



Te Mate Pukupuku o nga U

Exercise and wellbeing during treatment for Breast Cancer

**“Kia ora! Hau ora! Mauri ora!”
Be well, be healthy, be invigorated!**

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August 2011

Pharmacy Prescription Form

Name of patient

Date of review

Patient phone number

Preferred time to call

Pharmacy stamp

Rx

Exercise prescription

- Aim to exercise for 30 minutes per day
- Keep an exercise journal
- Weigh yourself either at home or in the chemotherapy room once a month
- Fill in your personal weight chart
- Have a discussion or meeting with the nurse specialist before and during your treatment.

The oncology team is always available for ongoing advice, support and motivation.

Signature of prescriber

Date
dd/mm/yy

[illegible]

Dear _____

There are good reasons to make exercise a part of your cancer treatment.

Much of the research to date on exercise has focused on cancer prevention. Recently however research has started to examine the effectiveness of exercise for women during cancer treatment and following breast cancer. All of the evidence so far suggests that exercise has a beneficial role for most women during cancer treatment. The evidence shows that there is very little risk of harm if care is taken and professional exercise advice is followed correctly.

- Fatigue
- Nausea (feeling sick) and anorexia (loss of appetite)
- Anaemia (low red blood cell count and/or haemoglobin count)
- Depression and anxiety
- Body weight and composition (muscle and fat changes)

Women receiving chemotherapy, on average, gain 2 – 6 kilograms and this is a source of distress for many women. We aim to help and motivate you to keep your weight under control by providing advice and support.

Dietary myths and misconceptions

- **Chemotherapy will make me nauseated and I will vomit all the time.**

Chemotherapy may cause nausea and vomiting. However, in the last ten years, new drugs have become available that can almost completely control nausea, and very few people have persistent nausea and vomiting from chemotherapy.

- Herbal remedies and dietary supplements can help treat breast cancer

No herbal remedy, dietary supplement or alternative therapy has been scientifically proven to treat breast cancer. Furthermore, doctors do not know how these alternative medicines interact with established medicines – whether or not they cause their own side effects or interfere with the traditional therapy's effectiveness.

- People having chemotherapy always lose weight

Some cancers cause people to lose weight but in general most women receiving chemotherapy for early breast cancer will put on weight if they do not exercise.

This may be due to some medications prescribed to alleviate nausea. Dexamethasone which is often prescribed for the first three days after chemotherapy can increase the appetite.

Chemotherapy can alter hormone levels within the body which may lead to weight gain.

Some women find that ‘snacking’ or eating small meals more often helps to control nausea. We recommend that you make healthy choices when feeling tired or a little under the weather.

- People can't continue to work while having chemotherapy

Most women keep working during their treatment and arrange time off to go to hospital for each treatment. Some women can work part time instead of fulltime, while others take a few days off around each treatment.

Notes

[illegible]

Alternative therapies

- Little solid scientific evidence exists to support claims for alternative therapy benefiting menopausal health.
- Black cohosh has been shown in some trials to reduce hot flushes in peri-menopausal women. However there have been reports of liver damage with its use.
- Vitamin E (800mg), Vitamin C, selenium
- Acupuncture
- Support groups

Lifestyle recommendations:

Diet

- Restrict intake of alcohol, caffeine, sugar and salt.
- Maintain a balanced diet that includes plenty of fresh fruit and vegetables.

Physical activity

- Maintain a regular exercise routine.
- Maintain a regular and sufficient sleep schedule.

Stress management

- Massage – helps muscles relax and relieves built-up tension.
- Yoga – breathing, exercises and meditation calm the body and mind.
- Relaxation and/or meditation – these techniques will help in relieving tension and reducing stress.
- Tai Chi – a martial art that consists of slow, gentle, rhythmical movements. Good for calming the nerves and promoting relaxation

Be active and healthy!

Regular exercise has many health benefits. It works the heart and lungs, builds and tones muscles, strengthens bones, promotes weight loss and improves your outlook on life. Exercise reduces the risk of cardiovascular disease and stroke, Type 2 diabetes, high blood pressure and osteoporosis. It may also reduce the risk of developing some cancers.

