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The formation of urea in the liver.

By DONALD D. VAN SLYKE, GLENN E. CULLEN, and FRANKLIN C. MCLEAN.

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

In dogs etherized and operated at various intervals after feeding, we have found the urea content of blood from the hepatic vein to be from 3 to 20 per cent. higher than the portal blood. A similar increase in the urea content during passage of the blood through the muscle tissue of etherized dogs did not occur.

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Accurate determination of chlorides in small amounts of blood serum.

By FRANKLIN C. MCLEAN and DONALD D. VAN SLYKE.

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

By the use of an iodometric method under definite conditions one can determine the chlorides in 1 or 2 c.c. of serum with an accuracy of 1 per cent. The proteins are coagulated, and an aliquot part of the filtrate treated with an excess of standard silver nitrate, nitric acid in 5 per cent. concentration being present to prevent precipitation of the purines. A drop of octyl alcohol, which has a faculty of causing colloidal silver chloride to coagulate, is added, and the solution is shaken and filtered. The excess silver in the filtrate is then titrated back with N/50 or N/100 KI, sodium nitrite and starch being present as indicators. The nitrous acid frees iodine as soon as a drop of excess iodide is added, and the blue starch iodate color forms. In order that this end point may be sharp, the solution must have a definite, slight acidity. This is obtained by adding, before the final titration, for each gram of nitric acid present 4 c.c. of a solution containing 446 grams (5/4 gram molecules, 15/4 equivalents) of crystalline trisodium citrate and 19 grams (1/4 gram molecule) of sodium nitrite per liter.