MEDICINE

Avoiding Heat Stroke

Summer health hints may sound out of season now, but if overweight is your problem, start reducing now in order to be less subject to heat stroke.

A NEW kind of milk, when to use and when not to use penicillin, prevention of strep. infections and influenza in the Navy, and some health hints for next summer's heat waves were discussed at the meeting in Washington of the Association of Military Surgeons of the United States.

The summer health hints are not as far out of season as you might think. For example, if you are overweight, you may need to start reducing now, so that by next summer you will have the slim body that is less subject to heat stroke.

Of 20 cases of heat injury in nine Army camps last summer, seven were overweight according to Army standards for officers, and the trainee who died of heat stroke was 59 pounds overweight, Maj. Edgar L. Cook of the Army Chemical Center, Md., reported.

The new milk is a three-to-one concentrate of whole milk developed to solve the Army's problem of furnishing high quality fresh milk to installations remote from adequate milk supplies. In a full-scale field study, this milk was shipped from Wisconsin to Texas, reconstituted at a pasteurization plant in the El Paso vicinity and served at nearby Fort Bliss.

Consumers there could not tell the difference between the dairy reconstituted milk and whole pasteurized milk, Lt. Col. Robert G. McCall of the Army Environmental Health Laboratory, Army Chemical Center, Md., reported.

Penicillin should not be given to uncon-

scious patients or others unable to give an adequate history, Dr. Monroe J. Romansky of George Washington University Hospital, Washington, warned the military medical men.

This is to avoid the danger of reactions in patients who may be sensitive to the famous mold drug. Persons who are sensitive to it should know this and carry identification with this information, Dr. Romansky said.

Erythromycin, one of the newer antibiotics, is just as good as penicillin with the added advantage of being effective against germs which are resistant to penicillin. It has no side reactions, and Dr. Romansky's report suggested that it might be used instead of penicillin in many cases.

Influenza vaccines of the proper composition will reduce the number of cases of influenza in Naval Training Stations and epidemic strep. infections in the same installations can be controlled "to a very great degree by the intelligent use" of penicillin pills, Comdr. John R. Seal of the Navy's Bureau of Medicine and Surgery reported from six years of observation at the Naval Training Center at Great Lakes, Ill.

The streptococcus control, however, is handicapped by the fact that recruits often try to avoid taking the pills and the line petty officers in charge of the prophylaxis program are not sufficiently willing to take responsibility for seeing that the men take their pills every day for long periods.

Science News Letter, December 25, 1954

PLANT PATHOLOGY

Disease Plaguing Holly

➤ GROWERS OF English holly in the Pacific Northwest received an unexpected scientific Christmas present with the identification of a leaf and twig disease that has been plaguing their commercial plantings.

Ivan Buddenhagen and Roy Young, plant pathologists at Oregon State College, played Santa Claus when they discovered that the disease that has denuded as much as 80% of the coastal orchards is a fungus of the *Phytophthora* group. It is hoped that the identification of the disease will speed the finding of a control measure.

The disease results in black leaf-spotting, the Oregon scientists report in *Oregon's Agricultural Progress* (Fall), beginning in the lower part of the tree in late fall and spreading upward in the winter. The twigs are soon infected and killed, Young holly

plants are also attacked and the funguscaused leaf drop may kill them. The disease is spread chiefly by spores carried by splashing rain drops.

Conservationists have long asked the American public to buy only the English holly at Christmastime, because the American native holly is in danger of being hunted almost out of existence.

The pathologists are currently experimenting with fungicides to try and control the new disease, but as stop-gap measures, they recommend that new trees be planted on moderately open sites, where the wind will circulate; that the trees be spaced and pruned to permit good air movement; that a fungicide be applied as a precaution when fall's cool, rainy weather starts, and that diseased leaves not be shipped.

Science News Letter, December 25, 1954

• RADIO

Saturday, Jan. 1, 1955, 5:00-5:15 p.m., EST

"Adventures in Science" with Watson Davis, director of Science Service, over the CBS Radio Network. Check your local CBS station.

ENGINEERING

Endurance Machine Tests Railroad Ball Bearings

➤ RAILROAD ENGINEERS can now find out in a few days what will happen to their newly designed ball bearings, axles and lubricants after years of all-weather service.

A machine being installed in the Research Center of the Association of American Railroads, Chicago, can produce the combined long-term effects of load, speed, lubricants and temperature on wheel actions.

Science News Letter, December 25, 1954

MEDICINE

Urge Legal Reforms To Aid Epileptics

➤ STATE LAWS governing motor vehicle licenses, workmen's compensation, marriage and eugenic sterilization should be brought up-to-date in their application to victims of epilepsy, a committee of the American League Against Epilepsy has urged in New York.

The committee, under the chairmanship of Dr. Howard D. Fabing of Cincinnati, had as its legal adviser Dr. Roscoe L. Barrow, dean of the college of law of the University of Cincinnati.

Some of the outmoded laws, the committee pointed out, "prohibit the marriage of epileptics, require their sterilization, limit their employment opportunities and their right to operate motor vehicles.

"These laws are in part responsible for the profound economic deprivation and moral despair of one out of a hundred American citizens.

"Proposals for the revision of these laws are being made on the basis of a two-year study conducted by Dr. Barrow and medical authorities in the field of epilepsy. These laws were promulgated originally to protect society.

"On the basis of modern medical knowledge, however, these laws have been found to run counter to that purpose. Medicine can now partially or completely control 80% of all seizures; we now know that heredity plays little or no role in the development of epilepsy; and we know that epilepsy is unrelated to mental deficiency. The time has now come to bring state laws into harmony with modern medical knowledge and advances."

The committee presented a "blue-print" for new laws affecting epilepsy to be used in a proposed nation-wide campaign.

Science News Letter, December 25, 1954

There are more than 80,000 species of