

4. Intravascular clotting has not been observed after intravenous administration of pancreatic rennet.

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Observations on the excretion of sugar in the urine in health and disease.

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The amount of sugar in the twenty-four-hour urine specimens has been determined by the new acetone-picric acid method of Benedict and Osterberg.¹ It was found that a diet rich in carbohydrate increases the amount of sugar excreted over that on a low carbohydrate diet. This method also demonstrated the increase in hourly sugar excretion after meals and after glucose ingestion. In four normal adults studied, the average amount of reducing sugar excreted daily was between 0.59 and 1.14 grams. In ten children from 2.5 to 9 years of age, representing a variety of pathological conditions, the average range was from 0.12 to 0.43 gram sugar daily. To cite a few of the 116 hospital cases studied, in 20 patients diagnosed as neurasthenics, on the average between 0.42 and 1.24 grams sugar were excreted daily; in hyperthyroidism the average range was between 0.46 and 0.98 grams; in one case of hypothyroidism an average of 0.40 gram sugar was excreted; in nephritis 0.41 to 0.89 grams, in hypertension 0.44 to 1.12 grams, in arthritis 0.44 to 1.39 grams, and in various cardiac disturbances 0.51 to 1.39 grams on the average were excreted daily. It appears, therefore, that in the diseases studied, when the patients are on ordinary diets, there is no striking increase nor decrease over normal urinary excretion. In diabetes alone there is an increase, although when by dietary regulation the patient is rendered "sugar free" the amount of sugar excreted is practically normal.

¹ Benedict, S. R., and Osterberg, E., *J. Biol. Chem.*, 1921, xlviii, 51.