

Turbo Charge Your Immune System Information

This document brings together a suite of information relating to the immune system and how various things like wellbeing and mindfulness experiences can be used to improve that system. This information was prepared to support **Mental Messages** and presented from 2009 onwards at various forums as detailed in the various sections.

If you have questions or concerns please get in touch via the mentalmessages.com website.

Boost Your Immune System Talk

Boost Your Immune System Talk

Lyndall Briggs' notes for her presentation at the Australian Counsellors Association in 2009.

What I would like to talk about today is what got us started in this study, what we created and what methods we used. Anne will talk about the process of live blood testing and about the results that we achieved.

Ten years ago a friend, Lyn Macintosh was diagnosed with cancer. During this time she had an appointment to see **Jennie Burke**. Jennie is an internationally recognised expert in her field, working from Australian Biologics which is a diagnostic clinic, which primarily uses Live Blood Analysis. I have to tell you I was fascinated.

During the first session Jennie commented that it was a shame Lyn was not "in love" as this would have boosted her immune system. After the session we had lunch and discussed this, coming to the conclusion that as hypnotherapists we should be able to induce "love" thereby improving her immune system. Later we also got together and organized a workshop for the ASCH to demonstrate this. Lyn was the hypnotherapist, I was the control person and we had 3 volunteers. Jenni did the live blood testing.

Firstly Jenni took the pin prick of blood from the 4 of us and analysed it on the screen – giving us a rating for our white cells. Lyn then induced trance in the other 3, then gave each volunteer their own suggestions. One was for sadness, one was for love and one was for relaxation. More blood was taken. The results were interesting – the one for sadness the white cells became much slower in action, the one for love started moving along and the one for relaxation didn't change much at all and mine also didn't change. Lyn brought them out of trance – blood was tested again, relaxation was the same, mine was the same, love slowly came back to the original state but sadness took much longer.

Lyn was fascinated by the outcomes as was I, and decided to do further studies with Jenni. She got a few people together to test over 3 months. Their blood was tested every 3 weeks and they were asked to listen to a tape of guided imagery that Lyn had created with suggestions specifically to boost the immune system. Plus we were asked to look at photos of healthy white cells. Unfortunately none of these results were ever published. I must add here very happily that Lyn has now passed the 10 year mark of being free from cancer.

After this we came across Peter O'Hara who wrote about blood saying "Most of us don't pay much attention to the blood, except if we cut ourselves, or our children come to us bleeding after an accident, or we hear bad news about blood clots. Our blood, however, is our life stream and deserves more consideration.

For several years now our awareness of the effects of pollutants in the environment has increased dramatically. We no longer tolerate the disposal of toxins into our waterways. The end result of these changes in attitude is the resurgence of many creeks, rivers and marine environments. The time is right to initiate similar changes in attitude and behaviour towards how we treat our blood – the body’s waterways. Resurgence in your health and vitality are inevitable rewards.”

I have known Anne for several years and we have discussed her use of Live Blood Testing in her clinic in Adelaide South Australia. When I suggested to her last year that we do a bit of a study combining hypnotherapy, and Live Blood Testing she agreed. We present this topic hoping to motivate others to become interested in going on to do more formal research in not just this area but in many areas of hypnotherapy.

Also please understand that we don’t want to just prove that it worked. We just wanted to see what actually happened and record our findings. We also want to open up discussion that may show us ways to improve our study.

The process - Firstly we gave the participants a disclaimer.

Secondly was a list of instructions for Participants in Study. Now I am going to read through this because I think it is important that you know what we asked for.

Many thanks for being part of this study.

We would like to take this opportunity to emphasise the EXACT order in which things are done.

It is essential that the starting point blood test is the very first step. It is critical that this test is a truly “before” test.

The very next step is the article. The reason that you need to read and view the article BEFORE listening to the guided imagery, is to give your inner mind a road-map with clear, visual “landmarks” so that each landmark is more readily identifiable and visualised during when listening to the track. In this case for example, having a clear sense of what a particular cell looks like connects with the inner mind’s image of that cell during the guided imagery, greatly enhancing and accelerating effectiveness.

Then we had participants follow the following steps in this exact order:

Week 1

1. Have blood sample taken by Anne for analysis
2. Read article on the immune system
3. Listen to the Relaxation Track that we have supplied (preferably just before going to bed) – you need only listen to this once.
4. Subsequently, each night listen to the track on Boosting the Immune System (preferably just before going to bed)

Week 2

5. Have blood sample taken by Anne for analysis (optional)

6. Continue to regularly read article and listen to Boosting the Immune System track for another week

Week 3

7. Have blood sample taken by Anne for analysis
8. Continue to regularly read article and listen to Boosting the Immune System track for another week

Week 4

9. Have blood sample taken by Anne for analysis
10. Continue to regularly read article and listen to Boosting the Immune System track for another week

We would also ask that you do not begin taking any “new vitamins” or other supplements during the trial. If you are currently taking vitamins or supplements, continue doing so at your current rate.. Naturally also continue taking all medications prescribed from your GP and keep a list of any new medications prescribed during the trial. At the end of the trial you are entitled to a complementary naturopathic consultation and will be provided with a written report outlining the findings from your live/dried blood and you also retain the CDs used in the trial.

