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# Effect of aging on sports performance

**Dr. Gurdeep Bhola**
Assistant Professor, RKSD (P.G.) College, Kaithal, Haryana, India

**Abstract**
Throughout the aging process, individuals develop functional limitations and physical ability begins to diminish. In most sports, there is an age "sweet spot", at which the combination of physical, technical and strategies abilities comes together. Research indicates that the fast twitch (FT) muscle fibre decline in number and function with age. The cells that support the repair and growth of skeleton muscles in response to exercise decline endurance type performance capacity also decline with aging. As they age, many athletes complain that the ability to recover from hard bouts of exercise diminishes ages athlete need longer to recover and adapt to a training stimulus, so exercise planning or schedule needs to change with age. With aging body fat constant increases and is redistributed from the periphery to the center of the body while fat free mass decreases.

**Keywords:** aging, physical abilities, strategies abilities fast twitch muscle fibre, fat free mass

## Introduction
The number of men and women over age 45-50 years who exercise regularly or a participate in competitive sport has increased dramatically over the past 3 decades. I modern societies the level of voluntary physical activity begins to decline soon after people reach physical maturity. Technology has made virtually every aspect of life less physically demanding. Considering the importance of exercise for main training muscular and cardio respiratory fitness, it is not surprising that inactivity can leads to deterioration of one's capacity for strenuous effort. Sports was considered important for5 young people and not necessary for older person. More recently, however, many have argued the potential benefits of leisure involved to healthy development in later life. In particular, sport participation is now promoted to older people as a means to maintain their health a wellbeing.

## Aging and Sports Performance
### Height, Weight and Body Composition
With aging, body fat content increases and is redistributed from the periphery to the center of the body while fat free mass decreases. These changer can be attributed to the reduction in general activity levels that occurs with aging. Body weight5 tends to increases with aging, whereas height decreases. Fat free mass decrease body fat increase with age. Decrease muscle & bone mass, both resulting at least partly from decreased activity.

### Physiological Response to Acute Exercise
Cardiovascular endurance tend to decrease with age & muscular power, strength also decrease. The age reduction in physiological function. Muscle mass reducing cause decrease in physically activity & muscle mass. Number of muscle fibres and the fibres cross-sectional area decrease with age.

### Cardiovascular and Respiratory Function
Much of the decline in endurance performance associated with aging can be attributed to decreased cardiovascular function. Max HR decrease about 1 beat/minut every year. Max strock volume slightly reduced. Lungs capacity decrease.
Aerobic capacity, which is your cardiovascular system's ability to convert oxygen to energy, can drop 5 to 9% each decade beginning in your 30s much of this is because your heartbeat slows a little each year. That means oxygen rich blood is being pumped to working muscle a little less often.

### Aerobic & Anaerobic Function
Aerobic & Anaerobic capacity slightly decrease with aging, 1%/year.

### Components of Fitness and Functioning
Speed is also reduces. Strength, endurance, co-ordinative abilities also decrease with aging.

### Sports Performance
Running, Swimming, Weightlifting, decrease with aging.

### Heat is Harder to Handle
During hot flashes and whenever the body begins to get too warm. Blood rushes to the skin surface to offload heat – which is annoying for sports persons, who'd prefer that the blood feed working muscle. In older adults, sweating a key part of cooling, begins later in a workout. As if that's not enough, the thirst mechanism dulls with age. So dehydration is more likely.

### Flexibility decreases
Age makes all of us less flexible, which means a greater risk for muscle pulls and strains.

**Muscle Shrink**

Testosterone and other growth Hormones plunge along with estrogen, so building and maintaining muscle is tougher. Fat begins to marble the tissue reducing its ability to generate power.

**Bones get thinner**

Estrogen works with calcium and vitamin D to strengthen bones. In the five to seven years after menopause, a womens bones can lose upto 20% of the density.

**Conclusion**

In this research we examined the effects of aging on physical performance we evaluated changes in cardio respiratory endurance and strength with age. We considered the effect of aging on body composition, which we know can affect performance. After the research study it became clear that much of the change that occurs with aging is to a great extent attributable to the inactivity that often accompanies aging.

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