The Effect of the Central Nervous System upon the Action of Insulin and Adrenaline:

A Contribution to the Problem of Insulin Resistance. (Klin. Wochenschr.,
vol. xii, p. 1719, 1933.) Högler, F., and Zell, F.

The removal of the cerebrum, corpus striatum and thalamus in rabbits does not affect the activity of insulin or adrenalin. Removal of the mid-brain beyond the corpora quadrigemina, however, decreases the sensitivity to insulin and increases the hyperglycæmic action of adrenalin. Sectioning the spinal cord as high as the sixth cervical does not affect the sensitivity to insulin.

H. EAGLE (Chem. Abstr.).

Relation of the Metabolic Effect of the Thyroid Secretion to the Condition of the Central Nervous System. (Biochem. Z., vol. cclxvii, p. 389, 1933.) Indovina, R.

Thyroxine administered with therapeutic doses of strychnine causes a much greater rise in the metabolic rate than when acting alone, but cocaine does not affect the thyroxine action. Likewise when the secretion of the thyroid gland is stimulated by the thyreotropic hormone from the anterior lobe of the hypophysis, the effect is greater if the nervous system is at the same time also stimulated by strychnine.

S. Morgulis (Chem. Abstr.).

The Affinity of Individual Parts of the Brain to Bromine Administered in "Physiological" Quantities. (Arch. Exp. Path. Pharm., vol. clxxiii, p. 508, 1933.)

Bier, A.

After administration of either organic ("multibrol") or inorganic (NaBr) bromine into rabbits, it can be demonstrated in the brain, largely in the mid-brain and medulla rather than in the cortex.

H. Eagle (Chem. Abstr.).

Preliminary Studies in the Distribution of Neurotropic Drugs between the Various Lipoids of the Encephalo-spinal Centres. (Boll. Soc. Ital. Biol. Sper., vol. viii, p. 1325, 1933.) Biancalani, G.

Dibromostearin and sodium bromide were administered to adult dogs in increasing doses such that the amount of bromine was the same for the two compounds. The animals were killed; the brain, spinal cord, liver, muscles and subcutaneous fat were removed, ground and extracted with ether. Extracts and residues were dried and incinerated. Results of bromine determination by the Ergel method showed that for dibromostearin the largest amount of bromine was present in the fat, with decreasing amounts in the liver, spleen, muscles, brain and spinal cord; for sodium bromide there was no bromine in the fat and only traces in the other tissues. In the brain and cord, regardless of which compound was administered, the largest amount of bromine was found in the acetone-soluble portion, not associated with cholesterol, but in the non-saturated phosphatides and water-soluble fractions. For dibromostearin the bromine content of the phosphatides was about twice that of the protein fraction; for sodium bromide the reverse was found.

P. Masucci (Chem. Abstr.).

The Lipoid Composition of the Cerebro-spinal Centres as Influenced by Neurotropic Substances. (Arch. fisiol., vol. xxxiii, p. 261, 1934.) Biancalani, G.

The free cholesterol and its esters increase in ether and veronal narcosis.

A. E. Meyer (Chem. Abstr.).

Action of Some Divertics of the Purin Series on the Functioning of the Blood-spinal Fluid Barrier. (Comp. Rend. Soc. Biol., vol. cxv, p. 625, 1934.) Stern, L., and Kassil, G.

Rats and cats were treated with xanthine, guanine, uric acid, theobromine, theophylline and diuretin. No effect on the permeability of the blood-spinal fluid barrier to potassium ferricyanide, trypan blue or arsphenamine could be detected.

L. E. GILSON (Chem. Abstr.).