

Nutrition and Myeloma

When you have myeloma it is important to eat a well balanced diet and to maintain a good fluid intake. Eating a well balanced diet will help maintain muscle mass and strength, increase energy levels, and may help to promote recovery after periods of treatment. It may also help the immune system to function more effectively. You may find that your appetite and your dietary requirements will vary and there may be times, especially when you are receiving treatment for your myeloma, that eating and drinking may be more difficult.

This information sheet describes what a well balanced diet should consist of as well as giving you tips for healthy eating.

What is a well balanced diet?

A well balanced diet is one that will supply your body with all its nutritional needs so that it functions well. Your diet should consist of foods from each of the major food groups and should be rich in all the essential vitamins and minerals.

A well balanced diet should include:

- **Protein** – to help build new cells and replace old ones. Foods that contain protein include milk, cheese, nuts and fish.
- **Carbohydrates** – provide an ideal source of energy. There are two types of carbohydrate; complex and simple. Complex carbohydrates are often referred to as starch and simple ones as sugars. Foods that contain carbohydrates include bread, pasta and rice.
- **Fats** – as well as being a valuable source of energy, fats are also needed to transport various vitamins around the body. There are three major categories of fats - saturated, polyunsaturated, and monounsaturated. Saturated fats are found mainly in animal and dairy products and should be eaten only in small amounts. Polyunsaturated and monounsaturated fats are found mainly in fish, nuts, seeds and oils from plants. There is some evidence to show that polyunsaturated and monounsaturated fats may help to lower blood cholesterol levels.
- **Fibre** – to maintain a healthy digestive system. Some fibres can also lower blood cholesterol levels. Foods that are high in fibre include bran, whole-wheat bread and cereals, as well as most fruit and vegetables. It is recommended that you eat five portions of fruit and vegetables per day.
- **Vitamins and minerals** – are important for a variety of functions such as helping to increase the body's resistance to infection and maintaining healthy nerves and tissues. Vitamins and minerals can be destroyed in the cooking process. Therefore try to avoid overcooking your food.
- **An adequate fluid intake** – three litres per day is recommended in myeloma to help keep your kidneys working well. Any fluid is acceptable but coffee and alcohol should be taken in moderation as they can cause dehydration. Keeping

in mind not to intake too much excess sugar. Also please note green tea interacts with a treatment for myeloma, Velcade (bortezomib) so should be avoided during the course of this treatment.

What makes a well balanced diet difficult to maintain when you have myeloma?

Myeloma and its treatment can have side-effects that can at times make maintaining a balanced diet difficult. These can include:

- Loss of appetite – many medications can reduce your appetite as well as your enjoyment of food
- Taste changes - you may notice a slightly metallic taste after chemotherapy treatment
- Sore, dry mouth – especially after high-dose chemotherapy
- Nausea and vomiting
- Tiredness or fatigue
- Diarrhoea or constipation – an alteration in your normal bowel habit can temporarily put you off your food
- Anxiety and depression
- Steroids - these can increase your appetite and lead to weight gain

Tips to maintain a healthy diet

Sometimes, particularly if you are receiving treatment and are feeling poorly, it may be difficult to maintain a well balanced diet. At these times it is important to eat what you can and try not to worry too much.

Tips that may help include:

- If your appetite is poor try eating small amounts regularly throughout the day
- A sore mouth or taste changes can put you off eating – ensure that you are using any treatments for your mouth as prescribed by your doctor and try to keep your mouth fresh and clean
- Light gentle exercise (e.g. walking) may stimulate your appetite, as can a glass of sherry before your meal
- If necessary, to help gain weight, try supplementing your diet using every day food such as cream, butter and sugar
- Dietary supplements may be useful to ensure that you are getting all the essential vitamins and minerals. Most cancer centres have access to a dietician who can assess your nutritional status and prescribe supplements if necessary. Ask your doctor or nurse if you think you would benefit from seeing a dietician.
- If you are suffering from fatigue try to cook larger portions and freeze some for another day. Ask other people to help you with cooking and shopping.
- Even if you are unable to face food it is important to drink plenty of fluid.

Is a special diet ever necessary?

There may be periods during treatment and recovery when a special diet is required. For example you may need to alter your diet when your white cell count is low (your doctor may say that you are 'neutropenic') as this means that you may be at an increased risk of picking up an infection.