Next we gave the people in the study group an article to read with pictures of different cells. You have the complete article in your folders. However I would like to summarize it here.

What is the Immune System?

The immune system is the collective army of a trillion white blood cells, bone marrow, antibodies, cytokines and the thymus gland that help to identify and destroy the millions of microbes (i.e. bacteria, viruses, parasites, fungi) that penetrate our bodies every day, and the thousands of our own cells that have become genetically abnormal or cancerous.

How does Immune System strength determine health?

A good indicator of the level of our immune system is how energized or alive we feel. If we feel low or weak, our immune system is probably low and weak. We are intuitively aware of this which is why we use expressions such as being “below par”, “feeling low” or being “under the weather” when we are feeling unwell. Usually we try to compensate for these “low” feelings by drinking more caffeinated drinks, eating more sugar and watching action movies — anything that gives us a chemical “buzz”. While this might give temporary relief, it is a dangerous long-term solution as we will find ourselves having to take more and more of these quick fixes just to maintain normal functioning energy. So a strong immune system not only determines how healthy our bodies are, but our mental state as well.

When we think of health and nutrition, few of us imagine the cell. But actually, the cell is the source of the body’s energy supply; it’s what keeps you not only functioning at optimal health, but functioning at all. Healthy cell life produces what we call “vitality” – a healthy level of energy and resistance to stress. But how do we make sure our cells are working at full pump on the energy front?

To understand what can affect your cells, and therefore your energy levels, it's useful to have a rough idea of how the cells actually work: how the cell produces its energy. The immune system is the body's first line of defence. It is a complex of organs, highly specialized cells and even a circulatory system separate from blood vessels.

The organs of the immune system, positioned throughout the body, are called lymphoid organs. The word "lymph" in Greek means a pure, clear stream, an appropriate description considering its appearance and purpose.

Healthy cells, according to Nobel prize winner Otto Warburg, have cell voltages of 70 to 90 millivolts. Due to the constant stresses of modern life and a toxic environment, cell voltage tends to drop as we age or get sick. When a body becomes overwhelmed with toxic substances, thoughts or feelings, the positive bio-electric field is immensely lowered in vibration and frequency. In other words, our body has a higher frequency or vibration when it is healthy and a lower vibration when it is sick.

As the voltage drops, the cells are unable to maintain a healthy environment for themselves. If the electrical charge of a cell drops to 50, a person can become chronically fatigued and may get sick often. When the body's immune system gets overwhelmed and cannot fight an abundance of toxins and then we continue to put toxins into our bodies and minds such as alcohol, nicotine, caffeine, negative fear-based thoughts and heavy emotions, we can experience a physical imbalance.

How the Immune System Works

Cells that will grow into the many types of more specialized cells that circulate throughout the immune system are produced in the bone marrow. This nutrient-rich, spongy tissue is found in the centre shafts of certain long, flat bones of the body, such as the bones of the pelvis. The cells most relevant for understanding vaccines are the lymphocytes, numbering close to one trillion.

Finally the Tracks that we used.

These I wrote and personally recorded under our company name of Mental Massages. They were recorded and edited in a professional studio in Sydney.

We incorporated the use of binaural beats. I was originally led to believe that Binaural beats were originally discovered in 1839 by a German experimenter H. W. Dove. Basically, binaural beats are perceived as an auditory beat which is used to entrain specific neural rhythms, at the frequency of an external stimulus. They encourage altered states of consciousness. However, I have since seen a documentary on the Egyptian pyramids where upon translating the hieroglyphics on the walls of the pyramids it showed that especially formed chambers were created with the use of a drummer and flutist to generate this effect, bringing their spiritual leader to a deep trance state,

We had background music created to enhance the effect of the tracks. The music is designed in a BAR ROCK fashion – starting at the beat of the normal heart rate for a couple of minutes and then decreasing to a resting heart rate for the main body of the tracks and then increasing back to a normal rate towards the end.

Both the relaxation track and the one specifically created for the immune system, called "Turbo Charge Your Immune System" are about 24 minutes in length.

