

CANCER

A threat to your life or a chance to take control of your future

When a person is told they have cancer, usually their mind goes into turmoil. It is hard to think clearly and the amount of information available from friends, books, the internet, health professionals, alternative practitioners is usually too much to comprehend.

In this booklet we will try to help in this decision making process by bringing together most of the therapies available and we aim to enable a person with cancer to reach a therapy decision with some confidence, and develop an action plan.

Up to 90% of people with cancer look at using complementary therapies and $\frac{3}{4}$ of them do not tell their doctor what they were doing. In this booklet we want to show the value of both conventional and complementary treatments, and, armed with this information, we would encourage you discuss all forms of treatment with all your health providers.

In this booklet we will explore:

What treatments are available

Why they work, or theories on why they might work

When patients should consider using them

Cancer can be beaten

Many people when told they have cancer believe that this is a death sentence. But with modern treatments this is now far from reality.

Be aware of these true facts:

- People have been cured of every type of cancer,
- Cancer is the most curable of all chronic diseases (yes this is true !)
- In the USA alone there are 8 million people living with cancer, 3 million of these are considered cured.

The long term survival rates for cancer patients are much much better than most people realise. *For all cancers the 20 year survival rate is over 50%, and is higher in thyroid and testis (90%), melanoma and prostate (80%) bladder cancer & Hodgkins (70%), breast (65%) and cervix (60%).*

*More than half of all patients with bowel, rectal, ovarian and kidney cancer live for more than 20 years.*¹

With the extent of research being done world wide, we are confident that within 20 years we will almost certainly have beaten cancer (similar the way previous generations have beaten bacterial and virus infections.)

It is essential to feel positive towards your body and your health because with cancer, probably more than with any other disease, our attitude to the illness and the strength of our resolve to recover, in most cases is more important than any other treatment.

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What is cancer?

Our bodies are made up of trillions of cells, each with a limited life. Throughout our life, these cells wear out, and are replaced with new cells. Sometimes the new cells are imperfect; the immune system recognizes these and destroys them, just as it does with invading viruses and bacteria. . Cancer develops when cell duplication goes wrong and for some reason the immune system does not destroy the abnormal cells.

When an abnormal cancer cell slips through this defense system, it starts to multiply out of control. If the immune system does not recognise and stop it, this new clump of abnormal cells can become a cancer. Initially the cancer cells grow where they first occurred, but sometimes small clumps can break off and travel in the blood or lymph to other parts of the body and start growing there – these are called metastases or cancer secondaries.

The most important way to prevent, arrest and treat cancer is to support the body's immune system

So it seems obvious – *the most important way to prevent, arrest and treat cancer is to support the body's immune system*. Remember the immune system is designed to destroy foreign or 'different' cells (like viruses and bacteria) and it also considers cancer cells to be abnormal and tries its utmost to destroy them as well. However the immune system can become overwhelmed by the number of the cancer cells. Many of the treatments we discuss aim to strengthen our immunity as well as damaging the cancer cells. Because our immune system is so powerful, cancer should never be considered incurable. As we have stated above – **every type of cancer has been cured!**

The effects of cancer – as the result of the growth of the cancer cells, a number of things can occur:

1. They invade into vital organs and damaging them. This accounts for only about ¼ of the deaths from cancer.
2. Release of toxins and chemicals from the growing and dying cancer cells can 'poison' the body and affect the function of the liver, kidney or other organs.
3. Suppressed immunity can lead to severe infections including pneumonia which can be fatal.
4. Weight loss and debilitation – as the cancer cells grow, they consume most of the body's energy and nutrients. "Starvation" and depletion of essential nutrients suppress the immune system, causes weight loss and exhaustion, and is the cause of almost half of all cancer deaths..
5. Very rarely, the cancer cells can secrete hormones or other products which can cause unusual symptoms (called the non metastatic manifestations of cancer).
6. Cancer causes emotional, mental and spiritual problems – anger and frustration, unresolved problems from the past, uncertainty on the meaning of life, what happens after death. Most patients have many of these and other feelings. People are much healthier when all of these are openly discussed, rather than being bottled up inside. The relationship with family and friends can also become strained, or it can become a time of real closeness within the family.

Preventing Cancer:

There are many materials and toxins which are known to increase the risk of developing cancer. There are also substances and actions which can lower the risk (e.g. including selenium in the diet, not wearing a bra for more than 12 hours per day – see under breast cancer. And many more).

However this booklet is written mostly to help people once cancer has been diagnosed. People wanting to know more about prevention, we would refer to our first booklet in the Fad Fable Fact series – “The scientific documentation about our diet and the use of dietary supplements.

Therapies for cancer

The shattering news that a person has cancer often causes a state of shock, incomprehension, fear and impotence. The effects of this stress cause a number of chemical and hormonal changes in the body rendering any logical thought and decision making difficult. It is very difficult to reach well researched and logical decisions on what steps to take. There is an overwhelming array of treatments available. Do they work? Could they cause harm? Do they interfere with conventional treatment?

All this needs to be weighed up before making a decision on what to do.

In this booklet we will discuss most of the treatments which can be used - both conventional and complementary. We will try to separate the fads and fiction from the proven facts.

We would encourage you to be open with your oncologist or surgeon and confirm that what you are considering does not clash with their treatments – especially radiotherapy or chemotherapy.

At the present time not many treatment providers know about the wide range of available therapies, but as more information becomes available, the diverse opinions of complementary and conventional treatment providers is narrowing. We have made a study of ALL modalities to provide a balanced overview.

Overview

Very rarely is one treatment the ‘magic bullet’, but the combined affect from a number of treatments can be extremely powerful and therapeutic. We will start with an overview of possible therapies, then each will be discussed in detail.

1. **A positive attitude to your illness** – probably the most important in successfully overcoming cancer.
 - a. Relationship with your doctor – openness and trust
 - b. Exercise
 - c. Mental attitude
2. **Cleansing and detoxifying the body** – a clean and unpolluted body, with all its cells free from toxins and poisons, provides a secure foundation; helping the immune system to function at optimum.
 - a. Bowel cleansing - enemas and colonics
 - b. Liver detoxification.
 - c. Eat pure, organic unpolluted food; drink plenty of clean filtered or pure water.
 - d. Intravenous heavy metal removal – if there is a history of any exposure
3. **Make the body inhospitable to cancer**
 - a. Oxygen – cancer cells do not like oxygen,
 - b. Avoid high blood glucose peaks because cancer cells use glucose as their energy source.

- c. Alkaline pH – cancer cells do not like an alkaline medium.
- d. Reducing the spread of the cancer cells
- 4. **Strengthen the normal body cells**, especially the immune system cells -
 - a. Complete nutrition – good food raw foods, juicing, fruit and cruciferous vegetables.
 - b. Nutritional supplements – high quality supplements will supply what is required
 - c. New therapies are developing which may boost the immune system’s fight against cancer.
- 5. **Treatments targeting the cancer cells:**
 - a. Traditional therapies
 - i. Surgery –removing the tumour, debulking procedures, cryosurgery
 - ii. Radiotherapy and brachytherapy
 - iii. Chemotherapy and hormonal therapies.
 - b. Non traditional therapies
 - i. Mind body medicine
 - ii. High dose nutritional supplements
 - iii. Herbs
 - iv. Intravenous therapies – high dose vitamin C
 - v. Homeopathic therapies and extracts
 - vi. Hyperthermia
 - vii. Others – magnetic, electric field therapies, live blood and stem cell infusions.....

Now let’s study each of these treatments in turn:

A Positive & confident attitude to your illness

Your health advisors

Your overall plan should be discussed with your health professional who may be your GP, oncologist or another health practitioner, who should be like the conductor of an orchestra and refer you to other specialists as necessary.

When you see any one of these,

- Make sure he or she is a person you can relate to, who will listen to your opinions and will allow you to have some input into your treatment. Remember this is your journey and you are ultimately the decision maker.
- If you are unhappy or confused, ask for a second opinion.
- Write down all your questions, perhaps take your partner or a friend with you, take notes and clarify all your questions. Buy a beautiful notebook in which to write all ideas and suggestions, especially the positive ones.
- Find out all the treatment options – their possibility of success and likely side effects and adverse effects. It is your right to know about these so you can weigh up your options. In the past, people accepted treatment and often did not ask about side effects and other adverse effects. This knowledge is most important and can weigh one’s decision to proceed with a treatment.
- If the option you are offered is a major procedure – major surgery, radiotherapy, chemotherapy – ask if you could have a second opinion just to give you the unreserved conviction that the treatment you are being offered is the best one for you. Ask if the treatment will prolong the quality or the quantity of your life.



As we will discuss below, *your confidence that your treatment is going to be of real benefit – is possibly the most important part of your healing therapy.*

Your attitude and your lifestyle.

In most books discussing how a person can beneficially affect their disease, the most important chapters usually discuss Mind / Body medicine. In the Western world we have forgotten how much our thoughts, fears and attitudes affect the rest of our body. The Aboriginal bone pointing ceremony shows just how powerful the mind can be in a destructive way; but equally a positive, optimistic, happy attitude can make a huge difference. Those who saw Robin Williams in the 'Patch Adams' movie saw just how important caring, happiness and laughter were in helping people to cope with their current situation, and also how it helped their wellbeing and recovery.

Your Mental attitude is probably the most important treatment modality of all. A positive attitude and confidence in your health team, believing that you will recover is almost essential for a complete healing. There are many important techniques which can help to achieve this:

- **Meditation** – emptying the mind and creating inner peace is often tremendously helpful. Most non Western countries practice this and realise its value. Meditation provides an inner peace and strength and will boost your conviction that you will recover. Read about meditation and attend workshops which are available everywhere. For some notes on about meditation [see appendix F]
- **Imagery** - for many people this may seem weird – but it really does work. In a meditative state, focus on the immune cells and imagine them moving in like a small army and destroying the cancer cells. Strange though it sounds, it is effective and not just with cancer. Dr Dean Ornish is a cardiologist and uses imagery in heart patients to open up their arteries. There are many things we don't understand about our minds – some things we just have to take on trust, and this is one of them. Imagery and affirmations link our bodies to the power which created us.
- **Spiritual awareness** and growth is also very important. Whether we acknowledge it or not, we have a dimension as human beings that sets us apart from the animal world. We are a very complex interaction of body, mind and spirit. We may not be aware of the power of our mind and we often only find out in adversity the power of the Spirit. Almost all cultures acknowledge some greater spiritual force although it may be expressed in differing ways. Once people realise that their health and wellbeing is in danger, the importance of this spiritual awareness comes into focus. When one becomes ill, it is important to nurture the spiritual side of our existence. This concept is far broader than any one religion. It is linking into the power that created us with the whole energy of the world - gain strength from it.
- **Be positive** – remember we become and move towards what we focus on. So think constantly on cancer, illness and the possibility of dying – this pulls us down. Think of power and beauty, abundant health and strength, and your mind will move your body in this direction.
- **Ignore any negative comments** from people who should know better. People who talk about their bad experiences, or who criticise conventional or complementary treatments without really knowing about them. Sadly some doctors do this about vitamins, meditation and other complementary treatments because they feel that their treatment is the only thing that matters. It is important to realise that often their criticisms are made in ignorance with the attitude "if I don't understand it, then it can't work"

A request to all those talking to people with cancer never, we repeat never criticize or make someone lose faith in a therapy – providing it is doing no harm. In ways we do not understand, a healthy positive mind strengthens the immune system and any criticism or attempts to make the patient lose confidence in a therapy, could do positive harm!

- **Forgiveness** – always practice forgiveness, do not hold grudges or negative feelings toward others. The only person this is hurting is you. Look at the grievances of the past, study them, forgive the perpetrators (either physically or in your mind), and put the whole experience behind you. This can

be a very healing process, because the negative feelings caused by these stresses actually impairs the immune system.

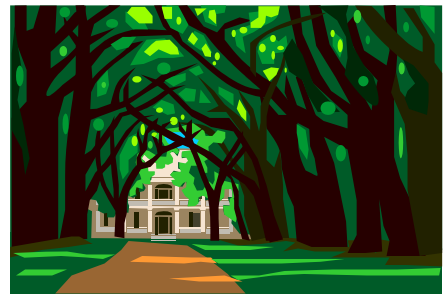
- **Laughter** – people feel better when they laugh because the metabolism is increased and neurochemicals enter the blood. Laughter has been shown to boost the immune system – it lowers cortisol which enables interleukin 2 and other immune boosters to express themselves. After a session of genuine belly laughing (watching funny movies, Rowan Atkinson, the Goons....) pain can be effectively reduced for many hours.
- **Make your own endorphins** – become your own ‘drug factory’ Endorphins are morphine like ‘hormones’ created by our bodies to help cope with stress, endure pain and make us feel happy. Long distance runners create endorphins – enabling them to cope better with pain. Any person in pain can also increase their own pain relieving hormones which can reduce pain, discomfort and depression. [See App E for a list of simple satisfying techniques.]

Exercise and lifestyle – Cancer generates feelings of weakness and low energy. Walking, especially along a beach or amongst beautiful trees lifts the spirits, and boosts vitality. Being amid beauty and experiencing the sun, wind and even rain provides a positive spiritual uplift.

Search out inspiring and moving music, movies & DVDs, books and friends.

Go out and do things you enjoy.

Arrange to have a regular massage.



