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CONCENTRATES

Asbestos in talc

Two different infant talcum powders contain from 5 to 25% asbestos, says Dr. Arthur Langer, professor of mineralogy of the Mt. Sinai School of Medicine. Tremolite, a form of asbestos, can range up to 30% of industrial talcs. In calling for a federal program from HEW to check out the potential health hazard of asbestos in talc, New York City's environment protection administrator, Jerome Kretchmer, says that although there is no evidence that infant exposure to talcum powder asbestos contributes to later disease, it is prudent to minimize exposures unless they can be demonstrated conclusively to be harmless. ■

Accelerator working

Workers at the National Accelerator Laboratory, Batavia, Ill., have guided a proton beam through the entire accelerator system for the first time. The beam was accelerated to 7 b.e.v. in the linear accelerator and the booster synchrotron, then allowed to "coast" through the giant (4 miles in circumference), ring-shaped main accelerator. ■

Bacteria detector

A laminated card to detect bacteria causing infectious diseases in the digestive tract will be marketed by Wilson Pharmaceutical & Chemical Corp., Chicago, Ill. The card, called Auxotab Enteric 1, contains 10 capillary tubes with reagents that permit the identification of a wide range of enteric bacteria within seven hours from pure culture, the company says. Color changes in the capillaries are compared with a reaction chart to identify 18 enteric bacteria and Pseudomonas. The laminated card is used once and discarded. ■

Scanning the pancreas

Radioactive 6-fluorotryptophan may permit external scanning of the pancreas, according to results of animal studies at Brookhaven National Laboratory, Upton, N.Y. Dr. Harold Atkins, Dr. Alfred P. Wolf, and coworkers quickly prepare the labeled amino acid (half-life of 110 minutes) after preparation of fluorine-18 in a cyclotron. The amino acid concentrates preferentially in the pancreas, unlike other radiopharmaceuticals that concentrate in the nearby liver as well, Dr. Wolf says. ■

Protecting pacemakers

Sensitivity of heart pacemakers to electromagnetic radiation interference should be diminished when manufacturers receive the results of tests now under way. The project is operated jointly by the Society of Automotive Engineers and several industrial organizations. The SAE project is aimed at determining the influence of such devices as microwave ovens and ignition systems for gasoline engines on the pacemakers. ■

Uses of straw

An Oregon State University project under the direction of Dr. D. O. Chilcote has been funded by EPA to find new ways to use straw residue from harvested crops. Now beginning the second and final year, the project has developed a method for producing paper and a process for the hydrolysis of the straw with hydrochloric acid to produce a yeast protein. Paper samples are now being tested against conventional papers. The food proteins are expensive but contain all the materials required for human and animal consumption. ■

Schools in trouble

Public universities as well as private schools are having financial difficulties. Deferment of maintenance, elimination of new programs, and faculty-staff freezes or cutbacks are economy measures taken by 40 or more of the 78 universities that responded to a survey by the National Association of State Universities and Land-Grant Colleges. Financial deficits occurred at 14 of the institutions during 1969–70. ■

Biology technicians

Project BIOTECH will develop teaching materials and a core curriculum for the training of technicians in the life sciences. In the next four years the project will write, edit, and field test the materials under the direction of Dr. John H. Busser of the American Institute of Biomedical Sciences. The materials developed will be used in modular form for on-the-job training, in formal academic instruction, and for some individual self-instruction. Particular emphasis will be placed on training technicians for pollution abatement, industrial and agricultural biotechnology, and health sciences. The project is funded by NSF. ■

Dietary trace metals

Dr. K. M. Hambidge, of the University of Colorado medical center, has begun a three-year project to study the need for six trace minerals in the diets of children, infants, adolescents, and pregnant women. The scientists will utilize some of the newer clinical analytical procedures, including auto-analysis, to determine levels of copper, zinc, iron, chromium, manganese, and molybdenum in easily accessible body fluids such as blood serum and urine. ■

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