



EXERCISE AND HEALTH RELATED PHYSICAL FITNESS

Lt. Dr. G.P. SUDHEER

Associate Professor and Head, Department of Physical Education, Christian College, Kattakada, Thiruvananthapuram, Kerala.

Abstract

We certainly live in the technology age, and the advances we see in technology have simplified many physically demanding tasks. In fact, it can make you wonder if all of this technology has eased our physical burdens so much that one day we might be so physically unfit that we can no longer perform tasks without the help of technology. Our ability to carry out daily tasks and routine physical activities without undue fatigue is called physical fitness. In this article the concept of exercise and health related physical fitness components were discussed.

Keywords: Exercise, Physical Fitness.

INTRODUCTION

To better understand the importance of increasing physical fitness, must first understand the concepts of physical fitness components.

BODY COMPOSITION

One's body is naturally designed in a certain way. Some people are tall and others short, some people are bulky and others svelte. For this reason, body composition — the ratio of bodyweight made up of fat to that made up of fat-free tissue — is the preferred way to distinguish whether one is in a good place in regard to weight. Having a high ratio of fat to non-fat is detrimental to your health.

CARDIORESPIRATORY ENDURANCE

This component is the one that most individuals associate with physical fitness as it involves many muscles in the body, is typically moderate-to-high intensity, and includes dynamic movements — all while being performed for extended periods of time. The standard method of determining cardiorespiratory endurance is measuring one's maximal oxygen uptake.

MUSCULAR STRENGTH AND ENDURANCE

When it comes to the muscles in your body, strength and endurance are the categories that will determine your physical fitness. 'Muscular strength' involves the amount of force that a muscle can generate in a given time, and 'muscular endurance' refers to the number of times a muscle can be used (contracted) without exhausting. As with cardiorespiratory endurance, muscular strength and endurance has numerous health benefits including: increasing your metabolism, reducing the ratio of fat to fat-free tissue in the body, and increasing bone mass.

FLEXIBILITY

One of the more overlooked components of physical fitness, flexibility determines your range of motion. Being able to move without unnecessary encumbrance is key to physical fitness as it will determine your fitness ceiling. Inflexible people are unable to recruit their joints and muscles efficiently, and are thus limited in the exercises that they can perform. Put another way, inflexibility in a situation that might require greater range of motion (such as exercise) can cause tissue damage as the joints and muscles are pushed past their limits.

TIPS AND EXERCISES TO INCREASE HEALTH-RELATED PHYSICAL FITNESS

Now that we understand the importance of being physically fit along with the components of fitness, it is time to act on this knowledge.

- Focus on you; don't make comparisons with others unless it is used for motivation.
- Physical fitness is about movement and activity. Try an exercise and see if you can do it; worry about performance later.
- When just starting, remember to take it slow—progression is the aim.
- Once you've become comfortable doing certain exercises/running certain distances, look to gradually increase the workload.
- Age is a big factor in progression: the older you are, the more time it will take and the more care you should give to your fitness regimen.
- When you start getting comfortable, you can switch up your routine by adding or targeting different muscle groups; just try something totally new so that you can keep improving.
- Observe what you are doing so that progression may take place. Monitor your heart rate, count

your steps, and time your runs. Take your exercise routine seriously by tracking your progress.

EXERCISES

BODY COMPOSITION

Becoming physically fit will naturally help your body composition, so there aren't specific exercises for body composition.

CARDIORESPIRATORY ENDURANCE

Some effective exercises are: walking, jogging, running, sprinting, interval training, bicycling, and swimming. Remember to start out slow; look to increase your workload as you feel more comfortable.

MUSCULAR STRENGTH AND ENDURANCE

Effective exercises include push-ups, sit-ups, squats, lunges, and calf-raises. For muscular strength, should look to perform these movements with added weight; for muscular endurance, you should look to practice timed tests in which you perform as many repetitions as you can, without sacrificing form. Beginners should first get used to the movements and then look to improve. More advanced individuals should look to increase resistance for strength and increase time, repetitions, or both for endurance.

FLEXIBILITY TRAINING

These exercises should be performed every day, ideally twice a day — 5 minutes in the morning and 5 minutes before going to bed. Flexibility training is similar to muscular training in that it is specific to target location (i.e., if you stretch your legs, your shoulders won't necessarily increase in flexibility). Some effective exercises are: hamstring and quadriceps stretching (standing, sitting, or lying down), spinal twists, knees-to-chest, back extensions, forward and side lunges, shoulder stretches, and neck stretches. Beginners and advanced individuals should go as far as they can until they feel slightly uncomfortable — but not to the point of pain — and look to stretch, lunge, etc. a little further each time.

REFERENCES

1. Barrow, M. H., McGhee, R. (1979). *A practical approach to measurement in physical Education*. Philadelphia: Lea and Febiger, Edition-3rd.
2. Werner, W and Hoeger, K. (2008). *Life time Physiological and Wellness*, Thomas books publication., 6-11.
3. Albert, Mark. *Eccentric muscle training in Sports and Orthopedics*. New York, Churchill Livingstone. 1991.
4. Baumgartner, A.Ted and Andrew, Jackson (1987). *Measurement for Evaluation in Physical Education and Exercise Science*. IOWA: W.M.C Brown Publishers.
5. Brown, L., & Ferrigno, V. (Eds.). (2014). *Training for Speed, Agility, and Quickness*, 3rd Edition. Human Kinetics.
6. Chu, Donald, A. *Explosive Power and Strength*. Champaign, IL: Human Kinetics Publishers, Inc. United States. 2000.
7. Dhanaraj. S. (2014). Effects of Ladder Training on Selected Motor Fitness Variables Among Handball Players. *International Journal of Scientific Research*, III, IV.
8. Fox, Edward. L, Richard Bowers and Merle L. Foss. (1993). *The Physiological Basis for Exercise and Sport* (5th ed). Dubuque, Iowa:WCB Brown and Bench Mark Publishers.