Dr Bernard Fox of Boston University Medical School has described the profile of a person most likely to survive cancer – “They fought with their doctors, they sought alternative opinions and forms of treatment. They refused to relinquish hope and struggled to survive.” “Cancers tend to disappear in people who have faith, independence, emotionally transforming experiences, and active involvement in their disease.” In a word, people who are really determined to live have a fighting chance to get over the disease.

2 – Detoxifying and cleansing the body

Does your body contain toxic levels of heavy metals and other poisons?

In today's world it is almost impossible to avoid fumes, pollution and poisons in the air and in our food. These weaken the body, especially the immune system, and if they are present in high amounts, then it would be a good idea to consider their removal

There are a number of techniques which claim to identify toxin levels by magnet/electrical and other measurements. Because their mechanism of action is hard to understand to conventional medical thinking, we do not fully understand these and really cannot comment on their accuracy. Probably the most reliable method is to measure the level of toxins found in the hair or in the blood or urine. The hair is one of the few ways that the body can rid itself of many toxins, so the level of heavy metals and other materials found in a hair sample taken correctly, probably gives the most reliable indication of the current toxic load in the body.

Cleansing and detoxification –

Cancer is a toxic disease. The tumour cells often outgrow their blood supply and die. They also break down for many other reasons and release toxins into the body causing malaise. Sometimes they can create a noticeable smell. Toxins can also affect healthy body cells and impair their functions. Thus removing toxins is an important adjunct to therapy.



- **Drinking plenty of pure filtered or clean water** enables the body to flush more of the toxins out through the kidneys. Dehydration concentrates the toxins and makes people feel unwell. Everyone should drink at least 8 glasses of water daily, in addition to other drinks. Make the water as pure and chemical free as possible.
- **Eat quality, unprocessed and organic food** – trying to rid the body of toxic chemicals and materials is pointless if one continues to eat polluted food which contains toxins, pesticides, fungicides, sprays, heavy metals and poisons. Eat organic, raw and unprocessed foods as much as possible. Increase your intake of fruit and vegetables, especially sprouted seeds, cruciferous vegetables [see appendix B] and nuts. Burning and over cooking, especially using hot oils or barbequing has been shown to increase cancer inducing chemicals in our food.
- **Eat plenty of fibre** in the diet – because cancer patients often have a poor appetite this can sometimes be challenging. Fibre is found in fruit and vegetables. There are two types of fibre:
 - Soluble fibre - which absorb toxins and carry them out through the bowel
 - Insoluble fibre - which simply keeps the bowels moving, reducing the time toxic matter stays in the bowel for reabsorption.

There are some very good plant fibre drinks which many patients prefer taking instead of eating mountains of vegetables.

- **Colonics** - One major way to eliminate toxins is through the bowel. Cancer patients should keep their bowels moving regularly with bulking agents and especially with fibre. Avoid constipation. Colonic irrigations are probably the most effective way of removing garbage from the body. Correctly

performed they are comfortable and leaving one feeling healthier and cleansed. Enemas can also be used, but tend to be more exhausting, but can also be done at home.

- **Detox in a sauna** – Increasing the temperature of the body does not damage the body's normal healthy cells but weakens the cancer cells.

Sweating and regularly wiping the skin eliminates many toxins.

Far infra red saunas are the cheapest and the best for treating cancer. Unlike conventional saunas which heat the entire room, the far infra red models use an infra red light at the far end of the infra red spectrum . The heating is less intense and also the heat energy penetrates deeper into the tissues. [For more details on how to use saunas- see appendix D]

- **Liver Cleansing** - The liver is the largest organ in the body with 1.5 litres of blood passing through it per minute. The liver has many roles:
 - The liver stores, produces and releases glucose as needed by the body
 - Stores many vitamins, iron and copper.
 - The liver manufactures most of the proteins and fats required by the body for energy and to rebuild new tissues.
 - Detoxification -- the liver filters the bloodstream of toxins, and dead materials. It metabolises drugs, hormones and waste products from the body for the body to use and to be eliminated.

Inside the liver the Kupfer cells are the 'garbage collectors'. These take in dead cells, viruses and bacteria, artificial chemicals, toxins, incompletely digested proteins *and cancer cells*. The Kupfer cells digest and neutralise all of these. So the liver cleans and filters the bloodstream.

A healthy liver keeps the body clean, protects the immune system from overload, improves metabolism, and helps control body weight.

Liver cleansing reduces the work load for the liver, enabling it to clear the blood more efficiently and boost immunity. There have been a number of books written on a liver cleansing diet which is also beneficial for cancer treatment. [see appendix G]

- **Removing heavy metals** – if the body has a significant load of heavy metals such as lead, aluminium, arsenic, cadmium, iron, nickel, or mercury, then it might be beneficial to remove these. Intravenous EDTA chelation or a combination of DMSA, Vitamin C, lipoic acid and chlorella can remove heavy metals. These heavy metals impair cell function and if there is a history of significant exposure, or hair analysis suggests there is a high metal load, then perhaps removal could be considered.

Identify and treat other causes of toxicity:

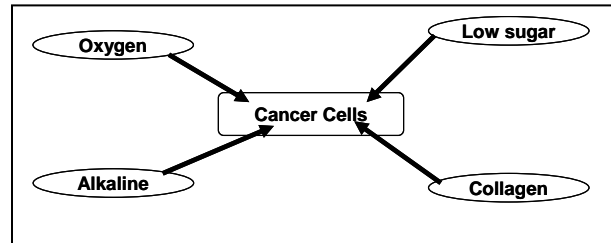
- Leaky gut syndrome allows large damaging proteins into the body
- Candidiasis – yeast infection weakens the immunity
- Chemical or metal toxicity, esp mercury in teeth
- Chronic infections – gut, sinuses, teeth, root canals, tonsils, lungs

3 - Making the body an inhospitable host for cancer

In a number of ways cancer cells are different from normal body cells, and in most ways they are much simpler and primitive cells

- they grow faster,
- they have fewer specialised enzymes
- they metabolise differently (convert food into energy).

By understanding these differences, the cancer cells can be selectively damaged or their growth slowed, without affecting the other normal cells of the body.



Because cancer cells grow very fast, they often grow away from the small blood vessels which provide all the cells with oxygen and energy (sugars and fats), and take away the waste. To overcome this problem, some cancer cells secrete hormones which encourage the growth of new blood vessel (this is called angiogenesis).

Because cancer cells need to survive with a poor blood supply they changed the way they make energy:

- They create energy without oxygen. This is only possible with sugars which they ferment (similar to fermenting a wine).
- Therefore sugars are the main source of energy for cancer cells and they avidly take it up. Cancer cells also encourage the liver to break down proteins into glucose. This is one of the reasons many people with advanced cancer lose so much weight. [The drug Hydrazine sulphate can block this – see pg xxxx].
- Fermentation works best in an acid medium, so cancer cells like the tissues to be acidic, not alkaline.

So cancer cells use glucose as their energy source, and prefer an acidic medium, low in oxygen

Therefore we can fight cancer by providing the opposite conditions:

- lots of oxygen,
- as little glucose as possible,
- alkaline tissues.

1. Oxygen – cancer cells prefer to live without oxygen. This is why a number of treatments providing oxygen treatments may help cancer patients.

- Breathing – We all know we need to breathe to live, yet most of us do not breathe correctly – we do not fully open our lungs. Learn diaphragmatic breathing by initially keeping the chest still and breathe in by blowing out the stomach - tummy breathing.

Sometimes take a double breath – breathe in as deeply as you can and then try to take another breath on top of this. The more oxygen taken in, the better our healthy cells feel and the weaker the cancer cells become.

Fresh outdoor air contains more oxygen than indoor air, smoking is an obvious oxygen drain - both direct and second hand smoking. There are a number of specific breathing exercises and programmes which may help further. Consider walking along the beach, by a river or in trees.

- Exercise, on a bicycle or treadmill, while inhaling oxygen through a mask (EWOT – Exercise With Oxygen Therapy) gives high levels of oxygen all over the body.

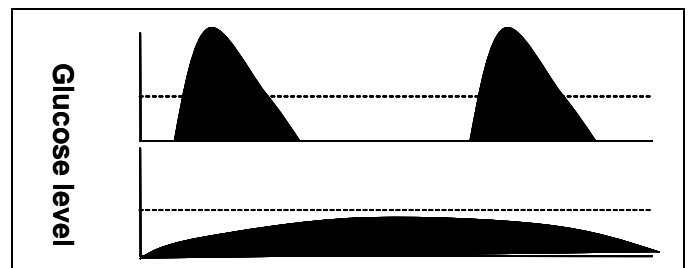
- Hyperbaric oxygen chamber – in a hyperbaric chamber the very high pressure forces oxygen deeper into the tissues at higher concentrations.
- *Intravenous hydrogen peroxide or hydrogen peroxide in enemas are suggested by some. It is claimed they introduce more oxygen into the blood stream. But the amount released when 2 molecules of H_2O_2 becomes 2 molecules of water (H_2O) and one of oxygen (O_2) – is very small when compared to what is breathed in through the lungs. This treatment can be risky and there is little data that it increases the oxygen level or is of any benefit.*
- Ozone therapy - ozone therapy bubbles ozone (O_3) directly into the blood, or into drinking fluids or that used for enemas and colonics. Inside the body, the ozone (O_3) divides into O_2 and O' which is believed to give more oxygen. Again this is a very small amount and the value of the O' is not known. As with hydrogen peroxide this therapy needs to be approached with considerable caution.

Does oxygen therapy make a difference? There are no trials showing that cancer is ‘cured’ by oxygen therapy, but it may well help. The less aggressive treatments (improved breathing techniques and EWOT) are likely to give the greatest benefit.

2. Avoid peaks in the blood glucose. – Cancer cells can only use sugar for energy, and in the absence of oxygen do it very inefficiently. (without oxygen, 1 mole of glucose creates 2 moles of energy ATP, while with oxygen 1 mole of oxygen creates 38 moles of ATP). This means that the cancer cells need a lot of glucose to survive and to multiply.

Keeping the blood glucose levels low can starve the cancer cells of energy. This does not mean you shouldn’t eat carbohydrates, because our healthy cells need these, especially the brain. But avoid high peaks of glucose in the blood by eating low glycemic carbohydrates [appendix B]. It is the high peaks which makes the glucose more available to the cancer cells.

These graphs show how eating low glycemic sugars (bottom graph) provide just as much sugar and energy as high glycemic meals, but no high levels are reached which the cancer cells require.



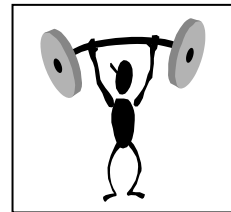
3. Alkaline pH – Cancer cells create an acid medium around themselves. Eating alkaline foods has been suggested as a way to neutralize this acidity and so make it less ‘comfortable’ for the cancer cells. Eating foods which have an alkalising action and avoiding acidic foods may be beneficial and can do no harm. Because the blood contains buffers, the blood will nearly always test at a neutral 7.4, but this does not necessarily reflect pH in the tissues. Many people suggest testing the saliva or urine as a better indication for the acid/alkaline state. [for a list of alkalinizing foods see appendix A].

4. Reducing the ability of the cancer cells to spread (metastasize) – All the body cells are held together by fibres made of collagen. For cancer to expand and spread, it must break down these collagen barriers. Some cancer cells produce a number of ‘digestive’ enzymes to do this (collagenases and metalloproteinases).

Some nutrients (such as l-lysine and L-proline) are powerful inhibitors of these digestive enzymes. High dose vitamin C helps the body to repair and replace the collagen and by reforming the barrier may slow down the cancer cells spread.

4. Strengthen the body and its immune cells

Just as a car will not work without petrol, air, water and oil, our bodies require a number of nutrients to function properly. With cancer cells ‘stealing’ many essential nutrients, polluting the body with poisons and toxins, our normal cells including our immune system need all the help they can get to fight this ‘invader’.



Diet – An excellent diet can have 3 benefits

- (1) to provide all the nutrients the body needs to function perfectly
- (2) some foods actually damage cancer cells
- (3) a good diet can boost the immune system.

There are many foods and herbs which have been claimed to attack cancer cells or strengthen the immune system. There is much debate around these, however there is NO debate that a good healthy diet is very important.

THERE IS NO DEBATE THAT AN EXCELLENT HEALTHY DIET IS VERY IMPORTANT

- A diet of fresh fruits and vegetables, picked when only ripe when all the vitamins are produced. Preferably organic and free of toxins and sprays. Eat in Technicolor.
- Avoid eating too much meat or saturated fats and avoid processed foods.
- Eat salt water fish regularly (sardines, herring, tuna) to provide good quality protein and essential fats.
- Avoid sugar and other high glycemic carbohydrates, coffee and alcohol.
- Do not overcook, and many foods are best not cooked at all.
- Freshly prepared sprouts are full of nutrients, and many cancer patients make their own.
- The cruciferous vegetables are full of antioxidants, isothiocyanates and also indole-3-carbinol which have a beneficial effect on cancer cells. A list of the cruciferous vegetables is seen Appendix B.
- Other natural cancer fighting foods are listed in appendix C



An ideal diet is almost totally vegetarian (with the addition of good fish). Using organic foods this will reduce the toxin burden the immune system has to cope with. Many of these vegetables have anticancer actions.

