

PUBLIC HEALTH

# New Method of Using Height And Weight Appraises Health

## Efforts To Improve Health of American Youth, Spurred By Defense Program, Facilitated By New Technique

**T**HE PHYSICAL fitness of boys and girls between two and 20 years of age can now be reliably and quickly appraised by a new method of using height and weight figures. The method, which fills a need felt for over a century by physicians, school and child health authorities and military authorities, was developed by Dr. Norman C. Wetzel, of Western Reserve University School of Medicine. (*Journal, American Medical Association*, March 22.)

Efforts to improve the health of American youth, quickened by the spur of national defense preparations, can go forward with increased speed by the use of this method. With more than 40,000,000 boys and girls under 20 years of age in this country, health improvement programs are delayed at the very start by the vast number of examinations that must be made to find all the boys and girls needing better diet or medical care. Dr. Wetzel's grid method for using height and weight measure-

ments alone enables the medical examiner to tell at a glance, the editor of the journal points out, whether a child "is safely situated in a channel where its nutrition cannot be seriously questioned or whether it belongs to the abnormal groups."

Tests on several thousand Cleveland school children show the method to be 94% reliable in picking out the children whom experienced examiners call "poorly nourished" or "borderline."

The method shows any tendencies toward abnormal growth or development at an early stage, when the abnormalities can be most readily corrected. It has the advantage, also, of giving information in an objective way, making it most suitable for large surveys of the physical status of millions of children. Such surveys have heretofore been unsatisfactory because medical examiners have used different indices of physical fitness and there has been no general agreement on which was most reliable.

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tion, and euphoria. Like alcohol, or the other anesthetics, it perhaps will have contrary effects, as some people become combative, sullen, or boisterous and effusive. Its predictive value over several "shots" of alcohol is still in the experimental stage. It must be remembered that the gasoline is administered in a volatile state."

In the white rat experiments, Dr. Cornsweet found that after recovering consciousness the animals showed hearty appetites and absolutely no ill effects of their experience.

Like other anesthetics, gasoline vapors caused unconsciousness to proceed from tail to head—a caudo-cephalic sequence—with recovery in a directly opposite pattern, from head to tail.

But the difference in effects of gasoline from other types of vapor lay in the fact that the animals also lost and recovered consciousness "uni-laterally"—one complete side losing and recovering consciousness before the other.

In human beings, Dr. Cornsweet stated, recovery and induction is exactly the reverse of animals.

Superiority of unleaded gasoline was also exhibited in the complete lack of nausea as an after-effect. All other anesthetics did produce nausea, as exhibited in a lack of appetite, "grogginess," and other general symptoms of "hangover."

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METALLURGY

## "Impurities" in Copper Make Roofs Wear Longer

**T**HE purest copper, made by modern electrolytic processes does not wear as long when used for roofing purposes as the old-fashioned fire-refined copper produced for centuries. Reason is that certain of the "impurities" were actually beneficial in reducing wear. Consequently, one large copper manufacturer is deliberately introducing these elements, to give a copper roofing which should stand up as well as the old material did. (*Revere Copper and Brass, Inc., N. Y. C.*)

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PSYCHOLOGY—PHYSIOLOGY

# Studying Anesthetic Effects Of Gasoline Vapors

**T**HE HIGH SPIRITS and talkativeness induced by inhalations of alcoholic vapors are also elicited by inhaling the vapors of pure gasoline, Dr. A. C. Cornsweet, University of North Carolina psycho-physiologist, has found from experiments made on himself.

The opposite effects of sullenness and combativeness might also ensue from inhaling gasoline vapors, as alcohol has contrary effects on people.

Dr. Cornsweet's experiments were not done as a stunt. They are part of a long-time study he has been making of the effects of various anesthetics. This study brought him considerable notice two years ago when he used the vapors of

alcohol to anesthetize a group of experimental animals.

As an anesthetic for white rats, purified gasoline vapors, Dr. Cornsweet found, is superior to ether, chloroform and "laughing gas" in regard to time requirements for anesthetization and recovery. The gasoline vapors anesthetized the rats with a rapidity second only to cyclopropane.

Dr. Cornsweet's report of the controlled experiment on himself with gasoline is as follows:

"The inhalation of the gasoline vapors seem to follow and elicit similar symptoms to that of alcohol in its vaporous state, a hyperactivity, desire for conversa-

## ● RADIO ●

Dr. Irvin Stewart, secretary to the National Defense Research Committee, will discuss the part of the Committee in the defense program as guest scientist with Watson Davis, director of Science Service, on "Adventures in Science," over the coast to coast network of the Columbia Broadcasting System, Thursday, April 10, 3:45 p.m. EST, 2:45 CST, 1:45 MST, 12:45 PST. Listen in on your local station. Listen in each Thursday.