Exercise shouldn't be a chore and it isn't just about sport. Adding more activity into everyday life is an easy way to get moving. As you see your fitness improve, gradually increase your activity, aiming for 30 minutes or more everyday. Whatever you choose, it must be fun and enjoyable to keep you motivated. Any activity is better than none at all.

If you haven't exercised for a long time any movement will be a great start. Everyone benefits from exercise and you are never too old to start. You may need a GP check-up before you start if you haven't exercised in years. Start slowly and don't overdo it. Always take five to 10 minutes to warm-up and stretch.

Doing 20-30 minutes of moderate physical activity each day will help you stay healthy. You might think there isn't enough time in your busy day to fit in 30 minutes of exercise. Whether you want to lose weight, reduce stress, get active or boost energy levels - there is an activity out there for you. There are 1,440 minutes in a day and you only have to find 30 of them to become active! Vary your exercise so it combines a work-out for your heart and lungs, and one to tone and build muscle.

Here are some ideas:

- Walk or bike to the local shops/school/work rather than always taking the car.
- Try to fit a 20-30 minute brisk walk into your day. Maybe in the morning, lunchtime or after work.
- Take the stairs rather than the lift wherever possible.
- Join a club or find an exercise 'partner' to help motivate you!
- Group fitness classes – there is something for everyone, from yoga and pilates.
- Dancing – this is a fun way to burn lots of energy.
- If you prefer the outdoors activities, there is no reason why you can't continue with the things you enjoy doing e.g. golf, gardening, tramping or orienteering.
- In the water - swimming, aqua-jogging and aqua-aerobics is supportive for ageing, stiff or sore limbs.

- Go window shopping - plan an outdoor walking route through a retail area and get friends to join you.
- Join a gym - an instructor will plan an exercise programme to meet your personal and fitness goals.

Check out your local recreation, leisure centre, gym or sports club or www.sparc.org.nz for other ideas and activities in your area.

Exercise reduces stress

Exercise reduces stress hormones such as cortisol and increases the body's natural feel-good chemicals called endorphins. One way to release emotional tension is to get out in the fresh air and move as many muscles in your body as possible. Exercise, especially activity which raises your heart rate, also acts as a distraction and will take your mind off your problems and improve your mood.

If you need an energy boost

Sometimes the more you sit around; the more tired you will feel. Get outside, get some fresh air and start moving your body. Exercise increases your blood flow and breathing rate, which in turn increases more oxygen to your heart, lungs, brain and muscles. The oxygen boost can make you feel more alert. So not only can exercise be fun, it can boost you mentally as well. Reducing the amount of junk food you eat and including more fresh food in your diet will also improve your energy levels.

References

www.sportwaikato.org.nz
www.sparc.org.nz

**** FREE 1 MONTH TRIAL ****

CONTACT



www.contours.co.nz to find nearest location.

- 'Replens' is very effective, this is a long acting lubricant that is inserted into the vagina two or three times per week, this can only be bought on-line.

Loss of libido

- Loss of interest in sex or reduced sex drive may occur due to decreased estrogen levels.
- Body image concerns – scar, change in skin sensitivity or the sense of just not wanting to be touched are other common factors.
- Vaginal dryness and loss of enjoyment.
- Side effects of medication.

Tips:

Communication with partners is of utmost importance, discuss how you are feeling. Seek counselling if problems are developing within your relationship.

Osteoporosis

- Premature menopause may cause bones to weaken and fracture more easily. (see Ministry of Health booklet 'Preventing Osteoporosis')

Tips:

- Calcium in your food helps keep bones strong - eat low-fat dairy food and high calcium food. Regular weight bearing exercises e.g. walking, tennis, jogging, dancing, cycling, golf and low impact aerobics all help reduce the rate of bone loss. Don't smoke.
- Vitamin D helps your body absorb calcium, this can be obtained by spending 20 minutes a day in the sun, avoid between 11am and 4pm in the summer.

