

liver in abundance, this organ showing ability to supply the body for up to three years in cases of impaired absorption of the vitamin.

Neomycin, an antibiotic, and the amino acids arginine, ornithine and citrulline, were found effective in reducing toxic accumulations of ammonia in some cases of liver diseases, heart trouble and shock.

Allocations for Salk polio vaccine were lifted because of plentiful supplies, while estimates of 50% reduction in paralytic polio in 1956 over 1955 in spite of a severe outbreak in Chicago were given.

Germ-stopping action of penicillin was found due to blocking of the germ's production or use of adenosine triphosphate.

The year's new antibiotics included oleandomycin, so named because it contains a sugary chemical of the oleander bush; Bryamycin from organisms in Hawaiian soil; a team of tetracycline and oleandomycin; and tritium-tagged streptomycin for study.

The collecting ducts of the tubular portion of the kidney were found to have also the function of producing ammonia for excretion.

A chemical, n-hexadecane, added to tuberculosis germs was reported to make possible creation of an effective killed germ vaccine against tuberculosis.

Lack of an enzyme that converts galactose, one of the sugars in milk, into glucose was discovered to be the cause of galactosemia, disease of babies causing blindness, mental defect and death.

Mice, guinea pigs and monkeys showed no health damage from cosmic rays in flights above 90,000 feet.

A lung operation was done on a hypnotized patient for the first time.

Drinking of large amounts of salt and soda solution was found to be a handy and effective emergency treatment for shock caused by severe burns.

President Eisenhower underwent an operation for ileitis.

The U. S. Food and Drug Administration celebrated its fiftieth anniversary.

Development of heart catheterization for study and diagnosis of heart, circulation and pulmonary conditions in health and disease won the 1956 Nobel Prize in Medicine and Physiology for Dr. Werner Forssman of Germany and Drs. Dickinson W. Richards and Andre Cournaud of Columbia University, New York.

PSYCHIATRY-PSYCHOLOGY

Mentally Sick Persons Use Less Oxygen

An abnormality in brain chemistry of mentally sick persons, a lower than normal rate of oxygen use, was discovered for the first time.

Man's brain, in contrast to that of lower animals, was found to be as highly differentiated chemically as it is intellectually.

A new technique for studying the organization of the brain and specific functions of various parts was found when hormones were injected into specific areas.

A center for pleasure and one for pain or discomfort were located in the brain of the monkey.

A particular brain center that controls the recognition of melodies was found in auditory cortex of a cat.

Experience with tranquilizing drugs included: good results reported for two new ones, meprobamate and promazine hydrochloride; large scale use and evaluation of the drugs undertaken by the Veterans Administration and Public Health Service; unpleasant side effects of the drugs controlled in certain instances by Cogentin which

stops finger trembling and by better manipulation of the dosage.

A substance was discovered in the blood serum of schizophrenics that seems to produce characteristic schizophrenia symptoms when injected into normal persons.

The heart muscle can be conditioned to respond in a certain way to angering or frightening stimuli and the tranquilizing drugs can lower blood pressure by modifying or reducing such conditioned responses, it was found.

Experience with a new kind of intelligence test which involves neither the use of words nor manual dexterity but tests ability to form or deal with concepts, suggested that conceptual instruction may raise the intelligence level of subnormal children.

It was found that intelligence does not reach a plateau as early in life as has been thought and some intellectual abilities may continue to increase slowly up to the age of 50 or later.

The more frequently a slot machine pays off, the quicker the player will give up after it stops rewarding, it was found.

More intelligent individuals were observed to be more distracted by conflicting background situation when they are learning a new task.

A simple test of accurate and rapid finger and hand movements was found to show how a man will react under serious stress such as parachute jumping.

A measure of temporal acuity, or ability to perceive rapid stimuli as separate, was found useful in distinguishing patients with nervous disorders from those with psychoses.

