**Chapter 19.**

**Complementary Therapies**

The terms ‘Complementary Therapies’ and ‘Alternative Therapies’ are often incorrectly used interchangeably. ‘Complementary Therapies’ refers to those treatments that are used together with mainstream medical practice. ‘Alternative Therapies’ refer to treatments that are outside the mainstream of conventional medical practice. These are reviewed in Chapter 21. Use of natural products, mainly in the form of dietary supplements including herbs or botanicals, minerals, vitamins and probiotics, maybe used as Complementary or Alternative therapies. In this book they are covered extensively in the next chapter on Diet and Nutrition. Mind and body practices, such as meditation, etc. also have a very important part to play in fighting prostate cancer.

After you have been diagnosed with prostate cancer, it is amazing how you become aware of many friends, acquaintances, work colleagues and others that have, or have had, prostate cancer. There are about 600 playing members of my golf club, and as a long-term member who plays twice a week, I know perhaps half of these. The majority are in the 55 plus age group; i.e. in the zone for prostate cancer. Many keep their prostate cancer circumstances to themselves, but a few were of help to me, after my prostate cancer ‘plight’ became known to them (I didn’t go out of my way to ‘publicise’ my affliction or seek pity). Three or four underwent radical prostatectomies, one had seed brachytherapy and two more had x-ray radiation. One of the RALP patients was a surgeon. I was a little surprised that he seemed unaware of the specifics of the various radiation treatments available to him or to have considered them in any way. Perhaps it was the ‘cancer anxiety factor’ at play again: get rid of the danger posed by removing it immediately!

In 2012, at about the time I was diagnosed with prostate cancer, I met Peter at a social function near where I live. Peter, a US resident, who was visiting relatives in Australia at the time, had an interesting story to relate. He had previously been diagnosed with incurable prostate cancer with metastases having set in. Five years ago, the medical profession had told him that he had better get his affairs in order as he would be dead in 12 to 18 months. At about 60 years of age, Peter was not of the mindset to accept this and committed himself to finding a way to rid himself of the cancer. His online research turned up a host of sites that provided ‘non-mainstream’ treatments for his cancer. Some of these involved complementary and alternative therapies. One of his challenges was to sort the wheat from the chaff or scientific fact from fiction. His search led him to the Prostatepedia (formerly the Prostate Forum) web site of Dr Charles ‘Snuffy’ Myers in the USA. Access it via Appendix 2.

Prostatepedia’s content was prepared by pioneering prostate cancer oncologist and prostate cancer survivor, Dr Myers (before his retirement in 2018). As a leading prostate cancer specialist, Snuffy Myers offered a non-biased look at all the available treatments. He made his analyses based on the available science—period. Peter made contact with Dr Myers and visited him in Charlottesville, Virginia in, I think, 2006. Peter was provided with a host of preparations that were to be taken daily. Each year Peter made an annual visit to see Dr Myers and return with adjustments to his treatment regime. As I understand it, some part of the treatment involved taking homeopathic substances. Each year, his PSA levels dropped or held previous levels with the metastatic progression of the prostate cancer regressing. The cost of the ‘pills’ was in excess of $25,000 a year. Rob, a golfing friend, also visited Snuffy Myers some twelve or thirteen years ago. More on Rob in the last chapter of the book.

My brother had been diagnosed with prostate cancer some 21 years ago. He had had exposure to Chinese medicine prior to his cancer diagnosis, and decided to undertake an ongoing course of herbal treatment prescribed by his specialist (who offered conventional treatment as well as Chinese herbal solutions). After 18 months of herbal treatment, his PSA was still elevated, but was not increasing. The 55 pills he took three times a day provided by his specialist were costing $10,000 per annum. At that time, he decided to take a more proactive approach to his prostate cancer treatment and moved to another urologist. In 2000, my brother came across a book titled ***“How to Fight Prostate Cancer and Win”*** by **Ron Gellatley**. This book was first published in 1998 by Cargel Press International and has since been reprinted a number of times. At the time the book was published, Ron was an accredited Naturopath, Clinical Nutritionist, Homeopath and Medical Herbalist who had been in practice for over 15 years. His PSA was 126 and sixty percent of his prostate was cancerous. The very well written book describes in great detail his plan to rid himself of prostate cancer over a six months period. His plan culminated in his PSA reducing to 0.07 at the time of his book going to press.