Generally when I am creating scripts I use the BRIMS technique. This technique was first described in an article by WILLIAM SUTTON from Volume 17 No 2 September 1996 edition of the ASCH journal. Self-Hypnosis for Stress Management and Self-Exploration. As a Mnemonic device, the word BRIMS is used. It stands for the five steps of this process: Breathing; Relaxation; Imagination; Messages; and Sign. Basically what this means is to use patter to regulate and deepen breathing, create a relaxed state, then activate the imagination. Followed by the message which whatever the session is about – this is the bulk of the track. In this case I have used the principals of the commonly used control room but I developed a slightly different perspective calling it a control centre where you have brilliant scientists working for you. In the message we spend time using suggestions to help the immune system, boosting its electrical energy levels, and talking about cellular nutrition. Saying such things as

-

“Your scientists tell you that another way to easily boost your natural defences, your immune system, is through optimal cellular nutrition. They say that this simply involves providing all nutrients to the cells at optimal levels, which allows it to decide what it actually does and doesn't need, making sure there aren't going to be any nutritional deficiencies. You ask which nutrients are needed for optimal cellular nutrition and they tell you that it means giving your body all the antioxidants, in addition to the supporting B and C vitamins and antioxidant minerals. They tell you to make sure that everything that goes in to your mouth is good for you, they tell you to stay clear of caffeine, cigarettes or refined white sugar knowing that these rob your body of minerals and vitamins. Instead of a diet full of sugar, you find yourself choosing raw fruits and vegetables for their antioxidants, vitamins, minerals, fibre and enzymes, which give your immune system the ultimate boost. They suggest you drink plenty of life quenching water and eat plenty of protein which is a building block for a healthy body, mind and immune system.

You're surprised to learn that your immune system won't work for you properly if it's bombarded with negative mental energy. Your body involuntarily responds, almost immediately to whatever crosses your mind. Think a pleasant thought and you smile. Think a melancholy thought and you feel sad. Think an angry thought and you frown. Think an embarrassing thought and you blush. Think a fearful thought and you tense. But tension cannot exist when the mind is calm, when you replace thoughts of fear with thoughts of calm and peace, your tension soon subsides and your mind's healing power continues working for you. Therefore, in essence, you are what you think and the stress of inner conflicts will suppress the body's defence system. Also, keep in mind that the body and mind are a single integrated organism. As the saying goes "You have nothing to fear but fear itself". You have no reason to fear a disease because *you* have the power to reject invasion in your body. Realizing that you have a strong, indestructible immune system, now becomes a permanent fact in you mind. You've no reason to feel tension, anxiety or fear in regards to disease if you know disease doesn't have a chance of surviving within you now that you have such a strong healthy immune system.

When that's accomplished, you can enjoy a feeling of deep relaxation and self-satisfaction, knowing that you've taken important steps that will help you to achieve your goal of turbo charging your immune system. You understand that the basic laws of health - pure air, sunlight, abstinence from harmful substances, moderation in the good things, balance, rest, exercise, proper diet, the use of water and trust in a higher power are the habits that ensure immunity. And this message remains with you, far beyond these words, far beyond these words.”

You have a copy of the “message” part of the script in your folder.

One of the reasons I think that we have had the results that we have is because our participants can use the tracks repetitively. I am reminded of a teacher who takes a bit of lightweight thread and wraps it one time around a student's wrists. He tells the class, "This string represents the power of doing something one time. Can you break the string?"

The student easily breaks the thread with a small flick of his wrists. The teacher then wraps the string around the student's wrists many times and repeats the challenge to break it.

Despite repeated efforts, the lightweight thread is too strong to break.

His teacher says, "Now you see the power of repeated actions. It takes more than mere willpower and personal strength to break them. It takes a change in the way you think about the problem."