Other typical symptoms may include aches and pains, irritability, tiredness, loss of concentration, weight gain and depression.

You may also feel anxious or experience mood swings.

Urinary symptoms

The urethra and bladder rely on oestrogen to function well. The loss of oestrogen reduces elasticity which may cause problems such as an increased need to urinate, pain or burning when passing urine, or bladder infections.

Tips:

Drink plenty of water. Treat infections early. Go to the toilet after having intercourse. Keep vulva well moisturised

Managing menopausal symptoms:

The sudden start of menopause can cause more severe symptoms than a natural menopause because the body hasn't had time to get used to the loss of hormones.

Hot flushes and night sweats

- The hallmark and the most commonly associated symptom with menopause.
- A sensation of heat spreads over the body, in particular the head, face and chest and is often accompanied by flushing and sweating, followed by a chill.

Tips:

Avoid potential triggers - heavy clothing, overheating, hot drinks, caffeine, stress, hot weather, spicy foods, alcohol and smoking.

Wear loose, cool fitting clothing (e.g. cotton and silk). Use an electric fan.

Take cool showers. Use moist wipes to keep your skin cool.

Vaginal dryness

- Not something openly discussed but a symptom that is regularly experienced.
- The lining of the vagina needs oestrogen to stay lubricated and elastic.
- Loss of elasticity causes dryness leading to uncomfortable intercourse.
- Can make women more prone to vaginal infections such as thrush.
- Painful penetration - can develop tiny vaginal tears or splits due to involuntary muscle spasm.

Tips:

- Treat thrush - prescription creams, pessaries or natural remedies (non-hormonal therapies recommended). Wear loose cotton underwear. Avoid pantyhose and tights, tight jeans or trousers.
- Soap, shower gels, bubble bath or oils may irritate genital area. Wash with either 'Dove' or 'Simple' soap, or if very problematic consider using Aqueous cream (you can buy this from your pharmacy - 500ml jars available for a reasonable price), or can be obtained by prescription from your doctor.
- Moisturise vulval area after showering with Aqueous cream or Vaseline.
- Use non-perfumed water based lubricants prior to intercourse e.g. 'KY jelly' or 'Sylk'. You can also use olive oil, however beware that oil based products destroy condoms.

Breast cancer and the importance of exercise and weight control

Nutrition, weight control and lifestyle play an important role in breast cancer treatment, management and outcome.

- Breast cancer is one of the world's most common types of cancer in women.
- Obesity is a recognised breast cancer risk factor.
- Breast cancer is influenced by hormones.
- Obesity and fat increase hormone levels.
- Excess fat around the abdomen and upper body – the “apple” shape as opposed to the “pear” shape (fat on hips and thighs) is of particular concern.
- Increased body fat can lead to potentially harmful increases in circulating oestrogens.



Weight gain may be a significant side effect associated with treatment for breast cancer.

It is also suggested that there is a potential increased risk of breast cancer recurrence association with weight gain.

Each one of us has the ultimate responsibility to make any changes necessary to improve our diet and lifestyle.

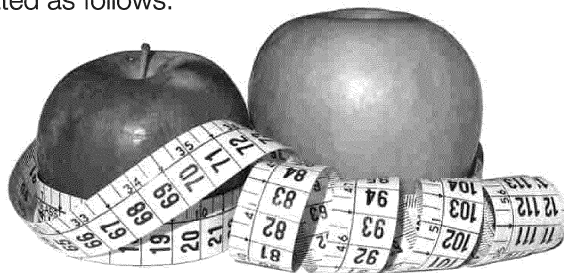
What weight is ideal for me?

Desirable weight

Based on body mass Index (B.M.I.)

BMI stands for body mass index and is a calculation where your weight in kilograms is divided by your height times your height in metres.

