

Interesting Experiments Started at West Point with the Fletcher-Chittenden Sy...

New York Times (1857-Current file); Jul 7, 1907; ProQuest Historical Newspapers The New York Times (1851 - 2005)

pg. SM4

Interesting Experiments Started at West Point with the Fletcher-Chittenden System.

THE practical value which is placed by those who have investigated the subject of the new methods of eating as advanced by Horace Fletcher, Dr. Van Someren, and others, and supported by the experiments of Prof. Chittenden, is strikingly illustrated by the interest and approval manifested in these new methods by army and navy authorities of the United States.

The old-time reliance placed on "strong man's food" has received staggering blows in literary circles. This was the diet that is summed up in the popular phrase, "three square meals a day." It is fully in accordance with the ideas almost universally held by scientists prior to the time when Sir Michael Foster, Prof. Folin, Prof. Pawlow, Prof. Chittenden, and other physiologists by scientific experiments based on the ideas advanced by Fletcher upset the old values placed on abundant meats and other hearty foods in the diet; the ideas that strength and endurance were based on eating things that in themselves had possessed strength and endurance, viz., the flesh of animals. In ancient times, and at even a late date among South Sea Island cannibals, warriors ate the hearts of their slain enemies in order to absorb into their own persons the valor they had overcome and the strength they had laid low. Crude was their reasoning, of course, and as forthright as the blows of their battle-axes or stone hatchets, yet it was in tune with views held by scientists later on that from meat came strength. Of course, this is so—to a certain extent. It is this certain extent that is one of the chief points of the problem. Those who hold by the old ideas say eat of meat as much as you can, eat heartily. Those who hold by the new ideas say eat of meat all that you can thoroughly masticate—for if you thoroughly masticate it, granting that it is demanded by your appetite and not eaten merely through habit, why you will naturally and almost without consciousness of the fact reduce the amount consumed to a very large degree.

In common practice, no class of men

holds more strongly to the idea that meat is the most valuable food for the building up of muscle and the increasing of physical endurance than athletes, and especially the professional trainers of athletes. Dr. William G. Anderson of Yale, himself a famous athlete and instructor of athletes, is the authority for this statement. Not that he holds to that idea, but it is one of the chief points of the opposition he encounters in attempting to bring the athletes at Yale around to his view of the matter.

"I feel positive that if the Yale athletes should adopt Fletcherism it would only be a question of time before Yale would be supreme in athletics, and would distance all her rivals," is the statement Dr. Anderson makes. "The mistake must not be made that I advocate abstention from meat, as has been assumed in many quarters. Nothing is further from the truth. I know of too many great athletes who are great meat eaters to hold any such view. The English college students, for example, are tremendous meat eaters, and the Englishmen are the best athletes. The Americans are the best medal winners, but in point of general athletic ability the English are ahead of us. But even they would be better off if they reduced their eating of meat. The healthy young human animal can stand a tremendous amount of work without breaking down or discovering very bad results immediately, yet since it is amply proved that much of the unnecessary work athletes put upon their bodies by over-eating can be done away with to advantage, the time must come when the athletes will have to open their eyes to the real situation. Their eyes may be opened by some body of athletes showing the way—and beating all the others."

Dr. Anderson hopes that Yale may supply this body of athletes. When the fall term at Yale opens he will begin a systematic effort through a series of lectures to the undergraduates to arouse their interest in the practical benefits he declares flow from the ideas of eating and drinking which he advocates, and which, when his son, a

In the Matter of Proteids the Diet Recently Adopted by Cadets at Military Academy Comes Near Desired Ideal.

Yale student, was practicing, certainly did not prevent even if they did not help his winning the collegiate and inter-collegiate gymnastic championships of America.

And so it may be that the way to athletic victories through the paths of the "new epicureanism," as Horace Fletcher prefers to term his method of eating—doing so because he insists that unless you take real, sensuous pleasure in your food, eat it with the gusto of an epicure of refined taste, it is worse than useless for you to adopt his system—may be shown by Yale to all other colleges if the New Haven athletes should follow Dr. Anderson's plan.

It is the hope of increasing the students' endurance, their general strength and mental as well as physical fitness, it may be supposed, that leads Dr. Anderson to this, as well as the hope of seeing his flock triumph in athletics.

Horace Fletcher has just concluded a series of tests of endurance at Yale under the observation of Prof. Chittenden and Dr. Anderson. Last week it was related how he had broken the record set by the strong men of the university and establish a new one for lifting of weights on Prof. Fisher's endurance-testing device double that of the old record; but an even more wonderful fact is that the tests—reports of which will soon be made by Prof. Chittenden and Dr. Anderson—prove through scientific demonstration that Mr. Fletcher has improved fully 100 per cent. in endurance since the date of his work at Yale four years ago, at the time when he astonished the scientists by his feats.