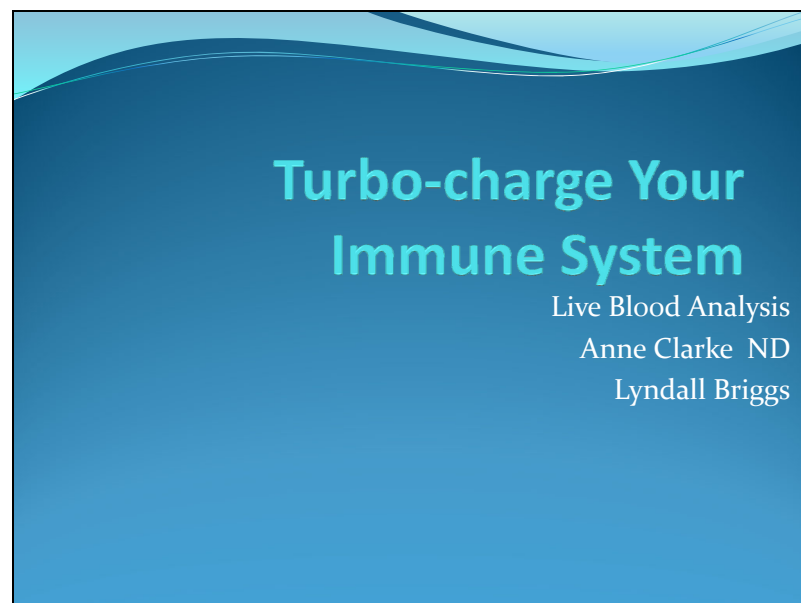
Finally I would like to close by saying that there is a philosophy which says that we live in an ocean of bacteria and viruses, but it is not only the microorganisms that cause disease, it is an inefficient immune system. We see the evidence of this truth constantly around us. One person in an office gets a very bad cold. The one sitting next to him doesn't get a sniffle. Certainly both were exposed to the same microorganisms. What is the difference? It is in the differences between their immune systems, isn't it?

I would like to think that in the future people suffering during the dreaded flu and cold season would come to the local hypnotherapist for a healthy boost to their immune system.

Turbo-charge Your Immune System PPT Presentation

Turbo-charge
Your Immune
System PPT
Presentation

Presentation slides from Lyndall Briggs and Anne Clarke's talk in 2014



The Study

- Planning from mid 2009
- Lyndal wrote and recorded CDs Mp3 October, plus written information
- Participants approached
- 1st participants began study March
- 3 Participants did not return after initial appointment

Procedure

- 1st appointment patients assessed for suitability
- Requirements discussed, disclaimer form signed
- Blood analysis – Live and coagulated blood
- Patients shown various components of blood to assist with visualization process
- Blood reassessed weekly or fortnightly
- Patient feed back after week 4

Brief Introduction to LBA

Antoine Bechamp

French biologist 1816 – 1908

Origins in 19th century. Antoine Bechamp, who discovered “small living cells” in the blood, which he named microzyma.

He believed that these microzyma were common ancestors of all bacteria in nature and they lived in harmony in the organism.

He observed these microbes through dark field microscopy.

Bechamp described how in certain conditions microzymas could develop into bacteria within a cell .

They presented a danger only if the body was in a run-down state due to a disturbed *milieu*.

This evolution of microbes into pathological forms is known as Pleomorphism.



Claude Bernard

Born in France 1813 – 1878
Physiologist

He was one of the first to suggest the use of blind experiments to ensure the objectivity of scientific observations. He was the first to define the terms *milieu interieur* or homeostasis as we know it today. The latter was the basis of Bechamp's work.

Also proved the importance of the pancreas in digestion, glycogenic function of the liver and discovery of the vaso-motor system.

Experimented with animals which caused much disgust at the time.



Louis Pasteur (1822 - 1895) French Microbiologist and Chemist

The 19th century French scientist, Louis Pasteur, was instrumental in increasing our understanding of microorganisms. Since microorganisms were often found in the presence of disease, he propounded the idea that they were the cause of disease – the so-called germ theory.

Monomorphism – one specific organism is the cause of each individual disease.

Bernard and Pasteur published work at the same time, yet their views differed significantly and were engaged in a lifelong argument.

It wasn't until Pasteur was on his deathbed that he conceded. *Bernard was right, the germ is nothing--the milieu [the environment within] is everything.*



More recent Studies

- The micro biologist **Professor Dr. Guenther Enderlein** (1872 - 1968) continued on the Bechamp's work. Much of today's LBA is based on his findings.
- **Hansen-Pruss** (1936) used LBA in clinical examinations and was the first to describe many blood cell elements. Published *Am J Clin Path*
- **Haemaview** method (late 1980's) developed. Dark field only.
- **Bradford method** (also 1980's) developed a system using darkfield, bright field and phase contrast.
- Early 1990's studies suggested that there are very small microbes (smaller than a cell) have been found in meteorite rocks from Mars in Antarctica. **Phillipa Uwins** (Uni of Qld) found living *nanobes*, similar to those from Mars, in ancient calcereous rock in WA.

Dr Trevor Douglas

- Trevor Douglas, PhD Clinical Biochemist, Naturopath SA based
- Trained some 20 years ago with Bradford.
- 15 years of practice. 10,000 patients.
- Added to Enderlein and Bradford's work.
- Trains doctors, naturopaths world wide.
- Soon to begin work with Dr Rau of the Paracelsus Clinic, Switzerland
- LBA becoming more accepted in mainstream medicine, especially Europe and Canada.

