

Creatine and total nitrogen attain the level characteristic of adult cows at the 6th-7th month of development; at the same time there is yet less dry matter than in the case of adult cows. In different parts of bovine brain there is a difference in the creatine, total nitrogen and water evident long before the beginning of myelination. The creatine content in the brain of chicken embryos is lower and of total nitrogen and water higher than of adults, and both change at the 18th-19th day, attaining values characteristic of an adult; the water content still remains higher.

E. E. STEFANOWSKY (Chem. Abstr.).

Liberation of Acetylcholine-like Substance from the Cut Surface of a Nerve under Physiological Impulses. (*Atti accad. Lincei*, vol. xxiii, pp. 518-21, 1936.)
Bergami, G.

When the diaphragmatic nerve and vagus nerve of a dog are cut, and the cut end is immersed in Ringer solution for 2 minutes, and then this solution tested on the dorsal muscle of the leech, the muscle contracts. But if the nerve is chilled by holding an ice cube over it for 10-15 minutes and then cut and immersed in Ringer solution, no acetylcholine-like substance is liberated, i.e., no contraction takes place on the leech muscle.

A. W. CONTIERI (Chem. Abstr.).

The Physiology and Pharmacology of the Cerebral Vessels. IV: The Action of Adrenaline. (*Arch. Intern. Pharmacodynamie*, vol. liv, pp. 109-28, 1936.)
Bouckaert, J. J., and Jourdan, F.

Adrenaline causes constriction of the cerebral vessels of the isolated dog brain. In the intact animal rapid injection of adrenaline causes cerebral vasodilatation because of the general rise of blood-pressure. The slow injection of small amounts causes cerebral vasoconstriction.

V: The Action of Carbon Dioxide. (*Ibid.*, pp. 155-62.)

By perfusion of the isolated brain carbon dioxide was shown to act directly on the cerebral blood-vessels, causing vasodilatation.

VI: Action of Drugs on the Cerebral Vessels. (*Ibid.*, pp. 168-83.)

When an isolated brain preparation was used it was found that posterior pituitary extracts, barium, ephedrine and adrenaline constrict the cerebral vessels. Choline, carbaminoylcholine, amyl nitrite, caffeine benzoate, papaverine, F 883 and F 933 dilate the vessels. The last two substances diminish, and ergotamine abolishes, the vasoconstrictor action of adrenaline.

M. L. C. BERNHEIM (Chem. Abstr.).

The Permeability of the Nerve Centres. I: The Activity and Permeability of the Isolated Cerebro-spinal Axes of Bufo vulgaris. (*Boll. Soc. Ital. Biol. Sper.*, vol. xi, pp. 433-4, 1936.)
De Marco, R.

The amount of potassium eliminated from the cerebro-spinal axes of *Bufo vulgaris* immersed in physiological saline and at complete rest increased markedly as a result of the oxygenation of the nutritive fluid. An increase of potassium elimination took place as a result of electrical stimulation of the preparation; such increase was not influenced, however, by the oxygenation of the Ringer solution. A greater increase in elimination took place through the action of strychnine on the preparation at rest, and greater still on that electrically stimulated.

PETER MASUCCI (Chem. Abstr.).