Good nutrition is crucial – undernourishment can have devastating consequences for cancer patients. It causes weakness and lethargy, but it is believed that almost 40% of cancer patients die from malnutrition not from the cancer.

Poor nutrition is caused by a number of factors:

- the cancer cells guzzle nutrients faster than other tissues,
- some cancer cells secrete a hormone called cahexin which suppresses appetite,
- poor appetite and nausea are side effects from radiotherapy and chemotherapy,
- toxins created by the cancer reduce the appetite

The answer - eat as well you can. It is often well worth having regular nutrient ‘shakes’ and protein powders. There are some very good nutrient drinks available, low glycemic sugars, good fats, proteins and fibre. The improved nutrition can make a big difference in wellbeing and long term outlook.

Nutritional supplements –

We believe these are essential for all, even more so for those with cancer. Unfortunately, much of the food we buy today contains fewer nutrients than in the past.² This is because of depletion of minerals from the soil, early picking before vitamins are formed and ripening them in store. Processing and then preparing and cooking remove more nutrients. For these reasons, taking a comprehensive pharmaceutical supplement which is well absorbed and offers the complete pantry of nutritional needs is essential for health.

Note - TAKING SUPPLEMENTS DOES NOT MEAN YOU CAN EAT AN INFERIOR DIET!

If you eat as well as you can and take a good supplement – your body can help itself to any nutrient it requires.

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We strongly recommend that everyone with any form of cancer, should take a good preparation of the following supplements:

- **Multivitamin/multimineral tablets** - A comprehensive good quality multivitamin and multimineral supplement, containing vitamin E, vitamin A or beta carotene, vitamin D (provided the blood calcium level is not too high), folic acid and vitamin C and selenium(or this can be taken separately). A good multivitamin/mineral tablet should contain:



- **Vitamin E** (400 – 800iu daily) has been shown to reduce breast cancer³ prostate cancer⁴
- **Vitamin C** – Cancer patients are nearly always depleted of vitamin C, which, because it is like a sugar, is avidly taken up by cancer cells. A regular intake of vitamin C 4 - 8 grams per day has a number of beneficial actions:
 - Most people experience a major improvement in quality of life – with a sense of wellbeing and improved appetite.
 - Vitamin C neutralizes carcinogenic nitrites we get from our diet and in the air
 - Vitamin C reduces inflammation and so can help in relieving some of the pain caused by inflammation which occurs around the cancer cells.
 - It boosts the immune system, helping it to attack and kill the cancer cells more effectively.
 - Vitamin C may reduce the spread of cancer (metastasis). Cancer cells spread between normal cells by breaking down the fibrous collagen which holds our cells together. The enzymes from some cancer cells dissolves this collage. Taking plenty of vitamin C, which is essential for making new collagen, may make it harder for the cancer to spread.
 - Vitamin C in high doses given intravenously – can selectively damage cancer cells and act almost like chemotherapy. [see pgxxx]

Note - it is very important not to stop high dose vitamin C treatment suddenly because it can create a 'scurvy' like situation. If vitamin C must be stopped, reduce the dose over a few days.

- **Vitamin D** **– the sunshine vitamin. Vitamin D is a hormone like vitamin and may reduce breast cancer by an anti-oestrogenic action. Exposure to sunlight light makes vitamin D in the skin. This can reduce the incidence of breast cancer by 30-40%. Vitamin D also seems to be protective against cancer in men. Those with higher levels of vitamin D were half as likely to develop aggressive forms of prostate cancer as those with lower levels⁵

** Note - in some cancers high blood calcium levels can develop. Before taking a supplement

containing calcium or vitamin D check with your doctor that the calcium levels in the blood are satisfactory.

- **Folic acid** – low levels in the blood are associated with an increased incidence of breast, cervical, brain, lung and colon cancer. In the USA Nurses Study, colon cancer was reduced by a massive 75% in those taking folic acid for longer than 15 years.⁶
- **Selenium** 100-200ug (if you live in NZ where the soil is very low in this mineral). This has been shown to reduce the risk of prostate cancer in China (where the level is also low). *In a study performed in Arizona, selenium supplements halved the deaths from cancer*⁷. Selenium boosts the immune system, is essential for the formation of glutathione and other very important enzymes, and selenium can also provide some protection from the dangerous heavy metals mercury, cadmium and arsenic.
- **Magnesium** - many people benefit from additional magnesium 500mg per day. It usually comes with calcium, but check first with your doctor that the cancer has not caused high calcium levels. Magnesium can improve relaxation, cramps and sleep.
- **Omega 3 fish oils** – 1 gram daily will provide plenty of the essential fats necessary for healthy cell and immune function. Some studies have also shown that the spread of prostate and liver cancer may be slowed with omega 3 oils⁸

Other supplements which have been shown to help in treating cancer:

- **Green tea** – 1-3 cups per day - In addition to being a refreshing and invigorating brew, green tea has many proven actions –
 - It blocks enzymes called matrix metallo-proteinases – this may reduce the cancer cells spreading
 - Encourages natural cancer cell death (apoptosis)
 - It penetrates the blood brain barrier so can help brain cancers
 - Has been shown to help medullo blastoma, chronic lymphatic leukemia, skin cancer, and metastatic prostate cancer.⁹
 - Breast cancer patients in Japan who drank green tea had longer survival times.
- **Pro-biotics** – a good quality lactobacillus or other probiotic is important to maintain good bacterial colonization in the gut.



Is it appropriate to use herbs and supplements?

Most doctors and health professionals have little knowledge about these compounds, and as frequently happens in medicine, lack of knowledge is often equated with lack of effect. However there are good trials confirming their benefit, and many years of experience in complementary practices in the orient should not be ignored without good reason.

Many of today's drugs are derived from plants and herbs, including some anti cancer drugs – Taxol (Pacific yew), Etoposide (May apple), and Vincristine & Vinblastin (periwinkle plant)

What is most important is that these herbs and supplement are very unlikely to have any adverse effects and together with conventional treatment could be very beneficial. However if you are currently undergoing treatment (chemo or radiotherapy) it would be best to tell your doctor what supplements you are taking.

Other support programmes:

- Regular and plentiful sleep. Taking melatonin at night can frequently help. Melatonin has additional useful properties in cancer patients [see pg xxx]
- Regular healthy physical exercise – to a level you find comfortable
- Regular relaxation and Spiritual practice (if this is appropriate)
- Have a regular massage
- Spend time with nature – woods, flowers, sea, hills – anywhere where you can feel at peace and appreciate our world with awe.

New and developing treatments:

These are still in the developmental phase, but some units actually do provide these treatments and hopefully many more will be developed. Their aim is to strengthen the immune system and direct it more strongly against the cancer cells, thus enabling the body to rid itself of the cancer.

Peptide modulators – these are compounds which can be inserted into the T killer cells of the immune system and could make them much more active and successful in their hunt against the cancer cells.

Cancer vaccines – just as vaccines help the body's immune system to recognise and then fight viruses and some bacteria, vaccines are also being developed for cancer cells. Sometimes the body does not recognise the cancer cells. Vaccines can be made from cancer cells which are removed, changed and then re-injected back into the body. In another technique, some of the patient's immune cells are removed from the body, exposed to the cancer, and then replaced into the body boosted with a new aggression to fight the cancers.

The cancer cell 'switch' – many researchers believe that there is some biochemical 'switch' which makes cancer cells multiply out of control. One such 'switch' has already been found for a form of leukemia. If we can find 'switches' for other cancers, then treatment may become very simple. Many researchers the world over are hunting for the 'switch'.

The future - Over the next few years, these treatments have the potential to completely change the treatment of cancer. We anticipate within 10 – 15 years, cancer will no more be feared than bacterial or viral infections are today. In our grandparent's day, polio, smallpox, Tb and pneumonia were feared diseases, much as cancer is today. Vaccines and antibiotics have blunted the effects of these illnesses. We are confident that new treatments will relegate cancer into a 'killer disease of the past' box.

5. Treatments targeting cancer cells

Conventional, traditional therapies

Surgery – Surgery is used in several ways to help cancer patients. It is the oldest form of cancer treatment and it provides the best chance to stop many types of cancer.

Having surgery for cancer is different for everyone, and depends on the type of surgery, the type of cancer, and the patient's overall health.

Surgery may be curative, especially if the cancer is localized.

Surgery can be performed to diagnose the cancer or stage its spread.

Sometimes it is used to reduce symptoms, especially when the cancer is blocking one of the 'tubes' in the body, or pushing on vital organs.

Occasionally 'debulking' surgery is suggested. This removes much but not all of the cancer mass – and is done when removing the whole cancer is impossible or too dangerous. By reducing the size of the cancer and the number of cancer cells in the body, other treatments may then be more successful.

Surgery is often used in conjunction with radiotherapy or chemotherapy.



In some cases surgery offers the best chance of a complete cure, but if the surgery being considered is radical, then do ask for a second opinion and ask if the more extreme surgery is any more likely to be successful than a more localized procedure. This applies especially to breast cancer. In breast cancer the timing of the surgery in relation to the menstrual cycle may be important [see pg xxx]

Cryotherapy – uses extreme cold to destroy cancer tissues. Extremely cold probes using liquid nitrogen or argon, are placed on or within the cancer cells. This destroys all the cells in the area.

Cryosurgery can be used for accessible cancers, such as those on the skin and the cervix. It has also been used in cancers of the eye, prostate and liver. Its use in conjunction with other therapies for breast, colon and kidney cancers is still being determined.

It is sometimes used for primary localized liver tumours, and it has also been used to treat secondary tumour deposits which have spread to the liver from other organs



How effective is cryotherapy? This depends very much on the type of tumour, its localization and also how accurately the surgeon can localize the tumour. Usually imaging such as CT or MRI scans or ultrasound are used to guide the probe, but these can only detect the larger cancer particles, not the microscopic ones. Thus complete eradication may not occur. Nearby normal tissues can also be frozen and damaged.

Cryotherapy can be very expensive and in most cases is not covered by medical insurance. It is important to discuss the possible benefits and disadvantages of this form of therapy and the true likelihood of success before embarking upon it. In most cases, it is good to seek a second opinion.

Radiotherapy – Radiotherapy therapy uses radiation to kill cells and to shrink tumours. The radiation damages the genetic material in the cells and stops them from multiplying. It also affects normal cells.

However cancer cells appear to be more sensitive to irradiation and normal cells have a greater ability to recover. Often radiation is directed at the cancer cells from a number of angles – this focuses the total dose onto the cancer cells but surrounding tissues are less affected. Thus the cancer cells may be destroyed but surrounding normal cells survive.

In some cases radiation is planned to be curative and destroy the total cancer load. At other times it is used to shrink the tumour and reduce the symptoms it is causing. Different cancers vary in their radio-sensitivity, and it is important that you discuss with your specialist the likelihood of benefit before considering having radiotherapy. Irradiation can be used to treat almost any form of solid tumour - brain, breast, cervix, larynx, lung, pancreas, prostate, skin, spine, stomach, uterus, and soft tissue sarcomas. It can also be very effective in treating some forms of cancer in the blood and lymphatic system.

Almost ½ of all cancer patients receive some type of radiation therapy.

Radiotherapy does have a number of side effects – these can be broadly split into two categories.

1. **The early or immediate effects.** These come on during or shortly after treatment, and depend on the size and area of the body being treated:
 - If irradiation involves the abdomen, then some nausea can be felt a few hours after treatment. It can also affect the bowel causing diarrhoea and occasionally some bleeding.
 - The skin often gets red where the radiation entered, similar to sunburn. Do not use sun creams without first talking to the doctors. Avoid exposure to the sun and wash the area gently. Use vitamin E or Echinacea. [refs xxxc] ??Monica vit E and Sense xxxxxxxxxx
 - If the ovaries or testes are irradiated fertility will be affected. If this is important to you, discuss this with your doctor. Perhaps consider freezing some eggs. Of course, the womb of a pregnant woman should never be irradiated – the effects on the foetus would be disastrous.
 - Radiotherapy to the mouth areas often causes a sore throat and occasionally thrush infections can develop (If white patches are present see your doctor for an antifungal mouthwash). Try to keep the mouth very clean, use soft tooth brushes, floss and use saline mouth washes. A liquid diet may be helpful. Avoid smoking and maintain good nutrition. This will frequently mean using supplements as discussed above.
 - It is almost certain that there will be hair loss in the area being irradiated, usually starting 2 -3 weeks after treatment is commenced. It is usually temporary and the hair grows back – but not always.
2. **The late side effects** develop months or even years after the conclusion of radiotherapy. These effects are caused by more permanent damage to the local tissues, and include - dryness of the mouth due to irradiation of the salivary glands, thickening of the skin, damage to nerves, bowel, waterworks, heart or lungs.
These are all quite rare but it is important before treatment to discuss the possibility with your oncologist who will have taken these possible risks into account when deciding upon therapy. .

Brachytherapy – this uses catheters, needles, capsules or seeds containing radioactive materials. These are implanted into the cancer mass or the organ containing the cancer. It is used very successfully in cancers of the head and neck, prostate, cervix, ovary, breast, and cancer involving the pelvic regions.

By giving a much higher dose of irradiation directly into the cancer cells, the results are excellent, and other tissues are affected much less. In prostate cancer, long term data show that 87% of men are free from cancer 10 years after brachytherapy.

