National Institute for Medical Research

INTERNATIONAL STANDARDS FOR PROLACTIN AND FOR THE GONADOTROPHIC SUBSTANCE OF PREGNANT MARES' SERUM

IT was stated in a previous issue (ANALYST, 1939, 64, 430) that the Third International Conference on the Standardisation of Hormones, held at Geneva in 1938, had decided that international standards should be established for certain hormones of the anterior lobe of the pituitary gland and analogous substances found in urine and serum, and that international units should be defined in terms of a weight of each such standard. It was further decided that the final preparation of these standards, their dispensing in a form suitable for the use of the laboratory worker, their storage, preservation and subsequent distribution should be undertaken by the National Institute for Medical Research, Hampstead, London.

The first of these new standards, as already announced, viz. that for the gonadotrophic substance of human urine of pregnancy—chorionic gonadotrophin—was established in May of last year.

We are now asked to announce that the preparation of two additional international standards has been completed, viz. for the gonadotrophic substance of pregnant mares serum and for the lactogenic (crop-gland stimulating) substance of the anterior lobe of the pituitary gland. The former standard has been prepared from substantial amounts of material generously provided by five manufacturing firms in four different countries, and the latter from material supplied by seven manufacturing firms and two research institutes in five countries. The individual samples for each standard were examined by members of the Conference, and a

suitable mixtures were then made to serve as the respective international standards and finally dispensed in the form of tablets which have been packed in sealed tubes. For each standard each tablet contains approximately 100 international units.

The international standard for the gonadotrophic substance of pregnant marcs' serum is dispensed in the form of 25-mg. tablets, each scaled tube containing ten of the tablets, and the international unit has been defined as the specific gonadotrophic activity contained in 0.25 mg. of the standard preparation.

The international standard for prolactin is dispensed in the form of 10-mg. tablets, each sealed tube containing ten of the tablets, and the international unit has been defined as the specific activity contained in 0·1 mg. of the standard

preparation.

As with the international standards for other hormones, drugs and vitamins, the above international standards are held, on behalf of the Health Organisation of the League of Nations, at the National Institute for Medical Research, Hampstead, London, N.W.3, and are distributed therefrom to national control centres established in other countries for local distribution to laboratories, institutes and research workers; also to workers in other countries in which the establishment of national control centres has not yet been completed.

With regard to the supply of these new standards to those requiring them in the United Kingdom, applications should be made to the Department of Biological Standards, the National Institute for Medical Research, Hampstead, London, N.W.3.