

ration of the hæmoglobin from the corpuscles. 10. Alcohol in small doses has little or no effect upon the respiratory functions; in large amounts it produces a depression of both rate and depth of the respiration through a direct action upon the centres in the medulla oblongata. 11. The drug kills by failure of the respiration. 12. On the elimination of carbon dioxide alcohol exercises a varying action, sometimes increasing, sometimes decreasing such elimination. 13. The action of alcohol on the amount of oxygen absorbed also varies, and may be said to be practically unknown. 14. The drug lessens the excretion of tissue-waste, both in health and disease. 15. In small amounts alcohol increases bodily temperature; in large doses it diminishes the same. The fall of bodily temperature is mainly due to an excess of heat-dissipation caused by the drug. 16. Alcohol, in sufficiently large amounts, has a decided antipyretic action. 17. In moderate amounts alcohol aids the digestive processes. 18. Alcohol diminishes the absorption of fats. 19. The drug exercises a varying influence on the amount of urine secreted, but it probably increases the activity of the kidneys. 20. In large doses, or when continuously used for a long time, alcohol produces cirrhotic changes, especially of hepatic tissue, and paralysis of spinal origin. It also causes insanity, epilepsy, and other maladies. 21. Alcohol is mainly burnt up in the system, when taken in moderate quantities, but when ingested in excessive amounts it is partly eliminated by the breath, the kidneys, and the intestines. 22. Alcohol is a conservator of tissue, a generator of vital force and may, therefore, be considered as a food.—*Therapeutic Gazette*, 1894, No. 6, p. 371.

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#### THE GLYCERO-PHOSPHATES.

M. A. ROBIN has been led to use these remedies because, in his studies upon neurasthenia, he had noted that certain patients eliminated in the urine considerable quantities of incompletely oxidized phosphorus, indicating an exaggerated denutrition of the nervous lecithin. It is well known that the greater portion of the unoxidized phosphorus is found in the urine as phosphoric acid, and that this is one of the constituents of lecithin. Since, then the elimination of medicinal phosphates is accomplished with great difficulty, it is believed that phosphorus is furnished to the organism in an organic combination which approaches that which obtains in the nervous system. Marvellous results are obtained, and these especially upon the apparatus of innervation. The calcium, sodium, and potassium glycero-phosphates are used, either singly or combined, administered by the mouth or subcutaneously. The lime salt in a four-grain dose given subcutaneously will increase the urea, the chlorides, sulphates, lime, magnesium and potassium, the coefficients of nitrogen and sulphur oxidation. It does not appear to have a marked influence upon the uric acid, and only causes slight variations in the amount of incompletely oxidized phosphorus, which it tends rather to diminish. It has a powerful influence in accelerating nutrition, and this acceleration has its source in the especial stimulation of the nervous apparatus. In this respect its action is entirely antagonistic to that of antipyrine, which is the remedy for exaggerated nervous excitability, as the glycero-phosphates are indicated for nervous depression. They have been successful in the convalescence from epidemic influenza and infectious diseases, the nervous asthenia

of various origins, in a particular variety of neurasthenia dependent upon a loss in the urine of incompletely oxidized phosphorus, in sluggish chlorosis, when the nitrogen is incompletely oxidized in the phosphaturic albuminurias, and in phosphaturia. In conclusion: 1. The glycerophosphates are powerful therapeutic agents which accelerate general nutrition through their action upon the nervous system. 2. The essential indication for their use is nervous depression. 3. In subcutaneous injection they produce at least as energetic effects as the testicular liquid, which probably acts only by virtue of the organic phosphate which it contains. There are advantages in using these in place of the liquid, in that definite products of regulated dosage are substituted for an uncertain preparation, which is variable and eminently unstable. 4. The observations above cited give the hope that these injections will be useful in the treatment of nervous asthenia from various causes, of phosphaturic albuminurias, of phosphaturias, of Addison's disease, of some sciaticas, and tic douloureux of the face. In locomotor ataxia the results are more uncertain, but appear to tend toward a diminution of the lightning pains.—*Les Nouveaux Remèdes*, 1894, No. 9, p. 203.

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#### LEGUMIN FOR INTOLERANCE OF MILK DIET.

DR. BORET, recognizing the very great usefulness of a milk diet in various conditions, believes that, owing to its contained lactic acid, it possesses a microbicidal power; it has been demonstrated that this acid is a bad soil for the growth of the bacillus coli communis. Certain individuals, however, are as intolerant of milk as others are of wine or alcohol. Some have a repugnance which can be overcome, others have an incompatibility due to their pathological condition. Even if the digestibility of milk is established in a certain case, inappetence or even disgust may render this treatment unavailing. Sometimes an actual indigestion can be remedied by the addition of alkalis, as sodium bicarbonate or phosphate, or the administration of vegetable or mineral acids before or after the meal. Even under these conditions the milk may not be borne, and then it becomes necessary to resort to some of the mixed natural diastases, of which legumin is the best type. Four cases are cited where this substance was used in daily dosage of one and one-half ounces. Even six ounces can be dissolved in a quart of milk. Legumin is certainly a eupeptic, and at the same time it is a food, because of the albuminoids and phosphates which it contains.—*Bulletin général de Thérapeutique*, 1894, 20e livr., p. 466.

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#### ANTISPASMIN.

DR. S. RABOW states that this drug consists of a union of one molecule of sodium narceine with three of sodium salicylate,  $C_{23}H_{26}NO_8Na + 3 C_6H_4(OH).CO_2Na$ . It occurs as a whitish, slightly hygroscopic powder of an alkaline reaction, easily soluble in water, giving a pale-yellow solution. It contains about 50 per cent. of narceine. Narceine is contained in opium in from 0.1 to 0.4 per cent., and was shown by Bernard to have a purely hypnotic action and to be only slightly poisonous. The remedy has been found to possess decided hypnotic properties and to be a sedative in painful affections, particularly in those where spasm is associated with pain. In whooping-