

reciprocal relation of the 2 remaining pairs of antagonistic eye muscles.

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Effect of Insulin on Protein Metabolism.

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The effect of insulin upon the protein metabolism of the rat was investigated by analyzing the entire carcass for urea and amino acid nitrogen within 1 to 4 hours after the commencement of the experiment.

Each estimation consisted of the sum of the substance in question within the animal and that amount which had been excreted within the experimental period. The values obtained were compared with those from control animals which received injections of 1% sodium chloride. Marked increases in the rate of urea formation were observed. The amino nitrogen content of the whole animal decreased. The average decrease observed was approximately equal to the average increase in urea nitrogen. These results were found to be independent of the nature of the diet—high or low protein, upon which the animals had been maintained for the preceding 3 days.

It is possible that the increased protein catabolism, here observed, is secondary to the accompanying hypoglycemia, and is due to a compensatory increase in the rate of glucogenesis from amino acids.