It was through arousing the interest of Gen. Leonard Wood and of Major Gen. O'Reilly of the Hospital Corps, both of whom Mr. Fletcher met on ship-board shortly after the officers mentioned had been working shoulder to shoulder with Dr. Reed at Havana in the attack upon the yellow fever plague that Mr. Fletcher made his conquests

in military circles. The first evidence of army interest in the subject was furnished by a detachment of soldiers being placed at the disposal of Prof. Chittenden for experiments at Yale, experiments which were triumphs for Fletcherism, and which the soldiers concerned afterward followed up in practical barrack life.

An idea of what the boys in blue now

eat may be gained through study of the regulation army diet which the soldiers at Yale followed in the first part of the experiments, and which were tabulated by Prof. Chittenden:

BREAKFAST.

Beefsteak, fried potatoes, onions, gravy, bread, coffee, sugar—and plenty of it, all the men wanted, in fact—and they wanted much, through habit, in the beginning.

DINNER.

Beef, boiled potatoes, onions, bread, coffee, sugar.

SUPPER.

Corned beef, potatoes, onions, bread, coffee, sugar, fruit jelly.

That was one day's bill of fare. Here is another:

BREAKFAST.

Bacon, fried cake, bread, sugar, coffee.

DINNER.

Roast beef, gravy, bread, sugar, coffee.

SUPPER.

Frankfurters, bread, milk, sugar, coffee.

So ran their menus, week in and week out. As they say in the vernacular, "When it wasn't one thing it was another"—of various meats, roast beef predominating, and meat being on the table three times a day.

By the end of the six months or so the experiments lasted, the soldiers were eating very little meat, their strength had increased, their endurance wonderfully so, and all through a trying winter at Yale, with rather monotonous ways of life—for United States soldiers—they were remarkably free from colds and other ailments. Tests indicated a slight increase of mental alertness, but were not carried far enough to furnish positive evidence of betterment in this direction.

In England and other European countries, where Horace Fletcher is known as widely as in America, and where his ideas are attracting certainly as much attention—and the attention here has grown wonderfully of late, since the publication of Prof. Chittenden's new book and the publication of the reports of Prof. Irving Fisher's notable experiments in endurance—Government au-

thorities are seriously considering the new dietary methods.

It is obvious what an advantage it would be in the administration of the most difficult, perhaps, of all military problems, that of the commissariat department, to have soldiers and sailors adopt the new ideas. There would be the saving of money, there would be the saving of weight carried by individual soldiers, and by the food wagons and transports; but, most important of all other things, say the upholders of these new ideas, would be the increase in the strength, endurance, and health of the men by the practice of rational habits of eating and drinking.

When Prof. Fisher had concluded his elaborate and exhaustive studies of endurance recently at Yale with nine healthy students who adopted (and have since kept up the practice of) thorough mastication, he says that the improvements the men made were "almost incredible."

"But statistics which I have been gathering for the past two years had prepared me to find great changes and differences in endurance," says Prof. Fisher. "The special result of the present experiment is to show that diet is an important factor in producing such alterations."

"The practical value of the experiment consists in the fact that any layman can apply it, with or without a knowledge of food values, though with more advantage if he possesses than if he lacks such knowledge."

"If the dietetic rules of the experiment are followed no self-denial as to foods is required. It is, however, absolutely necessary that there should be self-control enough to break up the habit of hurried eating to which modern civilization has brought us, habituating us, as it does, to eat against time."

The rules followed in this experiment, and which embody Prof. Fisher's own statement of the method formulated by Horace Fletcher, are as follows:

1. Mastication.—Thorough mastication of all food up to the point of involuntary swallowing, with the attention directed, however, not on the mechanical

act of chewing, but on the tasting and enjoyment of the food; liquid foods to be sipped and tasted, not drunk down like water. There should be no artificial holding of food in the mouth beyond the time of natural swallowing, even if, as is to be expected at the start, that swallowing is premature. It is not intended to "count the chews," or hold the food forcibly in the front of the mouth, or allow the tongue muscles to become fatigued by any unnatural effort or position, or in any other way to make eating a bore. On the contrary, every such effort distracts one from the natural enjoyment of food. Pawlow has shown that without such attention and enjoyment of the taste of food, the secretion of gastric juice is lessened. The point of involuntary swallowing is thus a variable point, gradually coming later and later as the practice of thorough mastication proceeds, until the result is reached that the food remains in the mouth without effort and becomes practically tasteless. Thus the food, so to speak, swallows itself, and the person eats without thought either of swallowing or of not swallowing it; swallowing is put into the same category of physiological functions as breathing, which ordinarily is involuntary.

2. Following Instinct.—Never to eat when not hungry, even if a meal (or more than one, for that matter) is skipped. And when a meal is taken, not to be guided by the quantity of food offered, or by past habit, or by any theories as to the amount of food needed. The natural taste or appetite is alone consulted, and the subject selects, from the food available, only those kinds and amounts which are actually craved by the appetite. After practice the appetite gradually becomes more definite and discriminating in its indications.

It remains to be seen whether the army authorities will emulate the Yale students and cut down their accustomed consumption of that which hitherto has been thought the bulwark of the military strength and the reservoir of its courage—rare roast beef, with other things on the side.