Body mass index is calculated as follows:



BMI= Kilograms divided by (height x height in metres)

For example: BMI = 75kg / divided by (1.8m x 1.8m) = 23

(1.8 x 1.8 = 3.24)

75 kg divided by 3.24 = 23.1

- Value obtained should be rounded to nearest whole number
- Suitable for use by both men and women
- Ideal or desirable weight for persons between the ages of
 - 18 - 65 years in the range of 20 - 25
 - or
 - over 65 years in the range of 22 - 27.

Weigh yourself once a week, preferably in the morning without shoes and with minimal clothing.

Try to reduce stress

- Learning relaxation techniques including breathing control may be helpful. You may find activities that divert your attention away from fatigue, such as reading or music, beneficial.

Exercise management

- There is growing evidence that exercise plays an important part in reducing fatigue. Regular moderate exercise can decrease feelings of tiredness and lack of energy; can improve stamina and lift your mood even during cancer treatments; studies have shown an improvement of fitness and quality of life among woman with breast cancer.
- It is recommended that the intensity, duration, frequency, and type of exercise be adapted to each person. You may like to discuss an exercise program with your GP.
- Documenting your daily/weekly exercise will help you prioritise and manage your programme more effectively.

Conclusion:

Fatigue is a common and debilitating side effect of cancer treatments but it can be managed effectively. Active coping strategies such as stress management and physical activity have shown in numerous studies to reduce fatigue and improve energy levels and feeling of vitality. In contrast, passive coping strategies, such as increasing rest and sleep and decreasing physical activity, seem inefficient in relieving fatigue, and may contribute to creating a vicious circle of immobility and reduced fitness, further contributing to more fatigue and low energy.

Acknowledgement: Pink Pilates 2008

- **Radiation therapy** - This can cause fatigue that increases over time. Fatigue usually lasts between three and four weeks after treatment stops but can continue for several months.
- **Combination therapy** - More than one cancer treatment at the same time or one after the other increases the chance of developing fatigue.

Other factors that may contribute to cancer-related fatigue

- **Decreased nutrition** - Side effects of treatments (such as nausea, vomiting, mouth ulcers, taste changes, heartburn or diarrhoea) can contribute to fatigue.
- **Anaemia** - A blood disorder that occurs when there is not enough haemoglobin (a substance in red blood cells which transports oxygen around the body) in the blood. Can cause fatigue but is treatable.
- **Hypothyroidism** - Occurs when there are low levels of hormones produced by the thyroid gland in the neck. This can occur after radiation therapy to the lymph glands in the neck. It can be treated.
- **Medications** - Some medications used to treat side effects, such as nausea, pain, depression, and anxiety can cause fatigue. Ask your doctor if you are unsure.
- **Prolonged severe pain** - talk to your GP.
- **Stress** - stress can worsen feelings of fatigue
- **Depression** - Depression and fatigue go hand-in-hand. It may not be clear which started first. Talk to your doctor, if you think depression may be causing your fatigue.

Practical tips to help manage fatigue:

Energy conservation

- Plan ahead and structure your daily routine to pace activities and rest periods.
- Prioritise your activities - decide what activities are important for you to do and what can be asked of others. Use your energy on important tasks. Help others understand and support you. Tell family and friends how they can help.
- Schedule high priority activities at times of peak energy.

Dietary guidelines and goals for weight control and reducing the risk of cancer

What should we eat?

- Current dietary guidelines for both cancer control and weight management promote plant-based and low fat foods combined with regular exercise.
- A sensible approach to weight control is to combine regular exercise with a healthy eating plan.
- Healthy eating means reducing your intake of fat, sugar and alcohol and increasing your intake of high fibre foods such as fresh fruits, vegetables, legumes, lentils, wholegrain bread and cereals.



1. Choose most foods from plant sources

Choose a diet rich in a variety of vegetables, fruits, legumes (dried peas, beans, lentils) and minimally processed starchy foods.

Plant based foods contain not only essential nutrients and fibre but hundreds of potentially cancer-suppressive agents known as **antioxidants and phytochemicals**.

Antioxidants are natural vitamins and minerals that wrap around and rid the body of damaging and potentially cancerous cells.

Phytochemicals are chemical compounds created by plants and thought to work by preventing carcinogens from forming in the body.

