permeability of the endothelial lining of the vessels. Loeb[1] in his studies on the selective diffusion in living organisms, made on the eggs of the marine fish *Fundulus,* showed that salts accelerate the rate of diffusion of dissociated alkalies and retard the rate of dissociated acids. He also showed they have no retarding influence on the rate of diffusion of non dissoviated acid and perhaps also of non dissociated alkali, and concludes that this probably has some bearing on secretions. It appears that the rate of diffusion of ions through membranes, which is undoubtedly influenced by the concentration, as well as proportions of salts in the body fluids, may have a direct bearing on such conditions as rickets, tetany, so called bronchial tetany, which frequently occurs in rickety babies, hemophilia, certain allergic conditions, spasmophilia, faulty kidney function and many other disorders, the etiology of which is unknown. Experiments are now under way, which we hope will throw more light on the phenomena observed, and will be published in detail, with complete histological studies, at a later date.

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The cholesterol content of the hair of the albino rat.

H. C. ECKSTEIN. (Introduced by H. B. Lewis).

[*From the Laboratory of Physiological Chemistry, Medical School, University of Michigan, Ann Arbor, Mich.*]

The data reported herein represent a preliminary study of the lipoids in the hair of the albino rat.

The hair of young normal rats was found to contain 4.5 per cent total lipoids. The total cholesterol content of these lipoids, determined by the digitonin method, was found to be 11.9 per cent, and of this amount 80 per cent consisted of free cholesterol and 20 per cent of combined cholesterol. The amount of lecithin present was calculated from the phosphorus content of the lipoids and amounted to 0.8 per cent of the total lipoids. In a previous communication[1] attention was called to the fact that the lipoids of the human skin contained as much as 20 per cent of total cholesterol. Work is now in progress which will determine the nature of the lipoids in the hair of rachitic rats.

[1] Loeb, J., *J. Gen. Physiol.*, 1922, v, 231.

[1] Eckstein, H. C., and Wile, Udo J., *J. Biol. Chem.*, 1926, lxvii, 59.