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"PHYSICAL FITNESS AND EXERCISE FOR SPORTS"



Rajani Dalvi

Director Physical Education ,A.R.Burla mahila mahavidyalaya, Solapur.

Short Profile

Rajani Dalvi

Director Physical Education ,A.R.Burla mahila mahavidyalaya, Solapur.



ABSTRACT:

"Physical fitness," "exercise," and "physical activity " are terms that describe different concepts. However, they are often confused with one another, and the terms are sometimes used interchangeably. This paper proposes definitions to distinguish them. Physical activity is defined as any bodily movement produced by skeletal muscles that results in energy expenditure. The energy expenditure can be measured in kilocalories. Physical activity in daily life can be categorized into occupational,

sports, conditioning, household, or other activities. Exercise is a subset of physical activity that is planned, structured, and repetitive and has as a final or an intermediate objective the improvement or maintenance of physical fitness. Physical fitness is a set of attributes that are either health- or skill-related. The degree to which people have these attributes can be measured with specific tests. These definitions are offered as an interpretational framework for comparing studies that relate physical activity, exercise, and physical fitness to health.

KEYWORDS

Physical Fitness , physical activity ,strength of muscles, ligaments .

INTRODUCTION :

"Physical activity is important for everyone. It helps develop and maintain the strength of muscles, ligaments and tendons — together, they support and stabilize the joints. But you've got to be careful with aggressive physical activity, especially in adolescence because the sport often gets rougher than expected." An alternative to team sports that involve a lot of body contact, or a sport that is not advised for a child or teenager with a target joint, is to combine a safer sport, exercise or physical activity with a fun social activity with friends and other people their age. (For example: leisure hiking, dance lessons, golf, bowling or billiards.) This can provide similar physical, psychological and social benefits. The physiotherapist and psychologist at the HTC as well as other members of the team are available to help guide you.

PHYSICAL ACTIVITY:

Several elements of physical activity have been identified Physical activity is defined as any bodily movement produced by skeletal muscles that results in energy expenditure. The amount of energy required to accomplish an activity can be measured in kilojoules (kJ) or kilocalories (kcal); 4.184 kJ is essentially equivalent to 1 kcal (1). Technically, the kJ is preferred because it is a measure of energy expenditure; however, historically the kcal, a measure of heat, has been employed more often. We have chosen to follow historical precedent.

Expressed as a rate (kcal per unit time), the amount of energy expended by each person is a continuous variable, ranging from low to high. The total amount of caloric expenditure associated with physical activity is determined by the amount of muscle mass producing bodily movements and the intensity, duration, and frequency of muscular contractions.

Everyone performs physical activity in order to sustain life; however, the amount is largely subject to personal choice and may vary considerably from person to person as well as for a given person over time. The most common units of time used to refer to kcals spent in physical activity are the week (3) and the day (2). Physical activity during monthly, seasonal, or yearly periods may also be examined to establish the stability of physical activity for longer time periods. Examples of physical activity range from gardening, dancing, walking the dog, shoveling snow and raking leaves.

EXERCISE:

The term "exercise" has been used interchangeably with "physical activity", and, in fact, both have a number of common elements. For example, both physical activity and exercise involve any bodily movement produced by skeletal muscles that expends energy, are measured by kilocalories ranging continuously from low to high, and are positively correlated with physical fitness as the intensity, duration, and frequency of movements increase. Exercise, however, is not synonymous with physical activity: it is a subcategory of physical activity. Exercise is physical activity that is planned, structured, repetitive, and purposive in the sense that improvement or maintenance of one or more components of physical fitness is an objective.

SPORTS

Sports also involve physical activity and exercise but differ in that they also have a set of rules, or goals to train and excel in specific athletic skills. Some are individual sports such as golf and swimming. Others are played in teams — for example, soccer and hockey. Sports are often, but not always, competitive. When doing a physical activity, exercise or individual sport, it is usually possible to control factors such as speed, length of time, intensity and movements as needed for the protection of muscles and joints. But with competitive team sports like basketball and contact sports like tackle football, it is difficult and often impossible to predict the actions of teammates and opponents. This generally results in more injuries and bleeds that can be very serious for a child with hemophilia.

PHYSICAL FITNESS

In contrast with physical activity, which is related to the movements that people perform, physical fitness is a set of attributes that people have or achieve. Being physically fit has been defined as "the ability to carry out daily tasks with vigor and alertness, without undue fatigue and with ample energy to enjoy leisure-time pursuits and to meet unforeseen emergencies". Although the definition may be conceptually sound, things such as vigor, alertness, fatigue, and enjoyment are not easily measured. On the other hand, a number of measurable components do contribute to physical fitness. The most frequently cited components fall into two groups: one related to health and the other related to skills that pertain more to athletic ability.