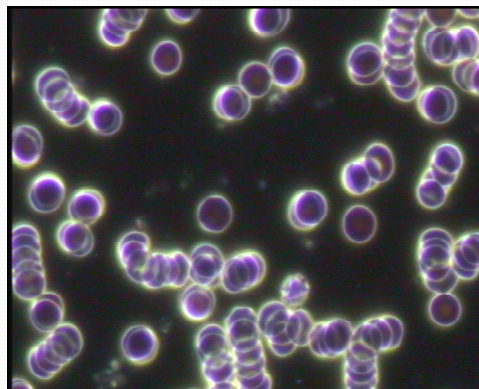
Live Blood Analysis

High powered clinical microscope

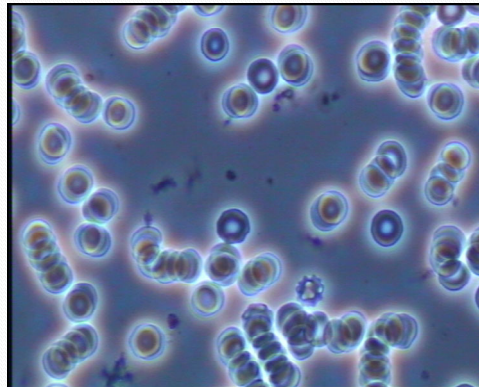
- Dark field – light from oblique angle, refracted light.
- Phase Contrast – Best technique for LBA shows internal structures and other aspects of blood. Uses an optical mechanism to translate minute variations in phase into corresponding changes in amplitude, which can be visualized as differences in image contrast.
- Bright Field – illumination from below and observed from above, via white light. Used in Coagulated Blood Analysis



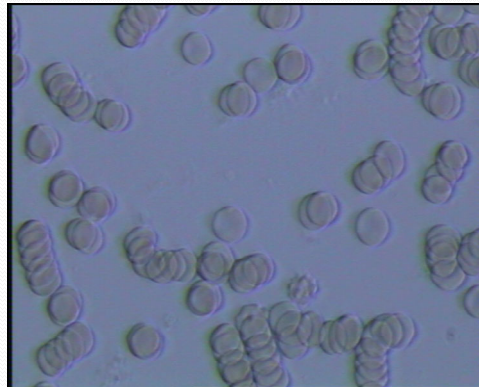
Dark Field



Phase Contrast



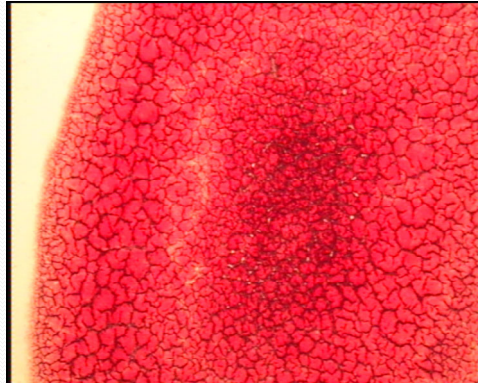
Differential Interference



Coagulated Blood Morphology

- This method is based on how a drop of blood dries or coagulates.
- All cells in the body produce free radicals, which can enter the blood and react with biological and or chemical substances. E.g. oxidised cholesterol
- Free radicals interfere with normal blood coagulation, by producing (ROS) white clot areas.
- Other observations are made too.
- Bright Field

Coagulated Blood Morphology



Cortisol

Cortisol is a life sustaining adrenal hormone essential to the maintenance of homeostasis. Called “the stress hormone” because it influences, regulates or modulates many of the changes that occur in the body in response to stress, including, but not limited to:

- Blood sugar (glucose) levels
- Fat, protein and carbohydrate metabolism to maintain blood glucose (gluconeogenesis)
- Immune responses
- Anti-inflammatory actions
- Blood pressure
- Heart and blood vessel tone and contraction
- Central nervous system activation

Higher and more prolonged levels of circulating cortisol

- Impaired cognitive performance
- Dampened thyroid function
- Blood sugar imbalances, such as hyperglycemia
- Decreased bone density
- Sleep disruption
- Decreased muscle mass
- Elevated blood pressure
- Lowered immune function
- Slow wound healing
- Increased abdominal fat

Chronically lower levels of circulating cortisol (adrenal fatigue)

- Brain fog, cloudy-headedness and mild depression
- Low thyroid function
- Blood sugar imbalances, such as hypoglycemia
- Fatigue – especially morning and mid-afternoon fatigue
- Craving sugar, coffee or salty foods late afternoon
- Sleep disruption
- Low blood pressure
- Lowered immune function
- Inflammation
- Loss of sex drive

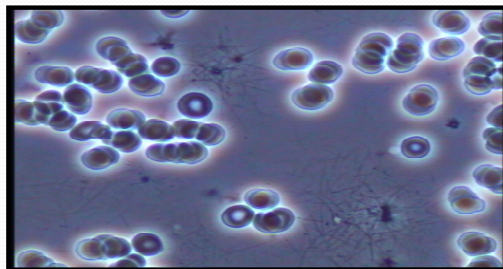
The Results

Patient 1

- Male 20 years old Hx of allergies, colds and has developed Glandular Fever at Christmas 2009. Not fully recovered. Often tired.
- Made no dietary changes during study.
- WBC many fragile, inactive 50%, low numbers
- After 4 weeks higher WBC count, activity level 75%
- Came down with cold – runny nose, no sore throat – 2 days duration, 1 month after completion.

