

In the case of corn and wheat a higher concentration of the reduced sterol was found in the outer covering, but a comparison between cottonseed oil and cottonseed meal, or linseed oil and linseed meal showed no such concentration.<sup>4</sup>

The last plant fat studied was that extracted from wheat germ. The crystalline sterol from this oil is generally mentioned in the literature as the best known, and fully described by numerous investigators as a homogeneous sterol—sitosterol.<sup>5</sup> We have found that this crystalline sterol is actually a complex mixture of several sterols, one of which is dihydrositosterol.

The dihydrositosterols obtained from these different sources appear to be identical, although there are some slight variations in their physical properties. The substance melts at 143-4° C. and has a specific rotation in chloroform of +24.00 to +25.82. The acetate melts at 140-141 and its rotation is +14.00 in chloroform.

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<sup>1</sup> Anderson, R. J., *J. Am. Chem. Soc.*, 1924, xlv, 1450.

<sup>2</sup> Anderson, R. J., and Nabenhauer, F. P., *ibid.*, 1924, xlvi, 1717.

<sup>3</sup> Anderson, R. J., and Nabenhauer, F. P., *ibid.*, 1924, xlvi, 1957.

<sup>4</sup> Anderson, R. J., and Moore, *J. Am. Chem. Soc.*, 1923, xlv, 1944.

<sup>5</sup> Burian, R., *Monatsh*, 1897, xviii, 551; Ritter, E., *Z. physiol. chem.*, 1901, xxxiv, 461; Windans, A., and Rahlen, E., *Z. physiol. chem.*, 1918, ci, 223; Windans, A., and Hauth, A., *Ber.*, 1907, xl, 3681; Windans, A., and Brunken, J., *Z. physiol. chem.*, 1924, exl, 109.

## 3230

### Hemophilia in Cats After Denervation of the Liver.

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This is to report the occurrence of a phenomenon, resembling hemophilia in cats that have survived an operation in which everything in the hepatic pedicle except the bile duct, hepatic artery and portal vein, is cut. This is spoken of here as "denervation," because the operation was undertaken in connection with some other work in which the function of the hepatic nerves was being investigated. It may be, however, that the severance of the lymphatics from the liver, or some other as yet unsuspected

result of the operation, is of more importance in this connection than the cutting of the nerves. But, whatever may ultimately prove to be the real cause of the condition, it has been observed in eight cats that the operation is followed by marked change in the coagulability of the blood. Two of the eight cats died after two and three days of continuous bleeding from a needle prick in an ear vein; a third cat had the bleeding from a similar wound stopped only by the local application of cephalin after the cat had been bleeding for two days. This phenomenon occurred in these cats 4 to 6 weeks after the operation, when they had regained their original weight and were apparently in good condition. In the remaining 5 cats the condition was not as severe, but with them it was often difficult to determine the clotting time of the blood because only a thin clot would be formed. We are of the opinion, however, that the clotting time is practically normal, although the amount of fibrin formed is decidedly less than normal. Unfortunately, there has been no time for further analysis and this preliminary report is made because of the interest of this condition in connection with the problem of hemophilia.

3231

### A Study of the Rous Chicken Sarcoma No. 1.

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Gye<sup>1</sup> concluded that malignant growth is a specific disease caused by a living organism. His crucial experiment was carried out as follows. A piece of chicken sarcoma was placed into a culture medium composed of Hartley's broth, 0.2 per cent KCl and rabbit serum, and was incubated at 37° C. After several days the supernatant fluid of this "culture" was no longer able to produce tumors in chickens. Next a piece of fresh tumor was ground up with sand and extracted with salt solution. The clear filtrate was then treated with chloroform. After removal of the chloroform *in vacuo* the filtrate proved to be inactive. How-