DIFFERENCES OF EXERCISE AND PHYSICAL ACTIVITY

- Physical activity is defined as movement that involves contraction of your muscles. Any of the activities we do throughout the day that involve movement — housework, gardening, walking, climbing stairs — are examples of physical activity
- Exercise is a specific form of physical activity — planned, purposeful physical activity performed with the intention of acquiring fitness or other health benefits, says David Bassett, Jr., PhD, a professor in the department of exercise, sport, and leisure studies at the University of Tennessee, Knoxville. Working out at a health club, swimming, cycling, running, and sports, like golf and tennis, are all forms of exercise.

Elements of physical activity and exercise	
PHYSICAL ACTIVITY	EXERCISE
1. Bodily movement via skeletal muscles	1. Bodily movement via skeletal muscles
2. Results in energy expenditure	2. Results in energy expenditure
3. Energy expenditure (kilocalories) varies continuously from low to high	3. Energy expenditure (kilocalories) varies continuously from low to high
4. Positively correlated with physical fitness	4. Very positively correlated with physical fitness
	5. Planned, structured, and repetitive bodily movement
	6. An objective is to improve or maintain physical fitness component(s)

DISCUSSION

The definitions of physical activity and physical fitness we have proposed contain useful parallels.

CONCLUSION

Both physical activity and physical fitness vary among members of the population from low to high. No member has no activity just as no person has no fitness-all are active or fit to greater or lesser degrees. When it is necessary to categorize members of the population into those who achieve certain levels and those who do not, operational definitions can be used.

Physical activity is a complex behavior. The major purpose of this paper has been to encourage more careful descriptions of the categories of physical activity that are being studied and discussed. This would facilitate comparison of reports in the scientific literature and hasten progress in this important area of study. In addition, we think it is likely that the different subcategories of physical activity have different determinants, may relate to very specific aspects of physical fitness and health, and may require different intervention and promotion strategies.

In contrast, the definition of exercise we have proposed is considerably more restrictive and focused than those in common use. A crucial element of this definition is that exercise be intended to improve or maintain components of physical fitness rather than to achieve or maintain an established level. Therefore, it is not necessary to determine the specific achievements necessary to become "physically fit," which will vary, at least, by age and sex. The proposed definition of exercise is not encumbered by questions concerning whether all of the five components of fitness are achieved, nor does it require the determination of whether the desired level of fitness has, or even could be, achieved by the activity under consideration. In contrast, the definition of exercise we propose requires only that the activity be intended to improve or maintain some component of fitness. The improvement or maintenance of fitness may be an intermediate objective, and the participant does not need to be continuously aware of it. The proposed definition applies at all levels of physical fitness and does not require predetermined levels of achievement. Activities to improve or maintain the flexibility of a

person with arthritis may require and achieve less joint flexion than activities of the gymnast, yet still satisfy this definition of exercise.

We have not addressed the underlying motivation to perform; to do so would compound the concept being defined with the reason for doing. One hoped-for advantage of carefully defining exercise as we propose is that investigators will be encouraged to describe the activity under study with more care. More careful descriptions and considerations of the components of daily living will facilitate cross-study comparisons. Discussion of activities that are not "exercise" may require more descriptive words but should produce a clearer understanding of how the categories of physical activity relate to physical or mental health.

REFERENCES:

1. Larson, L. A., editor: Fitness, health, and work capacity: international standards for assessment. MacMillan Publishing Co., Inc., New York, 1974
2. Corbin, C. B., Dowell, L. J., Lindsay, R., and Tolson, H.: Concepts of physical education with laboratories and experiments. Ed. 3. W. C. Brown & Company, Publishers, Dubuque, IA, 1978
3. Cooper, K. H.: The aerobics way. M. Evans and Company, Inc., New York, 1978
4. McArdle, W. D., Katch, F. I., and Katch, V. L.: Exercise physiology: energy, nutrition and human performance. Lea and Febiger, Philadelphia, 1981
5. Pate, R. R.: A new definition of youth fitness. Physician Sports Med 11: 77-83 (1983).
6. Davidson, S., Passmore, R., Brook, J. F., and Truswell, A. S.: Human nutrition and dietetics. Ed. 7. Churchill Livingstone, New York, 1979
7. Dishman, R. K., Sallis, J. F., and Orenstein, D. R.: The determinants of physical activity and exercise. Public Health Rep 100: 158-171, March-April 1985.

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