Chemotherapy : Chemotherapy drugs interfere with the ability of a cancer cell to divide and reproduce itself. Because the drugs are carried in the blood, they can reach cancer cells all over the body, except occasionally in the brain.

Chemotherapy drugs are taken up by cancer cells as well as by all rapidly dividing cells, which include some normal cells such as those in the lining of the mouth, the bone marrow (which makes blood cells), the hair follicles, and the digestive system. This can cause some of the more obvious side effects such as a sore mouth and throat, reduced blood cell production, nausea & diarrhoea, and hair loss. Healthy cells can repair the damage caused by chemotherapy but often cancer cells cannot and so they eventually die.

Frequently combinations of drugs with differing actions are used. This increases the effectiveness of the chemo but because lower doses of each drug are used, side effects are lessened somewhat.

With new research, chemotherapy is becoming more cancer specific. Some drugs work by preventing the cancer cells creating their own blood vessels (angiogenesis).

Chemo is usually given by intravenous infusion, but sometimes intramuscular injections or oral tablets can be used. Because of the effects on normal cells, patients having chemotherapy need to be supervised and have regular blood tests. They also need to be on the look out for infections.

Chemotherapy has the reputation of making people feel miserable. Certainly this is so with some of the more powerful drugs, and again you need to talk frankly with your oncologist to see if the discomfort is really be worth it. One of the major side effects of chemotherapy (and often radiotherapy as well) is nausea and vomiting. The newer anti-nausea drugs (5HT₃ receptor antagonists such as ondansetron) are very effective. These drugs are very expensive, but they can make life much more bearable. If nausea is a real problem, ask your oncologist for these drugs

There is also a condition more frequently recognised with the very descriptive name of “**chemo brain**”. This condition is a combination of forgetfulness, inability to concentrate and depressive feelings. It is caused by the chemotherapy and will usually cease when the treatment stops. It is reassuring for many patients to note that these feelings are due to the drugs and part of their illness.

With chemotherapy, some cancers are curable and other cancers can be arrested.

Hormonal therapy – for some cancers, usually those affecting the reproductive organs, drugs which block oestrogen or testosterone production (or their metabolites) can slow the cancer right down. For men with prostate cancer, the removal of the testicles is a major decision to take, but it can make a huge difference in the disease process and may avoid the need to take drugs which have side effects. For women with breast cancer, it is important for the cancer cells to be tested for their dependence on either oestrogen or progesterone – before any hormonal therapy is considered.

Two of the most commonly used hormonal drugs are Tamoxifen which blocks the action of oestrogen and Herceptin which reduces its production. In the correct situation these can be lifesaving.

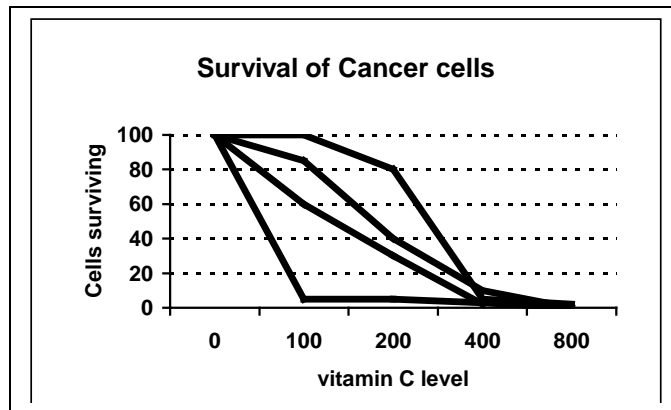
High dose vitamin C –

When given intravenously in very high doses, vitamin C acts like chemotherapy and can actually kill the cancer cells. But the plasma levels must be very high. The graph below shows the % cancer cell survival in 4 different cancers as the plasma level of ascorbate (vitamin C) rises. In these carefully performed in

vitro studies, almost all cancer cells are killed when the plasma level reaches 400mg/dl. Inside the body, it is only possible to reach these plasma levels with intravenous infusions.

High dose vitamin C has been shown to

- shrink the cancer and metastases,
- to reduce the level of the cancer markers
- help the body's immune system to rid the body of the cancer.¹⁰



[**How high dose vitamin C works** – Vitamin C is similar in structure to the sugars and the cancer cells which use sugar as their source of energy, avidly take the vitamin C into their cells. Cancer cells are not as specialized as normal cells and do not contain as many enzymes. When vitamin C enters the cells it breaks down into peroxides (like hydrogen peroxide). The enzyme catalase in our normal cells rapidly convert these peroxides into oxygen & water. But cancer cells have only 1/100th the amount of catalase found in normal cells, so by giving a very high dose of vitamin C, the cancer cell catalase can become saturated, and cannot break down the hydrogen peroxide (bleach which remains in the cancer cells and damages them). So the cancer cells are selectively damaged and the normal cells are either not affected or become healthier! Obviously the dose must be limited to the amount of catalase present in normal cells, so it is important to measure the vitamin C level after the infusion to determine the ideal dose for each person.]

It is important to be aware that not all doctors agree with this therapy, as most have never seen vitamin C being used in this way. However the tide is turning and some studies in prestigious journals have confirmed that high dose vitamin C does kill cancer cells¹⁰
In some situations this treatment has transformed people's lives.

With vitamin C – IT IS NEVER TOO LATE TO START , and no cancer is too advanced to benefit. Many oncologists do not like people taking antioxidants, especially vitamin C in high doses at the time of radiotherapy and some chemotherapies. So most will request patients to stop the antioxidants until after the treatment. While there is some animal data suggesting that antioxidants do not adversely affect the response to chem. and radiotherapy – we would probably suggest stopping them only over the treatment time and then restarting immediately the therapy finishes. Intravenous vitamin C is extremely safe, and can be even given in your family doctor's rooms. A treatment protocol for giving vitamin C can be seen in App xxx

Nutritional supplements:

It does not take an Einstein to realise that many if not most cancer patients have difficulty in providing their good cells and immune system with all the nutrients they require. This is because:

- the quality of today's food, grown in deficient soils, picked early and processed
- many cancer patients have poor appetites – due to their illness or the drugs they take
- the dividing cancer cells consume up many of the nutrients destined for other parts of the body.
- As the body attempts to neutralise the toxins released by the cancer cells, it soaks up many nutrients.

Starvation of the cells is very common in people with advanced cancer, and the benefits of providing the cells of our body with an optimal supply of all the nutrients, vitamins and minerals they need, seems just so obvious. To do this effectively will require the use of nutritional supplements.

However many medical professionals do not encourage their cancer patients to take supplements. This is probably because of their previous experience (or the experience of their tutors) that the poor quality supplements of the past seemed to give very little benefit. However today there are a number of good supplements – made to the same quality as pharmaceuticals (GMP - Good manufacturing Practice) and containing optimal levels of the nutrients required by normal cells to function as well as they can. (A good review and comparison of the supplements available can be found in a book by McWilliam¹¹). Using these products can only help a patient suffering from cancer.

A good supplement will provide the cells and the immune system with the nutrients they require to function optimally.

Many cancer patients are taking huge numbers of herbs and supplements, we do not feel that there is huge benefit in going beyond an ideal level of the nutrients required to keep the cells healthy. Because the nutrients are being soaked up for the reasons described at the top of this section, possibly a higher dose than a 'normal person' would require may be appropriate. It is also crucial that the product is of top quality, contains all that the body requires, is made to pharmaceutical standard and is well absorbed.

The supplements we recommend all cancer patients to take:

- A good quality multivitamin & multimineral – see McWilliam¹¹ for a selection of the best ones
- Selenium 200ug per day – (this may be present in the multivitamin and multimineral tablet, but probably not)
- Omega 3 fish oils – 1 gram daily
- Vitamin C 4 – 6 grams daily (note that is 4000 – 4000mg) – in divided doses over the day

We believe that these supplements are absolutely essential, and strongly recommend that all our patients with cancer take them.

In addition to providing the body and immune cells with the 'fuel' to function as well as they can, there are a number of supplements which can be positively helpful when patients receive chemotherapy and radiotherapy¹²:

- Vitamin E
 - reduces lung fibrosis caused by bleomycin
 - reduces cardio toxicity (heart damage) caused by adriomycin
 - protects normal cells from damage during irradiation
- Co enzyme Q10
 - Protects the heart cells from damage by adriomycin.

- o ?? vit E or other skin creams and radiotherapy????

Juicing –

Juicing fresh fruits and vegetables has become almost fashionable in many areas of the world, but its benefit in cancer patients seems to be well established.

In addition to the known vitamins and minerals, fruits and vegetables contain many chemicals, some of which are beneficial in preventing and treating cancer. These plant chemicals are called phytochemicals, and many drug firms are attempting to identify the useful ones from the myriad of compounds available.

Fresh produce also contains enzymes which are essential catalysts for the many thousands of chemical reactions which occur within the body. Heating will destroy these enzymes which is why low speed juicing is the most effective way to retain these beneficial chemicals. Some enzymes (e.g. trypsin) can break down a protective protein coating which forms round malignant tissue, and may make them more susceptible to the immune defense system.

In addition fruit and vegetables contain many vitamins and minerals and other useful nutrients, useful fibre and water – correct juicing makes all these available to the cancer patient.

To get the best out of juicing it is important to use fresh and organic produce, and a juicer which does not reach high temperatures which can damage the resulting juice.

Non-Traditional remedies:

There are a myriad of additional treatments available to a person with cancer, and we have listed these at the end of this booklet (pg xxx). Some, we feel have a real part to play in fighting the cancer and improving wellbeing, while others are very dubious in their value and could possibly be dangerous. Because of the number of these, we have placed them in the last section of the booklet. They are in alphabetical order to make the products easier to find, and we stressed that because we list them, we in no way endorse many of them.

In the next section we will give our recommendations for treatment, some of these non traditional therapies will be included, and we would ask you to go to the last section if you would like more information about them.

OUR RECOMMENDATIONS

The question often directed to a doctor at a consultation is – “Doc, what would you do if you or one of your relatives had this condition?” With the large selection of possibilities available to a cancer patient – this is not an unreasonable request. To undertake all the potentially useful ones would involve major expense and also occupy most of the patient’s waking hours.

It is also, however an almost impossible request to answer – but there are some principle approaches which we would certainly recommend. We must stress these are only our suggestions and we most strongly recommend that you discuss these approaches with your doctor before starting them yourself.

We most strongly recommend that you discuss these therapies with your doctor before starting them yourself

Treatments for all cancers –

We believe ALL cancer patients should:

- **Remove toxins and poisons** which may interfere with the immune system, because this is our most powerful weapon against cancer –
 - Eat clean organic food, drink plenty of pure water
 - Dental disease – if there is dental decay, infected root canals – get this cleaned up. Chelate mercury nutritionally (glutathione, lipoic acid, n-acetyl cysteine, and vitamin C).
 - Massage, heat therapy and far infra red saunas
 - Bowel cleansing – enemas and colonics

- **Make it hard for the cancer** to survive in the body –
 - Cancer cells like an acid medium - make your body more alkaline
 - Starve the cancer cells of glucose - use only low glycemic foods, good fats and protein
 - Oxygenate the body as well as possible – cancer cells do not like oxygen
 - Go for regular walks – in fresh air, beach, forests
 - Learn deep breathing and even consider occasional exercycle sessions breathing oxygen through a mask.
 - Hydrazine sulphate- especially when some cahexia (wasting) develops. (NB read about the interactions with barbiturates, foods or excess alcohol)

- **Strengthen the immune system**
 - A positive *mental attitude*, meditation, imagery and creating a sense of peace as well as a strong determination to beat this disease which has invaded into your life. .
 - Good *complete nutrition* – to strengthen the body, the immune system and ‘starve’ the cancer cells. Eat raw fruit, cruciferous vegetables, juicing, limit the amount of red meat.
 - *Nutrient rich ‘shakes’* can help by providing nutrients, energy, fibre and protein in an easily absorbed form, in patients who often cannot eat large meals.
 - *Nutritional supplements* – to complement good nutrition (NB it is important to use good quality supplements, preferably made to pharmaceutical standards (to make sure that you are getting what you think you are and avoid potentially dangerous impurities) –

- multivitamin & multimineral,
 - selenium, calcium & magnesium,
 - plenty of vitamin C (4-6 grams daily)
 - Melatonin 40mg at night
 - Omega 3 fish oils (mercury free) 1 gram daily.
 - Only if the blood calcium level is fine – vitamin D.
- **Other supplements & herbs** which could be added – Coenzyme Q10, green tea, tumeric, lycopene, garlic, indole 3 carbinol, Spirulina, wheat grass and paw paw.

Two further additional approaches can help patients with Cancer, and we would explore these for our patients:

- **Vitamin C – given as an intravenous drip** – as a form of chemotherapy. It is especially valuable when conventional treatments have been stopped. It is advisable not to have iv Vitamin C at the same time as radiotherapy and chemotherapy is being given.
- **Acupuncture** – we have seen so many patients with many conditions improve unbelievably with this treatment, that it would be inappropriate to deprive any patient of possible benefit from this ancient form of therapy – given by a skilled practitioner.

These are our thoughts:

From our research, we believe there is sufficient data that these treatments can only do good, and have little or no possibility of doing harm. There do seem to be quite a lot, but are very easy to include in a healthy cancer recovery lifestyle.

