

acid values of blood drawn from the hepatic vein are considerably lower than the high portal values, indicating removal of the lactate by the liver.

Further work is now in progress to determine whether the lactic acid actually arises in the gut as a breakdown product of fructose.

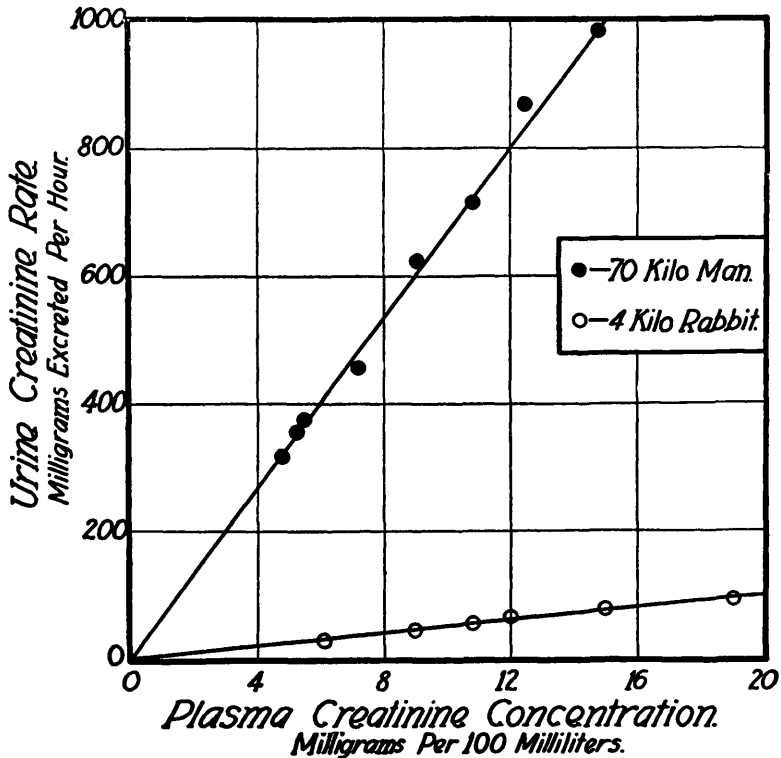
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### Relation of Creatinine Excretion in Urine to Plasma Creatinine Concentration.

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Following the administration of creatinine to normal rabbits during a copious diuresis, under conditions most apt to lead to full renal activity, the rate of creatinine excretion in the urine has been found to be directly proportional to the plasma creatinine concentra-



tion. A similar relationship has been found in man. Typical examples are presented in Fig. 1. The large difference in the values of the ratios:  $\frac{\text{Urine rate}}{\text{Plasma concentration}}$  is undoubtedly due, as in the case of urea,<sup>1</sup> to the different amounts of renal tissue possessed by man and the rabbit. Under the same conditions urea behaves in a like manner<sup>2</sup> although the urine rate for a given plasma concentration is always greater for creatinine. That is, the excretory ratio  $\frac{\text{Urine rate}}{\text{Plasma concentration}}$  is less for urea. The significance of this will be discussed elsewhere. Since the difference between the ratios for these 2 substances appears to bear a constant relation to the lower it is obvious that creatinine may be substituted for urea in measuring renal function by Addis' method.<sup>3</sup> Rehberg<sup>4</sup> has used creatinine in what is essentially this method but failed to observe the standard or other constant conditions and obtained inconstant results. He found<sup>5</sup> only a general tendency for the urine rate to increase in proportion to the plasma concentration. An examination of the method using creatinine under more rigid conditions is now in progress.

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**Bacteriostatic Action of Dyes on the Organisms of Undulant Fever.**

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As one of the various means purported to differentiate the undulant fever bacteria of caprine, bovine, and porcine types, the inhibitory effect of certain dyes, particularly gentian violet and thionin, has been suggested. As with other means of differentiation, there is no absolute scale for comparison, inasmuch as not all strains fall consistently into any one group by all differentiating tests.<sup>1</sup> The present study attempts to throw some light on the discrepancies in so far as the bacteriostatic effect of dyes is concerned.

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<sup>1</sup> Taylor, F. B., Drury, D. R., and Addis, T., *Am. J. Physiol.*, 1923, **lxv**, 55.

<sup>2</sup> Addis, T., and Drury, D. R., *J. Biol. Chem.*, 1923, **lv**, 105.

<sup>3</sup> Addis, T., *Arch. Int. Med.*, 1922, **xxx**, 378.

<sup>4</sup> Rehberg, P. B., *Zentralbl. f. inn. Med.*, 1929, **1**, 367.

<sup>5</sup> Rehberg, P. B., *Biochem. J.*, 1926, **xx**, 447.

<sup>1</sup> Meyer, K. F., and Eddie, B., in press.