Patient 2

- Male 53 years. Family Hx of heart disease. Chronic infection in tooth/jaw.
- Liver stress, Candida, WBC count normal, 20% inactive, fragile
- RBC aggregation

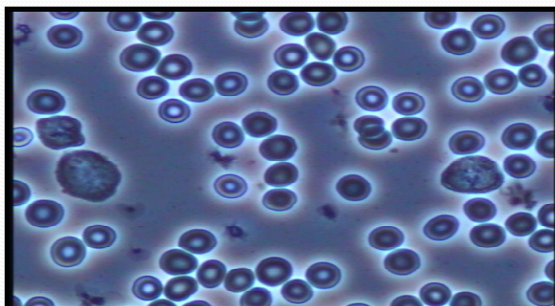


Patient 3 & 4

- Male 30 – did not continue with listening after 2 weeks. Became ill with bronchitis. Heavy duty meds.
- Female 33
- Very complex case immunity/food sensitivity issues. High stress levels, which had quite profound effects on her blood.
- Whilst she did not notice any changes, just being asked to be in the study was a positive experience for her.

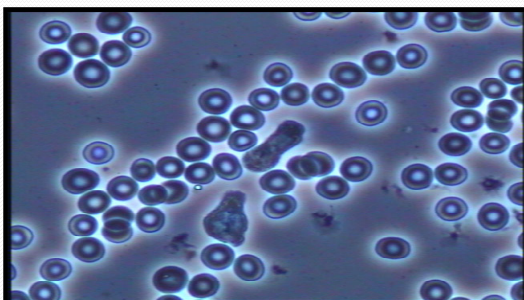
Patient 5

- Female 53 Hx long term stress, food sensitivities
- WBC low and 60% inactive, some fragile



Patient 5

- Improved WBC viability
- Minor cold developed, better sleep pattern, less stress



Patient 6

- Male 75 years old
- No major health issues, still very active and mentally alert.
- Gout occasionally. Rarely gets colds.
- WBC 50% inactive and 25% fragile.
- In 2nd week felt he was coming down with a cold.
- Began to eat more healthily. Cut out sweet foods.
- At 4 weeks WBC 80% active
- Enjoyed the study.

Patient 7

- Male mid 60's. Long term stress, digestive issues, possible chemical spray contamination.
- Impaired immune response, low energy.
- Listens 2x daily, at 2 week mark.
- Higher viability of WBC, Overall blood picture improvement.
- Some improvement in energy, but didn't last.

Patient 8

- Male 57. Chronic fatigue for 20 years.
- Energy levels at day 1, 3/10
- Very motivated, willing "to try anything".
- Returned after 2 weeks.
- Much better, energy level 7/10.
- Listens 2-4 times/day
- Protein message kept playing in his head.
- More alert, higher energy, brain active, better sleep.
- Able to stay up after 7pm.

Other patients

- 2 others started the study.
- Female 15 years. Glandular fever, very suppressed immune system
- Female early 60's. Long term stress. Gut, allergy issues
- Counsellor, thus interested in effects on self.
- Enjoying the challenge, listens 1-2x/day

Summing Up

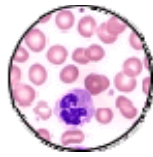
- Relaxationtime out
- Diet – especially the importance of protein
- Sleep....dampening of cortisol levels, slowing of brain waves
- Kick start to immune response
- Thank you to Lyndal
- Reinforced the value of hypnotherapy
- Never rule out new ways of treating patients
- **Future study**.....Hypnotherapy, saliva cortisol levels, LBA

A final word

- As we listened to Turbo-charge Your Immune System , we not only learnt to relax and take time out for ourselves, but each of us had the opportunity to go inside to awaken the inner healer that is in all of us. For some the inner healer may have been dormant for many years.
- By being still and quietening the conscious mind, our subconscious was nourished with positive messages, which we can take forward in our lives.
- We all have a choice when it comes to wellness.
- Never underestimate the power of the word.

What is the Immune System?