These should be the complementary treatment approach that ALL cancer patients should take.

Thereafter it is really a matter of careful consideration on what therapies should be added.

We believe it is essential to retain confidence and a close working relationship with your oncologist. Be frank and ask for an open discussion on the potential benefits and problems associated with any treatment being suggested. Conventional therapies (chemotherapy, radiotherapy and surgery) still remain by far the most likely treatments to cure the cancer or give long term remissions. Most of these other therapies can add to this benefit and improve the quality of life.

With a combination of all of the above treatments, cancer patients and their relatives can feel reasonably confident that they have given their best shot to both defeat the cancer and have an optimal quality of life. While it may well be difficult to cure cancer, slowing the disease process down, strengthening the body and improving a sense of well being, may have benefits far beyond our current hopes.

With all the research being done around the world against cancer and now HIV/AIDs, an enormous amount of new information is being discovered. The switch which makes the cancer cells start multiplying out of control is waiting to be discovered. The ‘switch’ has been found in one form of leukemia and it is likely that the ‘switch’ for other cancers must exist and will be found. When this happens cancer will no longer be a feared disease – just as bacterial infections have lost their sting since the development of antibiotics.

So in the immortal words of an ageing Winston Churchill, giving possibly the shortest but most memorable speech of all time,

“Never, never, never – give up!”

The cure may be just around the corner, so even though treatments may not cure the disease, slowing down its progression allows scientists time to come up with the answers.
And probably equally important, many of these therapies also greatly improve the quality of life.

Treatments for specific forms of cancer:

Please do not look at this section as a ‘cook book’ for treating a particular cancer. The purpose of this booklet is not to tell people what to do, but to show them what is available and explain how they work. With cancer, as with all serious conditions, it is important to have a specialized doctor (oncologist, surgeon, radiotherapist, physician...) conducting the therapeutic orchestra. However if the musicians know what they are doing and why, the resultant music will be that much sweeter. A patient who knows about all forms of treatment can make educated decisions when he or she discusses them with the ‘conductor’.

The previous section “Our recommendations” section applies to all forms of cancer.

In addition there are some therapies which apply specifically to individual cancer types. This section is by no means comprehensive but we felt it important to include it in this booklet.

Breast Cancer –

Please read the notes at the top of this section (Treatment for all cancers). Do not use these notes as anything more than a guide to what therapies are possible

- **Surgery** - the amount of breast tissue to be removed has been subject to huge discussions. This can vary from a lumpectomy right through to radical mastectomy which includes breast, underlying muscles, and lymph nodes. Discuss this carefully with your surgeon. Currently many prefer lumpectomy or simple mastectomy and removal of some of the lymph nodes in the arm pit. The decision must be individualised, but make sure you are happy with the recommendation. There have also been some studies which suggest that surgery done between the 3rd and 12th day of the menstrual cycle has a greater recurrence rate than surgery performed at other times – talk this over with your surgeon¹⁴
- **Hormones** – these have becoming increasingly specialized and effective. Analysing the response of the cancer cells to various forms of hormone can have a major effect on the likelihood of benefit. One of the first effective drugs was tamoxifen (which blocks the effects on oestrogen on the cancer cells). A new group of drugs called the ‘aromatase inhibitors’ (Herceptin is one currently in the news) is probably more effective in oestrogen dependent cancers as they selectively inhibit oestrogen production in post menopausal women.
- **Melatonin** has been shown to have a significant beneficial effect on cancer cells, and is especially beneficial if added to chemotherapy or with tamoxifen¹⁵ For more information read about melatonin (pg xxx)
- **Selenium** is a mineral very low in New Zealand, and low levels have been associated with an increase in many cancers. Some studies have also suggested that in doses of 200 – 400ug per day it may also have a beneficial effect in breast cancer.¹⁶

- **Tumeric** (or its active ingredient Curcumin) has been shown in animals to reduce the spread of breast cancer cells to the lungs. There is no evidence yet that it is effective in humans, but it is a very safe product and is used widely in Asia for many diseases.
- **Lycopene** – while this is usually suggested for men with prostate cancer, Lycopene has also been shown to be of benefit to patients with breast cancer. It acts by interfering with the ability of Insulin-like Growth Factor-1 (IGF-1) to stimulate the growth of Breast Cancer Cells¹⁷
- **Exercise** has been shown to reduce the risk of breast cancer developing. It is even more important once cancer has appeared (in 2987 nurses diagnosed with breast cancer from 1984 – 98, those who exercised at least 3-5 hours per week halved the risk of dying from the disease.)¹⁸
- **Throw away your Bra** –compression with a bra reduces the flow of lymph which drains toxins and waste products from the breast. In their 1995 book “Dressed to Kill”¹⁹ the authors investigated 4,500 women in the USA, ½ had breast cancer ½ did not. The results are too striking to be denied:

Breast cancer developed in:

- 3 out of 4 who wore a bra for 24 hours per day
- 1 out of 7 who wore their bra for more than 12 hours
- 1 out of 152 who wore their bras for less than 12 hours

In Non Bra wearing cultures, the incidence of breast cancer in women is similar to men, and when the Maori women converted to bra wearing, their breast cancer incidence became the same as European women.

So to minimize the risk of breast cancer, wear a bra for less than 12 hours – this probably applies to women with breast cancer as well as for prevention.

- **Pregnancy** if it occurs before 25 – 30 years, reduces the risk of subsequent breast cancer. If a person has a strong family history of breast cancer, it might be advisable to consider having children earlier in life rather than late and so achieve this protective effect.

Prostate cancer

Please read the notes at the top of this section (Treatment for all cancers). Do not use these notes as anything more than a guide to what therapies are possible

Prostate cancer is extremely common in older men, in fact it is unusual not to find some cancer in the prostates of very old men. So although prostate cancer is quite common, most men die with their prostate cancer not because of it.

- Surgery – has become less invasive in recent years, and total prostatectomy is usually not the initial treatment of choice. Radiotherapy and cryotherapy are commonly used (see pg xx).
- Hormones which lower the effects of testosterone and other male hormones, slow down the prostate cancer growth.
- Sometimes orchidectomy (removal of the testicles) is used. This dramatically lowers testosterone production and can be very effective in slowing the cancer activity.

- Diet does seem to be important in prostate cancer. Men eating meat 5 times a week were 2-3 times more likely to develop invasive prostate cancer (spread), than those eating meat only once a week.²⁰
- Selenium has been conclusively shown to reduce the development of prostate cancer and is very likely to be beneficial once the cancer is diagnosed. Dose 200 – 400ug per day.
- Lycopene which is found in tomatoes & pink fruit has been shown to benefit patients with prostate cancer, especially if given with other therapies.²¹
- Melatonin levels drop in patients with prostate cancer, and giving additional melatonin may well help slow the cancer growth.²²
- Saw Palmetto is usually recommended for benign prostate enlargement, but it is also possible it may help by stimulating prostate cancer cell death (apoptosis)²³
- Immunotherapy – this is a developing field, where the cancer cells are removed from the body, changed and re-injected, or the patient's immune cells (dendritic cells) are removed, exposed to the cancer and then re-injected. (For more details see immunotherapy in the melanoma section below). Currently this treatment is undergoing early trials but it is likely to be used in the near future.

Bowel cancer

Please read the notes at the top of this section (Treatment for all cancers). Do not use these notes as anything more than a guide to what therapies are possible

- Surgery is obviously the most effective therapy, and if diagnosed early enough, surgery frequently results in a complete cure.
- Prevention - bowel cancer can run in families (frequently associated with small polyps found in the colon). In people with a strong family history of bowel cancer, in addition to regular check ups (barium enema or colonoscopy), we would strongly recommend they take plenty of fibre in their diet, a multivitamin/mineral tablet (containing folic acid), and an adequate intake of selenium (200ug per day). These have been well demonstrated to reduce the incidence of bowel cancer developing by over 50%.²⁴
- While there is no data that these approaches also help people with established bowel cancer, it seems logical if they are preventive, they should also help – so we suggest plenty of fibre, a multivitamin/multimineral tablet and selenium (200ug/day)
- Melatonin – levels of this hormone are lowered in people with bowel cancer. In animal studies melatonin inhibits the growth of cancer cells and it can also stimulate cancer cell death (apoptosis).²⁵
- Immunotherapy – this is a rapidly developing form of therapy where the cancer cells are removed from the body, and either changed and re-injected (like a vaccine) or the patient's immune cells are also removed, exposed to the cancer and then re-injected to attack the cancer. Currently for colon cancer this therapy is still in the experimental stages.

Stomach cancer

Please read the notes at the top of this section (Treatment for all cancers). Do not use these notes as anything more than a guide to what therapies are possible

This is often a very difficult cancer to treat, and because it can cause few symptoms, is often diagnosed late.

- Surgery with removal of the cancer is the best treatment and the one most likely to be successful.
- Very few other treatments have been shown to have benefit.
- Newcastle virus – this is a chicken virus, and can be caught by humans. It causes a very mild flu like illness. Following an infection with this virus, a number of patients with stomach cancer went into remission. There have been some trials using this therapy which have had promising results, but the numbers are very small and the benefits are still uncertain.²⁶
- Immunotherapy – this is a rapidly developing form of therapy where the cancer cells are removed from the body, and either changed and re-injected (like a vaccine) or the patient's immune cells are also removed, exposed to the cancer and then re-injected to attack the cancer. Currently for stomach cancer this is still in the experimental stages.

Lung Cancer

Please read the notes at the top of this section (Treatment for all cancers). Do not use these notes as anything more than a guide to what therapies are possible

Many cancers can spread to the lungs which can act as a sieve as the cancer cells move round the blood stream. These are called metastases, and the treatment of them is the same as for the primary tumour.

Primary lung cancer is more common in people who have smoked or been exposed to inhaled compounds which can cause cancer (carcinogens).

- If still smoking – STOP – because this continues to feed the cancer with free radicals and literally hundreds of carcinogens.
- Surgery is the best therapy if the whole cancer can be removed.
- Radiotherapy is often used in addition to slow down and damage the cancer cells.
- Chemotherapy is also frequently used
- Melatonin levels are lowered in patients with lung cancer, and the addition of melatonin has been shown to increase the efficacy of treatments²⁷
- Immunotherapy – this is a rapidly developing form of therapy where the cancer cells are removed from the body, and either changed and reinjected (like a vaccine) or the patient's immune cells are also removed, exposed to the cancer and then reinjected to attack the cancer. Currently for lung cancer this is still in the experimental stages.

Primary Liver cancer – Hepatocellular cancer –

Please read the notes at the top of this section (Treatment for all cancers). Do not use these notes as anything more than a guide to what therapies are possible

(Please note these notes apply to cancer starting in the liver tissue, it is very different from secondary liver cancer – where a cancer from another organ (bowel, lung, ovary....) has spread to the liver.)

Hepatocellular cancer is one of the most common cancers in the world. Currently the majority of cases come from China, south east Asia and Africa, but the incidence of the disease in USA and Australia is rapidly increasing. This is possibly due to the increasing incidence of chronic viral Hepatitis, which can cause Hepatocellular cancer .

- Surgery to resect (remove) the liver tumour is often very successful in primary liver cancer, it is more difficult if cirrhosis is present.
- If surgery is not possible techniques to inject chemotherapy drugs, radiofrequency heating or even ethanol directly into the tumour (through the skin or via the liver arteries) may be effective.
- General chemotherapy appears to have little to offer patients with Hepatocellular cancer
- Liver transplantation – when performed on well selected patients, transplantation of a new liver can be extremely successful.

Melanoma

Please read the notes at the top of this section (Treatment for all cancers). Do not use these notes as anything more than a guide to what therapies are possible

Melanoma is the most dangerous of the skin cancers, and early diagnosis is by far the best approach to treatment. Melanomas often look like spilled ink as distinct to normal moles which have a clearly defined edge.

- Complete Surgical excision is the treatment most likely to be effective.
- Melatonin is lowered in patients with melanoma, and some uncontrolled data suggests that it may reduce the spread to the brain, or shrink brain secondary deposits ²⁸.
- Chemotherapy – either total body or local exposure to the chemotherapeutic agent is sometimes used.
- Immunotherapy – this is a rapidly developing and potentially very successful form of therapy. The cancer cells are first removed from the body. Then two types of therapy are used –
 - passive immunity – dendritic immune cells are removed from the body, activated against the melanoma cells and then re-injected into the patient. These activated cells can attack melanoma cells anywhere in the body.
 - Active immunity – the melanoma cells are removed from the body, changed by various treatments and then injected back into the body similar to a vaccine. The body produces an immune reaction to the ‘changed cells’ and the immune system then attacks the melanoma cells direct.

Non traditional therapies -

Some Refs from - http://www.townsendletter.com/June_2002/overcomoncologistsobjections0602.htm

There are many many treatments which are offered to patients with cancer. Some make outrageous claims and create a need for dependency. Some are also very expensive, uncomfortable and not without some risk. However many may give real benefit.

We can quite confidently say that these therapies alone are unlikely to cure cancer, but some may be beneficial when given with the treatments described above.

