Nature’s Amazing
Mononucleosis Cures

Elizabeth Noble  BSc. Dip Nat Res. Dip Nat Ther..
Qualified Naturopath
Member of the Complementary Medicine Association
Director Wholistic Therapy Centre

Wholistic Therapy Centre
Suite 10, 876A Pittwater Rd, Dee Why 2099
Suite 5, 169A Pacific Highway, Hornsby 2077
Ph (Australia) 1300 650 169
WholisticTherapyCentre.com

DISCLAIMER
This book’s intention is to inform and educate. It is not to replace medical advice given by your
health professional. It is recommended that you consult your doctor or health professional before
following any therapeutic advice, especially if you have a pre-existing medical condition. Never
reduce or discontinue your prescribed medication without the consent of your doctor. The author
cannot take medical or legal responsibility for illness arising out of the failure to seek medical
advice from a doctor.
INTRODUCTION

I have had a fantastic response to my book “Nature’s Amazing Mononucleosis Cures”. I’ve been moved by the number of people who’ve contacted me to thank me for my help and to share their amazing success stories. It’s such a great feeling to know that I’ve played a role in helping people around the world recover the health and youthful energy they used to take for granted.

I’ve also been receiving hundreds of requests for a far more detailed, step-by-step guide to beating this debilitating condition. People are really hungry to know more about how to implement all the revolutionary measures to relieve painful sore throats, swollen glands, draining fatigue and aching muscles once and for all as revealed in my book.

That’s why I’ve put together a 3 month support program to complement the book. I’ve created regular e-classes on how to implement the information in the book. These e-classes are jam packed with all the cutting edge natural strategies that can help beat mononucleosis and achieve extraordinary health in the long term. And it’s all broken down into easily manageable chunks. All you have to do is follow the steps!

Here’s all the amazing things you’ll enjoy with the Mononucleosis Support Program:

- Regular e-classes which are e-mailed to you every few days to take you step-by-step through the healing and recovery process. These classes will encourage and guide you. They’ll ensure you build up a strong, robust immune system that keeps mononucleosis at bay for life!

- Email support with me for as long as you need it to answer all your nitty-gritty questions. I'll be there to give advice on any problem you have. It's like having your own trained professional on standby (minus the massive cost) ready to pitch in and help anytime you need it.

- Interviews with other mononucleosis sufferers - their unique stories with all their trials, tribulations and successes. What's worked for them, what hasn't and how they have coped. What this means is that you won't make the mistakes that I've seen thousands of other people make!

- Interviews with health professionals, including nutritionally-minded doctors, naturopaths, homeopaths, chiropractors, dietitians, psychotherapists and energy healers on how they successfully treat mononucleosis. You’ll be able to apply this information to fast track your own recovery.

If you would like more information on the support program and how to join please send me an email at staff@wholistictherapycentre.com

I wish you well on your journey and I would love to hear of your progress.

Yours Sincerely

Elizabeth Noble

Wholistic Therapy Centre, Sydney, 2009

www.WholisticTherapyCentre.com
WHAT OTHERS ARE SAYING...

She just gave me my life back!

"When I was first diagnosed with mononucleosis, I couldn't get out of bed at all. I just couldn't function. I had a chronic headache. Very, very severe fatigue. I felt like I had the flu. I had chronic nausea 24 hours a day.

And I was ill for about eight months, until I purchased the e-book and started following Liz's suggestions.

Within a week, I started to feel more energetic. I just started to feel better. I can't believe that now I can hop out of bed. I am now functioning every single day.

And, it's just a great feeling. I'm able to go out. I'm able to see my friends. I'm able to do things with my family. I'm able to have picnics. I just love to go outside. I love to look at my yard. I love to look at my flowers. The birds...I love every single day. And I just don't sweat the small stuff. I really just appreciate every day that God gives me.

I can't thank Liz enough. She is just an inspiration and I tell everybody. She just gave me my life back."

Arlene, New Brunswick, New Jersey

You have been an answer to my prayer...

"I am feeling so much better that I can hardly believe it. You have been an answer to my prayer. I'm no longer exhausted at night, my body doesn't ache, my head rarely swims anymore. I've noticed that my appetite has returned and I rarely feel nauseous after eating. Thank you, thank you, thank you! I really feared I would be sick for the rest of my life!"

