

# Exercise and Myeloma

Most people with myeloma will experience fatigue. Fatigue can be present before diagnosis and is often an indicator that something is wrong. Once treatment commences, the fatigue is further compounded. It is also possible that during phases of intense treatment or illness the body can become deconditioned requiring some rehabilitation.

The benefits of exercise include increased strength, improved mental health and weight control. Those with myeloma in particular can experience an increase in blood flow to the extremities which can alleviate the symptoms of peripheral neuropathy and a reduced risk of falling due to improved core strength. Most health professionals will recommend regular activity during treatment. Some people will have been quite active before diagnosis while others may have led a sedentary life. When considering an exercise program it is important to keep this in mind and set realistic goals. It may only be possible at first to participate in 10 minutes of light activity per day. But the aim is to increase the duration over time by incorporating exercise into the daily routine. Regularity is the key to improvement. It is also highly recommended to seek guidance from a health professional when embarking on a new activity and to report any new pain to the treating team.

## What is exercise?

People often associate exercise with vigorous activity such as running and playing sports. This is not always the case; exercise can be defined as;

Incorporating physical activity to sustain or improve health and fitness.

In order to benefit from exercise, a small amount of physical stress through movement needs to be placed on the body to register the effort. Then during rest the body repairs and adapts to that physical movement. If the stress is too great, the body may not be able to repair effectively to continue with other day-to-day activities.

It is important to remember exercise for one individual may not be exercise for another. For instance, an Olympic sprinter may not benefit from a short stroll to their letterbox if they want to increase their fitness capacity. However, for someone recovering from a stem cell transplant or a new round of treatment, a short stroll is initially an adequate exercise.

## What are the symptoms of Cancer Fatigue? (CF)

- Diminished energy to accomplish normal activities of daily living including household work, gardening, and walking, as well as continuing employment.
- Increased need for rest.
- Generalised weakness or limb heaviness.
- Diminished attention or ability to concentrate.
- Decreased motivation or interest to engage in normal activities.
- Sleep disorder (insomnia or hypersomnia).
- Inertia (i.e. perceived need to struggle to overcome inactivity).
- Marked emotional instability.
- Perceived problems with short-term memory.
- Post-exertion fatigue exceeding several hours.

It is possible for some of the symptoms of CF to be relieved by introducing physical activity into the daily routine. The type of exercise and duration will vary greatly between individuals.

## Which form of exercise?

The National Comprehensive Cancer Network (USA) recommends an exercise prescription to counteract CF while improving functional ability. That is, being guided by a professional such as an exercise physiologist or physiotherapist when beginning an exercise regime.

The Medicare Chronic Disease Management Plan provides five allied health visits per year, including exercise physiology and physiotherapy.  
Call 1800 MYELOMA for a fact sheet or consult with the general practitioner.

Combining aerobic and resistance training in a regime has been associated with decreased muscle wasting and a reduction in CF.

Due to the many variables between each person with myeloma, their fitness levels and physical condition, there is no 'one size fits all' exercise. Some types of appropriate exercise include:

- **Walking** – always wear appropriate footwear and use an aid if required.
- **Swimming** – helps to build strength without putting stress on the joints. If using a public pool ensure the pool has a regular cleaning schedule. If you are neutropenic (see p.3) refrain from swimming. It is not safe to swim with a central venous access device in place such as a Hickman line or PICC line.
- **Tai Chi** – improves balance, posture, strength and flexibility and reduces stress and fatigue.
- **Stationary bike riding** – Helps build leg strength and can be performed in any weather.
- **Deep breathing and stretching** – When the body is very deconditioned simple movements can help to regain some fitness. (see figure 3.)
- **Gardening** – Most people have a garden to tend to and enjoy doing so. It is important to keep good posture (see figure 2.) and be mindful of infection risks. Don't work in the garden if neutropenic (see below) and if the treating team says gardening is safe, always use gloves as any break in the skin is an open window for infection.

## How do I exercise safely?

There are certain signs, symptoms and side effects of myeloma and its treatments that need to be considered when deciding which type of exercise is appropriate for the individual. Some things to be aware of are;

- **Pain** – if there are bone complications present or peripheral neuropathy, pain may also be life limiting. DO NOT keep exercising if pain presents or increases. Any new pain should always be assessed by the doctor.
- **Neutropenia** – neutrophils are white cells that protect our body from infection. During certain phases of the disease and also during some treatments the neutrophils may be low. This is called neutropenia. When neutropenic it is important to refrain from activities that may increase the risk of infection such as swimming in a public pool, participating in large classes and gardening.
- **Thrombocytopenia (low platelets)** – This means a reduced capacity for the blood to clot caused by the myeloma itself or treatments thus increasing the risk of bruising and bleeding from injury. Ask the treating team about thrombocytopenia and the individual's risks.
- **Anaemia** – a low level of red blood cells or the haemoglobin they contain, caused by the myeloma or its treatments. Anaemia can cause shortness of breath and fatigue. It is important not to over exert if anaemic.
- **Peripheral neuropathy (PN)** – a change in sensation and/or motor function in the extremities e.g. fingers, hands, feet and calves. This can be caused by myeloma or a side effect of some treatments. If experiencing PN, balance may be affected increasing the risk of falls. The ability to feel hot and cold may also be affected and should be considered when choosing an exercise.
- **Dizzy spells or low blood pressure** – some treatments can cause dizzy spells or low blood pressure. Always start an exercise slowly giving your blood pressure time to adjust and stop if feelings of dizziness appear.

It is also important to understand symptom patterns. Is fatigue more prominent at certain times of the day? Do medications give side effects that make it difficult to exercise? Taking notice of how the body responds to different external factors will help when planning to participate in exercise.

Being aware of how the body is feeling under stress is very important to prevent injuries during exercise. Good postural form and technique is also important to prevent injuries and should be mastered before increasing intensity levels. If dizziness or balance is an issue, holding onto something like the back of chair will help prevent falls and enable correct posture and technique.

Maintaining a balanced diet and adequate fluids is also very important for improving functional capacity. Avoid exercising in a very warm environment as this can cause dehydration and exacerbate fatigue.

Participate in activities that are enjoyable as exercise shouldn't be a chore. Exercising with a friend or in a group can increase motivation and is also safer than exercising alone.

**Always ensure that there is medical clearance for exercise therapy, as some exercise may be unsafe.**

# Appendix

Figure 1.

## BACK CARE

Work: Develop good work habits



Bend knees, not back when placing items on table surface or in refrigerator.

Practice this technique until it becomes your new habit.

Figure 2.

## BACK CARE

Gardening



Kneel using well padded cushion to get as close to work as possible. Raised beds allow for back to remain straight.

Figure 3.

## BREATHING

Three part breath (lying)

One hand on belly below navel, other hand on upper ribs. Breathe IN, expanding abdomen, lower and then upper ribs. Breathe OUT in opposite direction by pulling upper ribs then lower ribs, then abdomen inward.



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**The information in this fact sheet is not intended to replace medical care or the advice of a physician. Your doctor should always be consulted regarding diagnosis and treatment.**

For further information please contact one of our Myeloma Support Nurses  
on our Support Line:

1800 MYELOMA (1800 693 566)  
or visit our website: [www.myeloma.org.au](http://www.myeloma.org.au)