The starting point of Ron’s determination to rid himself of the threat to his life that was presented by his prostate cancer was his unshakable belief that he would succeed in his task based on the combination of a strong positive belief and the use of appropriate nutrients. His nutrient intake included **Bovine Cartilage** and **Lactoferrin**, which he suggests are amongst the most powerful anti-cancer nutrients available. He co-operated with a natural medicines company in Australia, to see the latter come up with a new product called **‘Promaxin Ultimate’.** In the interim, this product has become unavailable. However, there is a multitude of high-strength herbal and nutritional male support supplements available that have been scientifically proven to provide relief of the symptoms associated with medically diagnosed benign prostatic hypertrophy. Most include **Saw Palmetto** which assists in inhibiting the conversion of testosterone to dihydrotestosterone (DHT) in the prostate. It also blocks the attachment of dihydrotestosterone to cellular binding sites, and subsequently increases the breakdown and excretion of dihydrotestosterone from the body. (Medical research suggests that DHT is involved in the progress of healthy cells to cancer cells).

**Antioxidants and their Role in Fighting Prostate Cancer**

As will be revealed below, antioxidants are very important in the fight against cancer. However, in the minds of most doctors they are ‘complementary’ agents to more mainstream treatments. Many practitioners in the ‘alternative’ camp, believe that they have a more substantial role in prostate cancer treatment.

What are antioxidants? They are a class of molecules that are capable of inhibiting the oxidation of other molecules. (Oxidation is a chemical reaction that can produce free radicals in the body that can lead to chain reactions that are known to damage cells). The body naturally circulates a variety of nutrients in the body with antioxidant properties. The body also manufactures needed antioxidants in the form of enzymes in order to control free radical chain reactions. Natural antioxidant production deceases with age which leads to increased free radical cell damage. The maintenance of appropriate antioxidant levels in older people requires an adequate diet and/or supplementation.

This leads to the question what are free radicals? Simply put a free radical is an atom or molecule that has a ‘free’ electron, i.e. it is unpaired. This ‘free’ electron sees them highly reactive. They aggressively attack other molecules (proteins) to ‘steal’ an electron to complete their incomplete pair. They are formed in the body as a result of normal metabolism and energy production. They are also produced by the body during exercise and when there is inflammation anywhere in the body. They are the body’s natural biological response to environmental toxins like cigarette smoke, chemicals, excessive sunlight, cosmic and man-made radiation. The result is damage to the body’s DNA and other cell structures. Free radicals generally collect in cell membranes, which makes the cell’s ***lipids*** prone to oxidative damage. When this happens, the cell membrane becomes brittle and leaky, causing the cell to eventually fall apart and die. This in turn, is disruptive to the duplication of DNA and interferes with its orderly maintenance.

Free radicals go on the rampage throughout the body, in the absence of sufficient antioxidants to ‘surrender’ an electron so as to halt the oxidative process. Unchecked free radical proliferation leads to poor cell performance followed by tissue degradation and increased risk of disease.

Antioxidants are nature's way of providing your cells with adequate defense against attack by reactive oxygen species (ROS). With the availability of appropriate micronutrients, the body is able to resist aging caused by its everyday exposure to environmental toxins and other pollutants. An inadequate supply of antioxidants puts the body at risk of oxidative stress, which leads to accelerated tissue and organ damage.

