

# Ultraviolet Glass Useless in Schools

Medicine—Public Health

The following stories are from the joint meetings of the American Public Health Association, the American Child Health Association and the American Social Hygiene Association, at Chicago, October 15 to 19.

Schoolrooms and offices should spend their money on outdoor sun-parlors, rather than on the new windows that allow ultraviolet light to pass through, was the advice given by Dr. Walter H. Eddy of Columbia University at the meeting of the American Public Health Association. In homes and apartments these windows would be a great mothers' helper, saving the mothers from some of the hours spent walking up and down with babies and sitting in the park watching small children while they get their daily dose of sunshine.

Dr. Eddy experimented with rats that were fed a diet that would result in rickets, unless they got enough sunlight to counteract it. These rats were placed in cages in front of the new windows at various distances and angles and for the same length of time. Only those rats directly in the path of the sunlight failed to develop rickets. Those that were more than a few feet away or next to the window but outside of the path of the sun's rays, developed the disease.

Apparently the windows do permit the ultra-violet rays to pass into the room, but they do not go far enough or in sufficient intensity to take the place of outdoor sunshine. For office workers and school children, a few minutes' walk at noon will be more beneficial than all day spent in a room with ultraviolet light transmitting windows.

## *Eradication of Social Diseases*

The worst of the social diseases can be made to disappear practically in our lifetime by means of the methods now at our disposal, stated Dr. Thomas Parran, Assistant Surgeon General of the U. S. Public Health Service, at the meeting of the American Social Hygiene Association.

The control and eradication of this disease is a public health problem, like the control and eradication of yellow fever and smallpox. However, the nature of these social diseases requires different methods to wipe them out and the methods that we have are costly. Research is needed, and is now under way, to simplify these methods and reduce their cost.

In every community, no matter

how many cases of social diseases there are at any given time, there are always only a few active spreaders. If it were possible to quarantine these, as active cases of other communicable diseases are, the social disease situation could be quickly and radically improved. As it is, the most practical method is that of "prophylaxis by treatment" which proved its effectiveness during the war.

The death rate from these social diseases has not declined in the last ten years as have the rates for other diseases as a result of public health work. Estimates based on hospital and clinic records place the number in this country under treatment for social diseases as approximately 1,000,000 people. The cost of these diseases to state and individual is enormous and must be figured from loss of wages, cost of medical treatment and shortened life span.

## *Diet, Not Toothbrush*

Brushing your teeth after meals is not so important as eating the right food at your meals, as far as preventing tooth decay is concerned, Dr. William R. Davis, director of the Bureau of Mouth Hygiene of the Michigan Department of Health, said in discussing what to teach children about dental health.

"If we could have early attention to small defects and correct diet, I believe we could almost wipe tooth troubles off the map, even if another toothbrush was never manufactured," declared the dentist, overthrowing the favorite idea of health educators that you must brush your teeth several times daily.

The old adage, "A clean tooth never decays," has about as much or as little truth as the one about the daily apple keeping the doctor away. Only such cleanliness as the surgeon uses in performing an operation would prevent tooth decay, and it is not possible to achieve surgical cleanliness in the mouth, said Dr. Davis. Brushing the teeth is a good habit, like taking a bath and washing the face, but as a means of preventing decayed teeth it has practically no value.

## *Cleanliness in Dairies*

Cleanliness is the exception and not the rule in dairy establishments, Milton E. Parker said. Ordinary methods of cleaning leave a film of

oil and sometimes a rough deposit, known as milk-stone, on tanks, pipelines, pasteurizers and other equipment. This occurs even when the washing compound used has the power of killing germs.

However, killing germs is not enough, for if traces of milk are left on the equipment, there is a chance for more germs to breed and get into the next batch of milk. Failure to clean thoroughly is the fault of the washing compounds in general use. Mr. Parker reported the results of experiments made with several alkali compounds and recommended crystalline tri-sodium phosphate as the most satisfactory for really cleaning dairy equipment. However, this alkali should not be mixed with carbonate or bicarbonate.

## *Source of Undulant Fever*

Milk or milk products are probably the source of undulant fever, the new disease that is becoming more and more prevalent throughout the country, according to James G. McAlpine of the Storrs Agricultural Experiment Station and Friend Lee Mickle of the Connecticut Department of Health.

Cattle of all kinds may be infected with the germ of the disease. In countries around the Mediterranean the goats carry the germs, but in this country it has been traced to cows, where it appears as infectious abortion. When human beings drink milk from such infected cows, they may get the human form of the disease, undulant fever.

However, cows are infected with two kinds of the Bacterium abortus, the germ causing the disease. Probably only one of these two is capable of producing the disease in human beings, which is the reason why not every person drinking infected cow's milk gets it.

## *Must Follow Rules of Science*

If advertising would invoke the aid of science it must follow the rules that govern research in science, said Dr. E. V. McCollum of the Johns Hopkins University. Particularly in food advertising, the public is being misled by a wrong use of science. Dr. McCollum presented a plan for an advisory board to consider food advertising.

The board would be composed of eminent scientific men and would only act to advise pub- (Turn to next page)

## Public Health Meeting—Continued

lishers on strictly scientific matters. This board would decide on questions of accuracy, authenticity, propriety and applicability of scientific statements in food advertisements.

Advertisers themselves are feeling the need of such a board, for the idea was first suggested by John Benson, president of the American Association of Advertising Agencies. Dr. McCollum believes that publishers are also feeling perplexed over the developments in advertising of food products, which have become so extravagant in their claims.

The reason for the fierce competition prompting this wave of so-called scientific advertisements of food is that we are at present eating all we possibly can without harm, says Dr. McCollum. Advertisers, in order to sell more of any kind of food, must take advantage of present scientific knowledge of our nutritional needs. However, too many of them are being led to give the public half-truths in place of scientific facts.

### Girth More Important

The new tables for determining normal weights in children will pay

more attention to hip line than to height, according to a report given by Dr. Raymond H. Franzen. A child's body may be likened to a cylinder, said Dr. Franzen. The short cylinder and the tall one may weigh the same, if the short one is big around and the tall one slender.

The size and weight of the bones are most important in determining the weight of the whole body. A child can be heavy without being fat and fat without being heavy, Dr. Franzen pointed out.

Dr. Franzen studied measurements of 8,000 fifth and sixth grade children in 70 cities scattered all over the country, from New Orleans to St. Paul and from Spokane to Providence. From these studies he determined the relative importance of different measurements in determining body weight. For 11 year old boys Dr. Franzen places width of hips at 30 per cent., depth of chest at 25 per cent., breadth of chest 20 per cent., height 20 per cent., and width of shoulders 5 per cent. in their influence in determining weight. The figures are somewhat different for

girls, the chest dimensions being more important and height still less so.

### Need Better Tests

One of the big needs in health education at present is better tests for health, Dr. James F. Rogers of the U. S. Bureau of Education told the assembly. Our present tests are all too coarse and our attempts at measuring health result in too great standardization.

Our models are discouraging to the average child and his parents. "We are sometimes too dreadfully scientific and not sufficiently human. We are not dealing with a paragon, and it is our business to make the most of the child as we have him," said Dr. Rogers.

Since there is no satisfactory way of measuring health, it is hard to tell what the results of school health work are. To overcome this difficulty Dr. Rogers advises every school to keep a control group for comparison with the group that is having instruction and other measures for promoting health. This is the system used in every well managed laboratory and Dr. Rogers thinks it should be followed in the schools to prevent health work becoming too dogmatic.

*Science News-Letter, October 20, 1928*



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