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# Youth Fitness: Looking Backward and Ahead

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After the end of the second world war, enthusiasm for fitness began to dwindle. The first indication of the decline of the fitness levels of young Americans came in the early stages of the Korean War. The public was alerted to the problem by the publication of the rejection figures of the new draftees. In 1952, the head of the Selective Service reported that 1-1/2 million of the 18-1/2 to 26 year olds — almost one out of every two young Americans — were rejected for the draft as being mentally, morally or physically unfit.

In December 1953, this anxiety was heightened by the results of a battery of tests — published by Dr. Hans Kraus and Dr. Sonja Weber — which revealed that American children were not as fit as their European counterparts. The tests were given to 4,458 normal, healthy U.S. school children and 1,987 suburban communities. These six tests of muscular strength and flexibility were developed from a 15-year study of patients with low back pain at the Posture Clinic of the Columbian Presbyterian Hospital in New York. The tests were identical to those given to the muscularly deficient subjects and, as such, were by no means considered strenuous. Yet, 56.6% of the U.S. children failed one or more of the tests while only 8.0% of the European children failed.

In response to these much-publicized findings, President Eisenhower formed a President's Council on Youth Fitness in 1956 — which was the forerunner of our current President's Council on Physical Fitness and Sports. Near the end of 1960, president-elect John F. Kennedy described the results of the so-called "Kraus-Weber Tests" as "the most startling demonstration of the general physical decline of American youth" (Kennedy, 1960). The Kraus-Weber Tests spawned scores of subsequent fitness tests and research studies that revealed much of the same basic conclusions: American youths were out of shape and overweight.

Today's situation hasn't improved much since the low fitness levels of American children were first noted forty years ago. In fact, there are strong indications that the problem has deteriorated even further. For example, a report by the Federal Department of Health and

Human Services found that children born in the 1980s are less fit than the children of the 1960s were (Sullivan, 1989). In addition, a national survey of 12,000 youths aged 6 to 17 — co-sponsored by the Amateur Athletic Union and the Chrysler Fund — found that fewer children today meet minimum standards for cardiovascular fitness, flexibility and abdominal and upper body strength than in 1981 (Bloch, 1989). Two other national surveys show that at least half of all American school children don't get enough exercise (Jaworski, 1989) and a recent study pointed out that up to 20 million youths are overweight (Bloch, 1989). Finally, a 1986 study undertaken by the Public Health Service collected data from 19 states on 4,678 children aged 6 to 9. This study disclosed that youths in this age bracket carried more body fat than did their counterparts twenty or more years ago (Ross and Russell, 1987).

Indeed, the number of studies, tests and surveys that spotlight poor fitness levels among American children seems endless. But perhaps the most frightening finding of all was made by the American Alliance for Health, Physical Education, Recreation and Dance. Their 1987 study showed that 40 percent of those youngsters between the ages of 5 and 8 already have at least one of the four risk factors associated with heart disease — obesity, high blood pressure, elevated cholesterol levels and inactivity (Jaworski, 1989).

## The Need for Regular Exercise

Just how important is it to participate in regularly scheduled physical activity? Children — and adults — who exercise regularly can obtain numerous physical benefits. Regular exercise facilitates the normal growth and development of children's bones and muscle tissue. Vigorous physical activity also helps youngsters to maintain proper bodyweight and a desirable level of body fat. In addition, children who are physically fit can perform their daily activities without showing signs of undue fatigue. Exercise develops a wide range of motor skills that can be used in everyday functions and leisure pursuits. Most importantly, regular physical activity reduces a child's risk of coronary heart disease.

There are several mental and psychological benefits as well. Regular physical exercise improves a child's self-discipline, self-confidence and self-esteem during the critical identity-forming years. Physically active children are less prone to emotional disturbances and are generally more outgoing and optimistic. Youngsters can also use physical activity as an outlet to release tension and stress. Finally, regular exercise increases a child's alertness and interest in learning.