Alison C, Utah, USA

I'm also losing weight which is an unexpected surprise!

I've been so happy with your book as not only is my sore throat pretty much gone, but due to the changes in my diet I'm also losing weight which is an unexpected surprise!

Last week I was able to do my dancing (either rehearsals or classes) every day, except for Sunday, without feeling to bad. This is a HUGE improvement for me and one that raises my spirits as I live to dance!

And I'm only on my 2nd week of following your instructions so things are looking good! Thanks.

Charis, MAROOCHYDORE, QLD Australia
“You have no idea how much this means to our family”

Thank you, thank you, thank you for your rapid replies! I cannot begin to thank you for all of your support. You have no idea how much this means to our family.

I really noticed a difference with my 10 year old son once he started taking the recommended amounts of vitamins and minerals you suggested. Within a week of taking them I noticed a HUGE improvement!

On November 24 he had a series of tests. His blood work was very good. He was not anemic, his liver enzymes were good, his mononucleosis count good but his white blood cells were a little low. The chest x-ray was clear. He has been eating great! He returned to school on Nov. 27, and hockey on Nov. 30. Our coach has eased him back into it.

Thank you so much again for your time and support. I credit you with getting Tyler back on the path to good health!

Sincerely, Gale M. Crystal Lake, Illinois. United States

“This book has helped us immensely”

Wow! Is all I can say! Thank you so much. Not only for the prompt reply but for such a wonderful book. All three of my daughters were recently diagnosed with Mono, whereupon the doctor informed me that there was "nothing" that could be done. After much agony, I decided to try a natural approach. I feel very lucky to have found your company. This book has helped us immensely.

Again thank you and God Bless.
Sincerely, Annette M, Howell, New Jersey USA

“I feel like I have my life back”

I've been sick with mono on and off for about 3 years, and during my last "on" time, I read your book and started taking the vitamins you told me about.

Some weeks later I realized that my throat wasn't hurting me, and that some of the other things that come with mono had stopped. Normally, when I had a recurrence of mono, I would slowly return to school and push myself until my energy level improved and I could drag myself through a daily routine.

This time was different. Instead of trying to muster my energy each time I wanted to do something, I had it there from those vitamins. I am now making sure that I get the correct amount of vitamins each day and also a nice amount of sleep (which comes much easier to me now).

I want to thank you for your book and the advice you gave me. I feel like I have my life back.

Thank you again! Shani F, Baltimore MD USA

“I've increased my energy levels tremendously”

I would just like to say that I've improved so much! This is the first winter that I did not catch a cold. Everyone around me did but I did not get sick.
When I stick to the diet my symptoms disappear. The nutrients help a lot with my allergies and increase my energy levels tremendously. My skin looks much better and my eyes are not that yellow anymore. I will not allow stress to knock me down anymore. I stay calm and do what I can do and that's it. I sleep so much better!

Last year I did a test on my metabolic age which said I was 57. We did the same test 3 months ago and it said that it had improved to 31! I am 31, so that was very good.

Thank you for always responding so quickly on my e-mails. You are a true blessing.

Cecilia S, Pretoria South Africa

“I'm improving without a doubt”

Your book is awesome, stunning, brilliant...... I am so thoroughly impressed!!!!

I'm thrilled to report that my glands and strange throat are subsiding - don't feel like I'm being throttled anymore. I'm improving without a doubt.

I love your book, you've been there and address it magnificently, and as you say, you know what works and what doesn't.

God Bless, Carol G, South Africa

“I feel like the riddle of my ailments has finally been solved”

Thank you so much for your kind help and encouragement at a very discouraging time. I wished I had ordered your book months ago! I have known for two and a half years that I have been under too much stress and extremely unhappy with my life. Hmmm, it looks like I need to change it, as scary as it might be ...

Your e book is helping me focus on very practical strategies, i.e. vitamins, herbs, affirmations etc. and it continues to give me hope. I feel like the riddle of my ailments has finally been solved. I have learned so much from you.