They will be listed alphabetically, not in the order of their efficacy, and before using any of these, we would recommend that the patient gets a reliable educated second opinion and discusses the likelihood of real benefit and also the risks:

Acupuncture – Many conventional physicians and oncologists use acupuncture to help manage the pain and the nausea and vomiting which can occur with some cancer treatments. Acupuncture practitioners suggest that acupuncture can boost the immune system which is often suppressed by cancer treatments, and thus directly aid in treating the disease. The belief behind acupuncture is that in disease the body's Controlling Processes (CP) have become distorted, and that acupuncture can return the CPs to their normal healthy state. Doing this will also 'switch off' the multiplying cancer cells. However some suggest that acupuncture incorrectly applied may well stimulate tumour growth and do more harm than good. Therefore it is essential to see an experienced practitioner
Studies demonstrating tumour regression have been seen in both humans and animals, but, as with most alternative cancer therapies, there are no controlled scientific studies.

Aloe Vera juice – may be helpful in reducing cancer cell spread or possibly cause some deterioration in cancer cells. In one trial with aloe vera (1 ml twice a day) plus melatonin (20 mg per day), compared with melatonin alone in patients with advanced cancer, the addition of Aloe vera doubled the stabilization of the disease and the 1 year survival rate.

Artemisinin – this is an extract of 'sweet wormwood' with powerful oxidant actions. It has been used to treat malaria and bacterial infections since the 1970's. This powerful oxidant action has also been used to treat cancer because the cancer cells have fewer antioxidant enzymes than normal cells. There have been some individual reports of people with advanced cancer responding to artemisinin.

Because anti-oxidants many neutralise the oxidation of artemisinin, some people suggest that Vitamin C should not be given with artemisinin. But because vitamin C is so valuable others suggest that the two treatments should be given at least 6 hours apart.

Although it has been used for many years for malaria and other conditions, artemisinin's use in cancer is still in its infancy.

Astragalus – This is a common ingredient of ancient Chinese herbal medicine. It is claimed to improve immune function by helping the white cells and T lymphocytes. Some cancers produce white blood cell suppressant products, and astragalus appears to neutralise this and bring the white cells back to their full fighting function. Although most of this information is obtained from tissue cultures, there have been some positive studies with cancer patients in China, but the quality of the studies is not good enough to satisfy conventional western doctors. However they have not attempted to repeat the work. There is also some data suggesting that Astragalus may reduce the side effects of some chemotherapy³⁰

Ayurvedic medicine - Ayurvedic medicine disagrees with the conventional medical model of treating only that part of the body which is considered diseased. Ayurvedic medicine treats the whole person in the belief that one cannot safely split a person into parts. Ayurvedic doctors work extensively with the

way the patient thinks, believing that thoughts affect the biochemistry of the body. The Ayurvedic doctor uses many hundreds of herbs, many of which are used in a more purified form in conventional medicine. Some of these herbs (MAK 4 and MAK 5) are considered useful for cancer. Some conventional doctors have incorporated the principles of Ayurvedic medicine into their practices.

Cat's Claw - Also known as: Hawk's Claw, Life-Giving Vine of Peru, Paragyayo, Garabato, Uña de Gavilan, Samento, and Popkainangra. Cat's claw is a thick, woody vine found in the rainforests of South and Central America that has been used as a sacred plant of healing for over 2000 years by the indigenous people of the Andes. It is classified in the same horticultural family as coffee. Studies in test tubes show it improves the immune system and reduces the DNA changes which lead to cancer. There have been very few reports on the use of cat's claw in cancer but in the cases, it is impossible to tell whether the improvement was the Cat's Claw or other cancer treatment the patients were receiving at the same time.

Cesium chloride - 3 – 6 grams of cesium chloride or rubidium chloride taken in 3 divided doses after meals, together with potassium chloride raise the pH, i.e. neutralise the acidity produced by cancer cells. Some doctors have found it relieves the pain of cancer, and tests on mice have shown the tumour size to shrink within 1 week. Cesium is usually a trace element, and although these doses are well below the toxic level 135 grams, it is best to discuss with your doctor before considering this treatment.

Co-enzyme Q10 - Cancer patients are often very seriously deficient in this nutrient. CoQ10 is an essential co-factor in the production of energy inside the cells. Co Q10 is also a powerful antioxidant and there have been some published case studies where it has been shown to be beneficial in patients with breast or prostate cancer. Research at the University of Miami suggested that CoQ10 causes cancer cells to self destruct (apoptosis) without any adverse effect on normal cells. Even if it had no anti-cancer activity, its use to increase energy levels and feeling of wellbeing may well help patients with cancer. Only quality gel form Co Q10 is effective, the recommended dose is 150 – 200mg daily.

Coffee enemas – Enemas are one of the oldest forms of treatment still in use today – the ancient Egyptians in 1,500 BC used them. The use of colonics and enemas to detoxify has been discussed above, but why add coffee? Some substances in coffee raise the level of an enzyme (glutathione S-transferase) which plays an important part in detoxifying the blood stream. Caffeine also dilates the bile ducts which may assist in the elimination of the cancer breakdown products excreted by the liver. (Sadly these beneficial effects are not experienced by drinking coffee!)

Cummin seeds – black cummin may be helpful in cancer patients by reducing the ability of the cancer cells to produce collagenase (which helps the cancer cells to spread.) The volatile oils (thymoquinoline and dithymoquinone) of black cummin seeds have been demonstrated to inhibit tumor cells in laboratory experiments (including tumor cells resistant to anti-cancer drugs).

Electromagnetic and frequency vibration therapies. These treatments have caused a great deal of controversy. While some people claim to have achieved spectacular results, others believe that the whole theory and process is complete rubbish. There are few people standing in-between these two extremes. The basic theory is that normal cells, cancer cells, viruses and bacteria all have their own natural vibrating frequencies – much like the string on a violin, and on a larger scale a swing bridge. When soldiers march across a bridge they are told to “break step” – not to march in step, because if they marched at the natural frequency of the bridge, it could be set into vibration and shake itself apart. A soprano singer can have the same effect on a wine glass. Vibration therapies work on this principle. Send vibration signals into a tissue, and it could damage the cells at that specific frequency. The discoverers of the machines believe

that they know the frequency of all involved cells and so can specifically target the cancer cells, viruses or bacteria. Skeptics do not believe that such precision is possible or even that cancer cells are necessarily different from normal cells. There are a number of machines using this technology -

- **Rife machines.** The theory behind this treatment was suggested by Albert Abrams (1864-1924), an American physician who became a millionaire selling his machine. His research was refined by a Californian pathologist, Raymond Royal Rife (1888-1971) The Rife theory is that cancers are caused by viruses which Mr. Rife was able to identify using a microscope which he invented. By using the frequency of these viruses with electromagnetic fields, Rife believes the 'cancer causing microbes' are destroyed and the cancer may resolve. He claimed to achieve significant cancer cures using his machine, but his data was stolen and destroyed before he could present it to the scientific community. His data has never been reproduced, even using some the more sophisticated machines of today. However machines built along similar lines to Rife's do have some sort of bioactive effect. People who have used them in cases of serious illness do seem to have experienced improvements in their conditions. Unfortunately the entire field is constantly brought into disrepute by unscrupulous vendors who sell machines with exaggerated and often ridiculous claims.

With the increasing acceptance of energy fields, electromagnetic vibration (seen most convincingly in MRI scanners), many scientists and medical practitioners do accept that there it is possible that the 'Rife' type effect could have some benefit. However whether the currently recommended frequencies have any beneficial effect is still far from proven, or even demonstrated.

Energy Balancing: There are many techniques for energy balancing. Practiced for centuries in the Orient, these techniques appear mumbo jumbo to most conventional medics who have no ability to understand how it works – but as most practitioners say – it just does. It “realigns the energy throughout the body through the charkas.” Energy balancing usually involves very gentle movements of the hands touching the skin or, more frequently just off the skin. There are a number of treatment schools including Reike, healing touch and EMF. These techniques are mainly used to create peace and relieve symptoms, so their effects on cancer are indirect.

Garlic and onion – these are believed to improve the immune cell function and block carcinogenic compounds entering the cells. They may also slow tumour development. They have been shown to lower the risk of stomach and colon cancer. (Fresh raw garlic is best).

Gerson Therapy - Max Gerson, M.D., was a refugee from Nazi Germany and introduced the dietary and detoxification therapies he had developed during his time in Germany. He was persecuted for his approaches - even though his diet for cancer has an uncanny resemblance to the American Cancer Soc diet to prevent cancer.

Gerson Therapy emphasizes fresh, organically grown, raw vegetables and also fresh juices made from these.. Various supplements are given, including an iodine solution, Vitamin B-12, potassium, thyroid hormone, an injectable crude liver extract, and pancreatic enzymes. The primary detoxification method is the coffee enema. Following the Gerson protocols requires an enormous effort and commitment on the part of the patient. It is said to be almost a full time job

While the claim is that all types of cancers respond, the results have been quite variable. It is also difficult to assess the reports which state almost 30% of the patients with 'advanced incurable cancers' have a five year survival, when the patients were also receiving other treatments as well.

Ginseng made from the root of the ginseng plant is reputed to have a number of anti tumour actions. There is some data suggesting that it may reduce the development of some cancers, but its use in the presence of cancer has still to be confirmed. There has however been no suggestion that it can do any harm. Ginseng is claimed to inhibit spread (metastases), slow down the cancer cell growth, and increase the activity of the immune cells.

Graviola - Graviola, also known as soursop, is a small tree from the Amazon jungle and some of the Caribbean islands. While there have been many studies in test tubes showing that graviola has potent anti cancer (as well as anti viral and antiparasitic) effects, there is almost no published data on its use in humans.

One slight concern is that the alkaloids from graviola can effect the dopamine producing nerve cells. Might this increase the risk of developing Parkinson's disease? We just do not know.

Homeopathy - Homeopathy rests on three principles: (1) Each substance has a unique energy. (2) This energy remains in a solution of the substance and may increase as the substance is diluted (3) Disease can be cured by giving a very very dilute solution of the substance which may have caused the disease. Just how this is applicable to cancer is a little difficult to understand and there is disagreement even among homeopaths as to the value of homeopathy in the treatment of cancer. Some feel it has little value, while others report results any oncologist would envy.

Hydrazine sulphate – like many cancer therapies, this compound has had a strong following from some 'alternative' cancer doctors, but is rejected by conventional medicine. However it is now undergoing phase 3 trials sponsored by the National Cancer Institute and in the USA is available to patients as a 'compassionate Investigational new drug'.

It's major role with cancer is to stop and reverse the wasting (Cachexia) which is common in many terminal patients. The cancer cells use glucose as their only energy source, but unlike normal cells which burn glucose into water and carbon dioxide, cancer cells ferment the sugars into lactic acid. This moves to the liver where it is converted back into sugar and returned to the cancer cells. Hydrazine blocks the key enzyme in the liver needed to convert lactic acid back into sugar. Thus it starves the cancer cells and stops the body from breaking itself down to create more sugars for the cancer cells. Normal cells can use fats for energy and so are unaffected by hydrazine.

Probably the strongest proponent for Hydrazine is a Dr. Gold. He feels that all cancer patients who are showing signs of wasting should be taking this treatment, and he believes that up to 50% benefit, feel much better and live longer. It can also relieve cancer pain in some patients. It has a few side effects like pins and needles in the legs, itching or insomnia. Sometimes taking vitamin B6 can help these. The side effects do go when the drug is stopped.

In patients with severe cachexia, the careful addition of hydrazine could be considered. (60mg with breakfast for 3 days, then if there are no problems, 60mg morning and evening for 3 days, then 60mg three times daily with meals. If there are symptoms, reduce to the previous dose. After 6 weeks stop for a week then start again – 60mg morning for 3 days, 60mg twice a day etc as above; then repeat the cycles.)

Some doctors believe that because of its low toxicity, hydrazine should be a treatment of first resort – not last resort. Because much of the morbidity of cancer is due to the wasting and cachexia, hydrazine which can hugely reduce this can reduce pain and suffering for many patients.

NB – Hydrazine Sulphate is a drug of the mono amine oxidase inhibitors (MAO) – some foods can react with it, so taking on Hydrazine, AVOID – *sour cream and yoghurt, aged and fermented cheeses (most cheeses other than ricotta, cottage and cream), cured or smoked - fish, meat or poultry; soy sauce,*

teriyaki sauce, MSG, Equal, Nutrasweet, broad beans, pickles, bananas, avocados, raisins, figs, dates and dried fruit; all alcoholic drinks; chocolate, marmite, miso soup, tofu.

Hyperthermia – this is a form of treatment where the whole or a part of the body is raised to high temperatures (up to 106 – some places use 113 degrees F). This makes the cancer cells more sensitive to treatments such as radiation and chemotherapy. It is usually recommended to be used at the same time as cancer damaging treatments.

The temperature may be raised

- locally - in a limb, or via a probe inserted into the body,
- in an area using magnets and devices which can ‘shine’ energy into an area (occasionally the patient’s blood is heated and perfused into the affected area)
- or it can involve the whole body (using thermal chambers – much like an incubator).

Normal tissues are usually not damaged by temperatures to this level, but if the heating is not uniform, occasional damaging temperatures may be achieved. Total body heating can rarely have adverse effects if people have heart or other vascular disorders. Patients having hyperthermia do need to be carefully monitored, and their BP may well be very low when they stand up following treatment. Diarrhea, nausea and vomiting are not uncommon with hyperthermia.

