This document makes a number of observations about physical fitness in America. Among them are: (1) the symptoms of aging (fat accumulation, lowered basal metabolic rate, loss of muscular strength, reduction in motor fitness, reduction in work capacity, etc.) are not the result of disease but disuse; (2) society conditions the individual to believe that at age forty he is on the way down hill, at fifty he is old, at sixty he should be preparing to die; (3) American men and women could improve their life expectancy from seven to eleven years by practicing good health habits; (4) women are twice as likely as men to exercise to lose weight, but men are more likely to exercise for health reasons or because it makes them feel good. Implications of these views for improving physical education programs and persuading people to exercise regularly, include: (1) expanding physical education programs into elementary and junior high schools; (2) expanding intramural sports programs for both men and women; (3) concentrating on lifelong sports; (4) improving public facilities for jogging, swimming, bicycling; (5) promoting jogging and weight training for adults; (6) providing information on scheduling exercise into a daily routine; (7) changing the concept of old age as a barrier to exercise; (8) using arguments toward health, vanity, and pleasure as motivation techniques for physical exercise; (9) providing information on kinds and amounts of exercise necessary for developing and maintaining physical fitness. Studies have shown that physical fitness scores (which have not improved for boys or girls in the last decade) can be raised by giving added emphasis to physical activities in the public school system. (MB)
The so-called "average" person gets less and less exercise as he grows older. He is perfectly willing to accept the societal stereotype of the decrepit aged. Ordinarily, the man or woman who has reached middle age has about a dozen unpleasant physical changes to look forward to. Among them:

1. Accumulation of fat.
2. Lowering of basal metabolic rates.
3. Loss of muscle strength.
4. Reduction in motor fitness--balance, flexibility, agility, and reaction time.
5. Reduction in work capacity and associated oxygen intake capacity during attempts at hard work.
6. Reduction in respiratory reserves.
7. Increase in ligamentous injuries and dislocation strains in shoulders, knees, spine, etc.
8. Increase in blood cholesterol and blood pressure.
9. Decrease in arteries' resiliency and suppleness.
10. Progressive bone loss which leads to a weakened and brittle skeletal system.

How is he ever to recognize that the symptoms of aging are not the result of disease but disuse?

Through experiments with several thousand men, Thomas K. Cureton, Ph.D., professor emeritus of the University of Illinois, and other exercise physiologists, have found significant evidence that many of these classic symptoms of old age are merely the result of inactivity. Our whole society is conditioned to assuring the individual that once he has reached 40 he is on his way downhill, by 50 he is an old man, by 60 he should be retiring and releasing his hold on life.

A study of the National Center for Health Statistics showed that the death rate from coronary heart disease fell 10.5 percent in the period from 1963 to 1971. The rate had risen 19 percent in the period from 1950 to 1963. The Division of Public Health Statistics, Indiana State Board of Health, cites in 1971, 357.5 deaths attributable to heart disease as compared to 342.7 deaths in 1974 for the state. (The death rates are based upon per 100,000 population.) Major private and government programs of public education about heart disease prevention have been cited as possible factors in this decline. The American Heart Association, The American Medical Association, and the President's Council on Physical Fitness and Sports have been identified as leaders in advancing regular, vigorous exercise as one means of reducing the risk of the seriousness of heart attacks.

There are 15,000 people in the United States who have lived a century or longer--and this is the fastest growing subgroup of the population. This fact, in itself, suggests that it is not simply a matter of having lucky genes, but that a change in the life style or the environment must be given some credit.

According to a reliable study of longevity, American men and women could
improve their life expectancy from seven to eleven years, respectively, simply by practicing what has been called "good health habits." Yet we smoked a record number of cigarettes in 1975, we continued to eat too much of the wrong kinds of food, and 45 percent of the adults didn't exercise enough to really benefit themselves.

In 1972, the PCPFS included questions in the National Adult Physical Fitness Survey asking the subjects why they did, or did not, exercise. Advanced probability sampling techniques were employed in the design and execution of the survey, which involved interviews with 5,875 men and women 22 years of age and older.

