because it is not very sweet and not so likely to disgust the taste as other sugars, and because it does not so readily produce digestive disturbances. The objections to its use are that in some patients it produces nausea and vomiting, but more often vomiting without nausea. When vomiting occurs, the milk sugar should be stopped. In a few cases milk sugar caused tympanites, but usually the patients could be gradually taught to take and assimilate large amounts. An ounce of milk sugar is equivalent to 120 calories. Milk sugar may be given in the milk; in coffee, tea, or coca, in lemonade, or in custard made with milk and egg. Coleman and Shaffer found that in order to maintain nitrogen equilibrium from 12 to 16 gm. of nitrogen are required in the diet. Approximately 11 gm. are contained in one and one-half quarts of milk and one pint of cream. Coleman supplies the deficiency in nitrogen with eggs. A two-ounce egg will supply 1+gm. nitrogen. The details of administering the diet may be modified to suit the individual case. Coleman gives as a working basis six ounces of milk with two ounces of cream every two hours. From one to four tablespoonfuls of milk sugar are added to the milk and cream mixture. The eggs may be given soft-boiled, poached, or raw in milk with or without whiskey.

**Antidiphtheritic Serum and Antidiphtheritic Globulin Solutions.**—PARK (*Jour. Amer. Med. Assoc.*, 1910, liv, 251) says that until recently the only means of giving diphtheria antitoxin was in the whole serum of the horse in which it had originated. Lately a practical method has been developed to eliminate a portion of the non-antitoxic serum substances while retaining the antitoxin. Park gives a brief description of two globulin preparations containing diphtheria antitoxin. He also points out the fact that the blood serum from different horses varies not only in antitoxic potency, but also in its liability to produce disagreeable after-effects. Thus, different lots of serum of the same manufacturer will vary in liability to produce rashes, and this, together with the idiosyncrasy of the patient, causes some physicians to approve and others to condemn the preparations of the same manufacturers. Park compares the effects of antidiphtheritic serum with those obtained by the globulin preparations. He believes that the globulin preparations contain all the important substances of the whole antidiphtheritic serum. He also states that the rashes and after-effects, in cases observed by him, were undoubtedly much less after the Gibson injections than after the whole serum, and somewhat less after the injections of the Banzhaf modification than after that of Gibson. Curiously enough, only certain types of rashes are eliminated. The urticarial reactions still frequently follow.

**Tuberculin Treatment of Tuberculosis.**—LÖWENSTEIN (*Therap. Monats.*, 1909, xi, 593) used Koch's "old" tuberculin in the treatment of 300 cases of open pulmonary tuberculosis at the Beelitz sanatorium. He commences with a dose of 0.0002 gm., being convinced that smaller doses are liable to induce anaphylaxis. In case of a strong general reaction