With lots of gratitude for your help and kindness!!! And thank you so much for taking the time to read my story!!! Your help has been so invaluable. You made me feel supported and normal in a crazy situation.

All the best to you. Regina Y, Missouri, United States

“I am definitely feeling the benefit of the supplements”

Thank you so much for sharing this experience and comprehensive information to those who most need it. I am definitely feeling the benefit of the supplements you suggested.

Having rested 3 days, I started to take a gentle outdoor walk today, and it seems OK so far. I wish I had known about you and your book 2 months earlier, and it could have helped me so much when I was so desperate and helpless. I'm now content that I can always find a way to ease off the symptoms.

I finally had time to read the preface of your book today. I was very touched by your own story, and feel so lucky to be able to get in touch.
Kind Regards, Dr. Liang L., Swindon UK.

“I am now back at work as a flight attendant”

It has been 4 weeks since my mononucleosis diagnosis and I have followed the suggestions you provided in your book, taking the suggested amounts of vitamins as well as watching my diet.

I think it has definitely helped me recover a lot quicker than normally would be expected. I am now back at work as a flight attendant.

I would like to pass on that your books have been a tremendous help and somewhat a ‘bible’ for helping me through the last 4 weeks. I love the recipes you have provided in the immune boosting recipe book and have been enjoying trying out a lot of the dinners.

Thank you! Kind regards, Sue L, Randwick, Sydney, Australia

“The regular doctors had nothing to offer”

For my college daughter with infectious mononucleosis, we took your advice with the supplements and all the other ideas. I really feel that the mononucleosis virus left her rather quickly. She really only suffered about 2 weeks. I would say that it was your advice that turned this thing around.

Thank you again for your wonderful information. The regular doctors had nothing to offer. I can't believe that they don't know about these ideas.

Thank you. John C, Bangor PA, United States

“I am very happy with my results so far”

I want to personally thank you for all the information and the advice you have given me on my mononucleosis. I am very happy with my results so far. Without you, I would not be where I am now. I would still have the strong fatigue and would be very upset and maybe into a depression. The e-classes have helped me a lot.

Since taking the supplements and herbs, I have a very good sleep and wake up pretty well refreshed. I have not been able to sleep like this since starting my menopause, 8 years ago!

You are a very special person to give so much of your time in helping people like me. I do so much appreciate the results I have had in getting your book, e-classes and specially your personal help.

Yours Sincerely,
Denise C, Mississauga, Canada
CONTENTS

Preface My story Page 9

Chapter 1 - Mononucleosis - the facts you need to know
What is mononucleosis, its symptoms, complications and how long it lasts.. 13-16
How is mononucleosis spread, its incubation period and who gets it 16-17
How is mononucleosis diagnosed and what is the standard treatment? 17-19
What happens to your body when you get mononucleosis? 20
Why do some people never get over mononucleosis? 23
When to call a doctor 24
The dangers of conventional drugs 24

Chapter 2 - Targeted supplements, herbs and foods to eliminate mononucleosis
The benefits of supplements 28
Vitamin C 30
Zinc 34
Vitamin A and beta carotene 36
Vitamin E 37
Selenium 38
Magnesium 39
B vitamins 40
Co Q10 41
Colloidal Silver 42
N-acetyl cysteine 42
Healing Herbs 44
Foods as medicine 49

Chapter 3 - The Immune Boosting Diet
The importance of a healthy diet 57
The cleansing diet for Epstein Barr 58
Selecting your protein 62
<table>
<thead>
<tr>
<th>Chapter 4 - Other supportive therapies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homeopathy</td>
</tr>
<tr>
<td>Essential Oils</td>
</tr>
<tr>
<td>Massage</td>
</tr>
<tr>
<td>Acupuncture</td>
</tr>
<tr>
<td>Oxygen therapy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 5 - Lifestyle factors for optimal immunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifestyle factors</td>
</tr>
<tr>
<td>7 easy ways to beat the stress habit</td>
</tr>
<tr>
<td>Exercise</td>
</tr>
<tr>
<td>Sunlight</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 6 - Detoxification for a new you</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastrointestinal cleansing</td>
</tr>
<tr>
<td>Liver cleansing</td>
</tr>
<tr>
<td>Lowering your carb intake for improved detoxification</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 7 - Are you allergic?</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to track down a food allergy</td>
</tr>
<tr>
<td>How to track down an environmental allergy or sensitivity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 8 - Your mononucleosis action plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of strategies to help prevent mononucleosis</td>
</tr>
<tr>
<td>Summary of strategies to help treat mononucleosis</td>
</tr>
</tbody>
</table>