Dietary fibre (the indigestible part of plant food) is also strongly thought to provide protection.

2. Maintain a healthy weight

- Avoid being overweight or underweight. Aim to achieve and maintain a healthy weight.
- Current research suggests not to gain more than 5kg (11lb) in adulthood.

3. Keep physically active

- Balance the food you eat with physical activity.
- Regular exercise and a healthy diet are thought to be protective against breast cancer.

From research we know that women treated for breast cancer (with either chemotherapy or hormone treatment, radiotherapy or a combination), who have regular daily exercise have a better outcome and cope better with treatment side effects.

You should aim to do some form of exercise, a minimum of 3 - 4 times per week for at least half an hour.

4. Eat more vegetables and fruit

Eat five or more serves of a variety of vegetables and at least two serves of fruit.

One serve is equal to:

- 1 1/2 cup cooked vegetables
- 1 cup salad vegetables
- 1 medium fresh fruit e.g. apple, banana
- 2 small fruits e.g. apricots
- Limit fruit juice to 1 serve (1/2 cup) per day unless it is strained juice extracted from the whole fruit.

Frozen, dried and tinned vegetables and fruit may be used. Where possible choose those with little or no added salt or sugar.

Overall, it is preferable to choose fresh fruits and vegetables.

Fatigue information

This information is intended to help explain cancer-related fatigue, offer some practical suggestions and encourage people to ask for help from their medical support team; friends and family to assist if necessary.

Fatigue has been described as the most common, most debilitating side effect of cancer treatment and some people report this as a long-term complication of treatment.

However, many people seem to surrender to the idea that fatigue is inevitable and that it must be accepted. Many people do not seek any assistance to help them manage or alleviate their fatigue.

What is cancer related fatigue?

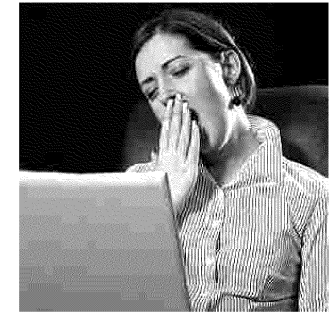
Cancer related fatigue is not predictable by tumour type, treatment or stage of illness. It may come on suddenly or you may become aware that you have been 'tired' for a long time. This fatigue does not result from activity or exertion, and is not relieved by rest or sleep. It may continue after treatment is complete. The exact reason for this fatigue is unknown.

What is the difference between fatigue and tiredness?

Tiredness happens to everyone - it is an unexpected feeling after certain activities or at the end of the day. Fatigue is a daily lack of energy; an unusual or excessive whole-body tiredness not relieved by sleep. Fatigue can prevent a person from functioning normally and impacts on a person's quality of life.

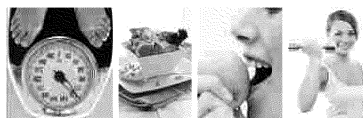
Cancer treatments commonly associated with fatigue:

- **Chemotherapy** - Any chemotherapy drug may cause fatigue. Its effect varies from person to person but people frequently experience fatigue after several weeks of chemotherapy. Some people find that fatigue lasts a few days, while others report fatigue persisting throughout the course of treatment and continuing after the treatment is complete.



