

## PHYSIOLOGY

# Yogic Breathing Exercises Change Body Processes Little

**B**REATHING in special rhythms, as practised by the Yoga cult of India as a preliminary to thought concentration, has relatively little effect on the bodily processes, Drs. Walter R. Miles and K. T. Behanan of Yale University told members of the National Academy of Sciences at their annual meeting here today.

In the Yogic breathing exercises, several "patterns" are followed. In some, the breathing is relatively light and rapid; in others, very deep, and as slow as only once a minute. Some of the exercises change from one pattern to another.

Dr. Behanan, who is a young Hindu, followed a Yogic regimen for two years, while physiological measurements were made on his bodily processes. It was

found that during the breathing exercises, lasting from ten to thirty minutes, the metabolism or physiological life-speed was increased considerably. The effect, however, was transitory.

"In the case of Bastrika pattern where shallow and deep breathing are alternated within each minute, the after effect is more definitely prolonged and is in the direction of a reduced metabolism," the two investigators reported. "No reliable difference in oxygen consumption is found between experiments on mental concentration and normal quiet periods. The study suggests that artificial breathing patterns, if they influence mental concentration, do so probably more in psychological than in physiological terms."

*Science News Letter, April 27, 1935*

the body can burn alcohol only at a fixed rate and that exercise, exposure to cold and similar conditions will not speed up the burning of alcohol by the body. The discovery of the Indiana investigators is the first example of any procedure which will speed up the handling of alcohol by the body. They also investigated the effects of other drugs on the body's handling of alcohol. Insulin, employed in diabetes, and thyroxin, which is effective in reducing fat people, have no effect on the rate of burning of alcohol. Another drug, dinitrocresol, was also found to be effective in speeding up the sobering-up process in dogs.

A recent report from Sweden, Prof. Harger pointed out, indicates that Dr. E. M. P. Widmark of the University of Lund has independently discovered the sobering-up action of dinitrophenol.

*Science News Letter, April 27, 1935*

## METEOROLOGY

## Rains in Southwest Give Hope for Future

**E**ASTER gifts of rain, last week-end, laying dust and easing drought conditions in the Texas panhandle and across Oklahoma, are hopefully regarded by crop-weather watchers of the U. S. Weather Bureau at Washington, D. C. as possible foretastes of like favors yet to come. The season's rainfall, even in normal years, does not begin in the southern and central Plains area until late April or May. Drought is an expected, normal late-winter condition in that region; it is only because drought this winter has followed three abnormally dry summers that dust storms arose this spring.

The rain-bringing storm welcomed by New Mexico, Texas and Oklahoma, on Good Friday and Holy Saturday brought its moisture from the Gulf of Mexico. Practically all summer rains in the West originate in this way, Weather Bureau meteorologists explained. The first one that comes may not penetrate very far over the land before it empties itself of water. The next one may carry its drive farther, until finally the southwestern "lows" the making their effects felt well out into the Prairies. For this reason, Weather Bureau scientists are hopeful that the next invading "low" may get far enough inland to water the desolate drought area in western Kansas and eastern Colorado, which last week's rain did not reach.

*Science News Letter, April 27, 1935*

## MEDICINE

# Find Drug That Sobers Up Dogs in Half the Usual Time

**A** DRUG that will sober-up intoxicated dogs in less than half the time it took their fellow drunks to recover from an alcohol jag was reported by Prof. R. N. Harger and H. R. Hulpieu of the University of Indiana School of Medicine at the meeting of the American Society for Pharmacology and Experimental Therapeutics.

The drug is a yellow powder known to chemists as dinitrophenol. It has recently been used to cause fat people to lose weight. Because it is very dangerous when used without a physician's supervision, the Indiana scientists particularly warn the public not to use it as a home remedy after a spree.

"Severe poisonings and several deaths have resulted from its rather widespread use by overweight people," Prof. Harger said.

"We wish to emphasize that our experiments were done only with dogs and that the presentation at this time is solely for its scientific interest. Until further carefully supervised work is done this

drug should not be used in treating intoxication in human beings.

"Otherwise, when 'hubby' returns home 'soused' at four a. m. and takes a capsule of this drug in order to be sober when he goes to the office at nine, he might accomplish the desired result, but again he might go to the undertaker instead."

So dangerous do Prof. Harger and his associates consider this drug that they have hesitated to publish their discovery of its sobering-up effects for fear that some unscrupulous medicine manufacturer might exploit the drug as a treatment for drunkenness and thereby produce cases of serious poisoning or even death.

Their experiments showed that the drug enabled the dogs to burn the alcohol they had been given much more rapidly than the usual rate. While the drug produced some fever in the dogs, which caused them to breathe more rapidly, very little of the loss of alcohol was by way of the lungs.

Other investigators have shown that