

## PHYSIOLOGY

# Wine Warms Skin of Toes; Coffee Makes It Colder

**Y**OUR big toe is likely to be the coldest or the hottest spot on the surface of your body, with a temperature range of more than 50 degrees Fahrenheit. A drink of wine warms it, a drink of coffee makes the skin of the toe colder. So does smoking.

It may sound like a scientific stunt to measure the temperature of the skin of the big toe or other body surfaces, but the findings are of broad interest to physicians. They were obtained in studies made by Dr. William Bierman at Mount Sinai and Beth Israel Hospitals, New York City. The American Medical Association granted financial aid, and publishes Dr. Bierman's findings. (*Journal, American Medical Association*, April 4.)

Knowledge of skin temperature changes gained from these studies will help the physician to evaluate the effect of medicines, of hot and cold baths, of short wave currents (fever treatment) and of other physical measures used in treating disease.

Among Dr. Bierman's findings are the following:

Nose, ears, fingers and toes are usually colder than the rest of the body, protruding and curved parts being colder at the skin surface than is the torso.

The temperature of the skin is higher over muscles than over bone, over an active organ than over one at rest.

Fat persons have cooler skins than thin ones.

The probable purpose of these marked variations in skin surface temperatures is to keep the temperature of the interior of the body fairly constant. There is a continual balancing of heat production and heat loss.

Some parts of the surface of the body can tolerate heat much better than others, as is well known. The skin of the forehead, of the feet and of the hands can stand more heat than other parts of the skin surface of the body and at the same time actually keep cooler.

Scientific explanation of this possibly lies in increased sweating of these parts, communication between veins and arteries and the greater number of thermal nerve endings.

A drink of wine causes a warming of the toe surface, it was found. A drink of whiskey causes a faster temperature rise. Coffee makes the skin of the toe colder. With the caffeine removed, it produces no change. Smoking also lowers the skin temperature.

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beer or sandwiches with cocktails. When questioned about cirrhosis of the liver, a serious condition quite different from fatty livers, Dr. Bollman said he knew of no evidence that alcohol caused the condition.

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## EDUCATION

## Harvard is Celebrating Its Tercentenary This Year

**I**N 1636 the general court of the Massachusetts Colony voted 400 pounds toward "a schoale or colledge." First named "Newetowne," the name was changed to Harvard in 1639.

From August 31 to September 12 this year Harvard will celebrate its tercentenary. In honor of Harvard's founding, 75 of the world's leading scientists and scholars will gather at Cambridge in a conference seldom equaled in America in respect to distinguished speakers and the breadth of subjects. Fourteen Nobel Prize winners will be among the persons making addresses, including:

Albert Einstein, physics, United States; Niels Bohr, physics, Denmark; Hans Fischer, chemistry, Germany; Arthur H. Compton, physics, United States; Sir Frederick G. Hopkins, physiology and medicine, England; Robert A. Millikan, physics, United States; Friedrich Bergius, chemistry, Germany; August Krogh, physiology and medicine, Denmark; Thé Svedberg, chemistry, Sweden; Otto Warburg, physiology and medicine, Germany; Karl Landsteiner, physiology and medicine, United States; Hans Spemann, physiology and medicine, Germany; Edgar D. Adrian, physiology and medicine, England; and Werner Heisenberg, physics, Germany.

In the sciences, symposia will be held upon latest researches in mathematics, astronomy, physics, chemistry, geology and biology. But in addition symposia will be held on broad problems which defy a narrowly specialized approach. Thus the symposium, "Factors Determining Human Behavior," will enlist the biological sciences, the social sciences and the humanities.

The remaining symposia, on "Authority and the Individual" and on "Independence, Convergence and Borrowing in Institutions, Thought and Art," will likewise draw from the social sciences and humanities contributions which each discipline can make to two timely and important problems.

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# Alcohol Harmless to Liver But Excess Increases Its Fat

**T**HE IDEA that alcoholic drinks have a harmful effect on the liver was somewhat "debunked" by Dr. J. L. Bollman of the Mayo Clinic.

With Dr. F. C. Mann, president this year of the American Physiological Society, Dr. Bollman reported studies at the society's meeting showing that alcohol increases the fat content of the liver.

The amount of alcohol which produced this effect in the dogs they studied, however, would be equivalent to a ration of one quart of alcohol a day for a man, Dr. Bollman explained. Fur-

thermore, a fatty liver is ordinarily not harmful, although a large fat content in the liver does make it harder for that organ to cope with what Dr. Bollman termed "further insult" in the shape of certain drugs, or surgical operations.

In previous studies he and Dr. Mann found that the fat content of the liver can be reduced by feeding a diet high in starch and sugar content. This is important in preparing a patient with a fatty liver for surgical operation. It also seems to put a physiological okay on the custom of eating pretzels with