Numerous long-term studies have shown that the regular taking of antioxidants in supplement form has yielded reductions in specific cancers by up to 48%. Most studies were a random, blind test showing cancer occurrence or death reductions of 13 to 40%. Antioxidants have other properties which include:

An ability to hold onto dangerous metals such as mercury, arsenic and chromium, by what is called the chelation effect. These metals can be washed out of the body in the urine by this chelating effect before they create oxidative stress and cell damage.

Some such as flavonoids, can act as a virtual shield by attaching to DNA to protect it from free radical attack.

Yielding anti-cancer compounds that halt cancer growth and force some cancer cells to self-destruct (apoptosis).

Stimulating the body's genes and increase its natural defenses.

**Types of Antioxidants**

There are numerous types of antioxidants each of which has its place in the scheme of things. The first two types can be determined by their solubility. Some are water soluble whereas others are oil soluble. They are referred to as being either hydrophobic (lipid/fat soluble) or hydrophilic (water soluble). Both types are important as the membranes between cells are made of fats whereas the interior of the cells and the spaces between them are water filled. Free radicals attack both types of cell material, both watery cell content and the fatty cell membranes.

Lipid-soluble antioxidants are those that protect your cell membranes from ***lipid peroxidation***. Some examples of lipid-soluble antioxidants are vitamins A and E, carotenoids, and lipoic acid.  As expected, water-soluble antioxidants are found in aqueous fluids, like blood and the fluids within and around your cells. Some examples of water-soluble antioxidants are vitamin C, polyphenols, and glutathione.

Another important characterization of antioxidant types is whether or not they are enzymatic or non-enzymatic antioxidants. ***Enzymatic antioxidants*** are only produced by the body with their task being the capture and removal of free radicals from the system. This is achieved by converting the free radicals into hydrogen peroxide and then to water by a complex process of chelating with various metals.

Glutathione is considered to be the body’s most important enzymatic antioxidant as it optimizes the performance of all the other antioxidants, including vitamins C and E, CoQ10, alpha-lipoic acid, as well as the fresh vegetables and fruits that are eaten. It is present in the form of a peptide and is found in every cell in the human body. It oxygenates the cells and protects their mitochondria from oxidative and peroxidative stress damage by breaking down the hydrogen peroxides and other organic peroxides into alcohols. It assists in the removal of toxins from the cells of the body and gives cells protection from the damaging presence of chemicals, radiation and pollutants. It diminishes in the body with age which lessens its impact in fighting age-related diseases.

Fortunately, there are foods available that contain micronutrients that stimulate its natural production in the body. These foods include avocados, asparagus, curcumin, watermelons, strawberries, cauliflower and broccoli.

Perhaps the next most important enzymatic antioxidant is ***Alpha-Lipoic Acid*** or ALA***.*** It is an excellent free radical scavenger and is one of the few antioxidants that cross the brain barrier. It helps in the fight against brain diseases such as Alzheimer’s. It has other amazing properties such as reducing inflammation via its role in gene expression and is an excellent chelating agent. To top it all off, when glutathione and other key antioxidants levels are low, it acts to stimulate them to rapidly increase their production. It is similar to glutathione in its ability to stimulate glutathione and Vitamin C and E production in times of need. Yeast, liver, kidney, spinach, broccoli, and potatoes are good sources of ALA.

***CoQ10***, or coenzyme Q10, is another important antioxidant, which is converted by the body to its reduced form, called ubiquinol, to maximize its benefits. It is used by every cell in your body and has a role in producing ATP, a molecule in body cells that energise the cells.

Other important non-enzymatic antioxidants that must be provided by food, beverage or by supplements are:

**Resveratrol:** Besides being an excellent scavenger of free radicals, it has further properties that lowers blood pressure, improves the health of blood vessels and helps inhibit prostate cancer. It is found in the skin ofred grapes, cocoa and red wine.