| Glossary | 143 |
| References | 146 |
PREFACE

Elizabeth’s Story

The early days

I was a sickly child - picking up any sore throats, colds, flu or infections that came along. At age 3, I was hospitalized for pneumonia. I can still remember vividly the feeling of struggling to breathe through nasal tubes and claustrophobic oxygen tents. In those days parents were not allowed to stay with sick children, so I spent many long, lonely days and nights in the hospital ward. Feeling scared and frightened. Bewildered by what was going on.

At age 7, I developed pneumonia and a collapsed lung after playing netball in the rain. Again I was hospitalized for several weeks, suffering from intense fevers and debilitating lung pain. My doctor prescribed countless rounds of antibiotics and the recommendation to eat a few big, juicy steaks because I was so pale and thin!

Once home I developed a bad case of mononucleosis, or glandular fever, which was caused by the Epstein Barr virus. I was ordered to rest till better. I spent most of my time at home trying to sleep it off. I can remember the intense, sweating fevers and the vivid nightmares that accompanied them.

Throughout the following school years I came down with severe bouts of bronchitis. I became a slave to my illness. I was wrapped in cotton wool by my parents. Not allowed to go on overnight school excursions. Not allowed out at night to watch the fireworks.

I spent hours in physiotherapy - having my chest and back pummeled in order to bring up the thick, green phlegm that clogged my lungs. I can remember my friends running around in the sunshine outside my house - hearing them laugh and play. Yearning to be part of the fun. When I finally did get to run around with my friends, my lungs would start to ache, and I’d have awful, rattling coughing fits.

My struggle for good health

While at university, where I studied biology, I was again diagnosed with mononucleosis. This time I believe it was triggered by my nonstop student lifestyle - late nights cramming for exams, poor food choices, little exercise and too many parties!

After this second bout of mononucleosis, I seemed to develop allergies. I used to sneeze my way through the first hours of the day. I always seemed to be blowing my nose. My doctor diagnosed my breathlessness as asthma and put me on inhalers. A couple of times I had some scary episodes where I could not get the breath into my body. I felt panic stricken and felt sure I was going to pass out. I did not want to follow the steps of my father who had been a chronic asthmatic all his life.

In my first job as a nutritionist at Taronga Zoo in Sydney, I became really ill with swollen glands, nausea, extreme fatigue and diarrhea. It seemed like mononucleosis all over again! I traced my illness back to being exposed to dangerous chemicals which we used to clean
out the grain silos which stored the animal’s foods. Despite plenty of time off work, it seemed I never quite got over it.

I was plagued with recurrent sore throats - the pain so bad it felt like I was swallowing razor blades. I hated the constant irritation and discomfort. The horrible pain when I swallowed. The yucky feeling of mucous stuck at the back of my throat.

I disliked the tender, swollen glands in my neck. The hoarseness of losing my voice. The pain that made it impossible to sleep well at night. And waking up with a throat so dry that I could hardly talk.

I dreaded the inevitable chit chat of parties or social get togethers. I even hated answering the phone, knowing it would hurt my throat. I felt guilty at not wanting to participate fully in life. My heart sank when I missed out on family activities, fun and things I really wanted to do.

In most cases my sore throat did not progress any further than that. But in some cases it developed into a thick, mucousy cold accompanied by headaches, runny nose, tiredness and a racking cough. Sometimes it ended up in serious bronchitis or pneumonia, which made me feel like I’d been hit by a bus, and which took me months to get over.

“My doctors did not have a clue”

I was baffled by what caused my chronic symptoms. My doctors did not seem to have a clue. I was sent on a futile merry-go-round of doctors appointments, medical tests, antibiotics and dangerous drugs. I fiercely yearned for some kind of diagnosis and offer of a cure. I was worried about why my body had let me down.

