

Notes on the Basis for The Bristol Approach



- Like all living organisms, abnormal cells occur in our bodies all the time, but we are equipped with a defence system to deal with them. For various reasons, this defence system can fail, allowing the abnormal cells to progress to cancer.
- We can positively influence and boost our natural defences. The Bristol Approach is a blend of the many and varied ways with which we can both protect ourselves from cancer and enhance our living with cancer.

How does cancer occur?

- The development of a cancer is a complex process in which defective cells multiply rapidly and fail to die.
- Specific genes, in every cell of the body, control the cell's life span and rate of multiplication. The cells which line our stomach and intestines, for example, do not live long and must multiply rapidly. This is why chemotherapy, designed to destroy rapidly dividing cells, such as cancer cells, can also affect our digestive system. On the other hand, bone cells, which can live for 12 years, only multiply very slowly.
- *Oncogenes* are created when a cell is damaged, for example by viruses, radiation or chemicals in our environment. They interfere with the damaged cell causing rapid multiplication of abnormal cells.
- A tumour suppresser gene within each cell is designed to stop this overproduction of abnormal cells. Its job is to repair the defective cells, and if it cannot do so, to immobilise them. This gene, however, can become damaged itself, permitting abnormal cells to continue developing into cancer cells.

The Immune System

- Specific white blood cells, called *natural killer (NK) cells*, identify and kill cells which are developing abnormally. A healthy immune system has a greater number of these protective cells than a weak one. The nutritional approach at Penny Brohn Cancer Care is designed to provide our bodies with the best possible nutrients for normal growth and health, helping to support the immune system.
- Imagery has been shown to help boost the number of NK cells.
- Research has shown that chronic stress (when stress becomes dis-stress) reduces the body's ability to produce these protective NK cells. We all know

the tell tale signs of stress. We may develop cold sores, feel irritable and tired, digest our food badly and notice that minor cuts heal slowly. How can we reduce stress? Relaxation, meditation, imagery, time with nature, creative pursuits, healing, reflexology, shiatsu and aromatherapy massage are all ways to reduce stress and restore the body's natural balance.

Studies have reported that people who meditated daily or undertook some form of relaxation had a higher white blood cell count, and therefore more NK cells, than those who did not.

The Mind-Body Connection

- We know that our thoughts and emotions affect our physical body. We can use this fact to make a positive impact on our health.
- When we are feeling happy, fulfilled, loved and cared for, the cells in our body, including those of the immune system, work better. We can live in ways which maximise these positive states, taking time to do more of the things which fulfil us and bring us joy. It is at these times that our brain produces endorphins which create the physical sensation of pleasure.
- Endorphins, the body's natural painkillers and mood enhancers, were the first of the body's chemical messengers to be discovered. Their production encourages the good functioning of all our cells.
- Imagine that as you read this, I come up and say "Are you all right, you don't look very well?" – How do you feel? Does your body posture change? Your breathing? What are your thoughts? How do you think your body functioning may be affected?

If instead I had said "Oh, you do look well today" – How would that have been different? What is your posture like now? Your breathing? Your thoughts? Nothing has changed except that I have said something which has caused you to think about your health. These thoughts are likely to have produced changes in your posture, breathing, muscle tension, your emotions and even the state of your spirit. Can you see how these thoughts, "Maybe I'm not so well" or "Yes, maybe I am really well today" can affect your health?

- We can train ourselves to see the glass half full rather than half empty. i.e. to look at the positive aspects.
- We are not, however, saying "Be positive all the time." as this can create stress and cause us to override our true feelings. Rather, aim to be genuine. Suppressed emotion has been shown to reduce the healthy functioning of the immune system. When emotions such as sadness, fear and anger are appropriately expressed, we are more likely to find peace of mind.
- Suppressed anger, for example, can be the cause of quite marked tiredness, which, if you already have low energy, can result in you feeling very depleted. Find safe ways to release your emotions. Anger, in particular, is often best released in physical action, which can be anything from crushing a polystyrene cup, bursting a balloon, or doing a drawing with crayons, to hammering, drumming, running, or even housework! Be creative! Emotions are supposed to move and change like an April day.
- Life changes do not happen overnight, and are more easily accomplished with support. Penny Brohn Cancer Care offers advice and support on how you may want to make these changes.

Recommended Reading

The Endorphin Effect by William Bloom, Piatkus 2001 – very readable and practical with simple yet profound life affirming exercises.

Anticancer A New Way of Life by Dr. David Servan-Schreiber, Penguin Books 2008 – very readable, well researched.

Available from Penny Brohn Cancer Care bookshop and all good bookshops.

Research

Immune Responses to Guided Imagery During Breast Cancer Treatment Lengacher CA et al. (2008) *Biological Research For Nursing*, Vol. 9 (3) 205-214

Immuno-modulatory effects of relaxation training and guided imagery in women with locally advanced breast cancer undergoing multimodality therapy: A randomised controlled trial Eremin O, Walker LG et al (Feb 2009) *The Breast*, Vol 18, (1), 17-25

Impaired natural killer cell lysis in breast cancer patients with high levels of psychological stress is associated with altered expression of killer immunoglobulin-like receptors. Varker KA et al *J Surgical Res* (2007) May 1;139(1):36-44

Comparing Relaxation Training and Cognitive-Behavioural Group Therapy for Women With Breast Cancer Cohen M et al (2007) *Research on Social Work Practice* 17(3): 313 - 323.

Efficacy of progressive muscular relaxation training and guided imagery in reducing chemotherapy side effects in patients with breast cancer and in improving their quality of life. Yoo HJ et al (2005) *Support Cancer Care* 13(10): 826-33

Stress, depression, the immune system and cancer Reiche EMV et al (2004) *Lancet Oncology* 5(10): 617-25

Alterations in Brain and Immune Function Produced by Mindfulness Meditation Davidson RJ, Kabat-Zinn J, Schumacher J et al (2003) *Psychosomatic Medicine* 65:564-570

Intensive lifestyle changes may effect the progression of prostate cancer Ornish D et al (2005) *Journal of Urology* 174(3) 1065-9; discussion 9-70

A prospective longitudinal study of the relationship of psychological work to duration of survival in patients with metastatic cancer Cunningham AJ et al (2000) *Psycho-Oncology* 9(4):323-39



Advice:

While we make every effort to use up-to-date and reliable sources, we cannot accept liability for errors in the sources that we use and also cannot guarantee to find all the information relevant to your enquiry or request. All responsibility for interpretation of and action upon that information rests with you. This information and advice is offered on the understanding that if you intend to support your treatment with complementary or alternative approaches then you will consult your medical team to ensure that they have a complete understanding of your situation and the complementary or alternative approach that you are considering.