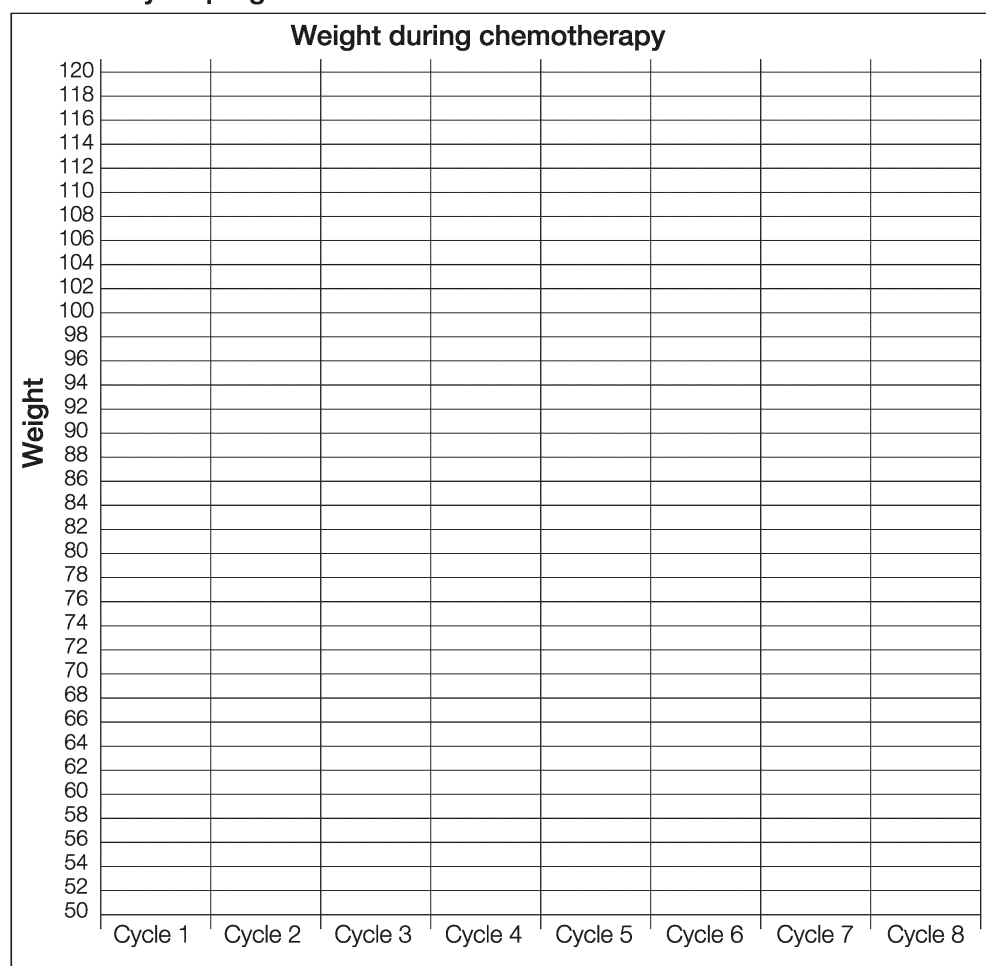
Keeping a healthy weight

Your health goals:



Healthy eating / lifestyle goals	Problem I may encounter	Solution
1.		
2.		
3.		

Chart your progress:



Many different fruits and vegetables have been reported to contain anticancer properties which work in a variety of ways to decrease cancer risk.

These include:

- **Dark green leafy vegetables** – spinach, silverbeet.
- **Deep yellow and orange vegetables and fruits** – carrots, pumpkin, squash, sweet potato, yams, papaya, mango, cantaloupe, bananas.
- **Cruciferous vegetables** – broccoli, broccoli sprouts, cabbage, brussel sprouts, kale, cauliflower, swedes, radish, turnip, turnip greens, watercress, kohlrabi.
- **Vegetables from the onion family** – onions, leeks, shallots, chives, spring onions, garlic.
- **Tomatoes** – fresh, dried, cooked as soup, juice and tomato paste and commercial and home made sauces.
- **Citrus fruits** – oranges, lemons, grapefruit, mandarins and tangelos.
- **Berry and red stone fruits** – Strawberries, raspberries, blueberries, cherries, plums and prunes.
- **Red grapes** – instead of red wine substitute with grapes which are potent sources of antioxidants.
- **Nuts** – are edible kernels of fruit and overall a good source of antioxidants. Nuts and seeds such as walnut, pumpkin and linseed (flaxseed) are good sources of omega 3 fatty acids which are thought to be protective factors.
- **Tea** – green tea and black tea are rich sources of antioxidants known as polyphenols that appear to prevent cancer cells from increasing. Green tea is best, followed by common black tea. Herbal teas do not appear to have this benefit. Caffeinated varieties are more potent than uncaffeinated.
- Avocados, chilli peppers, jalapenos (hot red chillies), mushrooms (include different varieties) zucchini, cucumber, peas, snow peas, figs, Asian vegetables such as bok choy and seaweed also contain a number of anti-cancer factors.