At this point in my life I became obsessed with my health - eating only gluten-free, organic food, drinking pure water, taking high dose supplements, meditating daily, exercising regularly and abstaining from coffee, tea, alcohol, sugar and cigarettes.

Since I wasn’t getting any better, I put my symptoms down as being “all in my mind”. I threw my job in, and decided that an overland camping trip across Africa would remove me from the stress of family and work life, and cure me of all my ills.

How wrong I was! After 7 months of traveling, I returned to Australia with my familiar mononucleosis symptoms of sore throats and swollen glands, plus giardiasis, ascariasis, irritable bowel syndrome, anemia and chronic fatigue to boot! I had also lost over a stone in weight and looked positively skeletal! I started to struggle with the cold - piling on layers of clothes but still freezing. I couldn’t sit for more than an hour or two before my feet would go numb with the cold.

Once home in Australia, I visited doctors, gastroenterologists, Chronic Fatigue specialists, nutritionists, naturopaths and all types of healers looking for a solution to my ills. I spent thousands of dollars, and took two years off work trying to rest and heal my body - all to no avail.

Some of the treatments I tried made me as sick as a dog, with pounding migraines, nausea, vomiting and bright red skin rashes. Some treatments made me feel good for a day or two, then the inevitable sore throats and swollen glands would return.
As my search for answers continued, I felt abandoned, alone and vulnerable. I was bitterly disappointed that the doctors had not found a cure for my sore throats, swollen glands and fatigue. They labeled my case as post-viral syndrome, probably brought on by the Epstein Barr virus, for which apart from rest, they said there was no cure.

The turning point

Since the medical establishment could not give me any answers, I started studying natural therapies and working in a health food shop. I came across hundreds of different vitamin, mineral, herbal and food supplements which I would read up on, and dutifully try. The ones which relieved my sore throats, swollen glands, fatigue and other symptoms, I kept on - the rest I discarded.

In my desperation I tried every alternative health therapy I could get my hands on. This included:

- allergy programs
- acupuncture
- Ayurveda
- bowel cleanses
- Chinese herbs
- chiropractic
- elimination diets
- hair mineral tests
- hydrotherapy
- hypnotherapy
- homeopathy
- intravenous vitamin C
- intravenous glutathione
- massage
- mercury removal
- meditation
- oxygen therapy
- physiotherapy
- reiki
- western herbs
- vitamin and mineral therapy
- yoga

I put what I’d learnt into practice. I tried and tested everything. What worked I kept. What didn’t work, I’d throw out in the garbage.

I spent all my free time reading up books and articles, and trolling through web sites that might shine some light on my symptoms. Over time, through trial and error, I learnt what worked and what didn’t.

After much persistence, I began to unlock the secrets of the causes and cures of my sore throats, swollen glands and ongoing fatigue. The pieces of the puzzle slowly fell into place, and finally everything made sense.

With all my knowledge, I started to manage my symptoms well, and successfully opened my first naturopathic clinic in Sydney. This brought me the most amazing opportunity to meet other people who suffered from mononucleosis and post-viral syndrome. I heard a lot of heart-wrenching stories, and the roller-coaster ride that many patients had experienced. I would always tease out from these patients their secret remedies and what had and hadn’t worked for them.
**My life today**

I am now at the point at my life where I have got managing my sore throats, swollen glands and fatigue down to a fine art. I know what triggers my symptoms. I know what foods and supplements keep my symptoms at bay. I have discovered exactly what to do to nip a sore throat in the bud.

This knowledge has been invaluable for treating my kids and family when they are sick. This information has been priceless for treating my patients. I am so proud of my patients out there who are making extraordinary changes in their lives and bodies, right now, by following my program.

**My hopes for you**

I am so glad to have found the answers to treating mononucleosis naturally, and pleased to be able to share the program with you.

I have put all my experiences and knowledge down in this book and in my mononucleosis support site. I truly believe with all my heart that the information you will discover in my program really has the power to help make dramatic changes in your body and life.

I hope my book can also be a voice of acceptance and comfort - a voice of someone who knows the reality of this illness. Mononucleosis is not a cop-out from life, a problem “all in the mind” or a fraud.