**Carotenoids:** A class of naturally-occurring compounds that have powerful antioxidant properties. They give foods their distinctive coloring. There are two different groups of carotenoids these being **Carotenes and Xanthophylls.**

Carotenes includelycopene (found in red tomatoes) and beta-carotene (found in carrots), which is converted by the body into vitamin A. **Xanthophylls** are antioxidants that reduce the sign of ageing and improve heart health. The US National Cancer Institute has determined that xanthophylls stop cancer cell growth and contribute to cell death.

Perhaps the most important xanthophyll is ***astaxanthin***. It is the most powerful carotenoid in terms of free radical scavenging being 65 times more powerful than vitamin C and 54 times more powerful than beta-carotene. It has wide ranging health benefits including its support of the immune system, reducing oxidative damage to DNA and reducing the risk of various cancers. It is found in micro-algae, yeast, salmon, and krill.

A final word: *Don’t under-estimate the benefit that antioxidants can offer in the prevention of prostate cancer and in the fight against it.*

**The General Categories of Complementary Therapies**

There are five general categories of complementary therapies (including diet, nutrition and herbal remedies which are considered separately in Chapter 20). These general categories and their sub-groupings are:

**Mind, Body and Spirit**

Meditation

Tai Chi

Aromatherapy

**Manual and Physical Healing**

Acupuncture

Massage

Exercise

**Diet and Nutrition** (See Chapter 20)

Supplements

Vitamins

Minerals

Proteolytic Enzymes

Special Diets

Fasting

**Herbal Remedies** (See Chapter 20)

Herbs and Spices

**Pharmacological and Biological Agents**

Homeopathy

Lactoferrin, etc.

It is arguable that some of the above therapies perhaps fit better in the ‘Alternative Therapy’ stream rather than the ‘Complementary Therapy’ category. Let’s not get too hung up on semantics. There are dozens of books, some of which are excellent, that give in depth discussion on the use of the above agents or treatments. This book gives a broad overview of their use rather than a detailed investigation of their therapeutic value.

The term ‘holistic medicine’ is often referred to when considering a number of the broad groupings listed earlier. It’s all a question of what is meant by ‘holistic’. Some people might define it strictly as complementary and alternative medicine. Others might consider it a term that refers to treating the ‘whole person’ rather than treating a specific ailment or disease. There is not a doctor anywhere, who wouldn’t promote a healthy lifestyle which might include regular exercise, good eating habits, not smoking and the management of stress. Of course, claims made by some holistic health practitioners are exaggerated and/or are not supported by the current scientific literature. It sometimes doesn’t mean the claims are necessarily wrong, but that science has not yet caught up with holistic medicine. The origins of some holistic therapies, go back thousands of years. One thing that is practically certain is the fact that an increasing number of holistic treatments are becoming more common in mainstream healthcare, where they are used as an adjunct to standard medical treatment. Perhaps the correct term for joint holistic and conventional treatment is **integrative care**.

Why do some cancer sufferers turn to holistic, complementary and/or alternative treatments?

The need to do something positive themselves to improve their situation.

To alleviate or reduce the pain or side effects of conventional treatment.

A need to take an active role in improving their own health and wellness which might contribute to a cure alone or by using conventional medical treatment.

Mainstream treatment hasn’t worked or is thought by the patient, unlikely to work.

***Cancer patients who choose alternative medicine instead of mainstream cancer treatments may be putting themselves at serious risk. They are ignoring or giving up the only proven methods of treating their disease. It is essential before embarking on a complementary or alternative therapy, to thoroughly discuss these intentions with your medical team, who hopefully are experienced in integrative medicine. This means them being experienced in ‘conventional’ and ‘complementary and alternative’ medical protocols.***

Many, or even most, cancer sufferers take complementary remedies with or without their doctor’s knowledge or approval. Some of these can be safely used along with standard treatment to help relieve symptoms or side effects, to ease pain, and to improve quality of live. You should discuss their use with your doctors.