Which ones are the best?

Do not limit yourself to just those listed.

There isn't a single component in a particular food that does all the work.

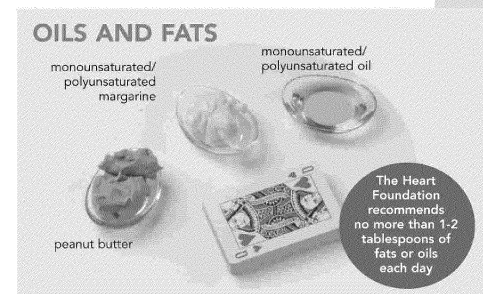
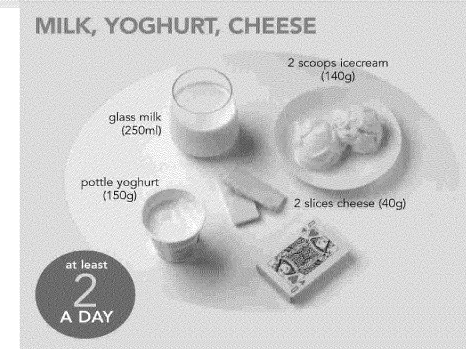
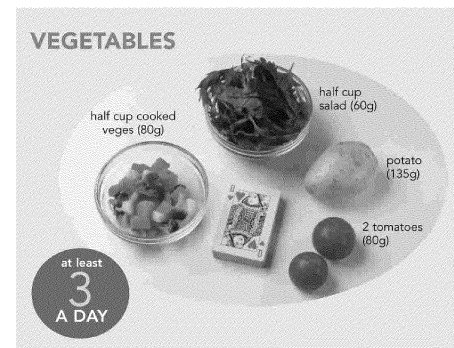
Eating a wide variety of fruits and vegetables daily will provide the greatest number of protective factors which are still to be discovered.



5. Include a variety of other plant foods

Eat 7 or more serves of a variety of:

- **Grains** (wheat, rice, rye, oats)
- **Grain products** (breads, cereals, pasta)
- **Legumes** (soybeans, chickpeas, kidney beans, lentils, etc)
- **Roots** (parsnips, turnips, carrots, fennel, radish, beetroot)
- **Tubers** (ginger, taro, yam, potato, sweet potato, and Jerusalem artichokes)
- **Nuts and seeds** (linseed/flaxseed, walnut, pumpkin, sunflower)



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To subscribe, go to www.healthyfood.co.nz

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What does a “Serving” look like?

We see a lot of information about “servings” in nutrition advice and on food packaging. If you’ve ever wondered what a “serving” of a particular food looks like, here’s a guide to help you. These are the recommendations from the Ministry of Health for the main food groups. The playing cards are there to give you an idea of the size of each item.



Aim for at least 5 of these serves to come from grains or grain products.

One serve of a grain product is equal to:

- 1 thick slice of bread
- 1 cup of breakfast cereal or cooked pasta
- 1½ cup cooked rice
- 1½ cup cooked legumes (dried peas, beans, lentils – canned varieties, if rinsed well are suitable to include).

