

intramuscularly to women in the seventh day of the puerperium. This inhibiting action occurs whether progestin is given before the injection of pituitrin or after such injection has started the uterine contractions. Under the latter condition, the inhibiting effect becomes apparent in a few minutes and lasts for at least 2 hours.

8132 P

Presence of Vitamin C in Saliva.

O. H. STUTEVILLE. (Introduced by C. J. Farmer.)

From the Department of Chemistry, Northwestern University Medical School, Chicago.

The presence of Vitamin C has been demonstrated in various body tissues: adrenal,¹ pituitary,² ovary,³ and tumors;⁴ also the following fluids: blood serum,⁵ cerebral spinal fluid,⁵ aqueous humor,⁵ and urine.^{5, 6}

Van Eekelen, *et al.*, reported biological tests of Vitamin C in urine.⁷ Johnson and Zilva fed urine to guinea pigs and found the biological value to equal the titrated value.⁸

Saliva was secreted by chewing paraffin and 7.5 cc. of saliva was acidified with 2.5 cc. of 20% trichloroacetic acid, then filtered. Two cc. of the filtrate was titrated with 2-6-dichlorophenolindophenol which was prepared by dissolving 10 mg. of the dye in 50 cc. of water. This was then standardized against an ascorbic acid (Cebione, Merck) solution, which had been previously standardized against a standard iodine solution. The estimation was made by titrating the dye solution into 2 cc. of filtrate until a definite pale pink color was obtained.

KSCN was found not to interfere with the titration.

¹ Harris and Ray, *Biochem.*, 1933, **27**, 303

² Gough and Zilva, *Biochem.*, 1933, **27**, 1279.

³ Same as No. 2.

⁴ Boyland, *Biochem.*, 1933, **27**, 802.

⁵ Van Eekelen, M., Emmerie, A., Josephy, B., Wolff, L. K., *Klin. Wnschr.*, 1934, **13**, 564.

⁶ Harris, Ray, and Ward, *Biochem.*, 1933, **27**, 2011.

⁷ Van Eekelen, M., *et al.*, *Tagung des Niederlandischer V. reins fur Physiologie und Pharmakologie*, Dec. 18, 1933.

⁸ Johnson and Zilva, *Biochem.*, 1934, **28**, 1393.

To further establish the presence of Vitamin C in saliva, a guinea pig which had been depleted for other purposes and was rapidly declining in weight was placed on a supplement of 4 cc. of saliva daily for 14 days, and later on 8 cc. for 11 days. The quantity of saliva fed did not cure the scurvy, but it prolonged the life of the animal and maintained the body weight above that of the initial value. The amount of Vitamin C given daily in 4 cc. of saliva, estimated by titration, averaged 0.010 mg.; the quantity being doubled with a supplement of 8 cc.