What is the immune system?



The immune system is the collective army of a trillion white blood cells, bone marrow, antibodies, cytokines and the thymus gland that help to identify and destroy the millions of microbes (i.e. bacteria, viruses, parasites, fungi) that penetrate our bodies every day, and the thousands of our own cells that have become genetically abnormal or cancerous. In fact, the immune system is considered every bit as complex as our nervous system, and is not only able to produce a matching antibody for every one of the millions of different infective agents, but is able to remember how to produce these agents decades later. Key to immune function is the activity of the white blood cells, such as NK, T and B cells, which form the backbone of the immune system.

How does the Immune System strength determine health?

The strength of our immune system determines our body's ability to resist infection and the growth of abnormal (cancerous) cells. If it is below its optimum level, we are much more prone to illness, both from infections and cancers. Without an immune system at all, we would not survive very long in the outside world (children born without an immune system have to be kept in an artificial environment or “bubble”).

If our immune system is maintained at optimum level, our incidence of disease is less, and we are less likely to develop abnormal cell growths. Also, when we do become ill or have a physical injury, a healthy immune system can ensure the fastest possible recovery. In some serious cases, for example with cancer, immune system strength can literally mean the difference between life and death. Without a healthy immune system, the body and mind languish in a state of ill health, greatly prolonging the journey back to vitality.

A good indicator of the level of our immune system is how energized or alive we feel. If we feel low or weak, our immune system is probably low and weak. We are intuitively aware of this which is why we use expressions such as being “below par”, “feeling low” or being “under the weather” when we are feeling unwell. Usually we try to compensate for these “low” feelings by drinking more caffeinated drinks, eating more sugar and watching action movies — anything that gives us a chemical “buzz”. Whilst this might give temporary relief, it is a dangerous long-term solution as we will find ourselves having to take more and more of these quick fixes just to maintain normal functioning energy. That is why, for example, so many of us NEED that cup of coffee in the morning to get going — our systems have been conditioned by an unhealthy lifestyle to tick over too slowly. So a strong immune system not only determines how healthy our bodies are, but our mental state as well.

It is of fundamental importance to both body and mind, therefore, for everyone to maintain optimum immune system health.

How does the Immune System become weak?

There are several factors that reduce the strength of the immune system:

1) Poor nutrition: the modern diet is depleted of many of the vitamins, minerals, antioxidants and other nutritive factors that are essential to the body to maintain a healthy immune system. Supermarket fruit is often picked green before the nutrients have a chance to develop; the vegetables are often grown in depleted soils (if the soil is depleted anything that grows in it is obviously does not have the full range of nutrients); and the meat comes from cattle that not only eat a depleted diet, but are often injected with hormones and steroids. Food that isn't fresh is often processed to prolong shelf life — great for the supermarket shelf life but maybe not the best thing for optimum health. The immune system NEEDS optimum nutrition in our diets in order to function well. If just a few vitamins or minerals vital to its processes are not available in adequate amounts, our immune system will be compromised.

2) A polluted environment: as our environment becomes more polluted, our bodies have to cope with a greater "toxic load". This comes into the body through the food we eat, our lungs and our skin, and also from over exposure to sunlight and electrical equipment. When the toxic load rises, the immune system has to work harder to identify and detoxify these pollutants — lowering its efficiency. Some toxins and chemicals can even cause abnormalities in cell growth and reproduction, leading to the development of cancer cells. These are occurring every day, not only through the action of certain environmental pollutants, but also through occasional mistakes being made in normal cellular division. It is the immune system's job to destroy these abnormal cells before they have a chance to proliferate, but if the load is too great, its neutralisation ability is severely strained.

3) Stress: when we are stressed, evolution has designed our bodies to get ready for action (fight or flight) by diverting all resources to the muscles. Bodily functions considered unnecessary in an emergency situation are temporarily closed down such as digestion, repair mechanisms and immune function. Whilst this was fine during most of human history, when stress invariably involved a danger such as a lion that would quickly pass, modern living often involves situations in which we are chronically stressed, and this means that our repair mechanisms and immune response are continually impaired. This can be greatly compounded by lack of sufficient sleep -- the main chance the body has to repair and recover. Over time stress and lack of sleep degrade our system making us prone to disease and premature ageing.

4) Drugs: both medicinal and recreational drugs can substantially lower the immune system. For example, antibiotics destroy the healthy bacteria in our stomachs which are essential for healthy digestion. Immune system depletion is also an unfortunate side-effect of some of today's modern treatments (for example in chemotherapy and radiotherapy) which can decimate immune resilience. Whilst powerful medicines might be necessary for short-term survival, the long-term view must include the healing of the body's natural defence systems.