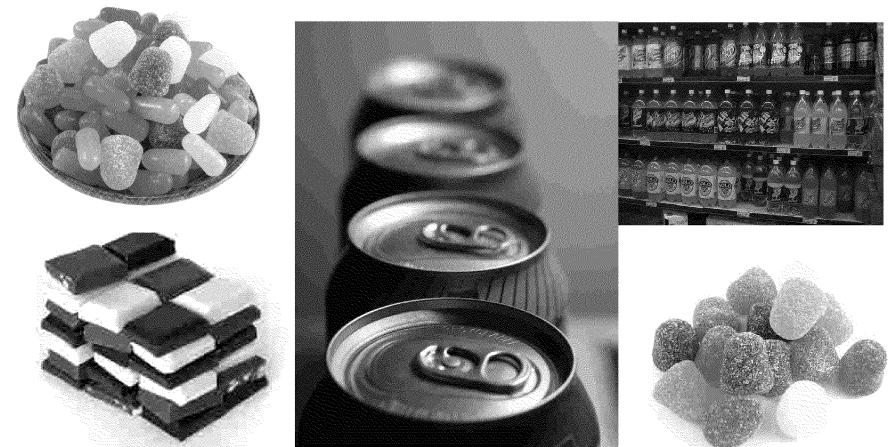
Select minimally processed varieties. Diets high in unrefined starch and dietary fibre are thought to reduce the risk of breast cancer.

Legumes and wholegrain varieties of breads, cereals, grain products, rice and pasta are good sources of plant protein, starch, dietary fibre, micronutrients and biologically active and protective anticancer compounds.

Replacing high fat foods with a variety of these low fat, fibre rich foods together with fruits and vegetables will also assist weight control.

6. Limit sugar consumption

- Limit refined sugars, these include white, brown, raw sugar, honey, glucose and syrups. Limit foods that are high in sugar.
- Where possible select the sugar free alternative.
- Reduce the amount of sugar you add to foods and drinks.



7. Limit alcohol

- Breast cancer patients are advised to **limit** alcohol.
- If consumed, limit to less than 1-2 standard drinks per week.



Alcohol is now a recognised breast cancer risk.

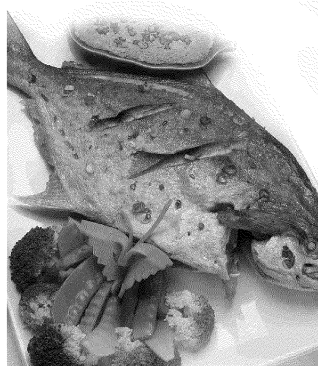
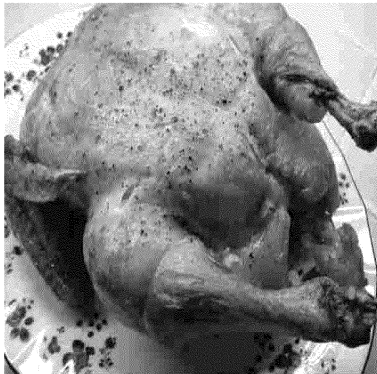
8. Limit the consumption of meats especially those high in fat

- Current literature suggests around 100g of red meat per day on two to three days of the week.

100 grams of steak or chicken is about the size of the palm of a woman's hand.

- Fish, poultry or meat from non-domesticated animals (e.g. venison, rabbit) are preferable to red meat.
- Preferably limit or avoid high fat meats like: salami, luncheon sausage, sausages, bacon and ham.

Overall it is recommended that you limit consumption of meats, especially high fat meats, include more fish (at least once per week) also skinless chicken and replace some meat meals with legumes/lentils.



9. Avoid animal fats

- Limit the intake of high fat foods particularly those from animal sources.
- Use vegetable oils in moderation and choose monounsaturated varieties such as extra virgin olive oil and canola oil.

10. Limit salt and salty foods

- Limit the use of table salt and salt in cooking.
- Aim to choose either “no added salt”, “low salt” or “salt reduced” products.
- Minimise intake of salt cured, salt pickled and smoked foods.
- Limit use of processed foods, aim for fresh, home made meals as much as possible.

11. Use healthy cooking methods

- Use relatively low temperature cooking methods.
- Avoid eating charred or burnt food.
- Avoid burning of meat juices.
- Choose lean cuts and remove any visible fat or poultry skin prior to cooking.
- Avoid eating raw meat.
- Aim to use these healthy cooking methods:

- Steaming
- Stewing
- Baking
- Roasting
- Braising
- Microwaving
- Poaching
- Boiling
- Slow cooker



Try not to char-grill, fry or BBQ too often.

Do not cook meat beyond well done.