**Mind, Body and Spirit**

‘Peace of Mind’ was considered earlier in this chapter as one of the key elements of any plan to fight cancer. Peace of mind might mean different things to different people. To me peace of mind means living a well-balanced life in every way, with a minimum of stress in one’s life, being emotionally well-adjusted and surrounded by love, with a positive outlook on life and towards your cancer journey and if you are spiritually inclined, at one with your creator.

The issue of stress is a VERY IMPORTANT consideration in your journey to beat your cancer. The University of Malaysia discovered that chronic stress prevents the rapid creation of infection fighting T-cells and prevents quick immune reaction. Hundreds of studies over the past 40 years have confirmed that stress negatively impacts the immune system. Our bodies all contain the ‘fight or flight’ hormone called ***cortisol.*** This hormone is a member of the localised eicosanoids family. (In 1982, John Vane won a Nobel prize and a knighthood for discovering these localised hormones) Cortisol causes chronic inflammation throughout the body, the precursor to chronic illness and particularly cancer. This inflammation also encourages metastases, and it has been shown that once you develop cancer your cortisol and nor-epinephrine levels rise, causing even more inflammation.

The stress that most of us experience in our daily lives, sees the production of another class of hormones called ***catecholamines*** that also are not good for you. It is released by the adrenal glands when you are under physical and emotional stress.  These hormones also damage the immune system.

According to an American Psychological Association study, there is a link between stress, cancerous tumour development, and a specific type of natural killer white blood cells called NK cells. These cells are important in fighting certain types of cancer (particularly liver, kidney, colorectal, and breast). They prevent metastasis and destroy small metastases. Stress suppresses NK-cell activity.

***Epigenetics*** has shown that proteins called histones, can build up around DNA and block inter-cellular messages being produced. It is thought that these lost messages may cause, spread and worsen cancer. Epigeneticists, who work in the environmentally-induced genetics field, have shown that poor diet, stress, environmental toxins and hormones such as oestrogen can cause these blockages and bring on cancer.

**Meditation**

The word meditation means different things to different people. However, most consider it as a mind-body process that uses concentration or reflection to relax the body and calm the mind. There are numerous forms of meditation, each offering different outcomes to the practitioner. It can be self-directed or under the control of doctors, psychiatrists, mental health workers or yoga-masters. An independent panel convened by the US National Institutes of Health found that it might be a useful complementary therapy for treating chronic pain and sleeping problems such as insomnia. Some cancer treatment centres offer meditation or relaxation therapy with conventional medical care. However, available scientific evidence does not suggest that meditation is effective in treating cancer or any other disease, but rather, it may help to improve the quality of life for people with cancer.

Earlier in this chapter ‘Peace of Mind’ was considered as one of the key elements of any plan to fight cancer. Recently, I met an advanced prostate cancer sufferer who had a comprehensive plan to fight his disease. A positive mindset was considered an important element in his mind, body and spirit stance. He further believed that his conscious and sub-conscious minds must be in step with each other. To this end he had spent a number of two-hour sessions with a medical practitioner, who had assisted him achieve this equilibrium. This was only achieved after he faced up to and reconciled ‘troubled” matters in his past. He continues regular meditation sessions to ‘de-stress’ his system. The doctor suggested that without this equilibrium being reached, the cancer memory cells in the body would re-surface in the future. (Editor’s note: I am unaware of what ‘cancer memory’ cells are or if they even exist).

**Tai Chi**

T'ai chi, taiji or tai chi as it is referred to in English, is an internal Chinese martial art form practiced for both its defence training and its health benefits. It is also claimed to increase longevity in older people who regularly practice the art. Medical research has found evidence that t'ai chi is helpful for improving balance and for general psychological health, and that it is associated with general health benefits in older people. A comprehensive overview of the scientific literature concluded that up to 2011, t’ai chi offered no conclusive evidence of benefit for any of the other conditions researched which included cancer.**1** T'ai chi health training concentrates on relieving the physical effects of stress on the body and mind. The focus and calmness cultivated by the meditative aspect of t'ai chi is seen as necessary in maintaining optimum health (in the sense of relieving stress and maintaining homeostasis).

