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The pancreatic lipase of infants in acute intestinal disturbances.

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In the former communication which considered the pancreatic secretions in chronic malnutrition in infants, it was found that various ferments of the gland are normally secreted even in advanced instances of marasmus or atrophy. In the present study of an *acute* disease, of acute intestinal indigestion or alimentary intoxication, which was carried out also by the direct method, by the use of the duodenal catheter the lipase was found deficient, although the two other pancreatic ferments were present in considerable amount. The deficiency of lipase seemed to some degree characteristic of this disturbance; it is not a general characteristic of all febrile conditions and was not met with in pneumonia or empyema. It is possible that the lack of lipolytic activity in this disease should be correlated with the clinical manifestation of fat intolerance, and the metabolic studies showing a deficient absorption of fat.

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The influence of protein concentration upon the absorption of antibodies from the subcutaneous tissues.

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The experiments so far completed indicate that the concentration of protein up to double its normal amount in an antitoxic or agglutinating serum or globulin solution has but little influence upon the absorption of the contained antitoxin or agglutinin from the subcutaneous tissues of man or animals unless the increased concentration of protein together with other substances gives rise to a greater local inflammatory reaction. The absorption of agglutinin was markedly less in a number of rabbits in which the subcutaneous injections of the high proteid solutions were followed by infiltration and necrosis of the adjacent tissues.

The high proteid concentration did not appreciably lessen the amount or rapidity of absorption, when no such reaction in the tissues took place. Contrary to the conclusion of Walbum the results obtained in four healthy men did not show any appreciable difference in absorption of antitoxin from an antitoxic globulin solution, the proteid concentration of which was equal to that of normal horse serum and one in which the concentration was double that amount.

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The influence of the vagus nerves on the faradized auricles in the dog's heart.

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The effect of vagus stimulation on the abnormal cardiac activity set up by faradization of the dog's auricle was studied in twenty-three experiments. Faradization of the auricles threw them into a tumultuous activity which in fifteen of the experiments persisted after faradization was discontinued from five minutes to over an hour. In these experiments opportunities were afforded for studying the nature of the abnormal auricular activity set up by faradization and for determining what effect stimulation of each vagus nerve had upon it. In several experiments the effect of cutting the vagi while the abnormal activity was present was observed. In eight experiments in which the abnormal activity could not be established independently, the effect of vagus stimulation was observed by beginning it before ending the faradization of the auricles. When this was done the abnormal auricular activity usually continued until after the end of vagus stimulation and was affected in the same manner as the continuous or established tumultuous activity.

The auricular activity resulting from auricular faradization consisted in very rapid movements, apparently contractions of the whole auricles, which were sufficient to produce definite movements of the recording tambour attached to the auricular myocardiograph. Beside this rapid auricular tachycardia, fine fibril-