A second set of four unknowns was selected and tested by an operator different from the one who tested those recorded in Table III. In this case, instead of using a control oil the results were read from the lines given in Fig. I using the experimental values found for the blue color as expressed in Lovibond Units. These results are given in Table IV.

In this case also it will be noted that the difference between the results of the two tests varies from a small difference (9%) in oil No. 2 to a large difference (100%) in oil No. 1. From the work reported on these two sets of unknowns one must conclude that the color test for vitamine A in cod liver oil has its limitations; until we have certain definite knowledge of the constituents of the oil which are related to the development of the blue color and the manner in which these substances are affected qualitatively and quantitatively by the conditions under which the oil has existed we will not be able to apply this test successfully.

In considering the results tabulated in Tables III and IV it must be stated that the biological and colorimetric assays were not made simultaneously but that a period of 6–9 months elapsed between the two tests; the biological assays being made first in all cases except those of Sample 11 in Table III and Sample 4 in Table IV. The oils varied considerably (2 months to several years) in age in so far as the time elapsing between the data of manufacture and that at which the biological assay was made is concerned. In all cases except one these oils had been under anaerobic conditions; oil No. 10 in Table III had been exposed to air during a portion of the time whereas the companion Sample No. 4 was under anaerobic conditions all the time.

Among the factors which influence the intensity of the blue color and the extent to which this color is indicative of vitamine A potency the following are possibly of importance: the source, age, manner of production and storage.

During our future studies we intend to give consideration to these factors.

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Irradiated Ergosterol. Effect on blood. Source of increase in serum calcium induced by Irradiated Ergosterol. A. F. Hess, M. Weinstock, and H. Rivkin—*Proc. Soc. Exptl. Biol. Med.*, 28 (1928), 199.—Through *Squibb Abstract Bulletin.*

The question was investigated whether the calcium in hypercalcemia produced in normal infants and animals by ingestion of irradiated ergosterol is taken from the bones and other tissues, or is the result of increased absorption from the intenstine. When large amounts of irradiated ergosterol, *i. e.*, 1 mg. daily, were fed to young rats in whom calcium depletion of the blood was effected by the ration including 0.8 mg. Ca and 400 mg. P a day (Ca:P 1:500), it was found that without exception the calcium could be increased rapidly 50 per cent or more. The high phosphorus content of the diet interfered markedly with the absorption of calcium. The results indicate that when the diet contains almost no calcium, the calcium which is supplied to the blood on giving irradiated ergosterol is derived from the tissues.—J. P.