**Aromotherapy**

Aromotherapy is the use of fragrant substances, such as essential oils, that are inhaled or applied to the skin to create a feeling of well-being and good health Aromatherapy is seen by devotees as a natural way to help patients cope with stress, chronic pain, nausea, and depression and to produce a feeling of well-being. The essential oils usually used in aromatherapy might include the following oils that are produced from plants: lavender, rosemary, eucalyptus, chamomile, jasmine, peppermint, lemon and geranium. Scientific studies suggest that no conclusive evidence of benefit was apparent in preventing or treating cancer. On the other hand, proponents of aromatherapy suggest that it is of use in fighting bacterial infections; in strengthening the immune system and curing a host of maladies including cancer.

Frankincense, sometimes also known as olibanum, comes from the genus *Boswellia* trees, particularly *Boswellia sacra* and *Boswellia carteri*. The milky white sap is extracted from the tree bark, allowed to harden into a gum resin, and then scraped off in tear-shaped droplets. It is often referred to as the King of Oils and is thought to be one of the presents brought for the baby Jesus, by the three wise men from the east. (By the way, although I am not a religious person, I believe that the gift of gold to Jesus, was in fact curcumin, which is gold-coloured and a very expensive spice in biblical times).

In aromatherapy, frankincense oil is either inhaled or diffused via a vaporizer. It is considered a very effective sedative that induces a feeling of mental peace, relaxation, and helps relieve anxiety, anger, and stress.

Frankincense oil is said to promote healthy cell regeneration and assist in keeping existing cells and tissues healthy. The health benefits of frankincense oil are mostly attributed to its anti-inflammatory, antiseptic, disinfectant, digestive, and diuretic properties. Scientists have determined that there’s a component in this oil that not only stops cancer from spreading, but also induces cancerous cell death.

**Manual and Physical Healing**

**Acupunture**

Acupuncture has been a key component of traditional Chinese medicine (TCM) for thousands of years. Today TCM is regarded as largely pseudoscience, with no valid mechanism of action for the majority of its treatments. However, there are a large number of devotees to the practice, including Western-trained doctors. The apparent effectiveness of acupuncture relies on stimulating specific acupuncture points which corrects imbalances in the flow of qi or Ch’i as it is also known (life energy or energy flow) through channels known as meridians.

A number of systematic reviews of randomised clinical trials (RCT’s) using acupuncture for cancer pain, found that the number and quality of the RCT’s were too low to draw definitive conclusions or provided insufficient evidence to determine acupuncture’s effectiveness in cancer pain management.**2** The literature suggests that acupuncture has its place in management of the symptoms flowing from advanced cancer and/or its treatment rather than the cancer itself.

**Massage Therapy**

Massage therapy includes many different techniques in which practitioners manually manipulate the soft tissues of the body. These practices are designed to relax and de-stress the recipient.

**Exercise**

Physical activity is **vitally important** to your overall health and quality of life. Today, many medical specialists encourage their patients to be as physically active as possible during their cancer treatment. Regular exercise is likely to provide a host of benefits that might include:

Keep or improve your physical capabilities

Improve your confidence, self-esteem and emotional state

Keep muscles from wasting due to inactivity

Lower the risk of heart disease or osteoporosis

Lessen symptoms of tiredness (fatigue)

Keep your weight in check

Improve your quality of life.

Of course, some treatments, such as a radical prostatectomy, limit the patient’s capability to exercise for a while. It is important to follow the medical team’s directions as regards post treatment exercise.

**The place of exercise in maximising the fight against cancer is now considered to be one of *the seven essential pillars* in successfully fighting the disease.**

The literature varies as to what constitutes adequate exercise, both in duration and intensity. Our capacity to cope with intense or even moderate exercise varies from person to person. What I try to do is to have a reasonably vigorous walk for 45 minutes three or four times per week. I play golf twice a week which substitutes for two of the walks. However, bearing in mind what follows next, I might have to re-think this regime.