Does it work? A statement from the American National Cancer Institute shows that it is being accepted in the conventional treatment regimens: *“Many of these studies, but not all, have shown a significant reduction in tumor size when hyperthermia is combined with other treatments. However, not all of these studies have shown increased survival in patients receiving the combined treatments.”*

There have also been a number of reports showing that hyperthermia can reduce the pain caused by cancer.

Indole-3-Carbinol - Cruciferous vegetables (Cauliflower, broccoli, Brussels sprouts, cabbage, kale, and Chinese vegetables) have long been known to help fight and protect against cancer. Cruciferous – because their flowers look like little crosses.

The active ingredient in these plants which causes the destruction of cancer cells is called Indole-3-Carbinol (I3C).

Animal studies have shown it to be more effective than chemotherapy in breast cancer, possibly by neutralizing oestrogenic actions. It has also been shown to be helpful in late stage cancers.

Laetrile - Other names for laetrile are amygdaline and B17. Centuries ago our food was quite rich in laetrile – coming from the seeds of non citrus fruits. The Hunza people, who live in near isolation in the Himalayas almost never contract cancer. Their diet is exceptionally high in laetrile – from apricot seeds which they powder and grind into oils.

Cancer cells are rich in the enzyme beta-glucuronidase. This reacts with laetrile and forms the toxic material CYANIDE. Cancer cells have thousands more times the amount of beta- glucosidase as normal cells – so produce huge amounts of cyanide. Normal cells also have a large amount of the enzyme rhodanese which converts the cyanide to harmless thiocyanates which are excreted in the urine. Cancer cells have very little rhodanese.

Theoretically Laetrile should help most forms of cancer and anecdotal reports suggest that it can reduce pain and improve survival time quite significantly. Scientists at Sloan-Kettering, tested laetrile in mice. While it did not destroy the primary tumors, some of the studies showed that laetrile can produce a 60-percent reduction in lung metastases. Following this work, laetrile is mainly used to treat metastases (spread) while other treatments are used to fight the primary cancer. In some countries (USA), the use of Laetrile is illegal.

Foods rich in laetril include – barley, bitter almonds, chick peas, wheat grass, lentils, flaxseed, maize,

millet, the seeds of apricot, apple, cherry, nectarine, peach, plum.

Eating a few seeds of bitter almonds or apricot every hour (total 50-60 seeds) per day. If you are able to obtain Laetril tablets the dose is 500mg two to six tablets per day.

Live Cell Therapy - also called cellular therapy, cellular suspensions, glandular therapy, fresh cell therapy, siccacell therapy, embryonic cell therapy, and organotherapy. In this treatment, processed tissue from animal embryos or animal organs, is injected or taken orally. Sometimes the products are made from the organs corresponding to the unhealthy organs of the patient. These cells are claimed to enter the diseased organs and strengthen them to fight against the cancer.

It is difficult to see how this can possibly be beneficial. When taken by mouth animal proteins are digested and broken down before being absorbed. If given by injection, then in all other situations, the body makes antibodies against the cells and rejects them. In cancer it is difficult to see why this should be any different.

However of greater importance is that injected animal cells could introduce viral diseases (such as mad cow disease) and there is a significant risk of triggering a severe allergic reaction. There are many reports round the world of severe often fatal reactions to this form of treatment.

Before a person embark on a series of live cell treatments, because of the risk of adverse reactions, make sure that full resuscitation equipment is available and people skilled in its use are present.

Lycopene - (10 – 14 mg per day) - Is found in tomatoes (tomato juice, ketchup, tomato paste and pizza sauce) and other pink fruit – melons, pink grapefruit and pink guava. This compound interferes with insulin-like growth factors (IGF) which may help cancers to grow.

Lycopene is very non toxic but a powerful preventative and treatment for cancer. It has proven protective actions against the risk of developing prostate, stomach, lung, pancreas, colon, rectum, oesophagus, oral cavity, breast and cervical cancers.

Lycopene has been shown to improve the outlook in patients with proven prostate and breast cancers.

It also has anti-inflammatory actions which can reduce swelling and pain.

Anyone with a family history of breast or prostate cancer should take Lycopene as a preventive and those with the disease should probably take it as well.

Maitake D-Fraction - an extract from the Maitake mushroom which is believed to activate the immune system to kill cancer cells without harming healthy cells. It also increases death (apoptosis) in some cancer cells. It is also claimed when given with radiotherapy and chemotherapy that Maitake enhances the action and reduces the side effects. Shiitake mushrooms are also beneficial – see below.

Melatonin – A hormone produced by the pineal gland in the brain. Its primary role is regulating sleep.

When the light goes out, the pineal gland produces melatonin which induces sleep.

In patients with cancer melatonin has a number of beneficial actions:

1. It improves the appetite – cancer cells produce a number of materials (interleukins, tumour necrosis factor and interferon gamma) which stimulates the production of the hormone leptin which suppresses the appetite. Melatonin can interfere with these actions and improved appetite and weight gain.
2. It has anti tumour actions – it can inhibit cancer cell multiplication, metastatic spread and can increase the number of cells in apoptosis (programmed cell death). It may also help reduce the blood supply to the cancer by inhibiting a vascular growth factor the cancer cells excrete.
3. It enhances the immune function – it is an integral part of the immune system and stimulates both cell and humeral immunity.

4. It may also give additional benefits when given with some forms of chemotherapy.

In some well designed studies performed in a Milan Oncology unit, the addition of melatonin to conventional treatment greatly improved the tumour response and the patients' outcome. It also has the potential to help with sleep, which is often a problem with cancer patients. The dose used for the cancer trials was quite high at 40mg per day.

Noni - Noni is a powerful immunomodulator and has been used to fight cancer in the islands of Hawaii for centuries. It is claimed to help the body make the enzyme xeronine which "can help cure various manifestations of diseases such as cancer, senility, arthritis, high blood pressure, and low blood pressure." There is almost no useful human data, but mice given Noni survived much longer after being injected with lung cancer cells.

Noni juice tastes and smells terrible (Islanders say it smells like doggy-do). It must be taken on an empty stomach and often sugar is added to make it more palatable. It is believed that the digestive juices stimulated by the sugar destroys the Noni properties, so most of the Noni juice available is worthless. If taken with coffee, alcohol or tobacco, strange interactions can occur.

Oils –

- **Fish oils** – have been shown to inhibit the development and progression of a number of types of cancer and may reduce the spread of some cancers (see above).
- **Olive oil** - the squalene content of olive oil prevents some of the cellular changes associated with the development of cancer (in animals).

Papaya – may reduce the absorption of cancer causing nitrosamines from the soil or processed foods. Like most fruits, papaya contains protective vitamin C and folic acid.

Paw Paw – not to be confused with the Papaya (called Paw Paw in Australasia), Paw Paw grows in the Eastern USA and is related to graviola (see above). Some believe it is a more powerful anti-cancer agent than Graviola. The Paw Paw affects the cell metabolism so that instead of making water (H_2O), hydrogen peroxide H_2O_2 is produced. As described in the vitamin C section, cancer cells do not cope with H_2O_2 and are damaged, while normal cells with a good supply of catalase (which neutralise the H_2O_2) are unaffected.

Paw Paw also slows down production of ATP which is the energy carrier of the cell (a bit like petrol for an engine). No ATP and the cell dies. Normal cells make ATP easily, but because cancer cells create ATP by fermentation, which is much less efficient, any reduction in ATP production can starve the cancer cells of energy.

Although it is quite non-toxic, but because it reduces energy most in fast growing cells, it should not be given to women who are or could become pregnant. It should also probably not be used long term by people without cancer, because it may affect other fast growing cells like those lining the gut. It also should be avoided in people with Parkinson's disease. Some manufacturers suggest that antioxidants should not be used simultaneously. There is no obvious scientific reason why this should be so, and because of the huge benefit of antioxidant vitamins (especially Vitamin C), we would suggest that this advice not to take antioxidants, should NOT be followed.

Quercetin – a plant phytochemical, could help in cancer treatment in a number of ways. It stimulates the immune response, blocks the formation and action of testosterone and oestrogens which may be beneficial in breast and prostate cancer, it also appears to trigger cancer cell death (apoptosis).

Selenium – This has already been discussed above. Many studies have shown that people with low selenium levels or who live in low selenium areas have much higher incidence of a number of cancers. This has been well demonstrated in China. It has been shown to increase the rate of cancer cell death (apoptosis) and slow down cancer cell multiplication. In women with breast cancer it reduces the development of new blood vessels necessary to support the cancer cells. It may also help when given with some forms of chemotherapy.

In one of the few trials done using selenium, men with skin cancer were given 200ug of selenium or dummy selenium tablets and followed for 7 years.⁷ The incidence of many cancers was halved. Because of the time to develop cancer, many of these peoples whose lives were saved by the selenium would have already had it at the start. It seems logical therefore for people with cancer to take selenium – especially in areas where the soil levels are low (such as New Zealand). Some people believe that selenium supplementation or fortification of some foods (flour, salt) should be encouraged in low selenium areas to reduce the development of cancer.

Shark Cartilage - The theory behind the action of shark cartilage is that it stops angiogenesis, the growth of new blood vessels. Because tumors have a higher rate of metabolism than normal organs, they require more blood to get their nutrition. Shark cartilage is claimed to stop the growth of new blood vessels to the tumor, thus starving it.

There is no doubt that both shark or bovine cartilage injected into mice can inhibit the development of a new blood supply to cancer cells. But injection into humans could cause severe allergic reactions and there is no proof that the products taken orally will even get to the site of the tumour. Also many cancers do not rely on new blood vessel growth.

A large amount of cartilage is required, it smells terrible, the taste is worse and belching is not to be recommended. It is also very expensive therapy.

Shiitake Mushroom- used widely in China and Japan and is claimed to have a powerful anticancer action. It is believed to strengthen the immune cells and shrink tumours and reduce the cancer cell spread. . It has been shown to significantly prolong the lifespan of patients with breast and other cancers.

Spirulina Several studies show Spirulina or its extracts can prevent or inhibit cancers in humans and animals. Test tube experiments have shown that Spirulina helps repair damaged DNA. Some common forms of cancer are thought to be a result of damaged cell DNA running amok, causing uncontrolled cell growth.. This may be why several scientific studies, observing smokers and with experimental cancers in animals, Spirulina appears to protect against developing cancer. Spirulina also strengthens the immune system.

Sprouts – contain very concentrated nutrition. (They are designed to feed a growing plant until it puts out roots to get more nutrition). Generally eating sprouts in the diet is beneficial, but some sprouts have additional benefits. Broccoli sprouts contain approximately 20 times higher levels of sulforaphane compared to cooked broccoli. Sulforaphane is a potent anti-cancer agent.

TENS electro medicine– (Trans cutaneous Electric Neural Stimulation) this unit is used in hospitals to relieve pain by sending gentle electric impulses from patches sitting on the skin into the nerves. These suppress pain by blocking the pain signals in the nerves before they reach the brain. Different people have variable responses to TENS, which is quite painless and safe. Some only have relief while the TENS current is on, for others, the relief can be for some time. TENS is a very good therapy for people with any form of chronic pain.

Tumeric– made from the Curcumin plant root is recommended for all cancer patients. It has been demonstrated to –

- Inhibit cancer cell invasion and metastasis (spread) by effects on the matrix metallo-proteinase enzymes.
- Can help reduce cancer cells becoming resistant to chemotherapy
- Helps chemotherapy drugs get into the cancer cells
- Sensitises the cancer cells to radiotherapy
- Its anti inflammatory actions reduce some cancer pains.

Tumeric may reduce the spread (metastasis) of breast cancer. Researchers in the University of Texas found this compound shut down a protein which appears to encourage spread of the cancer cells to the lungs (in mice). Tumeric and curcumin are widely used for many conditions in India and China.

Wheat Grass – is a treatment suggested by many cancer units. It is definitely an acquired taste, and is best sipped gently over time rather than the ‘down the hatch’ approach. It is rich in chlorophyll (which is almost identical to haemoglobin which carries oxygen around the body), it is rich in vitamins (over 13 vitamins, and many minerals) as well as superoxide dismutase one of the body’s strongest antioxidants. This creates peroxides in the cells which damage further cancer cells. This deep green drink is also a powerhouse of many other anti cancer compounds including abscisic acid (also called: dormin), over 30 other enzymes, the antioxidant enzyme cytochrome oxidase, laetrile, and many other nutrients.

Concluding section

This booklet has become much larger than we had initially designed. The more we looked at the problems faced by a person newly diagnosed cancer, the more we realised that it was our duty to provide the answers.

- The plethora of therapies, claims and counter claims must be bewildering for a person in a position least able to make a rational decision. Which therapy may be a straw worth clutching?
- We hope that we have suggested that conventional therapy should be the foundation for all patients. If the treatment is likely to be radical or debilitating, then check that it will provide the desired results. Many of the other ‘complementary’ treatments are also very powerful, and in the right situations can greatly increase the possibility of cure, in addition to improving the quality and quantity of life .
- We all have a finite time on this planet, for some this may be less than others, but we should strive to make that time as pleasant and fulfilling as possible. What is to be gained by increasing one’s lifespan from 6 to 9 months with powerful treatments, if most of that time involves suffering and discomfort. Talk to your advisors before undergoing the more unpleasant forms of therapy.
- Confidence in your clinical advisors, and a positive attitude to your health and future are possibly the most powerful medicine. We hope that increased understanding of the available treatments may help.
- It is important to face the spiritual side of life, a sense of peace and confidence is again very powerful ‘medicine’. Remove all the hatred, anger and negative feelings of the past. Forgive those who have hurt you in the past, because the remaining resentment only hurts ourselves. Fill you heart only with peaceful, loving and positive emotions.

