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Study of the chemistry of pernicious anemia.

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In the study of three cases of pernicions anemia we found a condition of marked intestinal putrefaction, with a reduction of the detoxication functional capacity of the liver as evidenced by the sulfo-conjugation test. While the functional activity of the pancreas is normal, the intestinal digestion, investigated by means of the Schmidt-Strassburger test diet, shows failure to absorb the normal amount of nitrogen, there being a very high nitrogen loss through the feces; the bulk of the feces is increased; the fat elimination is normal. The kidney function is normal. A study of the functional activity of the stomach by means of the fractional method reveals a complete anacidity, a total absence of pepsin, an increased gastric residuum, and a negative gastroalbumorrhea test. Examination of the duodenal contents, following the investigations of Schneider,[1] shows that the excessive hemolysis of pernicious anemia is attended by both a pleochromie and a urobilinocholie. The patients showed evidence of acidosis, as shown by the carbon dioxide of the plasma and of the alveolor air and by the H′ ion concentration of the blood. The nitrogen partition of the blood is normal, except for the high creatinine figure. The blood showed an increased ash and lime content, and a normal glucose, cholesterol and total lipin percentage. The urinary nitrogen partition was normal. The urinary oxyproteic acid fraction was increased. There was a marked increase in the ethereal sulfate and neutral sulfur fractions of the urine.

[1] Schneider, J. P., *Arch. Int. Med.*, 1916, XVII, p. 32.