A new visual pigment, visual gold, was found in the eyes of deep-sea fish, caught in the Bay of Biscay, that swim at a depth of about 500 yards.

When men in the 24-hour Arctic winter nights were allowed to sleep whenever and for as long as they wanted to they averaged just under eight hours a day.

Persons were found to be more suggestible when sleeping lightly than when under hypnosis.

Alcohol, in spite of its effect on equilibrium, does not affect perception of up and down.

Most frequently used words are the best recognized in very noisy surroundings.

Stimulation of the sympathetic nerve supply to the skin was found to make touch sense receptors over sensitive.

The ugliness or beauty of the room in which judgments are made were found to affect the judgment of faces.

The length of exposure time in which you can observe an object was found to affect perception of its shape and brightness.

Rhodopsin was found to be the visual pigment in all vertebrates from the primitive lamprey to man.

The emotional shock of the sight of a mutilated person was found to affect perception of bizarre appearance through distorting lenses.

Shifting attention from tasks involving perception of visual signals to auditory signals caused no reduction in speed but did cause increase in errors.

Standardized mental tests were found to work on baby monkeys and the possibility of rating their mental age was predicted.

Experiments with "automats" indicated that the effects of inflation on human beings can be assessed by tests of chimpanzees.

The simple miniature "brain" in a lobster heart was found to serve as a model for study of the infinitely more complex human central nervous system.

Use of a light as an artificial sun showed that fish are able to navigate by the sun.

Opportunity to play with, or manipulate, a ball was found to be sufficient reward to produce learning in a kitten.

Pigeons, it was found, can learn to match color samples even when the sample is removed from sight before the other colors are presented for selection.

A new apparatus made it possible to measure the sense of smell in a rat, a very difficult scientific task with lower animals.

Conditioning young trout to avoid the sound of a splash on the surface was found to reduce loss of the young fish when they are planted in trout streams.

The lowly earthworm was found capable of learning to find its way through a simple maze and also capable of latent learning.

Although a monkey does not reach full intellectual maturity until it is two or more years old, it was found capable of conditioning at less than one week and able to manipulate its surroundings at 20 days.

Even fish may become neurotic when faced with too hard a problem, experiments showed.

Ten primary factors in the personality of puppies were isolated by mathematical techniques.

Evidence was found pointing to a link between mental illness and anti-vitamins and anti-amino acids in the diet.

The eye was found to respond to a mild electric current as though it were seeing vague clouds, providing a new research tool for studying dark adaptation and vision in very dim light.

A relatively simple chemical test for diazocoupling compounds in the urine was found to diagnose schizophrenia correctly in more than 80% of newly admitted patients.

Brain wave changes while under the influence of alpha-chloralose were found in 48 out of 65 mental patients but not in normal persons.

An objective measure of fine differences in behavior between mental patients was developed, using reaction to a slot machine.

A pioneering nursery school workshop was instituted to define methods for adjusting a deaf child to a hearing group of preschool children.

The mental and emotional effect of complete isolation was explored when a psychiatrist had himself suspended in a tank of water of body temperature with a mask on to black out all sight.

By applying the mathematical decision theory, it was found possible to predict gambling behavior.

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PALEONTOLOGY

Find 13 Fossil Eggs In Prehistoric Nest

➤ A BIRD'S NEST in Nebraska yielded 13 fossilized eggs laid about 40,000,000 years ago.

They are the same size as hen's eggs, but the creature responsible for the prehistoric eggs is not known.

To see if any of the eggs contain embryos, which might indicate size and shape of the ancient bird, X-rays will be taken. Bits of shells and a fragment of a bird leg bone, embedded in the claystone rock with the eggs, may also help.

The eggs were unearthed by Donald E. Savage, Lester R. Kent and Malcolm C. McKenna of the Berkeley Museum of Paleontology. Their work was initiated by Harold J. Cook, a geologist-paleontologist, on whose ranch near Crawford, Nebr., the eggs were found.

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