- Talk openly with others about yourself, don't make cancer the only point of conversation, try to make the relationship with people as normal as possible. This applies particularly to people visiting patients with cancer. Treat them as you would any friend.
- Nourish your body and strengthen the body with good food (preferably organic) and quality nutritional supplements. 'Starvation' of our cells is one of the most debilitating features of cancer – weakening the immune system and sapping the body of energy.

Remember the statistics for cancer continue to improve; it is only a matter of time before we will find the cause of the chaotic multiplication of cells which is cancer. When we do that, a genuine cure will just be around the corner. We are quite sure that that will not be far away.

Gerald & Monica Lewis

APPENDIX

Appendix a - Alkalinising foods –

Cancer cells like to live in an acid medium. You can measure the acidity/alkalinity (pH) of your body quite simply by dipping a piece of litmus paper into some saliva produced at least 2 hours after a meal. The paper should be a blue colour if alkaline and red if the saliva is acid. Eating alkaline forming foods, makes the body less ‘hospitable’ for the cancer cells.

Foods considered to be **alkaline-forming** and thus helpful to people with consistently acid pH include: almonds, aloe vera, apples, apricots, bee pollen, buckwheat, cabbage, cantaloupe, celery, carrots, cucumbers, dairy products except hard cheese, dates, dulse, poached eggs, figs, grapefruit, honey, lettuce, millet, parsley, raisins, peaches, fresh red potatoes, pineapple, soy products, sprouted seeds, cooked spinach, turnip tops, wakame miso soup, azuki beans, rice, mineral water.

Or a longer list:

VEGETABLES

Garlic
Asparagus
Fermented Veggies
Watercress
Beets
Broccoli
Brussel sprouts
Cabbage
Carrot
Cauliflower
Celery
Chard
Chlorella
Collard Greens
Cucumber
Eggplant
Kale
Kohlrabi
Lettuce
Mushrooms
Mustard Greens
Dulce
Dandelions
Edible Flowers
Onions
Parsnips (high glyceemic)
Peas
Peppers
Pumpkin
Rutabaga
Sea Veggies
Spirulina
Sprouts
Squashes
Alfalfa
Barley Grass
Wheat Grass
Wild Greens
Nightshade Veggies

FRUITS

Apple
Apricot
Avocado
Banana (high glyceemic)
Cantaloupe
Cherries
Currants
Dates/Figs
Grapes
Grapefruit
Lime
Honeydew Melon
Nectarine
Orange
Lemon
Peach
Pear
Pineapple
All Berries
Tangerine
Tomato
Tropical Fruits
Watermelon

PROTEIN

Eggs
Whey Protein Powder
Cottage Cheese
Chicken Breast
Yogurt
Almonds
Chestnuts
Tofu (fermented)
Flax Seeds
Pumpkin Seeds
Tempeh (fermented)
Squash Seeds
Sunflower Seeds
Millet
Sprouted Seeds
Nuts

OTHER

Apple Cider Vinegar
Bee Pollen
Lecithin Granules
Probiotic Cultures
Green Juices
Veggies Juices
Fresh Fruit Juice
Organic Milk
(unpasteurized)
Mineral Water
Alkaline Antioxidant Water
Green Tea
Herbal Tea
Dandelion Tea
Ginseng Tea
Banchi Tea
Kombucha

SWEETENERS

Stevia

SPICES/SEASONINGS

Cinnamon
Curry
Ginger
Mustard
Chili Pepper
Sea Salt
Miso
Tamari
All Herbs

ORIENTAL VEGETABLES

Maitake
Daikon
Dandelion Root
Shitake
Kombu
Reishi
Nori
Umeboshi
Wakame
Sea Veggies

Acid forming foods – these foods are better avoided or used in only small amounts

ACIDIFYING VEGETABLES

Corn Lentils Olives Winter Squash

ACIDIFYING FRUITS

Blueberries Canned or Glazed Fruits Cranberries Currants Plums** Prunes**

ACIDIFYING GRAINS, GRAIN PRODUCTS

Amaranth Barley Bran, oat Bran, wheat Bread Corn Cornstarch Crackers, soda Flour, wheat

Flour, white Hemp Seed Flour Kamut Macaroni Noodles Oatmeal Oats (rolled) Quinoa Rice (all) Rice Cakes Rye Spaghetti
Spelt Wheat Germ Wheat

ACIDIFYING BEANS & LEGUMES

Almond Milk Black Beans Chick Peas Green Peas Kidney Beans Lentils Pinto Beans Red Beans Rice Milk Soy Beans Soy
Milk White Beans

ACIDIFYING DAIRY

Butter Cheese Cheese, Processed Ice Cream Ice Milk

ACIDIFYING NUTS & BUTTERS

Cashews Legumes Peanut Butter Peanuts Pecans Tahini Walnuts

ACIDIFYING ANIMAL PROTEIN

Bacon Beef Carp Clams Cod Corned Beef Fish Haddock Lamb Lobster Mussels Organ Meats

Oyster Pike Pork Rabbit Salmon Sardines Sausage Scallops Shellfish Shrimp Tuna Turkey

Veal Venison

ACIDIFYING FATS & OILS

Avacado Oil Butter Canola Oil Corn Oil Flax Oil Hemp Seed Oil Lard Olive Oil Safflower Oil

Sesame Oil Sunflower Oil

ACIDIFYING SWEETENERS

Carob Corn Syrup Sugar

ACIDIFYING ALCOHOL

Beer Hard Liquor Spirits Wine

ACIDIFYING OTHER FOODS

Catsup Cocoa Coffee Mustard Pepper Soft Drinks Vinegar

ACIDIFYING DRUGS & CHEMICALS

Aspirin Chemicals Drugs, Medicinal Drugs, Psychedelic Herbicides Pesticides Tobacco

ACIDIFYING JUNK FOOD

Beer: pH 2.5 Coca-Cola: pH 2 Coffee: pH 4

Appendix B – Cruciferous vegetables – vegetables whose flowers form a tiny cross. These vegetables have been shown to have active anti cancer actions

- Arugula
- Beet greens
- Bok choy
- Broccoli
- Brussels sprouts
- Cabbage
- Cauliflower
- Chinese cabbage
- Collard greens
- Daikon
- Watercress
- Rutabaga
- Horseradish
- Swiss chard
- Turnips
- Kale
- Kohlrabi
- Mustard greens
- Radishes
- Rutabaga
- Swiss chard
- Turnips
- Watercress

Appendix C

Other foods with cancer fighting properties:

tea (green & black), ginger, garlic, broccoli, onions,
carrots, soybeans, tomatoes, papaya, avocado,
citrus fruits (oranges & grapefruit) lime, bhindi (okra),
green vegetables – spinach, lettuce, broccoli, French beans, green fenugreek,
mustard leaves – the darker green, the greater the benefit.

Appendix D –

How to use a sauna.

Saunas provide a number of benefits to patients with cancer.

Both tumour cells and also viruses tolerate heat poorly, (and this is why we develop a temperature when we become infected). Saunas enhance the circulation and also oxygenate the tissues, they open the nasal passages and assist the sinuses to drain, and by creating sweating, the body is able to excrete toxins through the skin.

The conventional saunas consist of preheating a small room, generating quite intense heat which for many people is intolerable. This is particularly so in patients weakened with cancer.

Far infrared saunas use infrared light bulbs, and only heat the tissues they shine on. This is a lot more comfortable, and it is possible to construct one of these quite cheaply using infrared bulbs in a small room such as a bathroom or closet. Note infrared saunas do not work through clothing.

Saunas are safe for most people, but people with chronic conditions it might be safer to have a companion with them. Remain in the sauna no more than 30 minutes, and for most people treatment should be once a day. (For those who are weaker, once or twice a week may be as much as they can tolerate).

Drink two glasses of mineralised water before entering the sauna, and use a small towel to wipe off the sweat as it develops. Slowly move around so that all areas of the body are exposed to the infrared energy, and it is quite safe to look at the lightbulb on occasions. For men it is best not to directly expose the testicles to infrared rays.

When finished take a shower with a warm or cool water but not hot, and do not use soap as this leaves a film and can clog the pores. Wash off the sweat with a brush or loofa, and brush all over including the face and hair. Brushing may be a painful at first, but it does enhance the cleansing effect, and soon it feels wonderful.

After the sauna drink a glass of water, and sit or lie down for at least 10 minutes.

While in the sauna do not work or talk, but use this time to relax, reviewing your day or meditating.

Appendix E - How we can create endorphans – These healthy ‘morphine like’ chemicals make us feel better, happier and can relieve pain. There is no limit to the amount you can make, the more you do the better you feel:

- write a long letter to somebody you care about
- turn up a favourite song and sing-along loudly

- lie in bed and listen to the rain falling
- Go to the beach and dig your toes deep into the sand
- pour yourself a nice hot cup of tea and savour it in silence
- take a bubble bath
- get really wet in the rain
- visit a pet shop and pet the new puppies and kittens
- watch the sunset or if you're brave watch the sunrise
- lie outside on a clear night and watch the stars
- Buy an all-day pass to a fun park and ride all of the rides

(From Hubbard

Appendix F - Meditation -

This can be a very powerful and helpful part of healing. It is impossible to cover in a few lines and we would strongly encourage all patients with cancer to look at this therapy. Read one of the many good books ²⁷

Helpful meditation passes through a number of stages – physical relaxation; patchy concentration (as the mind wanders onto other things before coming back to tranquility); deeper relaxation (as the mind slowly clears and thoughts stop moving around); contemplation (when the mind by itself brings in a single thought and it is perceived in a different realm); then unification and illumination (deep trance like states with heightened awareness and a direct perception of new knowledge).

Regular meditation can give a person, no matter what situation they are in, a sense of peace, hope, love and fulfillment not possible in any other way. Deep contemplative prayer is a very similar process.

Appendix G – Liver Cleansing

This is a process foreign to Western Medicine, but in the orient, the importance of supporting the liver is considered very important in Asian health.

The liver essentially filters the blood, detoxifies poisons and creates sugars, proteins and fats to feed the rest of the body. It can only do this with the correct nutrition, and in cancer where excess toxin production and 'starvation' are common, taking steps shown throughout the centuries to be helpful to liver function, can only be beneficial in a sick patient:

- drink at least eight to 12 glasses of filtered water daily
- avoid eating large amounts of sugar and, especially refined sugar
- avoid foods that you may be allergic to -- ones which in the past have upset you
- avoid eating bacteria and viruses in food -- eat foods which are fresh, avoid reheating food, avoid food from take-away bars that are not fresh, always wash your hands before eating. When overseas avoid unpeeled fruits and vegetables, raw foods and shellfish.
- Try and eat organic food if possible, to reduce the load of pesticides.
- Avoid constipation by eating raw fruit vegetables and fibre, and drinking plenty of water.
- Avoid excessive saturated and trans fats.

Some herbs are also believed to help the liver to function –

- Taurine -- this is an essential amino acid required by the liver to remove toxic chemicals and create bile.
- Dandelion -- the bitter in dandelions stimulate the digested glands, and the liver and activate the flow of bile.
- St Mary's Thistle -- a known traditional liver tonic for centuries. This has been shown to protect the liver from toxic damage, and it also seems to improve the action of Cytochrome p450 which is one of the major detoxification enzymes with in the liver.
- Globe artichoke -- this has a bitter tonic with a protective and liver restorative actions.

- Soluble fibre – which can attach to the toxins released in the bile, and prevent them from being reabsorbed lower in the intestines.

Appendix F - The technique for giving iv vitamin C

This treatment can be given safely by any general practitioner, and they may wish to know the technique used:

How is it given –The vitamin is given by intravenous drip over 60 minutes, once or twice weekly:

- Week 1 - 15 grams 2 per week,
- Week 2 - 30 grams 2 per week
- Week 3 - 50 grams 2 infusions per week

There after the optimal dose is given once or twice weekly for some months.

Measure plasma Vitamin C level at the end of each infusion, aiming for a plasma level of 300 – 400 mg/dl. Adding alpha lipoic acid therapy makes the vitamin C more effective and lower plasma levels 250 – 300mg are as effective.

Precautions –

Although serious side effects from iv vitamin C are rare it is important to note some facts:

- There have been one or two cases reported where high dose vitamin C caused the cancer cells to die and then bleed. (This can happen with any treatment which damages cancer cells including chemotherapy and radiation). For this reason it is best to slowly work up the dose of vitamin C, especially in people with brain cancer.
- A very rare condition G6PD deficiency (glucose 6 phosphatase deficiency) can cause the blood to haemolyse with high dose vitamin C. So this enzyme should be tested for before starting high dose vitamin C.
- Because Vitamin C is a chelating agent, it can increase the excretion of calcium in the urine. Higher doses are usually given with 10 mls of calcium, but if the infusion makes the patient shaky, give 10mls of calcium gluconate at 1cc per minute.

For further information contact the authors at CAM Ltd, 3rd Floor, 110 Remuera Rd, Remuera, Auckland

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