

## **Effect of exercise on the skeletal system**

### Exercise and skeletal system

The skeletal system also provides the ability for a person to move. Which means it's affected by exercise.

When we think of exercise, it is stretching and working out their muscles, not the bones that we normally think of.

When skeletal muscles contract, they exert force on the bones.

The bones act like a lever, which allows movement.

This is true no matter what the activity, whether a person is swimming, running or lifting weights.

However, certain forms of exercise will have more pronounced effects on the bones than others will.

### **What happens when you exercise?**

It stimulates the bones at the points where they're connected to skeletal muscles.

The places where mechanical stresses are placed on the bones has been shown to create larger deposits of mineral salts, and those areas also produce more collagenous fibers than other parts of the skeletal system.

This leads to the development of greater bone masses in those who put more and more load on their muscles and bones.

It's for this reason that weightlifters have been shown to develop larger bone mass than joggers.

### **Exercise and arthritis**

Joints are the parts of the skeletal system in which bones meet one another. They are essential for movement.

Arthritis can cause pain and inflammation in the joints, making movement painful and even impossible in severe cases.

Exercise strengthens muscles and increases flexibility, which in turn takes excess pressure off the joints.

A combination of low-impact aerobics, strength training and flexibility exercises can lessen pain and achieve a greater range of motion in individuals who have arthritis.

Those who regularly exercise from an early age are less likely to develop arthritis.

### **Prevention of Injury**

Regular exercise improves the density and strength of bones.

This helps to reduce the likelihood of fractures, especially as individual's age.

Exercise also improve balance and muscle condition, which makes it less likely that a person will fall and suffer bone damage as a result of the fall.

Exercise can improve posture, especially in those suffering from osteoporosis. The types of exercises that are most effective at preventing injuries are weight-bearing exercises, including low-impact aerobics and weight training.

### **Exercise and back Pain**

Individuals who spend the majority of their day sitting down are at a greater risk of experiencing back pain.

People who exercise tend to be leaner than those who do not exercise. This is beneficial to the back because extra weight can stress the bones within the spine as well as the muscles surrounding those bones.

Exercise that targets the back also can strengthen muscles surrounding the spine, which reduces the chance of vertebrae compression.