

THE JOURNAL

OF THE AMERICAN MEDICAL ASSOCIATION

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Subscription price . . . Fifteen dollars per annum in advance

Cable Address "Medic, Chicago"

THE OLYMPIC GAMES

GUEST EDITORIAL

Allan J. Ryan, M. D.

Sport is an old word in the English language, dating back to at least 1440. Originally meaning any pastime or diversion, it soon came to refer particularly to games carried on in the open air and to a series of athletic contests; a little later, to the endeavor to take or kill wild animals, game, or fish. Ancient philosophers and physicians were unanimous in condemning the profession of athletics as injurious to the mind and body. Nevertheless, throughout history, physicians have continued to interest themselves in the effects produced accidentally and deliberately on the body by individual and group exercises in all forms. The quadrennial recurrence of the modern series of Olympic Games, to be held this November in Melbourne, Australia, provides an appropriate opportunity to present a brief symposium indicating the scope and variety of this interest through the years and at the present time.

The opening essay reviews the development of the ancient and modern Olympic Games, indicating the parts played by physicians, directly and indirectly, and some of the contributions made by athletes from the United States. Giuseppe LaCava tells the story of the development of an international organization of physicians and others with related interests devoted to the study of interrelated problems of sport and medicine. This is followed by a condensation of a series of articles by Dr. Ludwig H. Joseph relating the history of medical interest in the therapeutic uses of gymnastic and other athletic exercises from the earliest times through the 18th century.

Modern scientific interest in the physiology of exercise, in the development and application of methods of testing and measurement, and in the specific relation of utilizing the observed results to improving athletic performance is epitomized in the study of the relation of physical fitness to athletic performance by T. K. Cureton. The application of these methods to the study of a specific problem, namely, whether a period of warming-up produces a better performance by the athlete, is exemplified by the report of Peter Karpo-

vich. Robert Kiphuth discusses, from the standpoint of the director of physical education and athletic coach, the importance of continuing regular exercise to maintain physical fitness. Van Itallie, Sinisterra, and Stare emphasize the importance of psychological as well as physiological aspects of diet in the training programs of athletes, bringing to bear in their discussion the most recent findings in the field of nutrition.

The interest of the physician in protecting the athlete from injury and minimizing the effects of the injuries that occur in sports is discussed by Augustus Thorndike. He points out that the careful and accurate accumulation of figures regarding sports injuries has yet to be achieved on a wide scale and, also, that the coach has a particular responsibility in the preparation of the player, since the well-trained and well-conditioned competitor is less apt to be injured. Henry Montoye and his associates resurvey the often debated question as to whether the college athlete lives as long as his more sedentary classmate. They find that, except for a slightly greater number of deaths due to violent causes in later life, he does. Finally, a compendium of the scope of activities of physicians themselves as sportsmen, and particularly as competitors in the Olympic Games, is presented.

Within the past year, President Eisenhower has called two meetings of sports leaders at the White House. The result has been a decision to appoint a Presidential Council on Youth Fitness at the Cabinet level and to create a Citizens' Advisory Committee to this council. Motivation for this action has come partly from the often repeated and widely misunderstood figures on rejections for military service since the reinstatement of the draft in the United States in 1940 and partly from the still controversial findings resulting from tests on school children, indicating a high rate of failure in the so-called Kraus-Weber tests for physical performance. Whatever its origin, this indication of official interest in the question of our physical fitness as a nation will be welcomed by all those physicians interested in the relation between sport and medicine. The appearance of two such organizations as the American College of Sports Medicine and the Western Council of Sports Medicine within the past few years gives further indication that we are on the threshold of an even greater interest in the scientific study and development of sport in the United States.

THE A. M. A. AND SPORTS INJURIES

Just a year ago this month, a 16-year-old boy of Fort Edward, N. Y., tried to block a kick for his high school football team. He died of a ruptured spleen. A week earlier, in a high school football game in South San Antonio, Texas, a 17-year-old boy collided with another player while jumping for a pass. He died of a hemorrhage of the brain stem.

By this time next week at least two more American boys may die from football injuries. That has been the average weekly death toll during the football season over the past quarter-century. While the game has

been made safer, at least 1,000 young men have died in all sports during that period. Football takes more casualties than all other athletic games combined.

What are doctors doing about it? Within two weeks, a new American Medical Association Committee on Sports Injuries will meet in Seattle to consider recommendations suggesting certain rule revisions that would give more protection to athletes. Meanwhile, the A. M. A. Bureau of Health Education is continuing over 45 years of work with educational authorities to help make school sports and physical education programs safe and wholesome. This is done in meetings with high school athletic groups and educational association officials, articles in *Today's Health*, and pamphlet reprints from that magazine.

