Vitamin A

Immediately prior to adding the 16 per cent. diethyl ether developing solvent, remove the plug from the tip of the lower column and the tube from the side arm of the lower column and plug the side arm orifice. Adjust the flow into and out of the lower column by means of the three-way cock and collect the eluate in calibrated 1 ml. tubes. Mix the solution in each tube by blowing through the liquid a few air bubbles with the drawn out pipette. Withdraw, from each tube, approximately 0·3 ml. of liquid and test for vitamin A by adding about five drops of antimony trichloride solution. The development of a blue colour indicates the presence of the vitamin. From each tube in which a positive test is obtained, take exactly 0·5 ml. of solution, combine together in a 10 ml. graduated flask and adjust to volume with light petroleum. Measure the optical density of the solution in a 1 cm. quartz cuvette, against a light petroleum blank, over the spectral region 290 to 340 mμ. at the following wavelengths 290, 307, 309, 311, 322, 324, 326, 328, 332, 334, 336 and 340 mμ. Transfer the test solution to the blank cuvette, and the blank solution to the test cuvette, re-measure the optical density at λ max. and from the mean of the two measurements calculate the value of E (1 per cent., 1 cm.) at λ max. Multiply this value by 1,830 to obtain the vitamin A potency in International Units per g. The total vitamin A potency is equal to the sum of the potency of the vitamin A and the equivalent vitamin A potency of the carotenoids.

The validity of the test is assessed from the optical density measurements at (λ max. minus 15 mμ.) and (λ max. plus 10 mμ.). The ratio of the optical density at each of these wavelengths to the optical density at λ max. (normally 324 mμ.) should fall within the range of 0·86 ± 0·02. If this is not so the whole determination must be repeated.

EXPLANATORY NOTE

(This note is not part of the Regulations but is intended to indicate their general purport.)

The standard for butter prescribed in these regulations is the same as that contained in the Sale of Butter (Ireland) Regulations, 1902, which are now being revoked. The standard for margarine is the same as that prescribed in the Sale of Food and Drugs Act, 1899, and the Butter and Margarine Act, 1907, which were repealed by the Food and Drugs Act (Northern Ireland), 1958. The regulations also prescribe a standard, which applies on sale by retail only, for margarine as respects the vitamin A and vitamin D content.

1960. No. 188 **[C]**

FOOD AND DRUGS

Composition—Mineral Oil in Food

REGULATIONS, DATED 23RD NOVEMBER, 1960, MADE BY THE MINISTRY OF HEALTH AND LOCAL GOVERNMENT UNDER SECTIONS 4 AND 68 OF THE FOOD AND DRUGS ACT (NORTHERN IRELAND), 1958.

The Ministry of Health and Local Government, in exercise of the powers conferred upon it by Sections 4 and 68 of the Food and Drugs Act (Northern Ireland), 1958(a), hereby makes the following regulations:—

(a) 1958. c. 27.