

whereas when slices of these regions were used, constant and much higher respiration rates were observed. Cerebellar cortex has greater metabolic activity than any other part of the brain.

G. W. T. H. FLEMING.

Studies on Brain Metabolism. I. The Metabolism of Glutamic Acid in Brain. (Biochem. Journ., vol. xxx, p. 665, April, 1936.) Weil-Matherbe, H.

The only amino-acid oxidized by brain is *l*(+)glutamic acid, which is oxidized to α -ketoglutaric acid and ammonia, and further to water and carbon dioxide. The enzyme responsible for the oxidation of *l*(+)glutamic acid does not attack *d*(-)glutamic acid so long as it is bound in the cell or to some constituent of the cell, probably a lipid. In solution, however, the specificity is changed and *d*(-)glutamic acid alone is oxidized. The ammonia derived from the de-amination of *l*(+)glutamic acid disappears in secondary reactions leading to and beyond glutamine. The reaction *l*(+)glutamic acid \rightarrow α -ketoglutaric acid is reversible. The existence of an ammonia-binding mechanism is shown leading from glucose via pyruvic acid and α -ketoglutaric acid to *l*(+)glutamic acid, glutamine and further to an end-product. *In vivo* the glutamic acid de-aminase is rather concerned with the synthesis than with the breakdown of glutamic acid.

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A Study of Sugar-Tolerance Tests in Two Hundred Patients with Convulsions. (Bull. Neur. Inst. New York, vol. vi, p. 62, Jan., 1937.) Drewry, H. H.

In 200 cases with convulsions, dextrose tolerance tests were done before a diagnosis had been reached and the results compared when the series was completed. 93 patients had sugar curves with a peak below 150 mgrm. per 100 c.c., and 27 with a peak below 120 mgrm.; 3 patients had blood-sugar levels below 50 mgrm., and all 3 were found to have an adenoma of the pancreas. 24 had levels at one time or another between 50 and 70 mgrm., and all without definite symptoms of hypoglycæmia at the time the blood was taken.

Encephalography caused a rise in the sugar curve, which tended to return to the initial level as time passed.

It is concluded that factors influencing the blood-sugar level are so numerous and so complex that interpretations of the blood-sugar levels or sugar-tolerance curves must be made with caution.

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