My aim is to provide practical insights through real life experiences that can make your symptoms bearable and curable.

I wish you well on your journey.

*Elizabeth*

**Note on terminology**

Mononucleosis or glandular fever is caused by the Epstein Barr virus. Throughout the book I have used these three terms interchangeably - the treatment is the same.
CHAPTER 1:

MONONUCLEOSIS - THE FACTS YOU NEED TO KNOW

What is mononucleosis?

Mononucleosis or glandular fever is caused by an infection by the Epstein Barr virus, a member of the herpes virus family. In some cases a mononucleosis-like illness can be caused by other viruses like Cytomegalovirus.

Like all the herpes viruses, the Epstein Barr virus remains in the body for life, and in some cases can be reactivated when the body’s defenses are lowered.

The Epstein Barr virus affects the respiratory system and glands in the neck, groin, armpits, bronchial tubes, spleen and liver.

What are the symptoms of mononucleosis?

The typical symptoms of mononucleosis are:

- Swollen glands in neck, armpits or groin
- Fever - ranging from mild to severe
- Fatigue - sometimes extreme
- Sore throat, similar to tonsillitis

Some patients will also suffer from:

- Enlarged tonsils
- Headache
- Aching muscles
- Poor appetite
- Nausea, vomiting and/or diarrhea
- Skin rash
- Abdominal pain
- Puffy eyelids
- Sensitivity to light
- Cough or runny nose

When Epstein Barr virus lingers beyond 6 months you may be classified as having it in the chronic state. Chronic symptoms may include:

- Fatigue
- Muscle aches and pains
• Dizziness  
• Numbness  
• Brain fog  
• Palpitations  
• Weakness and malaise  
• Sore throat, swollen glands and low grade fever may also be present.

**Your liver**  
Mononucleosis can also affect the liver causing liver enlargement. Hepatitis caused by the Epstein Barr virus occurs in 80-90% of people with mononucleosis. The hepatitis infection is usually mild and goes away by itself. Jaundice - the yellowing of the skin and eyes, caused by an increase in the bile pigment in the blood, affects about 5% of patients with mononucleosis. If your liver has been affected by mononucleosis, it is wise to avoid drinking excess alcohol.

**Your spleen**  
An enlarged spleen occurs in about 50% of mononucleosis patients. Your spleen is a large gland located on the left side of your abdomen. It contains phagocytes, which remove worn-out red blood cells and other foreign bodies from the bloodstream.

If your spleen is sore or swollen, it is important that you avoid contact sports and heavy lifting. These could rupture your spleen and cause serious internal bleeding which requires emergency surgery and possible blood transfusions. Indications of a ruptured spleen are pain in the left upper abdomen, feeling lightheaded, palpitations, breathing problems and easy bleeding. It is recommended that athletes and those involved in contact sports or heavy lifting, avoid these activities for at least a month after the infection starts. A check up by your doctor is advisable before resuming sports.

A ruptured spleen is rare - occurring in 1 - 2 of every 1000 mononucleosis cases. Rupture usually occurs during the second or third week of the illness. The person is feeling better and resumes strenuous activities, thus endangering himself or herself. If the spleen ruptures, doctors may have to surgically remove it.

**What are the complications of mononucleosis?**

About 20% of people experience complications from mononucleosis. These can include:

• Thrombocytopenia, which is a decrease in platelets (the blood cells responsible for blood clotting), has been noted in up to 50% of people with mononucleosis. It is usually mild and not life threatening. If severe, corticosteroids may be used to treat this complication
• Auto immune hemolytic anemia (a condition in which the body destroys red blood cells) occurs in 1-3% of people with mononucleosis. It usually becomes clinically apparent during the second or third week of illness
• Heart inflammation
• Nerve damage, possibly leading to Guillain-Barr’e syndrome, Bell’s Palsy, meningitis and seizures
• Encephalitis - inflammation of the brain lining
• Severely swollen glands that compromise breathing and swallowing
- Pneumonia
- Chronic fatigue syndrome that is characterized by debilitating fatigue that lasts for 6 months or longer. It can also feature pains in the joints and muscles, headache, brain fog, poor sleep, bowel dysfunction and tender lymph nodes.