The answers given by members of the active 55 percent contain several useful clues for those interested in psychological motivation. Nearly one-half of these subjects said they exercised "for good health," and another one-third chose a related answer, "It makes me feel better." One-fourth said they exercised "to lose weight," and a like number said they did it "for enjoyment."

Nearly one-third of the subjects who said they didn't exercise listed "not enough time" as the reason. One-fourth of them settled for "get enough exercise by working," more than one-sixth of them cited "medical reasons," and one-ninth of them said they were "too old." Undoubtedly, the most honest response came from a group of working women, more than three-fourths of whom said they were "too lazy."

As responses were analyzed, it was discovered that women are twice as likely as men to exercise to lose weight but that men are considerably more likely to exercise for reasons of health or because it makes them feel good. The more background the subjects had in physical education and sports, the more likely they were to associate exercise with good health and enjoyment.

What does all of this mean? It suggests several implications which we should keep in mind as we go about the difficult tasks of improving physical education programs and of persuading people to exercise regularly. For example:

1. Expand physical education programs into elementary schools, especially, and junior high schools. More than 90 percent of all adults believe that all people should have physical education from elementary school through college. Adults who participated in physical education when they were in school are more likely to exercise in adult years.

2. Intramural sports programs should be greatly increased for both men and women in school.

3. Concentration is needed on the mastery of skills in lifelong sports. The value of the experiences gained by such competition in the dominant sports in programs for men and women is not questioned, but the skills acquired have little or no value as adult physical fitness activities.

4. A major need is to make easily accessible paths for bicycling, jogging, and walking; greater opportunities for swimming are also needed, with pools being reasonably accessible to participants.
Jogging and weight training deserve much greater participation by adults, so ways to encourage their use by both men and women should be developed.

People need more information on how exercise can be fitted into busy schedules.

The elderly need to be convinced that age is no barrier to exercise.

The most effective arguments are likely to be those which appeal to people's concern about their health, to their vanity, and to the idea that exercise can be enjoyable.

People need more information about the kinds and amounts of exercise necessary to develop and maintain fitness.

In a recent study conducted by the University of Michigan under a contract with the HEW's Office of Education, an announcement issued on March 19, 1976, stated that the physical fitness of American boys and girls didn't improve in the decade between 1965 and 1975. Girls made some minor gains in endurance and muscular power, but average fitness test scores for the 1974-75 school year were virtually identical to those recorded ten years earlier. The study consisted of administering the American Alliance for Health, Physical Education, and Recreation Youth Fitness Test to a scientifically-selected national sample of 7,800 boys and girls aged 10-17 years.

At a February 11 White House meeting of President Ford and the President's Council on Physical Fitness and Sports, it was agreed that a revitalized national physical fitness program was needed. The new program should include a stepped-up campaign to make the public more aware of the grave consequences of sedentary living, a concerted effort to increase the number of employee fitness programs in business and industry, and greater emphasis on developing physical fitness and sports opportunities for women and girls. The President displayed deep concern when informed that youth physical fitness test scores have not improved in ten years and that school physical education programs are declining in quantity and quality.

C. Carson Conrad, executive director of the PCPFS, expressed the opinion that the trends away from required physical education and fitness activities run counter to the desires of the public. In referring to the survey of adults, he pointed out that more than 90 percent of the adults want strong physical education programs for their children. It is his opinion that physical fitness has suffered because of optional programs. Where students are given wide latitude, they tend to choose activities which require little physical exertion.

The AAHPER six-item test includes pullups for boys and flexed-arm hangs for girls (arm and shoulder strength); situps (abdominal strength); standing long jump (leg power); 50-yard dash (speed); shuttle run (agility); and 600-yard run-walk (endurance). Essentially, the same test and a similar national sample were employed in studies conducted in 1958 and 1965. Nearly all test scores for all age groups improved significantly between 1958 and 1965, but this was not the case in the past decade.

Girls still tend to turn in their best performances at the ages of 13 or 14 and then level off or decline. The PCPFS believes the girls' problem is more
sociological than physiological, and that it may be intensified by the fact that physical education often is an elective subject after junior high school.

Simon A. McNeely, a physical education specialist for the Office of Education, emphasizes that studies have shown that scores can be improved when added emphasis is given to physical activities in the public school's curriculum.

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