ment is specific for fibrin, does not attack fibrinogen and is destroyed by heating to 56 C. (132.8 F.).

METHODS AND NORMAL LIMITS OF TESTS

Phenoltetrachlorphthalein.—This test was employed according to the method described by Rowntree, Hurwitz and Bloomfield, details of which are given in full in their publication.[9] The lower limit of normal excretion is considered to be 30 per cent. in forty-eight hours after the intravenous injection of 400 mg. of the substance. In health, phenoltetrachlorphthalein is practically never excreted in the urine after injection of such amounts.

Fibrinogen.—The heat coagulation method as described by Whipple[10] was used in these determinations, and values below 350 gm. per hundred c.c. were regarded as abnormal.

Lipase.—Determinations of the lipolytic activity of the blood were made, using Loevenhart's[11] method, which consists in the determination of the total acid production of the blood when exposed to known quantities of ethyl butyrate at 37 C. (98.6 F.). The result is expressed as the number of cubic centimeters of tenth-normal acid produced by 1 c.c. of plasma and 0.26 c.c. ethyl butyrate, diluted to 4 c.c. and allowed to react for from twenty to twenty-four hours. The upper limit of normal has been taken to be 0.40 c.c. of tenth-normal acid.

The Nitrogen Partition in the Blood and Urine.—The total non-protein nitrogen of the blood was estimated by the micro-Kjeldahl method of Folin and Denis,[12] with slight modifications, as suggested by Dr. B. B. Turner.[13] The urea percentage of the total non-protein nitrogen of the blood was determined by Marshall's[14] method, utilizing soy bean urease, and values below 40 per cent. have been regarded as abnormal.

The amino-acid determinations were made by Van Slyke's[15] method. As yet, data concerning the amount of amino-acids present in the blood of normal

10. Whipple: Am. Jour. Physiol., 1914, xxxiii, 50.
11. Loevenhart: Am. Jour. Physiol., 1902, vi, 331.
12. Folin and Denis: Jour. Biol. Chem., 1912, xi, 527.
13. These modifications will be described shortly by Dr. Turner.
14. Marshall: Jour. Biol. Chem., 1913, xv, 487.
15. Van Slyke: Jour. Biol. Chem., 1912, xii, 399.