MEDICINE

Brucellosis Causes Sterility in Men

➤ BRUCELLOSIS, also called undulant fever and Malta fever, may cause sterility in men, Dr. F. A. de la Balze of Buenos Aires, Argentina, reported at the meeting of the Endocrine Society.

The disease itself, a long drawn-out one with fever and frequent relapses, attacks both animals and humans. Humans get it chiefly from drinking raw milk from infected goats or cows and from handling infected animals.

Microscopic examination of bits of tissue from the sex glands of eight men patients, aged 27 to 50, showed inflammation, hardening and shrivelling of the tissue. Only two out of seven of the patients had normal sperm cells. There was complete lack of these reproductive cells in three cases and abnormally low number in two cases. Sex hormone excretion was increased in two cases and normal in five.

Some patients had no symptoms of sex gland inflammation although examination of the tissue under the microscope showed damage.

Associated with Dr. de la Balze in the study were Drs. R. E. Mancini, G. Iacapraro, F. Arrillaga and E. A. Molinelli, all of Buenos Aires.

Science News Letter, June 14, 1952

PUBLIC SAFETY

Follow Safety Rules For Vacation Near Water

➤ WHETHER YOU go to the seashore or a mountain lake on your vacation this summer, you will have more fun and be safer if you know how to swim.

Besides the enjoyment of swimming itself, you can more safely enjoy canoeing and sailing. So if you can not swim, put swimming lessons first on your vacation schedule.

Don't rely on water wings, old inner tubes or other air-filled tops to hold you up if you can not swim. A sudden leak may leave you struggling without support in deep water. Other rules for safe swimming, as important for practiced swimmers as for beginners, follow:

Swim only at beaches where lifeguards are on duty.

Do not swim out too far beyond your depth.

Always make sure you are accompanied by a boat when swimming long distances.

Never play practical jokes on persons in the water, especially on those who can not swim.

Before diving, always check on the depth of the water and make sure there are no obstructions hidden below the surface. This is especially important at low tide.

Don't go in the water immediately after

eating. If subject to cramps, wait for at least two hours and then do not go in water beyond your depth.

If you have a heart impediment, be very careful to avoid sudden shocks while bathing.

Never swim in polluted waters which have been condemned by the Health Department.

Watch the babies and small children. Many toddlers will daringly follow grownups or big boys and girls into the water. If they lose their footing or are covered by a wave, they may be drowned before they are missed, unless some one has the job of keeping constant watch over them.

Science News Letter, June 14, 1952

BIOCHEMISTRY

Swedish Drug Treats Ulcerative Colitis

➤ GOOD RESULTS with a Swedish drug for treatment of ulcerative colitis are reported by Dr. Lester M. Morrison of the College of Medical Evangelists, Los Angeles.

The drug is an azo dye combination of a sulfa drug and salicylic acid. It is called azulfidine. It was developed by A. B. Pharmacia, Upsala pharmaceutical firm, at the suggestion of and in collaboration with Prof. Nanna Svartz of the Carolinian Institute, Stockholm.

Of 42 patients who had the full course of treatment, 20 showed "great improvement" and 10 temporary improvement. Reporting his results and commenting on Dr. Svartz' 90% cure or greatly improved rate in 124 patients, Dr. Morrison called the drug "the most promising to date" for ulcerative colitis. Details of his studies are reported in the Journal of Gastroenterology.

Science News Letter, June 14, 1952

INVENTION

Prepare Better Antigens For Tick Fever Tests

➤ A METHOD of preparing better antigens for tests to diagnose tick fever, scrub typhus, spotted fever and other diseases caused by viruses and rickettsia has been invented by Carl J. De Boer, Perth Amboy, N. J., and assigned to the American Cyanamid Company, New York. He received patent number 2,598,659.

In preparing the antigens from such tissues as are found in egg yolk sacs it has been previously impossible to remove a substance which would react with the blood serum of a patient who has had syphilis but who does not necessarily have the disease to be tested for.

