

BIOCHEMISTRY

Origin of Food Allergies?

➤ A POSSIBLE clue to the origin of food allergies and other irregularities in the body's use of protein, sugar and fat was suggested by Dr. Anthony A. Albanese of the Nutritional Research Laboratory of St. Luke's Hospital, New York, to the American Chemical Society in Philadelphia.

Cortisone, the scarce but powerful drug used to treat rheumatoid arthritis in combination with sex hormones and other complex chemicals of the type known as steroids, has increased beneficial effects on the patients when their nutritional condition is improved.

This combination suggests that, by improving the patient's physical condition by better feeding, better results may be expected from the limited amount of cortisone available for his treatment.

Steroid chemicals have a profound effect in the body's transformation of food into tissues needed for growth and repair, ac-

ording to other papers presented to the chemists. The male hormone, for example, causes increase in the amount of protein stored in the body. These chemicals especially affect protein, fat and sugar metabolism, Dr. Albanese said. He pointed out that individuals vary widely in the way they are able to make use of the substances.

The relief that patients get from cortisone and other anti-arthritis drugs also varies widely from patient to patient. These effects may be parts of the same problem, Dr. Albanese said, and the solution may lie in the whole field of the relationship between steroids, hormones and foods. By evaluating the patient's condition through tests of vitamin levels and nitrogen analyses, he hopes to be able to obtain the maximum benefit of steroidal treatment of arthritis and the minimum of untoward effects.

Science News Letter, April 22, 1950

ENGINEERING

Photo-Electric Eye Heart

➤ A TINY disk of the metal germanium is the heart of a new photo-electric eye announced by the Bell Telephone Laboratories, New York, N. Y.

This entirely new type of electric eye is about the size of a small caliber rifle cartridge but it delivers very high power for a photo-electric cell.

The new device will be known as the "Phototransistor" because of its relation to the amplifying transistor which also uses a tiny chip of germanium. In this parent device, two hair-thin wires are pressed against the germanium, a semi-conductor material. The ends of the wire are hardly two-thousandths of an inch apart. The flow of very small electrical currents in one of the wires controls the flow of currents in the other in such a way as to give signal amplification. The transistor is a device to

replace vacuum tubes in certain usages.

The phototransistor is similar in operation to the amplifying transistor, but is controlled by light rather than electric current. It uses only a single collector wire. The tip of this wire rests in a small dimple ground in the germanium metal. At this point the germanium is only three-thousandths of an inch thick.

HANDEE

Tool of 1001 Uses

The original tool of this type and today's finest. The choice of mechanics, repairmen and craftsmen for 18 years. Handee is the best tool investment you can make.

IT RUNS COOL—Smooth, controlled power when you want it, as you like it. Non-fatiguing because it is perfectly balanced and has 7-bar armature rather than only 3. Speed 25,000 r. p. m. Wt. 12 ounces.

Handee with 7 accessories.....\$19.95
Handee with 51 accessories in steel case\$24.95

At your dealer's or order today post-paid on money-back guarantee. Write for catalog. Chicago Wheel & Mfg. Co., 1101 W. Monroe St., Dept. PM, Chicago 7, Ill.



A Whole
Toolshop in
one hand

Grinds
Drills
Engraves
Polishes
Cuts, Routs
Saws, Sands

Sport-ocular

AMERICA'S FIRST AND FINEST

- Brings objects 3 times closer.
- Featherlight—weighs just 3 ounces.
- Precision made.

Ideal at all Sporting Events, Horse Racing, Theater, Vacations, etc.

Specially designed temples hold the Sport-ocular snugly in place leaving the hands free at all times. Precision built of quality materials and handsomely styled to be in perfect taste everywhere. A convenient genuine leather case is provided so that the Sport-ocular may be carried easily in pocket or handbag. Why not be the first in your crowd to enjoy the many distinctive advantages of this fine product?

Order yours today! Sport-oculars are fully guaranteed, if not satisfied your money will be refunded.

\$15.00
postpaid (no C. O. D.'s)
Fed. Tax included.

NATIONAL SPECTATOR CO.
P. O. Box 3534B, Merchandise Mart
Chicago 54, Ill.

Light focused on the opposite side of the disk can control the flow of electricity in the wire, thus making a control device similar in function to a photo-electric cell. It is a rugged device, without vacuum, glass envelope, grid, plate or hot cathode.

Photo-electric cells have been in use for the past quarter-century and have wide applications.

Science News Letter, April 22, 1950

Words in Science—

ANTHROPOLOGY-ARCHAEOLOGY

➤ ANTHROPOLOGY, in its broadest sense, is the science of man. Why are we built as we are, act in a group as we do, live where we do? Anthropologists search for the answers. They are scientific historians, studying man as an animal in relation to his physical character, his geographical distribution, the origin of various races, social relationships and customs.

Archaeology is more limited. It is the study of ancient civilizations. By digging up the pots and pans of peoples who lived long ago, studying their art, architecture, language and literature, archaeologists contribute to man's knowledge of himself.

Science News Letter, April 22, 1950

IT'S EASIER TO LEARN A LANGUAGE

By **LINGUAPHONE**

You learn through natural everyday conversation . . . with effortless ease and real pleasure. First you LISTEN and in an amazingly short time you SPEAK, with correct accent and the right swing.

In your own home you can study alone in privacy or have wife and children or friends join you in a delightful pastime that is an asset in a career, business, profession and for cultural enjoyment.

It will take you only 30 minutes a day to master any of 29 important languages the Linguaphone Way.

SPANISH FRENCH
PORTUGUESE GERMAN
ITALIAN RUSSIAN

or any of the 29 languages available

Linguaphone courses were made astonishingly simple, easy and practical by more than 150 expert linguists of international fame. Endorsed by educators, used by colleges, schools and the choice of more than one million home-study students.

-----SEND FOR FREE BOOK-----

LINGUAPHONE INSTITUTE,
31 Radio City, New York 20, N. Y.

Send me the FREE Linguaphone Book.

I want to learn _____ language.

Name _____

Address _____ City _____