

*The Glyoxalase Activity of the Red Blood-Cell: The Function of Glutathione.* (Biochem. Journ., vol. xxvii, p. 486, No. 2, 1933.) Jowett, M., and Quastel, J. H.

The presence of reduced glutathione is necessary for the activity of glyoxalase in red cells. Human red cells show a high glyoxalase activity, which disappears almost entirely on lysis of the cells with distilled water, but can be restored by the addition of glutathione at concentrations of the same order as that present in the intact cell. Methylglyoxal and glutathione combine reversibly. The glyoxalase activity of the red cell under varying conditions is an indicator of the concentration of reduced glutathione in the cell. Oxygen diminishes the glyoxalase activity of both intact and lysed red cells. The inhibitory effect of oxygen on the glyoxalase activity of the red cells is decreased by glucose; the behaviour of the lysed blood-cell is unaffected by glucose.

G. W. T. H. FLEMING.

*Chemical Studies in the Epileptic Syndrome.* (Journ. of Nerv. and Ment. Dis., vol. lxxvii, p. 601, June, 1933.) Hopkins, H.

The author found the average whole blood cholesterol slightly lower in a group of epileptic patients than in a corresponding normal group. The range of variation in whole blood cholesterol from hour to hour throughout 24 hour-periods was greater in epileptic patients than in normal individuals.

G. W. T. H. FLEMING.

*A Comparative Research on the Chlorides in the Serum in some Nervous and Mental Diseases* [Ricerche comparative dei cloruri del siero di sangue in alcune malattie nervose e mentali]. (Riv. Sper. di Freniat., vol. lvi, p. 744, Dec., 1932.) Mazza, A.

The author found that the serum chloride is increased above the normal in epileptics, giving a value of 6.1% compared with a normal value of about 5.8. The other mental diseases, including post-encephalitic cases, gave normal values.

G. W. T. H. FLEMING.

*The Influence of Muscular Contraction on the Behaviour of Soluble Phosphorus and of Glucose in the Blood of Dogs Subjected to Muscular Activity Caused by Stimulation of the Sensori-motor Centres and by Peripheral Stimulation* [Influenza della contrazione muscolare sul comportamento del fosforo solubile e del glicosio del sangue nei cani sottoposti a lavoro muscolare mediante stimolazione dei centri sensitivo-motori e stimolazione periferiche]. (Riv. Sper. di Freniat., vol. xli, p. 627, Sept., 1932.) Longo, V., and Napoli, G.

The authors experimented on 18 dogs. In dogs predisposed to reflex epilepsy and submitted to faradic stimulation of nerves there was, after the fit, a considerable decrease in the inorganic phosphorus and in the total phosphorus and a marked increase in the glucose. In dogs not so predisposed there was a considerable increase in the phosphorus while the glucose behaved irregularly. The authors conclude that there is an intimate relation between the metabolism of phosphorus and of carbohydrates.

G. W. T. H. FLEMING.

*Soluble Phosphorus in the Cerebro-spinal Fluid in some Nervous and Mental Diseases* [Ricerche sul fosforo solubile del liquido cerebro-spinale in alcune malattie nervose e mentali]. (Riv. Sper. di Freniat., vol. lvi, p. 623, Sept., 1932.) Longo, V.

The writer examined the cerebro-spinal fluid of 53 individuals affected with various conditions, 15 general paralytics, 10 cerebral syphilitics, 10 catatonics, 10 hebephrenics and 8 cases of melancholia. He found that there was in general paralysis a marked increase in both the inorganic phosphorus and the total phosphorus. This increase was very much greater than that found in