## The "Unfitness Boom"

Unfortunately, the fitness boom of the 1970s and 1980s — which created a widespread appreciation of health and well-being among adults — has not filtered down to children. Why not? First of all, fitness testing isn't nearly as common nowadays — it was much more routine for children of the '60s ... and the children of the '60s grew up to be the adults of the fitness boom era. Another reason pertains to the many cultural changes and various technological advancements that have taken place over the past two decades. Today's youngsters are often charmed and seduced by the ubiquitous television set along with more recent developments such as computers and video games. Quite simply, children are becoming watchers instead of doers. Additionally, there are a host of products and appliances that require considerably less energy and effort than in the past and, therefore, have made chores much easier and less time-consuming. Just a few examples are dish washers, power mowers, motor bikes, electric pencil sharpeners and even pocket calculators. Ironically, automation has given youngsters more leisure time but it has also made them more lazy. And remember, an inactive child will probably become an inactive adult.

An additional reason had its genesis during the so-called "Psychedelic '60s" — perhaps the most troubling and turbulent social times this country has ever seen. If the United States ever went through a period of adolescence, it was during the decade of the 1960s. Like a young teenager struggling to find an identity, America struggled to revise its own identity as it grappled with a plethora of domestic conflicts and confrontations concerning such

issues as sexual freedom, campus unrest, drug usage, civil rights and political activism. The "Vietnam Era" also saw a rebellion against authority and conformity that pitted the young against the old thereby creating a "generation gap." Students became increasingly disillusioned by a society that they viewed as being overly competitive. Needless to say, physical education came under heavy scrutiny during that time. The basic argument was that students should have more freedom and self-expression in deciding what activities — if any — should be taken.

The aftershocks of this situation can still be felt today. Indeed, maybe the most frequently cited reasons for the low fitness levels of children have to do with the physical education (PE) in the schools in terms of both quantity and quality. Currently, there are only four states — Illinois, New Jersey, New York and Rhode Island — that require all students in all grades to take a specific amount of PE courses and only Illinois requires students to take PE every day (Manuel, 1991). This isn't very encouraging — especially when you consider that for many students, PE classes represent the day's only physical exercise. Yet, when state and local governments are looking to trim the budgetary fat, usually one of the first programs on the chopping block is physical education.

The quality of children's PE programs has also been questioned. It was previously noted that much less fitness testing is conducted today than in the past. The biggest criticism, however, is that schools place entirely too much emphasis on team sports — which has changed physical education to physical competition. The feeling is that PE classes merely cater to the needs of the athletes and do very little for the average students. Competitive sports develop many admirable qualities such as teamwork, discipline, self-esteem, camaraderie and sportsmanship. Nevertheless, many feel that PE classes generally do not promote healthy fitness habits or stress lifelong recreational activities like swimming, cycling, running and tennis.

### Correcting the Problem

There are certain steps that can be taken to correct the seemingly abysmal levels of fitness among American youth. To begin with, the quantity and quality of the schools' physical education programs must be addressed at the community level. PE courses must be made more frequent and should be required for all students in all grades. These classes must educate children so that they gain an

understanding and an appreciation of physical fitness. The reasoning is simple: A child who is taught an understanding and an appreciation for good health will have a better chance of staying healthy. Instruction should include — but not be limited to — such topics as the benefits of regular exercise, the risk factors of heart disease, nutritional and dietary guidelines and the basics of weight control. The curriculum should also promote more fitness and less competition. Remember, children need to develop an awareness that fitness is for fun and for a lifetime of health.

PE classes must emphasize lifelong sports/activities along with the recreational aspects of exercise. The courses must offer more participation in those activities that promote muscular strength, flexibility and cardiorespiratory fitness.

