

PHYSICAL HYGIENE AND THE BICYCLE

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The right use of the muscles is a subject that has for years engaged the attention of hygienists, and one, too, that is perhaps better understood than almost any other branch of hygiene.

The Greeks well understood the importance of muscular training, and in their athletic sport gymnastics was refined to a science. Under the pressing needs of our rapidly rising civilization, attention has been variously and studiously recalled to the subject of physical development as a means of counteracting the excessive and unequal excitements with which nearly all brain work is more or less associated. Baseball and boating clubs, yachting, gymnastics—light and heavy—all these methods of muscular exercise are now developed into sciences, and, when rightly studied and practised, may become invaluable means of training the body and preparing it to meet with less peril the toils of modern society. The modern system of training has not been without errors in regard to the relation of the quantity and quality of the food and drink to muscular strength.

Gross blunderings of creed and practise have been held, and the violence to which all these games and sports are pushed has wrought evil that has mingled with the good, and much disheartened the friends of enlightened physical culture. And yet, on the whole, the accepted views and customs of this matter of exercise are at present more nearly correct than in any other branch of hygiene. Extremes have gone down, wild excesses have been discontinued, the hideous and distastful have given way to the comely and agreeable, and in all directions there has been a tendency to sift, to prune, and to reduce to a finished whole the science of physical training.

Almost every form of physical exercise has its enthusiastic advocates who base their opinion of its superiority over other methods either upon the ground of healthfulness or pleasure. The young and vigorous, who "know not of their health," give little thought to the *method* of exercise so long as it meets the requirements of pleasure alone, and therefore the billiard-room and the bowling-alley possess attractions to a host of young men who imagine that they are fulfilling the various necessities of physical exercise by punching billiard-balls in a hot and close atmosphere surcharged with tobacco smoke or bowling in some underground alley-way.

All indoor athletics are, at the best, but a poor sort of makeshift for the attainment and preservation of health. The perfections of bodily and mental activity can be successfully wooed and kept only in the free open air and bright sunshine. Even the gymnasium, with its rational and thoroughly systematized methods and its corps of well-trained instructors, falls

far short of accomplishing the best possible good for the miserable dyspeptic with his lazy liver, or for that utter exhaustion of the nervous system which is such a frequent result of a busy life in our restless, rushing civilization.

Physical exercise, to be beneficial, must in no way be perfunctory. The daily walk to and from one's business is a relief and a benefit, no doubt, but how stale and unprofitable it becomes after a time! There are four things which few men learn early, and the majority never, and these are: How and what to eat and drink, and how and when to exercise the body.

Every sensible and observing physician, the longer he lives, must become more and more convinced that the cause and cure of the majority of the ailments that afflict humanity depend very much upon food and drink and habits of exercise. No saying is more trite than that men and women take too much medicine. They take many times too much, and too often the diseases and symptoms of disease for which relief is sought by this indiscriminate dosing are stimulated into increased activity.

The writer would by no means convey the impression that drugs are valueless, nor that there is not the widest range for their judicious administration. He simply protests against the impertinence of constantly interfering with the prerogatives of Nature. What sort of a teacher would he be considered who was always solving his pupils' mathematical problems or translating his Latin exercises? A vigorous intellectual growth is not stimulated in this way, no more than physiological functions are excited to a healthful activity by the artificial aid of pernicious poisons indiscriminately and persistently repeated. Our body is simply an incessantly active furnace, and the crucible through which its fuel must pass to be consumed is the liver. If the consumption is imperfect and incomplete very much the same thing takes place in this human furnace as in the furnace that heats our house. If the draught in the latter is insufficient, the combustion is imperfect, and the coal instead of being reduced to fine ashes, remains in the form of half-burned cinders, and materially interferes with the efficiency of the whole heating apparatus. In the human body the evil result of an imperfect combustion are far more widespread and complex than this.

Besides the obstructions to the portal or liver circulation, the imperfectly transformed products of digestion, circulating through every portion of the system, poison both brain and body. This it is that causes much of the irritability and unreasonable outbursts of temper among men.

Now, what the coal, and the draught which acts as the efficient factor in consuming it, are to the furnace, such are food and adequate muscular exercise to the body. What a simple statement and yet how true, and how few give it more than a passing thought! It is a fact so