

# Once upon a time...we were told that after 35 the rest of life was a downhill slope BUT is this really so???

## What happens to muscle as we age?

Muscles lose size and strength as we get older, which can contribute to weakness and not being able to do the things we need to do. This is caused by a number of factors working in combination, including:

- Muscle fibres reduce in number and shrink in size.
- Muscle tissue is replaced more slowly and lost muscle tissue is replaced with a tough, fibrous tissue.
- Changes in the nervous system cause muscles to have reduced tone and ability to contract.

BUT...studies have shown that it is possible to maintain strength and regain strength if we challenge our muscles through exercise and keeping active. Men in their 70's have been able to regain the strength they had when they were 40 through doing a weight program. We can also train our brain to do new movements so keeping the neural pathways developing.

## What happens to our bones as we age?

Bone is living tissue and constantly changing according to the stress and strain put upon them. As we age, the structure of bone changes and this results in the loss of some bone tissue. Bones become less dense as we age for a number of reasons, including:

- An inactive lifestyle causes bone wastage.
- Hormonal changes
- Bones lose calcium and minerals such as Vitamin D

But...doing exercise and having sufficient calcium and Vitamin D can minimise bone loss. Weight bearing exercise and ballistic activities, like skipping and jumping help load the bones.

## What happens to our joints as we age?

Joints are lined by cartilage, and have a membrane, which contains a lubricating fluid (synovial fluid). As you age, joint movement becomes stiffer and less flexible because the amount of lubricating fluid inside your joints decreases and the cartilage becomes thinner. Ligaments also tend to become stiffer which makes us less flexible. Many of these age-related changes to joints are caused by lack of exercise. Movement of the joint, and the associated 'stress' of movement, helps keep the fluid moving. Being inactive causes the cartilage to shrink and stiffen, reducing joint mobility. Being dehydrated also makes the joint structure less flexible.

## Some other facts to consider...

- At least half of the age-related changes to muscles, bones and joints are caused by disuse.
- Recent studies show that fewer than one in 10 Australians over the age of 50 years do enough exercise to improve or maintain cardiovascular fitness.

## Moving Onwards...

Name/s:

Adress:

Phone:

Email:

Would you like to continue with seat-based exercises?

Would you like to do exercises up on your feet for 45 mins?

What day/ time suits you best?

Would you like to receive a regular news letter?

Would you like assistance with any physiotherapy or individual programming?