**Muscular Strength.** Although weight training exercises are best for increasing muscular strength, these activities are usually inappropriate for children younger than about 13 or 14. In the case of prepubescent, calisthenic-type movements that involve their bodyweight as resistance (such as pushups and situps) are quite effective for building strength without placing an inordinate amount of stress on their bones and joints. When weight training is used by adolescents, the exercises should be throughout a full range of motion with a controlled speed of movement. The repetitions should be relatively high — such as 15 to 20 for the lower body and 10 to 15 for the upper body. The movements should be performed 2 to 3 times per week on nonconsecutive days and involve the major muscle groups (i.e. hips, legs and upper torso).

**Flexibility.** Stretching exercises should be done daily to maintain or improve flexibility. Once again, these exercises must address the major muscle groups. Each stretch should be held statically for about 30 to 60 seconds without any bouncing, bobbing or jerking movements.

**Cardiorespiratory Fitness.** Cardiorespiratory fitness is best developed by activities that are continuous in nature and involve relatively large amounts of muscle mass. Running, swimming, cycling, skating, hiking and rowing are a few excellent examples. These "aerobic" activities should be performed three to five times per week for 20 to 30 minutes.

### Fitness Testing

Several organizations — including the American College of Sports Medicine (ACSM) and the American Academy of Family Physicians — recommend that students undergo periodic fitness testing. In particular, the ACSM recommends

tests of cardiorespiratory endurance (running an age-appropriate distance), body composition (measuring skinfolds), muscular strength/endurance (completing pullups, pushups and bent-knee situps or modified versions of those exercises) and flexibility (performing a sit-and-reach or V-sit). Without a doubt, such testing in PE classes is necessary to ascertain the fitness levels of children, to monitor improvements and to encourage future involvement. Furthermore, these tests can identify those youngsters with substandard levels of fitness so that they may receive extra attention.

### The Parental Role

Lastly, educators must make parents understand that changing the direction of youth fitness in America is not just the sole responsibility of the school. The National Children and Youth Fitness Study II suggests that, on the average, parents exercise with their children less than one day a week. The study also revealed that children who had physically active parents — especially parents who exercised with them — tended to be leaner than children whose parents were less active (Ross and Russell, 1987). The message is clear: Parents are encouraged to take an active role in participating with their children.

### The Future

Remember, a positive change in youth fitness won't happen overnight nor will it happen by itself. But if families, schools and communities band together today, a powerful stride can be taken toward ensuring that children become more fit and gain lifelong habits for tomorrow.

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# PA Youthfit – Moving Forward

Laura L. Borsdorf, PA YOUTHFIT Task Force Chairperson

In this issue, YOUTHFIT would like to present an article by Barb Furman, Health and Physical Educator at Boyertown High School. One of the objectives of the YOUTHFIT project is to help professionals network and to gain fitness education ideas from others. Barb, along with the Boyertown High School science department, has developed an exciting "wellness" class that seniors can elect to take. The popularity of this interdisciplinary course, demands that we examine why it

has been successful, and whether other professionals can benefit from the content and format of this course. Do you teach an interdisciplinary course, or do you work with other disciplines on certain activities or programs? Would you like to? Send us your comments, questions and suggestions regarding these questions if you would like to network with other professionals interested in this topic. Some of your suggestions may even be published in future journals!

Another objective of the YOUTHFIT project is to develop and implement a state-wide fitness assessment and data collection program. This project is gearing up fast, and will begin in the fall of 1994. Read on for information regarding how you can be a part of this very important project!

Finally, the cooperative venture between AAHPERD's PHYSICAL BEST Program and The Cooper Institute for Aerobic Research's PRUDENTIAL FITNESSGRAM Program is real, and is almost too good to be true! As professionals we will all be touched by this joint undertaking in many positive ways. The winter issue of this journal explained about the initial merger of efforts between the two above organizations. The article entitled Physical Best and The Prudential Fitnessgram on page 29 is a synopsis of current happenings that the newly formed coalition has accomplished thus far.

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