The inventor claims that it is now possible to extract this syphilis-reacting substance by using dichlorethylene as a solvent. It removes the syphilitic antigens without appreciable effect on the viral antigens.

Science News Letter, June 14, 1952



MEDICINE

Ideal Hospitals Foreseen in 2000 A.D.

➤ PUT THE year 2000 in your date book as a good time to go to a hospital. By that time a hospital will be "a haven of comfort for the patient." Wards will be almost as extinct as the Dodo. Complete air conditioning and plumbing facilities built into electrically operated beds will be other features.

All this and more besides, such as radar cooked meals with "delightful" taste as well as suitable nourishing factors and instant sterilization of instruments and utensils by high voltage rays, are seen by Dr. Jack Masur of the U. S. Public Health Service.

He gave this picture in a report to the American Surgical Trade Association in Chicago.

Science News Letter, June 14, 1952

NUTRITION

World Hungriest Yet; Rice Critically Short

➤ THE WORLD is hungrier than it has been and the food situation, despite much international cooperation, is continually getting worse.

Dr. Norris E. Dodd, director-general of the Food and Agriculture Organization of the United States, speaking as guest of Watson Davis, director of Science Service, over the nationwide CBS Radio Network, declared:

"There can not be permanent peace in the world until the world's problem of starvation and undernourishment is solved."

A few years ago it used to be said that there were 55,000 new mouths to feed at each day's breakfast. The figure is now above 60,000 and steadily rising.

Rice is the world staple food that is most critically short, Dr. Dodd found on a world-circling inspection trip. More people in the world eat rice as a staple food than any other food. The amount of rice in the world market is at its lowest with a severe shortage in the Far East.

Production of rice is up only one percent over the pre-war average, although the area planted to rice has been expanded by 10%. Asiatic countries have had to make heavy imports of wheat and coarse grains to supplement and even to supplant the traditional rice diet.

Dr. Dodd, formerly U. S. Undersecretary of Agriculture, has his headquarters in Rome and he recorded the program when he was in the United States.

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CE FIELDS

ZOOLOGY

Zoo's Albino Kangaroo Is Only One in Captivity

See Front Cover

THE ONLY albino kangaroo in captivity, now on display at the National Zoological Park in Washington, is shown on the cover of this week's SCIENCE NEWS LETTER. It was given to the people of the United States by the government and people of Australia as a symbol of good will between the two countries.

The 14-month-old animal was presented by Percy C. Spender, Australian Ambassador to Washington, who has since been made a knight by Queen Elizabeth II. On behalf of President Truman, Chief of Protocol John F. Simmons of the State Department accepted the gift.

The white kangaroo was found in its mother's pouch in Australia by E. J. L. Hallstrom, after the mother had been shot in a kangaroo roundup. The eyes of albino kangaroos are quite weak and they often hurt themselves by jumping against obstacles.

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MEDICINE

Hope to Understand Deadly Stomach Cancer

➤ A NEW approach to the problem of stomach cancer, commonest form of cancer death in men, is being taken by Dr. Francis E. Ray of the University of Florida, Gainesville

Animals other than man almost never get stomach cancer and scientists have found it virtually impossible to give stomach cancer to experimental animals.

So Dr. Ray is investigating the factors that protect the stomachs of animals and fail to protect the stomachs of humans from cancer.

The mucous lining of the stomach is one thing that seems to protect animal stomachs from cancer, though man also has a mucous lining in his stomach.

Glandular parts of the stomach secrete acids which may rob cancer-causing chemicals of their ability to start cancers. Dr. Ray finds he can attack this part of the rat's stomach by injecting cancer-causing compounds into the rat's belly cavity in which the stomach is located. In from 15 to 60 minutes the chemicals showed up in the rat's stomach.

Rats developed gastritis and ulcers from these injections. They developed warts of a type that sometimes may precede cancer. But none of the animals has yet developed cancer.

The mystery of what protects them from stomach cancer is still unsolved but Dr. Ray hopes that further research, for which the American Cancer Society has awarded a \$2,000 grant, will solve it.

