

MEDICINE

Less Tan With Skin Cancer

► SKIN CANCER patients do not tan as well as persons without skin cancer, Drs. Mark Allen Everett and James A. Hagans, with Robert Bell, all of the University of Oklahoma Medical Center, Oklahoma City, have found.

Skin cancer patients have a "significantly reduced ability to produce pigment in response to ultraviolet exposure," their study showed.

Thirteen pairs of fair-skinned white men, aged 52 to 72, with and without skin cancer were selected from a group of patients at the University of Oklahoma Medical Center. A uniform measured quantity of ultraviolet light was given an area of previously unexposed skin of each patient (45 seconds at 20 inches from a hot quartz mercury vapor lamp).

An initial measurement with the photoelectric reflection meter was taken, and seven days later the measurement was taken with the photoelectric reflection meter equipped with a red filter. The red filter was selected as that most accurate in measuring color due to melanin, or dark pigment.

Measurements were taken of three areas on each patient: the ultraviolet exposed site, an unexposed site and the lateral neck above the collar line, which approximates the greatest exposure to sunlight in men.

The scientists report their findings of decreased pigment in exposed skin and reduced ability of the unexposed skin to tan reflect some "more profound physiochemical alteration" than can be attributed to basic skin type.

They add it may be possible to separate cancer-prone persons from others in studying the response of the unexposed skin to ultraviolet light. Further research to determine if the basic differences in the two groups existed before the development of cancer should be conducted, they suggest in the American Medical Association's Archives of Dermatology, 82:908, 1960.

Previous evidence that ultraviolet rays in sunlight are the chief cancer-causing factor in skin cancer and aging of the skin is supported by a report (p. 865) by Dr. J. B. Howell of Dallas. He cites studies showing that Texans have the highest incidence of skin cancer of any state population.

• Science News Letter, 79:6 January 7, 1961

PUBLIC HEALTH

Hide Signs of Drinking

► EARLY OR MIDDLE-STAGE alcoholism is usually masked by problem drinkers who put forth extra efforts to keep up work performance on their bad days, a study of more than 400 male alcoholics showed.

Supervisors have difficulty recognizing signs that are evident off the job, and tend to see the developing alcoholic as a "good worker who drinks too much now and then."

To aid in early identification of problem drinkers, Dr. Milton A. Maxwell, Alcoholism Foundation of Alberta, Edmonton, Alberta, Canada, compiled a list of 44 signs of drinking on the job. He then sent a four-page questionnaire covering the frequency of the 44 signs to more than 400 male alcoholics, mostly in New England and New York. Dr. Maxwell was formerly a senior research fellow at the Center of Alcoholic Studies, Yale University.

Fifty percent of the men had been able to keep any sign of their problem from showing up on the job for a year or more, 30% for three years or more and the rest for five or more years.

Of the 44 drinking signs on the job, hangovers were first, with 84% admitting serious or moderate degrees and 12% admitting mild or rare degrees of occurrence. Only four percent of the 400 who responded to this question said they never had hangovers on the job.

Other signs common to more than 50% included nervousness, irritability, putting

things off, red or bleary eyes, more spasmodic work pace, sensitive to opinions about his drinking, hand tremors, avoiding boss or associates, drinking at lunch time, morning drinking before going to work, flushed face, lower quantity and quality of work, using "breath purifiers," making mistakes or errors of judgment, mood change after lunch or other drinking, and more unusual excuses for absences.

Absenteeism of over a half or a whole day was 24th on the list, with only 52% of the 392 who responded to this question admitting serious or moderate occurrence. Twenty-two percent said absenteeism was rare, and 13% said they never were absent from work. Dr. Maxwell's study is reported in the Quarterly Journal of Studies on Alcohol, 21:655, 1960.

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GENERAL SCIENCE

Subscribers Invited to Send Old Copies to Asia

► COPIES OF SCIENCE NEWS LETTER when ready to be discarded are being sent by some subscribers to Asia addresses that may be secured by writing to Magazines, Box 3196, Los Angeles 28, Calif.

Mr. and Mrs. Henry Mayers began, as the result of a trip to Asia, this effort to aid Americans share their magazines with Asians who request such cooperation

through U. S. Information Service and other Government channels. More requests come for science than for sport magazines. Copies of SNL can be sent to Asia for less than 10 cents sea post.

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INVENTION

Radar Traffic Control and Fuel Device Patented

► THE TYPICAL American scene of an irritated auto driver, waiting impatiently for the red light at an intersection to change although no others cars are in sight, may soon disappear.

A new radar detecting device should solve this and many other problems found at traffic intersections. The device for controlling traffic, which received patent No. 2,965,893, in Washington, D. C., sends out very high frequency radio waves that bounce off cars approaching an intersection. The number of pulses sent back to the radar detecting device indicates the number of passing cars. John L. Barker of Norwalk, Conn., who assigned the patent rights to Eastern Industries, Inc., said that the device can be adjusted to handle the different flow of traffic throughout the day.

For those millions of Americans who have trouble starting and warming up their car engines on cold winter mornings Donald A. Munyan of Royal Oak, Mich., has developed a fuel device that regulates the amount of gasoline fed to the engine when it is first started. This invention was awarded patent No. 2,965,091 by the U. S. Patent Office.

The quantity of fuel metered out by this system depends upon the temperature of the engine. After the engine is turned over on a cold morning, movable cams in Mr. Munyan's invention change position, supplying varying amounts of gas to the engine as it warms up. The patent was assigned to Holley Carburetor Co.

A compact, portable, remote X-ray camera that can be used safely in industry has won patent No. 2,965,761 for Lorand Meray Horvath, Oakville, Ontario, Canada, who assigned the rights to Canadian Curtis-Wright, Limited. The camera, which uses a powerful source of radiation, is triggered by remote control, and is not limited to experimental or laboratory investigations.

Fishermen who enjoy fishing at night can now do so without leaving their warm campfire or cabin on a cold night. Frank Berghoff and Elmer H. Ricks, both of Lafayette, Ind., have invented a signal device that lights up a bulb when a fish strikes, warning the fisherman some distance away. The device, patent No. 2,964,869, can be attached to the fishing rod.

A selective bird feeder, patent No. 2,965,070, that feeds such friendly birds as sparrows and wrens yet keeps such birds as the crow from the food has been invented by George Myrick of Baltimore, Md.

The feeder has a perch, balanced by counterweights, that permits only lightweight birds to feed. A crow alighting on one of these platforms moves the perch downward, closing the entrance to the food.

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