*The Oxidation of Mescaline and Certain other Amines.* (*Journ. Biol. Chem., vol. cxxiii, pp.* 317–26, 1938.) *Bernheim, F., and Bernheim, M. L. C.*

Mescaline, the active substance of a Mexican cactus (*Anhalonium lewinii*) produces colour visions and other effects when taken internally ; its oxidation, which takes place in the liver, is in all probability a detoxicating mechanism. It is 3, 4, 5-trimethoxyphenylethylamine, and the presence of the OMe groups in the $C_6H_6$ ring of tyramine modifies the molecule in respect both to its oxidative deamination by tissues and its pharmacological action. In comparison with tyramine the oxidation rate is slow but the corresponding acid is formed by enzyme preparations, which are able to form only small amounts of acid from tyramine. -phenylethylamine and -phenyl- -oxyethylamine are also oxidized to the acids. The relative oxidation rates of tyramine and -phenylethylamine suggest that a free OH group in the *p* position inhibits the oxidation of the CHO group formed after deamination but has no effect on the deamination itself. The rate of deamination is, however, affected not only by OMe groups as in mescaline but by an OH group in the -position as in -phenyl- -oxyethylamine. Cyanide, pyrophosphate and borate inhibit the mescaline oxidation in concentrations that leave the oxidation of tyramine and other amines unaffected, and only the tyramine oxidase preparation of rabbit liver is able adequately to oxidize mescaline. These findings indicate that some factor other than oxidase is necessary, and since all these substances form complexes with heavy metals, it is possible that some heavy metal is necessary with the tyramine oxidase to effect the oxidation of mescaline. The oxidation-rate of both tyramine and mescaline is increased by raising the $O_2$ tension and $H_2O_2$ is produced during the oxidation. A. P. Lothrop (Chem. Abstr.).

*Mechanism of the Action of Quinine on the Central Nervous System.* (*Compt. Rend. Soc. Biol., vol. cxxvii, pp.* 1232–4, 1938.) *Richard, A.*

In dogs quinine has no direct action on the psychomotor nerve centres. It disturbs co-ordination of movements by interfering with the reflex mechanism of the labyrinth. L. E. Gilson (Chem. Abstr.).

*The Action of Narcotics on Brain Respiration.* (*Journ. Physiol., vol. xcii, pp.* 322–35, 1938.) *Jowett, M.*

The effect of narcotics on the respiration of slices of cerebral cortex in the presence of glucose was studied. The behaviour of narcotics can be divided into two classes. The first class includes urethane, magnesium, chloral, phenobarbital, evipan, chloretone and avertin. They act by inhibition of glucose oxidation. In the second class alcohol and ether are found. They do not inhibit the oxidation of glucose at their narcotizing concentrations ; at higher concentrations they inhibit it irreversibly.
E. D. Walter (Chem. Abstr.).

*Narcosis and the Reflex Mechanism of Subordination.* (*Compt. Rend. Soc. Biol., vol. cxxvii, pp.* 1235–6, 1938.) *Richard, Abel.*

In dogs narcosis with chloralose does not suppress all the subordination reflexes. Those of the mesencephalon may disappear but those of the medulla persist.
L. E. G. (Chem. Abstr.).

*Therapy with Blood-serum from the Testicular Vein in the Insane.* (*Rev. sudamericana endocrinol. immunol. quimioterap., vol. xxi, pp.* 202–17, 1938.) *Melgar, R., and Peluffo, J. L.*

Blood was taken from the spermatic vein of young bulls during œstrus and the serum was used on patients with dysthymic psychosis of the melancholic type. An initial desensitizing intradermal injection of 1 c.c. was followed by five daily intramuscular injections of 5 c.c. and 5 of 10 c.c. Four cases responded with spectacular bodily and mental improvement. A. E. Meyer (Chem. Abstr.).