When and if the protective factors in animal stomachs are found, it may be possible to reinforce human stomachs against cancer.

Science News Letter, June 14, 1952

HORTICULTURE

"Sandwich Tree" May Solve Virus Disease of Citrus Fruit

SCIENTISTS AT the University of California's Citrus Experiment Station, Riverside, Calif., have come up with a possible answer to Quick Decline, the mysterious virus disease threatening the state's multimillion dollar citrus crop.

Their solution: An ingenious "sandwich tree." For example, a sour orange rootstock, a sweet orange trunk and a lemon top.

This is one of the many varieties of "sandwiches" tried in an effort to find a combination that will not be susceptible to Quick Decline like the sweet-on-sour rootstock, widely used in orange plantings until a few years ago.

A grove of some five acres of sweet orange on sour orange stock, budded over to lemons in 1938 before Quick Decline appeared, still appears to be in excellent condition, while unworked orange trees nearby are declining.

Studies now being made by Drs. J. M. Wallace and H. Schneider are concerned with whether such trees actually have resistance to infection by the Quick Decline virus or whether they are infected and show no symptoms.

Science News Letter, June 14, 1952

MEDICINE

X-Ray Examinations Twice Yearly for Heavy Smokers

EVERY MAN over 45 who is a heavy smoker should have a X-ray examination twice a year as a defense against lung cancer, Dr. J. Winthrop Peabody of Georgetown University Medical School, Washington, D. C., declared at the meeting of the American Medical Association in Chicago.

He gives this advice because of a higher incidence of lung cancer among heavy smokers than among non-smokers. With this practice he believes that most lung cancers would be diagnosed in the stage where operation can be done to save the patient's life.

The disease can now be definitely diagnosed in about 85% of the cases, many times when cough is the only symptom or even when there are no symptoms.

Science News Letter, June 14, 1952

ORNITHOLOGY

Birds Use Eyes in Alighting From Flight

➤ WHEN A bird comes into the wind for a landing, it uses its vision in controlling the critical task of alighting.

After experimenting with blindfold pigeons, juncos and sparrows, Dr. William J. Beecher of the Chicago Natural History Museum concludes that birds alight by visual clues. They turn their heads intently downward upon alighting and Dr. Beecher believes they observe the let-down point binocularly. Blindfolded birds simply fluttered to the ground.

When the wind is less than five miles per hour, the birds pay no attention to it, alighting indiscriminately from any direction. When their speed or the wind is too high, the birds turn around or at right angle and alight when the wind cancels forward movement. The landing maneuver of birds, due to their mobile wings, is more like that of a helicopter than of a conventional airplane.

Due to the use of their eyes in landing, night flights of birds are very hazardous. Their vision is actually inferior to that of human beings and a migratory flight launched at night cannot land safely until daylight. This may explain migration catastrophes in which birds by the millions have been dashed to death against the earth in night storms.

Dr. Beecher makes his report in the journal Science (May 30).

Science News Letter, June 14, 1952

MEDICINE

Drug Eases Stiff Joints, Stops Acute Gout Fast

➤ GOOD RESULTS with a drug that lubricates stiff rheumatic joints and eases their pain was reported by two groups of New York physicians at the American Rheumatism Association meeting in Chicago.

The drug is phenylbutazone. In spite of causing a fair number of reactions, it "promises to be a superior analgesic" for relieving pain in muscle and joint disorders with slight, if any, anti-rheumatoid action, Drs. Otto Steinbrocker, Sidney Berkowitz, Solomon Carp, Mortimer Ehrlich and Mortimer Elkind reported from their experience.

Quick arrest of acute gouty arthritis which sometimes had been resistant to the usual anti-gout medicine, colchicine, was one of "the most remarkable effects" in the experience of Drs. E. C. Kidd, K. C. Boyce and Richard H. Freyberg.

Unpleasant reactions, reported by both groups of physicians, consisted chiefly of indigestion, lack of appetite, nausea, bloating, skin trouble, and disturbance of water balance as shown by weight gain and dropsy. No sign of blood disorder was noted.

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