This is particularly the case after high-dose chemotherapy and stem cell transplantation. Some foods may carry an increased risk of infection so, in order to reduce this risk, after high-dose therapy or when your white cell count is low, a 'clean diet' is usually recommended until the white cell count is normal again. Your hospital should provide you with a list of foods to avoid during this time. Foods you might find on this list include: raw or undercooked eggs, unpasteurised dairy products, live yoghurts, soft / blue cheeses, shellfish, pate, mayonnaise, meringue, takeaway foods (especially rice) or foods that have not been freshly prepared. It is important to handle and store food correctly and to use it by the 'best before' or 'sell by' date.

What does Calcium have to do with Myeloma?

It is quite common for people with multiple myeloma to suffer at some time from hypercalcaemia. The term hypercalcaemia refers to a raised level of calcium in the blood above the normal levels. It is caused by bone destruction due to the growth of plasma cells in the bone, which means too much calcium is released into the blood. Symptoms of hypercalcaemia frequently include loss of appetite, nausea, vomiting, dehydration and constipation. The elevated levels of calcium can also damage the kidneys. Treatment of hypercalcaemia helps to control the symptoms associated with it. The main forms of treatment are adequate hydration to help dilute the blood calcium as well as the use of drugs called bisphosphonates, which inhibit bone destruction (see Myeloma Bone Disease and Bisphosphonates information sheet).

It is important to note that dietary restriction of calcium is generally unnecessary in hypercalcaemia. The main dietary source of calcium is dairy products. Dairy products serve as an excellent source of calories and protein for someone that has a poor appetite. Hence combining dairy products with a healthy, well-balanced diet can help to ensure optimal nutrition and weight maintenance.

It is important to ensure that you drink at least three litres of fluid a day to help stay well hydrated, which can help with management of hypercalcaemia. Milk, soft drinks, Sustagen, herbal tea, weak tea and coffee, and water all count as fluid. It will be necessary to have these over the course of the day to get your three litres as too much fluid at one time may give you a feeling of fullness and may make you feel like not eating. Being as active as possible also helps with management of fatigue and decreases bone calcium release. Exercise and activity is great for your bones, muscle bulk, bowels and appetite as well as helping with your feeling of well-being. Whilst dietary calcium is not an issue in the management of hypercalcaemia, dietary modification may be necessary to manage some of its side effects such as nausea, loss of appetite, and constipation, particularly if unplanned weight loss is also occurring. For this reason it may be necessary to seek the help of, or referral to, a dietician in order to receive advice on diet and nutrition.

Why is it Important to Drink Plenty of fluids if I have Myeloma?

Kidney problems can occur in people with myeloma for a variety of reasons. They can be caused by the myeloma itself or sometimes the drugs used to treat myeloma can harm the kidneys. A good way to protect your kidneys is to drink at least 3 litres of water each day. This can be quite difficult to do, so try to drink little and often throughout the day so that it becomes a habit.

Having bottled water with you wherever you go is a great reminder to drink!

Diet as an alternative to conventional treatment

As with other types of cancer, there is increasing interest in alternative diets e.g. the Gerson diet. These can be taken alongside conventional treatment but are sometimes used by some people as an alternative. As alternative diets have not yet been properly studied, their actual effect is uncertain. If you are considering such a diet you should discuss it with your doctor or a dietician.

Should I see a Dietician?

A dietician can give you a lot of advice and food ideas to help manage symptoms and also to help you maintain a healthy weight and diet. If you are being treated in a public hospital then a dietician will generally be available for you to see. Community Health Centres often have a dietician (free service). Dieticians in private practice are listed in the Yellow Pages and many private health funds will provide a rebate for this service.

It is important to eat and drink as well as you can when you have myeloma. Not only do we get energy and nourishment from the food that we eat but eating can also be a sociable and pleasurable activity.

Useful resources

Leukaemia Foundation
www.leukaemia.com

Eating Well Guide

Cancer Council
www.cancercouncil.com.au

Food and Cancer Guide

The Dieticians Association of Australia
www.daa.asn.au

1800 812 942

References

Myeloma UK 2008.

Dr Tim Crowe, Dietician, Austin and Repatriation Medical Centre

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