

MEDICINE

Lack of Proper Food May be Cause of Nearsightedness

Study of Years Following World War Shows That Defect Prevails When General Health Conditions Are Poor

EVIDENCE that nutrition has a bearing on nearsightedness has been found by Dr. T. H. Butler, medical officer of the Coventry Eye Clinic, London.

Most people have the impression that shortsight, nearsightedness, or myopia, as it is variously called, is due to excessive or incorrect use of the eyes. From experience at the clinic, Dr. Butler publishes his conviction that the number of nearsighted children is increasing, and his belief that the use or abuse of the eyes has nothing to do with it.

"I believe that the true cause is a hereditary weakness in the scleral coat of the eye, which is aggravated by malnutrition and toxic influences of all kinds," said Dr. Butler. "Not only do I frequently obtain actual evidence of hereditary shortsight, but the final degree can often be foretold by a study of the myopia of the relatives. If, for example, a mother has seven dioptries of

myopia, her shortsighted child will probably reach approximately this figure."

Records taken at the Coventry Eye Clinic show that among elementary school children the occurrence of simple myopia remained stationary at about 9 per cent. from 1920 to 1924, when it began to rise, to reach to about 15 per cent. The curve of total myopia, that is, plus cases of myopia astigmatism, fell from 38 per cent. in 1920 to 22 per cent. in 1925. In 1926 the curve rose rapidly to 38 per cent., where it remained until 1928. There was a slight drop to 35 per cent. in 1929.

"There can be little doubt," says Dr. Butler, "that the variation of the curves

represents an alteration in general health conditions. The myopic curve is a nutrition curve. During the boom period after the War wages were high, and the nutrition of working-class children was good. The year 1926 began the period of increasing unemployment, with the inevitable result of diminishing comfort in the home and insufficient and unsuitable food for many children."

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ENGINEERING

Ship Uniformity Desired For Simplified Harbors

AN INTERNATIONAL understanding that ships shall not extend more than 35 feet into the water nor more than 160 feet above water is urged by Dr. C. E. Grunsky, San Francisco engineer and president of the American Engineering Council.

Ports could then plan their development for ships of a maximum size and bridges across harbors could have a maximum clearance under which all funnels and masts could pass.

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PSYCHOLOGY

Toy Hammer Tests Musical Talents of Young Children

A DEVICE designed to record the rhythmic responses of babies and thus determine their potential musical talents so that early intelligent control of musical environment can be started, has been developed by Prof. Harold M. Williams of the University of Iowa Child Welfare Research Station and Fellow of the National Research Council, who has carried to completion experiments started by others.

By means of his new instrument Prof. Williams can pick out in a few minutes the child who has particular musical talents.

The chief feature of the device is a "rhythm hammer" which appeals to

children as an interesting toy. The child to be tested is told to tap the hammer in time with the tick of a special, electrically-driven clock.

The rhythm kept by the clock can be adjusted and is regulated by lugs on the turntable of a phonograph on which is also recorded the tapping of the child.

If the child taps exactly when the clock ticks, a dot is registered on a line drawn through the center of the paper covering of the turntable. The nearer together the clock's tick and the child's hammer tap are, the closer will the dot appear to the line. If the child taps out of time with the clock, the dot will fall at some place away from the line. Children in an age range from three to eight years can be tested for rhythm by the Williams device. With three-year-olds, the tests were found to be 86 per cent accurate. With older children they were virtually 100 per cent correct.

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PLAYFULLY TESTING HERSELF

This little girl may be unconsciously testing her potential musical talents, so simple and so toy-like is the instrument she is playing with. It was devised by Prof. Harold M. Williams, of the University of Iowa, to record rhythmic responses of young children. The circles represent records made by two children. The one containing dots concentrated around two points indicates a fair sense of rhythm; the other was made by a child with a poor sense of rhythm.