What can we do to strengthen the immune system?

The best way to strengthen the immune system is to minimise as much as possible these four factors:

1) Get Better Nutrition: To increase our nutritional intake we need to choose the healthiest food we can find, preferably organic and local-grown fruits and vegetables. Drink plenty of clean water (and that does not mean tap water with fluoride and/or chlorine!). Also avoid anti-nutrients that end up actually using the body's nutrient store to metabolize it, rather than contributing to this store in the first place. Such anti-nutrients are sugar, white bread, white rice, alcohol (over a very moderate amount), chocolate (sugar content), biscuits, soda drinks, fast-food and dairy products (milk is not the best thing for health... despite all those advertisements by the milk marketing companies). It is also a complete fallacy that a well-balanced diet can give our bodies sufficient nutrients to function optimally. In fact, anybody who advises not only displays his or her nutritional ignorance, but actually damages public health. It is imperative to add food supplements to the diet, especially antioxidants which help to neutralize free radical attack and cellular damage. Everyone is advised to make sure they are getting adequate Vitamin C (at least 1000mg a day), Vitamin B-complex (all the B vitamins are very important so choose a strong one), Vitamin A (15000IU), Vitamin E (200IUs), Selenium (100mcg), Zinc (20mg) and magnesium (100mg). One can also try herbs such as Echinacea and Cat's Claw. These giving the body a helping hand to deal with an environment very different from the one in which humankind has evolved for millions of years.

2) Minimise Pollutants: Eat organic food and don't smoke. There are doctors around who will not even take on a patient if they refuse to stop smoking. It is imperative to drink plenty of clean water (at least 1.5 litres a day) so that we are able to flush our bodies of toxins that have accumulated. (Occasional fasts and colonic irrigation can also help to detoxify the body and therefore increase immune health.) The sun and other sources of electromagnetic radiation are also factors that use up much of the bodies immune resources and so should be minimized (a little bit of sunlight is actually strengthening for the immune system... but only a small amount). Don't sit too close to the television or the computer monitor (or get a flat screen if you can afford it). It goes without saying that drugs of any kind are a serious pollutant to the body and so these should be minimized whenever possible (see 4).

3) Reduce Stress: It is amazing what a holiday can do for the immune system! It is important, therefore, to pace ourselves in life as much as possible. Stress really isn't worth the higher exam grade or the money bonus because it sets in motion a terrible habit that will cause us serious health problems in the future. There are so many stories of people with serious health conditions that miraculously melted away when they started to let go and relax. We can help this relaxation process by getting enough sleep (at least 7 hours for most of us), choosing not to be around situations that make us angry, depressed and frustrated, and doing gentle to moderate exercise, the short term exertion of which paradoxically helps us to relax. We might also consider such activities as meditation, prayer, Tai Chi or yoga as a means to increase our relaxation levels and the feeling that we are in control of life — the feeling of being a victim in life, of being out of control, can be very stressful. (Remember however that strenuous exercise such as long-distance running, cycling etc. should be avoided as it tends to last too long, reducing immune health).

4) Minimise Drugs: If there is a natural product we can take instead of the drug your doctor wants to prescribe us, we should take the natural one (provided our doctor is in agreement... if he or she doesn't like the idea of you taking responsibility for your own health, you are with the wrong doctor). Doctors today are very busy and tend to focus almost entirely on fast-to-prescribe drug remedies ("magic bullets") to everyday complaints. Few know very much about nutrition or alternative remedies so you might have to challenge your doctor —

not a pleasant thing to do but certainly good for your health! Always choose lifestyle changes if you can, and use medical drugs, whenever possible, as a last resort (especially drugs such as antibiotics). As for recreation drugs, minimize these as much as possible, and when you must take them, make sure you get plenty of rest both before and after and also up the supplements to help to compensate for their immune-lowering effect.

*

*

*

There are always times when the above is just not enough to cope with a severely depleted immune system. Perhaps we are unwilling or unable to optimise our immune health (for example, we might be on a course of chemotherapy or radiotherapy, or live in the middle of a dirty city) and in such instances we might consider something more powerful such as arabinoxylan supplements, the most effective being a supplement from Japan called BioBran. This natural food supplement is made from the action of Shitake mushroom enzymes on rice bran, and the resulting hemicellulose compound is so potent and safe to take that it has now become the leading serious immune system supplement in both Japan and the United States, and more recently Europe.

For more information on BioBran and its benefits visit

www.healthy.co.uk/products/biobran.html. There is also some good info on this health supplement at www.biobran.org.

Please note that our products and product information are not intended for treating or diagnosing specific medical conditions. If you are unwell or pregnant, seek the advice of a qualified health practitioner before starting a food supplement program.