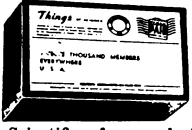


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PUBLIC HEALTH

Peaches-Cream Cosmetics

► PEACHES AND CREAM literally can provide that "peaches-and-cream" complexion every woman wants, Dr. Glen J. Sperandio, associate professor of pharmacy at Purdue University, Lafayette, Ind., reported.

Cosmetics can and should be safe, pure, and "good enough to eat," he reported at a symposium on "danger-free" cosmetics at the American Association for the Advancement of Science meeting in New York. The symposium was cosponsored by the American Medical Association.

The scientist-advocate of edible cosmetics recommended peaches, cream and other foodstuffs as a primary source of the "very safest materials that might be used in cosmetics."

He said foods contain most of the basic types of materials used in cosmetic manufacture: oils, creams and starches. Their safety has already been established.

Dr. Sperandio said he and two assistants had produced a highly successful complexion lotion "made basically from peaches and cream," and an anti-chapping cream "prepared mainly from tapioca." Tests of both products showed they were as good or better than available counterparts.

The team also prepared a liquid make-up composed mainly of chocolate syrup and mashed potatoes.

Safe, edible ingredients for a cosmetic are, however, only one requirement for an entirely danger-free beauty product. Other requirements include an effective quality control program, more stringent laws for proper packaging, and complete and clear labeling.

Dr. Sperandio predicted more therapeutic cosmetics for allergic individuals and geriatric cosmetics that are scientifically formulated to benefit aging skin. He also predicted that in the next ten years the American male will use virtually as many cosmetic products as the female now does.

Another Purdue University professor, Dr. William F. Bousquet, recommended the use of radioactive isotopes to study the penetration of cosmetic ingredients into the skin.

• Science News Letter, 79:30 January 14, 1961

Tranquilizer and Disease

► THE TRANQUILIZER chlorpromazine alters the natural resistance of animals to amoebiasis, or amoebic dysentery, but the drug has no direct effect on the infecting amoebae, the American Association for the Advancement of Science meeting in New York was told.

Guinea pigs experimentally infected with amoebiasis showed no ulcerations or amoebae in the intestinal cavity five days later. By the tenth day of treatment, however, ulcers may perforate the intestinal wall of the chlorpromazine-treated animals and spill amoebae into the intestinal canal.

Reporting the experiment were Dr. Svetozar D. Teodorovic of Mount Sinai

Hospital, New York, and Dr. James Ingalls and Leo Greenberg of the Brooklyn College of Pharmacy.

In other experiments the scientists gave guinea pigs adrenal cortical hormones before and for several days after infection with amoebiasis. A marked increase in the amount and intensity of inflammation, compared to untreated animals, was usually found.

Experimentally produced amoebiasis in guinea pigs resembles the human disease, which is a widespread and important health problem. The researchers chose it as a good experimental model for a study of the good or harm corticosteroids and tranquilizing drugs might produce in patients with an infectious disease.

• Science News Letter, 79:30 January 14, 1961

Female Homosexuality

► FEMALE HOMOSEXUALITY has no physical, organic, hormonal or neurological basis, Dr. Richard C. Robertiello, chief psychiatrist, Long Island Consultation Center, Forest Hills, N. Y., reported.

The causes are psychological rather than organic; and the only hope for cure is by psychoanalytic therapy, he said at the American Association for the Advancement of Science meeting in New York.

Many of the psychological factors that produce female homosexuality "may also be found in women who have other severe neurotic problems but are not homosexual," Dr. Robertiello emphasized. A homosexual seduction in childhood or adolescence may be the determining "factor as to whether a person becomes homosexual."

Based on his successful treatment of three Lesbians as well as from clinical observation and study, Dr. Robertiello said the family history of most of them revealed a good proportion, if not all, of certain situations.

Such situations include a sexually competitive mother, an overly restrictive mother, a cold ungiving mother, a brutal father, a seductive father, a cold ungiving father, an overly restrictive father, a poor relationship between parents, a seductive older brother, a sexually competitive older sister, and a sibling favored by the parents.

There are many women, however, with the same "psychodynamic pattern," who do not turn to homosexuality but to some other neurotic solution, such as masochism, sexual abstinence or alcoholism, he said.

The female homosexual or "Lesbian" tends to view the normal relationship between a man and a woman as one in which the man is exploiting and using the woman. She considers a man indifferent and, indeed, incapable of any tenderness or affection toward his female sexual partner.

Psychoanalytic therapy appears to offer the only hope for cure of Lesbianism; but this does not mean "all or even most Lesbians are treatable by psychoanalytic ther-

apy," he warned. For success in treatment, the patient "at least must have a basic dissatisfaction with herself."

