

0.071 gm. per day. The exact nature of the nitrogenous material thus excreted was not studied. A number of experiments were made on a professional bicyclist, riding a bicycle ergometer. The exercise was very severe, as the total output of heat was 600 calories per hour. The bath water and the extract water from the clothing gave a total of 0.87 gm. in a 4-hour experiment, or 0.22 gm. of nitrogen per hour.

Of greatest significance is the important bearing of this channel for the excretion of nitrogenous material in experiments on the metabolism of protein. Profuse perspiration, whether induced passively or by muscular work, results in a considerable excretion of nitrogenous material through the skin. While the work engaged in by the subjects of these experiments was severe, certainly that of some of them was not extraordinarily so, and might well be equaled by many men engaged in ordinary occupations involving muscular work. A total excretion equivalent to one or more grams of nitrogen per day is not at all inconsiderable, and hence in accurate metabolism experiments we must give recognition to the possibility of excretion through this hitherto almost unconsidered channel. Especially is this so in experiments where the total amounts of nitrogen in the ingesta and egesta are smaller than normal, since the percentage error is thereby proportionally larger.

20 (112). **“The effects of intravenous injections of solutions of dextrose upon the viscosity of the blood”**: **RUSSELL BURTON-OPITZ.**

The experiments were performed upon dogs, in accordance with the method devised by Hürthle. When small quantities (5 c.c.) of a concentrated solution of dextrose were injected intravenously, the viscosity of the blood became slightly greater. By the administration of large quantities (50 c.c. to 100 c.c.) the viscosity was markedly decreased at first, but reassumed its normal value in the course of about one hour.

By producing artificial glycosuria, the viscosity was decidedly increased. In the latter series of experiments the surface of the pancreas was painted with solution of adrenalin. The specific gravity of the blood pursued in all cases a harmonious course with the viscosity.