

SCIENTIA INTERNATIONAL

NOVAS DEL MENSE IN INTERLINGUA

Antibiotics. – Esseva reportate un simple test pro le identification de personas con hypersensibilitates pro penicillina. Un solution de polylysina penicillolylic es injicite in le pelle. Le resultante formation de un grande vesica (in un circulo rubie) indica que le subjecto non tolera penicillina e non debe esser tractate con ille antibiotico. Le test esseva disveloppate per un team medical in Atlanta (Georgia) in le Statos Unite. Illo esseva usate experimentalmente in 16,239 patientes. Illo non es totalmente specific sed representa un marcate progresso in comparison con previe methodos.

Ethica Medical. – Le medico qui accepta le responsabilitate inherente in experimentar in le tractamento de patientes human debe esser preste a experimentar con se ipse como subjecto. Iste principio es exprimate per Dr. O. E. Guttentag del Universitate California. Ille nota multe exemplos de recercatores medical qui usava lor proprie corpores in lor experimentos. Le doctores Sabin e Salk es ben-cognoscite nomines in le lista. Reguardar le medico como plus pretiose que le patiente, i.e., establir inter le duo un relation de general e simple soldato, es – secundo Dr. Guttentag – recognoscer un specie de hierarchia que non es compatibile con le ideales del civilisation occidental e etiam non con le spirito del juramento hippocratic.

Demographia. – Le population residente in fermas in le Statos Unite declinava inter 1960 e 1963 ab 15,6 ad 13,4 milliones.

Morbo Cardiac. – Dr. J. Yudkin del Universitate London (Anglaterra) crede haber constatate un correlation inter le ingestion de sucro e le incidentia de morbo cardiac. Le correlation inter le ingestion de grassia e le incidentia de morbo cardiac es ben cognoscite. Le consumption de grassia es plus alte in paisas (e classes) ric que in paisas (e classes) povre, e le mesmo vale pro morbos cardiac. Differentias inter rricos e povres in lor consumption de hydratos de carbon es minus marcate, sed – dice Dr. Yudkin – quando on distingue inter le duo major typos de hydrato de carbon, i.e. inter sucro e amylo, on trova que rricos consume multo plus sucro e multo minus amylo que povres. Le consumption de grande quantitates de sucro es tanto characteristic de rricos como le consumption de grande quantitates de grassia, e – secundo Dr. Yudkin – le correlation inter sucro e morbo cardiac es plus frappante que illo inter grassia e morbo cardiac. Si le these del Dr. Yudkin pote esser corroborate, un multo simple prophylaxia contra morbos cardiac esserea un dieta a reduce contento de sucro. Plus pan, minus torta.

Pharmacologia. – Conilias e rattas pregnantate metabolisa aspirina plus rapidemente que lor non-pregnante sorores. Isto esseva constatate per un gruppo de recercatores in Nottingham (Anglaterra). Il es possibile que le observation significa que aspirina es accumulate in le feto, sed il es etiam possibile que le decomposition de aspirina es accelerate per le alterate configuration de hormones in le organismo in pregnantia.

Politica. – Ha essite organisate un gruppo de action politic (pro Johnson) de statounitese scientistas, basate in le principio e le conviction que in nostre tempore le dominio del scientia non pote esser isolate ab le dominio del problemas social e cultural. Le nove gruppo vole: “Un bilanciata e rationabile politica de defensa; restringimento del armamentos in conformitate con le requirimentos del securitate national; continue progresso in le areas del recercas medical e alteremente scientific; expansion sin interruption in le numero e le qualitate del opportunitates educational al disposition de omne citatanos; intensification del action federal in re le application del scientias e del technologia al problemas social e economic de nostre tempore; continue progressos in le exploration del spatio cosmic; execution, sin modification, del Lege del Directos Civil; e rejection de omne forma de extremismo.” Le gruppo include homines universalmente respectate del calibre de Dr. Paul Dusley White, Dr. Jerome Wiesner, Dr. Detlev W. Bronk, Dr. Harold C. Urey, e Dr. Warren Weaver.

Recercas Cosmologic. – Es sub disveloppamento un satellite statounitese con un planate perigeo de circa 700 kilometros e un planate apogeo de plus que 300.000 kilometros.

• Science News Letter, 86:150 Sept. 5, 1964

PHYSICS

Breeder Reactor II Produces Electricity

See Front Cover

► THE EXPERIMENTAL breeder reactor II (EBR-II) has begun to produce electricity, bringing one of the most dramatic and complex engineering efforts in the 20-year history of the U.S. atomic energy program a long step nearer a successful conclusion.

The step-by-step process of operating the reactor at full power is proceeding satisfactorily, Dr. Albert V. Crewe, director of Argonne National Laboratory, Argonne, Ill., said.

EBR-II's assignment is to demonstrate that the atom has the potential of producing nuclear power economically, efficiently and safely, and that through use of a novel technique, a reactor can “breed” more fuel than it consumes. EBR-II also will play an important role in the development of plutonium fuels for use in future power reactors.

Designed, built and operated by Argonne for the U.S. Atomic Energy Commission, EBR-II is designed to produce 62,500 kilowatts (62.5 megawatts) of reactor heat. When the reactor is at full power, this reactor heat will be converted to 20 megawatts of electricity through a conventional turbine-generator system.

Although EBR-II was built as an engineering prototype and power production is not its primary purpose, 20 megawatts of electricity is enough to supply a city of 25,000 people.

The reactor is located at the AEC's National Reactor Testing Station near Idaho Falls, Idaho. The complex, shown on this week's cover, consists of four interconnected buildings: the reactor plant, a gas-tight cylindrical steel shell 145 feet high and 80 feet in diameter housing the nuclear part of the system; the sodium boiler plant; the power plant, and the fuel cycle facility.

Operation of EBR-II represents an important milestone in the Atomic Energy Commission's plan for development of fast breeder reactors.

EBR-II, along with other facilities now in various stages of design and construction, is expected to provide the technology for the design of prototype fast breeder nuclear power plants.

• Science News Letter, 86:150 Sept. 5, 1964

ELECTRONICS

Pocket Transmitter Has Coast-to-Coast Range

► A RADIO TRANSMITTER only slightly larger than a pack of cigarettes yet capable of sending signals across the United States has been developed.

The ten-ounce transmitter uses body heat to keep the constant temperature necessary for good frequency control. It is expected to prove useful to pilots, explorers, missionaries and others who work in the wilds. It was developed by the Radio Corporation of America, New York.

• Science News Letter, 86:150 Sept. 5, 1964