

must also be skeptically weighed before scientists draw any hard conclusions, he declares. For example, when the investigators put rats in one chamber, the rats were naturally curious about entering an adjoining chamber. But when they entered the secondary alcove, they were shocked. Several days later the rats were put in the first chamber again. The rodents treated with MSH were far more reluctant to enter the second chamber again than were the nontreated animals. "We believe the MSH rats adapted better," Kastin conjectures, "but a cynic of behavioral testing techniques might say that the MSH rats were more frightened in general."

Still other factors might influence MSH release, and its subsequent effects on behavior, Kastin notes. It is well established experimentally that the hypothalamic releasing factors and the pituitary hormones are influenced by feedback mechanisms that adjust future hormone release by past hormone release. For example, if an organism gets enough MSH for its particular needs of the moment, it may tell the hypothalamus, via the nervous system or bloodstream, to turn on the hypothalamic MIF, which will then turn off pituitary MSH. Feedbacks between pituitary hormone target organs and the hypothalamus, between the pituitary and the hypothalamus, and between the target organs and the hypothalamus have been demonstrated many times. In the past several months the Kastin team has also shown that MSH release from the pituitary also touches off a pituitary feedback to itself. In other words the amount of MSH in the pituitary influences how much MSH is released. This is the first time, he believes, that such a mini-feedback has been established for pituitary hormones.

Aside from feedback controls, environmental stimuli might also impinge on MSH production, and in turn, on MSH effects on behavior. Light and darkness are an example. Kastin has discovered they can influence how much MSH is released from the pituitary.

Kastin also sees some possible therapeutic benefits emanating from his group's work on MIF and MSH. Parkinson's disease is common among older persons, causing them to shake and have trouble walking and talking. Some of the tranquilizers used to treat the condition in patients trigger MSH release into rats' blood, Kastin and his team have determined. Thus he believes that a natural over-production of MSH by the pituitary might somehow be implicated in Parkinson's disease, and that an injection of MIF might have curative value by turning off excessive MSH. "It is also possible," Kastin declares, "that MIF might be a culprit in the disease without affecting MSH." □

films OF THE WEEK

APARTHEID: 20th CENTURY SLAVERY. 16mm, b&w, sound, 27 min. Almost everywhere in the world today, racial discrimination is, at least in theory, disowned and decried. In South Africa, however, it has become a fact of law as well as a fact of everyday life. This legal discrimination is known as "apartheid," literally "separateness." Many of the minority of whites who control the Government believe that the situation is normal and that people are content. The film demonstrates the terribly oppressive conditions under which the blacks must live, virtual slaves in their own country. The history of the situation, as well as the present attitudes of other African nations, are explored. Audience: Intermediate through adult. Purchase \$130 or rental \$8 from Contemporary Films/McGraw-Hill, Dept. SN, 330 W. 42nd St., New York, N.Y. 10036.

FOOD CHAINS IN THE OCEAN. 16mm, color, sound, 9 min. Organisms that live in the ocean are dependent upon each other just as are the organisms that live on land. Both land and sea communities depend on green plants to make energy available for life. Food chains and food webs form as the energy requirements of living things are satisfied. Audience: elementary, junior and senior high. Purchase \$120 or rental \$8 from BFA Educational Media, Dept. SN, 2211 Michigan Ave., Santa Monica, Calif. 90404.

SPRUCE HOUSE. 16mm, b&w, sound, 29 min. The theory followed by Spruce House is that a patient's behavior is the result of responses by other people to past behavior.

Normal behavior must then be rewarded and neurotic behavior ignored if behavior modification is to take place. This is achieved through the application of operant conditioning theory whereby a token economy system rewards adequate behavior and these tokens are used, in turn, by patients to buy personal items and privileges. Audience: mental health, public health. Purchase \$165 or rental \$7.75 from Audio-Visual Center, Dept. SN, Indiana University, Bloomington, Ind. 47401.

WHAT DID YOU TAKE. 16mm, color, sound, 35 min. Stresses recognition and treatment of drug abuse emergencies, accurate identification of symptoms and immediate clinical procedures. Scenes of actual cases in the emergency room and adjoining physicians' offices of Beth Israel Medical Center in New York City. Viewers observe emergency treatment of patients in the major classes of drugs most commonly abused—opiates, depressants, stimulants and hallucinogens—while a commentary gives basic medical instruction and highlights important clinical details. Demonstrates to health professionals, most of whom are not equipped by training or experience, that successful management of drug overdoses can save most lives and avert additional organic and psychiatric complications. Audience: health professionals. Purchase \$315 from Knightsbridge Productions, Dept. SN, 630 9th Ave., New York, N.Y. 10036. New York state residents contact New York State Department of Health, Office of Medical Manpower, 84 Holland Ave., Albany, N.Y. 12208.

Listing is for readers' information of new 16mm and 8mm films on science, engineering, medicine and agriculture for professional, student and general audiences. For further information on purchase, rental or free loan, write to distributor.

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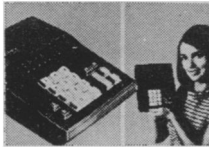
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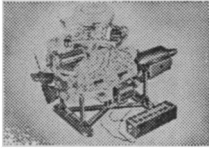
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