

the same time or several days later, the elimination of these dyes may be partly or entirely inhibited. In some experiments, permanent arrest of the passage of these substances was caused by the administration of chenopodium.

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### An index of urea excretion.

By FRANKLIN C. McLEAN.

[From the Hospital of the Rockefeller Institute for Medical Research,  
New York.]

Ambard and Weill have expressed the relationship between the concentration of urea in the blood and the rate of its excretion by means of a formula known as Ambard's coefficient,<sup>1</sup> the accuracy of which has been confirmed on a number of normal individuals by the author and Selling.<sup>2</sup> We now use the Ambard laws in a new formula, which expresses the ability of the kidney to excrete urea in percentage of the normal efficiency.

$$I \text{ (Index)} = \frac{8.96 D \sqrt{C}}{Wt \times Ur^2}.$$

$I$  = index of urea excretion (100 = average normal, 80-150 maximum normal variation).

$D$  = grams urea excreted per twenty-four hours.

$C$  = grams urea per liter of urine.

$Ur$  = grams urea per liter blood.

$Wt$  = weight of individual in kilos.

The index measures directly one of the more important functions of the kidney and has yielded valuable data in the study of various conditions associated with impaired elimination. For the calculation a special slide rule has been devised, which enables one to make the necessary calculation without effort in a few seconds.

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<sup>1</sup> Ambard, *Compt. rend. Soc. de biol.*, 1910, Dec. 3, p. 506.

<sup>2</sup> McLean and Selling, *Jour. Biol. Chem.*, 1914, XIX, 31.