Recent research published in *Cell Metabolism* reported active mice experiencing a 50% reduction in tumour growth compared to inactive mice. (The metabolism of mice closely resembles that of humans). The researchers determined that with high intensity exercise, adrenaline is released into the blood stream together with natural killer (NK) immune cells. The NK cells attacked any tumours found. Another research program found that the immune signalling molecule, called IL6, which is released by muscle tissue under heavy exercise loading, helped the NK cells, under the influence of adrenaline, to be guided to tumours.

Dr Daniel Galvao, Co-Director of the Edith Cowan University Health and Wellness Institute, recently suggested in an interview with *Prostapedia*, the importance of both aerobic and resistance exercises to prostate cancer sufferers. This again suggests that my exercise routine needs the addition of a resistance component.

A leading urologist who reviewed the draft of this book, was very vocal on the critical importance of all prostate cancer sufferers having a regular exercise program and sticking to it with a passion.

The importance of exercise extends beyond the benefits outline on the previous page. The key importance of exercise is to oxygenate the cells of the body. We have learnt in this book that oxygen is the enemy of cancer cells and the importance of maintaining an optimised aerobic (oxygen rich) environment in all body cells.

**Diet, Nutrition and Herbal Remedies** are covered separately in the next chapter.

**Pharmacological and Biological Agents**

**Homeopathy**

Homeopathy is a system of alternative medicine that involves treating the patient with highly diluted substances that are designed to trigger the body’s natural healing capabilities. The practice is based on the principle of treating ‘like with like’. For example, the symptoms created by a high dose of a compound, might see these symptoms counteracted by administering a much weaker or highly diluted amount of the same compound. The use of homeopathic remedies or the use of supplements is happening at unprecedented levels. A 2006 study tested 5 Indian-sourced homeopathic remedies against MAT-LyLu prostate cancer cells in rats over 5 weeks. The small study concluded that the remedies had no direct cellular anti-cancer effect, but appeared to significantly slow the progression of cancer and reduce cancer incidence and mortality in the target rats.**22**

**Lactoferrin**

As babies, we were all first exposed to lactoferrin immediately after birth when we started being breast-fed by our mothers. It is an iron-binding protein found in the colostrum (new mother’s milk). There is about seven times the quantity of lactoferrin in early mother’s milk in humans (and cows) than exists later in the breast-feeding cycle. It is thought to protect the new born against bacterial infections and disease. Lactoferrin is produced in the exocrine glands of the body and is found in fluids of the eye, the nose, the intestines and elsewhere. It appears to have two immune-boosting functions. Firstly, it binds with iron in the blood to deprive any iron-hungry cancer cells of one of the substances that facilitates their growth. It also has the ability to release iron when necessary which makes it an excellent anti-oxidant. It is able to mop up free radicals that are coursing through our bodies at any one time. Free radicals are thought to be responsible for, or a catalyst in, the ageing process and diseases like arthritis and cancer.

Research has also identified lactoferrin as an anti-carcinogenic substance.**5** It has also been found in animal experiments, that 'iron-saturated' bovine lactoferrin is a potent natural adjuvant to augment cancer chemotherapy.**6** Lactoferrin is available, as a supplement, from health food outlets.

**Summary - Complementary Therapies**

In this chapter, many treatments, compounds, and mindsets are considered (referred to below collectively as ‘agents’). It is fair to say that many people benefit considerably from the use of one or more of these ‘agents’. Of course, some people might benefit more than others from a specific ‘agent’. It is also evident that some of these ‘agents’ also provide benefit as regards prostate cancer. They might prevent or delay its onset; they might minimise its severity and, in some cases lead to the cancer going into remission.

Many good books are available that tell the story of complementary (and indeed, alternative) therapies for prostate cancer.