As a result of such cooperative effort by doctors, educators, and coaches, some 20 state high school athletic associations now have medical advisory committees. Two months ago the Orange County Medical Association of Santa Ana, Calif., sponsored an Athletic Injury Clinic, which attracted 50 coaches from 15 high schools and junior colleges.

It is rare indeed to find a community that does not have a doctor serving on the school board, as the school physician, or as a team doctor. Over 25 U. S. physicians today once were college football stars. Thirteen of them coached before, during or after medical school. Among them are Drs. Edward N. Anderson, John W. Wilce, Clarence W. Spears, and Marvin A. Stevens. The Secretary of the new A. M. A. Committee on Sports Injuries, Dr. Harold P. Muller, also is one of these "medical All-Americans."

The first team doctor in recorded history, Claudius Galen, tended the gladiators of Marcus Aurelius in 200 A.D. Today at Harvard University there is a staff of six surgeons, six physiotherapists, a dietician, a radiologist, and numerous coaches and trainers serving the college sports program. Doctors at the aeronautical laboratory of Cornell University are working to improve equipment, so that football and other sports can be safer. Other physicians serve as design consultants to athletic-equipment manufacturers. Elsewhere, Dr. Charles Lombard and his associates have been conducting electronics and speed movie research on the efficiency of various types, sizes, and shapes of football helmets and helmet liners.

Throughout the nation, there is rising medical interest and action in athletic matters—particularly at the high school level. There, where sports participation is the greatest, more than half of all football deaths have occurred in the past 25 years (at least one in every state and in Hawaii and Canada). There the A. M. A. Bureau of Health Education is concentrating its efforts.

Together with educators and coaches, this bureau is pointing out the character-building advantages of football, and the danger of young boys playing too many games in one season; the teamwork value of the game, and the necessity for regular physical examinations of players and for a physician on the bench; and the body-building potential of football, and the body-destruction of ill-fitted uniforms and lack of preplay warm-up.

Football can be a killer and a maimer, but for the player it is also a wholesome and valuable experience that—like life itself—can be made safer. American medicine, having helped make life safer and longer, is facing the new challenge.

SOME MEDICAL ASPECTS OF FREEDOM

The physician who attends athletes professionally is but one of many people who make decisions as to what is likely to favor, and what is likely to impair, athletic performance in competition. The decisions have to be clean-cut, and when competition rises to the climaxes of national or international events the accompanying tensions become terrific, as in the famous tennis match between Budge and von Cramm at Wimbledon in 1937. Everybody, from the coaches and masseurs to the purveyors of food and equipment and the designers of clothing and shoes, becomes emotionally involved to a degree that is often dangerous.

That many decisions on questions of hygiene in the past have been made without an adequate basis in fact is only natural. But the extent to which mere habit, faddish notions, pseudo-science, and downright superstition have at times influenced such decisions is amazing. Sometimes the medical scientist is called upon to clear the air of some of these obfuscating elements; at other times he finds he has become involved in efforts to justify some peculiar idea by *ad hoc* research. In the athletic situation, when he sees the confusion continue in spite of his efforts, he can generally console himself with the thought that, after all, athletics is not real life but only a formalized rehearsal for it; that most sports like fishing and archery are but stylized survivals of antique methods of food-getting; that athletes are free men who can ignore recommendations that do not appeal to them; and that only individual careers are at stake. He can look indulgently upon the athlete who carries a rabbit's foot, and can forgive the agitated coach who makes his protégé munch a handful of high-protein tablets between trials in a weight-lifting match.

Evidence is accumulating, moreover, to show that a normal person can judge his needs pretty well by his own feelings and impulses. This evidence comes not only from laboratory experiments on self-selected diets, on the thirst mechanism, on the regulation of respiration, on postural adjustments to circulatory needs, and on innumerable other manifestations of the "wisdom of the body"; it comes also from psychiatric observations on the survival value of neuroses and psychoses and from everyday examples of outstanding success achieved by people who were essentially self-taught. Except for recent disconcerting experiences with such things as tasteless poisons and unperceived ionizing radiations, it appears that instinct is a rather valuable guide to hygiene in normal people, provided they are free.

It is when people are not free, and when they are dependent in large numbers on the decision of one person, that the stage is set for large-scale tragedy.