HYPOPHYSIOTROPIC HORMONES OF THE HYPOTHALAMUS: 
ASSAY AND CHEMISTRY. Editor-in-Chief, J. Meites. 

Despite a dull, though provocative, title, this book tells a fascinating story in an absorbing fashion. The hypothalamic hormones referred to are, in fact, the more familiar releasing factors and it is regrettable that they have been labelled as hormones so prematurely. While the case for including them among the other internal secretions was set out by A. V. Schally in 1967, the term has not been widely adopted. In view of the disclaimer by the Editor-in-Chief that ‘this does not constitute formal adoption of this expression by us or by any other participant in the conference’, and that ‘only further clarification of the nature and actions of these hypothalamic materials will determine their ultimate terminology’, it is surprising that the newer nomenclature has been given such prominence. Perhaps the use of ‘releasing factor’ labels on a decorative diagram on the cover, in close proximity to the title, is a mark of editorial neutrality.

The book stems from a conference in which the extraction and purification of the releasing factors was described and commented upon by 57 of the North American investigators most active in the field, as well as an Englishman, an Italian, and a Dutchman. After a general portrayal of the function of the hypophysial portal vessels by G. W. Harris, the in vivo and in vitro bioassay and chemistry of each of the releasing factors is surveyed in detail. Because the group was relatively small and the participants well known to each other, the discussions of each paper are particularly rewarding in providing an insight into the problems and preoccupations that arise. In this connection, and in the light of the repeated emphasis on the need for reference standards, it is remarkable that when R. Guillemin made a preparation of thyrotrophin releasing factor available for this purpose, and offered it to investigators through a paper in Nature, not a single request for the material was received.

Although corticotrophin releasing factor was the first neurohumoral agent to be studied in detail, it emerges that the structure of the material from the hypothalamus has not been determined, although it appears to be a small polypeptide. Most work has been done with a corticotrophin releasing preparation extracted from the posterior lobe, but this is not necessarily the same as that present in the median eminence. The nature of the substances influencing the secretion of follicle-stimulating hormone, luteinizing hormone, prolactin, and growth hormone remains uncertain, although they also appear to be polypeptides. By contrast, great progress has been made in the identification and synthesis of the thyrotrophin releasing factor, for while the amino-acid content and tripeptide character of this factor was discussed at the meeting, since then its structure has been determined and it has been synthesized in several laboratories. As the culmination of years of effort by groups led by R. Guillemin and A. V. Schally, this achievement merits wide acclaim. With the greater availability of releasing factor for investigative purposes that will follow synthesis, the thoughtful paper by I. Geschwind on the possible mechanisms of action of these agents on the pituitary cell is particularly welcome as a basis for future work.

As the methods for the detection of releasing factors in plasma have been improved it has become practicable to look for them in hypophysial portal vessel blood, and some results of such studies are described by J. C. Porter, B. D. Goldman, and J. F. Wilber. So far, there is evidence for the presence of both luteinizing hormone and thyrotrophic hormone releasing factor, with more extensive investigations being under way.

Quite recently, Sir Solly Zuckerman has discussed upon the relationship of the hypophysial portal vessels to pituitary function in illustrating scientific attitudes in Beyond the Ivory Tower. Harking back to past controversy he writes, 'I would insist now that the hypothesis that the pituitary portal vessels are the controlling mechanism is probably beyond direct experimental proof; and I would go further and say that the speculation has no scientific value. This, of course, is an isolated view, and not, as I have admitted, the conventional wisdom'. While convention merits continuous reappraisal, readers of Hypophysiotropic Hormones will find it extremely difficult to go along with Sir Solly and bet that the pituitary-portal theory will find a place in the graveyard of abandoned hypotheses.

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CONTROL OF COMMUNICABLE DISEASES IN MAN
Edited by A. S. Benenson. 11th edn. (Pp. xx + 316; 80p.)
American Public Health Ass.: New York.

Though not primarily on a neurological topic, few neurologists will fail to find this handbook on communicable diseases quite fascinating to read, being so clearly written and economical in words, and yet abounding in information of value to clinician and laboratory worker alike. Each disease, common and rare, is given a brief clinical presentation followed by paragraphs on its distribution, the agent responsible and its reservoirs, the mode of transmission, incubation period and period of infectivity, what is known about individual susceptibility, and recommended methods of control, Preventatively, with patients and contacts, in epidemics, and internationally. It is sufficiently up-to-date to mention the use of idoxuridine in herpetic encephalitis, the role of the Australian antigen in serum hepatitis, the various neuromuscular syndromes associated with coxsackie and ECHO viruses (among many others), and a good summary of the present situation in respect of poliomyelitis control. Being so complete, it is a little surprising to find no mention of the encephalic syndromes in filariasis, the importance in some areas of coenuirus cerebralis rather than cysticercosis, nor to find reference to the possible relationship between measles and subacute
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