Effect of Sympathin on Blood Sugar. (*Amer. Journ. Physiol., vol. cxxi, pp.* 728–37, 1938.) *Bodo, R. C., and Benaglia, A. E.*

In cats with adrenal glands inactivated and liver sympathetic nerves destroyed, sympathin produced by electrical stimulation of the cardio-accelerator nerves causes hyperglycæmia. The degree of hyperglycæmia depends on the quantity of sympathin, the condition of the liver which, if sensitized, will respond with a greater glycogen breakdown, and on the glycogen content of the liver. Electrical stimulation of large groups of muscles does not change the blood-sugar level.

E. D. WALTER (Chem. Abstr.).

Fat in the Infant Brain in Relation to Myelin, Blood-vessels and Glia. (*Arch. Path., vol. xxv, pp.* 336–46, 1938.) *Tuthill, C. R.*

In a study of the brains of 46 infants varying in age from birth to two years, fat was found around the blood-vessels and glia cells of the centrum ovale, corpus callosum and white substance of the lower part of the gyri in all of 21 infants less than four months of age. The fat decreases with the formation of myelin and ceases at the age of four months, when myelinization in the white substance of the hemispheres is apparently complete. This fat seems to be a waste product of myelin metabolism and occurs in areas of poor capillary circulation, such as the internal capsule, basal ganglia, cerebellum and cortex. Perivascular fat is present in the large subcortical vessels from the first month to the end of two years of life, apparently as a metabolic product involving the myelin at the junction of the white and grey substances. The formation of myelin is influenced somewhat by disease, since it varies not only at birth but during the entire period of its development.

HARRIET F. HOLMES (Chem. Abstr.).

The Thyroid-Diencephalon Problem. (*Klin. Wochenschr., vol. xvii, pp.* 148–50, 1938.) *Falta, W., and Fenz, E.*

Alleviation of symptoms in Basedow's disease by diencephalon narcosis with prominal results from a decreased stimulation of the thyroid-regulating centre with consequent decrease in production of thyroxine.

H. L. MASON (Chem. Abstr.).

Hyperthyroidism and Brain Oxidations. (*Journ. Cellular Comp. Physiol., vol. x, pp.* 223–40, 1937.) *Cohen, R. A., and Gerard, R. W.*

The Qo_2 of hyperthyroid brain is initially 30% above normal, equals it in 2 hours and falls 10% below in 4·5 hours. The Qo_2 of hyperthyroid brain is increased approximately four times as much as that of normal brain by addition of glycogen, glucose, fructose, glycerophosphate, lactate and succinate. With p-$C_6H_4(NH_2)_2$ the increase over normal is 33%. With pyruvate, galactose, glycine and AcCHO, increases in the two kinds of brain are approximately equal. Respiration changes induced by methylene blue, cresyl blue, cyanide, malonate, iodoacetate, arsenite, barbital and urethane indicate that the absorbent concentration of various enzyme systems is greater in hyperthyroid brain, and that certain dehydrogenases are increased relatively more than oxidases. H. L. MASON (Chem. Abstr.).

The Action of the Nervous System on the Metabolism of Glucides and Lipoids in Muscle. (*Arch. Sci. Biol.* [*Italy*], *vol. xxiii, pp.* 377–98, 1937.) *Cedrangolo, F.*

In the frog, at variable times after cutting the sciatic nerve, the glycogen values in the denervated gastrocnemii are higher than in those innervated. This is due to a new formation of glycogen. In the dog the mobilization and utilization of glycogen after a long fast is greater in the innervated than in the latter. The mobilization of fat in the denervated muscle is practically abolished at least in the first few days. In the dog the denervated muscle can form glycogen and fat from the glucides in the same proportions as in the innervated muscle.

P. F. METILDI (Chem. Abstr.).