• Science News Letter, 79:30 January 14, 1961

Isolated Bluebirds Silent

► YOUNG BLUEBIRDS reared in isolation from adult songsters will never be able to sing, James M. Hartshorne, ornithologist from Cornell University, Ithaca, N. Y., has reported.

"Before it is a little more than a year old, a young bluebird must hear the song of an experienced adult or it will never be able to sing the typical song of its species," he told the American Association for the Advancement of Science meeting in New York.

Birds kept in isolation from the egg and nestling stage were able to sound the normal bluebird call notes of alarm, distress, aggressiveness and special location sounds, but their songs never developed beyond soft random warblings known as subsong.

Birds reared in isolation from fledglings (juveniles out of the nest up to two months of age) were able to utter the common call notes and the typical or primary song as well. This indicates a young bluebird can produce its full vocal repertoire if it has contact with experienced birds of its own species during the first two months of its life," Mr. Hartshorne said.

If the isolated birds were exposed to adult vocalizations at any time prior to 15 months of age, they could produce their species typical song. In fact, the young birds, when first hearing their species song, became wild with excitement and soon tried to repeat it. After 15 months of isolation, however, no matter how much the birds were exposed to the song, they were incapable of producing it.

In their quiet world of isolation, the bluebirds raised a family of young. Mr. Hartshorne said, however, that it was unlikely such birds could meet with success in the wild, because lack of song would be too great a handicap.

• Science News Letter, 79:31 January 14, 1961

INVENTION

Jet Pilot Training Aid Simulates Compass

► A NAVIGATIONAL AID that trains jet-age pilots without their leaving the ground can even accurately simulate the errors occurring in instruments under actual flight conditions.

Edward G. Schwarm of Binghamton, N. Y., has invented a device simulating the operation of a magnetic compass that gives the direction an airplane is traveling. The invention actually gives the "accurate" compass error that always results when a plane changes direction or its speed.

The proper correction of compass error, caused by the limitations of the compass systems, is an important phase of the precise navigation required in present-day jet travel, according to the inventor. Mr. Schwarm's device was awarded patent No. 2,965,976, which he assigned to General Precision, Inc.

A vehicle that can travel over rough land, swamps and lakes has been granted a patent by the U. S. Patent Office. The vehicle is essentially an engine mounted on a platform balanced on four oversized, air-filled rollers. It can maintain an essentially horizontal position even when driven on the side of a hill.

In addition to the driving mechanism for moving the rollers, an additional shaft is provided in the differential for attaching a propeller to navigate over bodies of water.

The vehicle is reported to be very compact so that it may be shipped with ease and speed. Vernon E. Gleasman of Cleveland Heights, Ohio, won patent No. 2,966,223 for this invention, which he assigned to The White Motor Company of Cleveland.

Persons with a broken leg can now move around more easily while the bone is mending, thanks to Arthur L. Purcell, Baldwin Park, Calif. Mr. Purcell has invented an adjustable walking iron, a device that is applied to a cast of the fractured leg to permit substantial use of the injured member during the healing period.

The walking iron, which received patent No. 2,966,154, consists of adjustable metal plates attached to an iron block. The metal plates can be easily secured to the cast by interlocking them with plaster of Paris.

A method and apparatus for electrical prospecting won patent No. 2,966,627 for James E. Hawkins of Broken Arrow, Okla., who assigned his rights to the Seismograph Service Corporation, Tulsa. Radio signals sent out from one or more transmitting points are received at other movable points, the relationship between the received signals indicating various geological formations through which the radio waves have passed.

• Science News Letter, 79:31 January 14, 1961

ROCKETS AND MISSILES

Centaur Booster Stage Has Added Fuel Capacity

See Front Cover

► THE BOOSTER STAGE of the National Aeronautics and Space Agency's Centaur launch vehicle is being assembled at Convair Astronautics Division of General Dynamics Corporation, San Diego, Calif. The booster airframe, seen on the cover of this week's SCIENCE NEWS LETTER just beyond the missile in the foreground, is not tapered in the forward end. This gives the booster added fuel capacity.

• Science News Letter, 79:31 January 14, 1961

Questions

ASTRONOMY—What information do scientists hope to get from photographs taken at an altitude of 80,000 feet? p. 24.

EDUCATION—How many percent of students questioned knew the name of the U. S. Secretary of Defense? p. 20.

SOCIOLOGY—How is I.Q. measured? p. 19.
Photographs: Cover, Convair Division of General Dynamics Corporation; pp. 19 and 23, General Electric Company; p. 21, California Institute of Technology; p. 26, Walter C. Lowdermilk; p. 32, Minnesota Manufacturing and Mining Co.



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