**Does mononucleosis increase the risk of any other diseases?**

The Epstein Barr virus has also been associated with an increased risk of some rare lymphomas, nasopharyngeal cancers and Multiple Sclerosis (M.S). In Africa, for example, EBV is associated with Burkitt’s lymphoma. In organ transplant patients, it can cause post-transplant lymphoproliferative disease (PTLD), a type of lymphoma.

M.S is a progressive weakening disease of unknown cause. A study of over 60,000 women found that women with M.S had higher antibody levels to the Epstein Barr virus in their blood, compared with those without M.S.

Another study showed that people with the highest rate of antibodies against the Epstein Barr virus, were more than 30 times more likely to develop M.S than those with the lowest level of antibodies. More research is needed as there are believed to be other factors involved in the causes of M.S.

It was noted in one study that people who had spent time with younger siblings, were less prone to mononucleosis and increased Epstein Barr antibodies. This in turn reduced their risk of MS. This correlation may be due to the increased exposure to infections when younger children are around and a subsequent increased development of the immune system.

Recent research indicates that reactivation of the Epstein Barr virus during pregnancy may shorten the duration of the pregnancy, leading to early labour or even stillbirth. Dr. Anne Eskild from the Norwegian Institute of Public Health, reports that Epstein Barr reactivation in pregnancy was also associated with the baby having a lower average birth weight, body length and head circumference.

Complications of the Epstein Barr virus can cause much more serious illnesses in people with impaired immune systems, like those with HIV/AIDS or people taking drugs to suppress immunity following organ transplants.

**Can mononucleosis be fatal?**

Mononucleosis is rarely fatal. Death may follow complications like rupture of the spleen, airway obstruction, central nervous system complications, pericarditis, myocarditis or encephalitis. In immune compromised patients, the infection or its reactivation may lead to fatal B cell proliferation.

Recently a 14 year old English girl died from a ruptured spleen despite being under hospital observation for her mononucleosis symptoms.
A news story from Calgary, reports the case of a 17 year old girl who presented with a sore throat, fever and fainting. She was misdiagnosed with a strep throat instead of mononucleosis, and given antibiotics. She went on to develop liver failure, multi-organ failure then death. Her parents believe that the treating physicians were inadequate in doing proper investigations before her diagnosis, and that the antibiotics may have contributed to her death.

Another parent claimed that the doctors treating her baby daughter failed to act appropriately when the baby was brought in with vomiting, weakness, irritability and a low blood platelet count. The baby later died from a brain hemorrhage, before mononucleosis had been diagnosed.

**How long does mononucleosis last?**

Symptoms of mononucleosis usually last from 1 - 4 weeks although some cases may last months. Studies amongst university populations have estimated that 20% of mononucleosis patients return to work within one week, 50% within 2 weeks.

It is estimated that about half of those who initially experience symptoms have ongoing symptoms two months after infection. At three months, about one in three sufferers reports symptoms, and at six months the figure is about one in ten. Twenty-four months after infection a small percentage of people still report symptoms, predominantly ongoing fatigue.

Generally, people only get mono once. However about 6% of people experience a recurrence of the symptoms for months or years after they initially contact the virus. I can remember being diagnosed with mononucleosis as a school aged child and then again in my late teens.

Cyclical reactivation of the virus with serious symptoms can be a sign of immunological abnormalities in a small number of people. Usually the longer symptoms are experienced for, the more the infection weakens the person’s immune system and the longer they will need to recover.

**How is mononucleosis spread?**

The Epstein Barr virus is shed from the throat during the illness and up to a year after the infection. The virus can become dormant and later reactivate and be shed from the throat again. Symptoms of the illness may not always be apparent. In fact many healthy people can carry and spread the virus intermittently for life. It is believed that these people are the main reservoir for person to person transmission of the virus.

Apart from through kissing, saliva can transmit the virus by people sharing drinking glasses, eating utensils, towels or toys. Mononucleosis can be transmitted from mouth to hand so washing hands well is important.

The virus is also found in mucous and can be transmitted through coughing or sneezing.
It is not as easily spread as the common cold or flu virus since the virus is very fragile and cannot survive for long out of the human body. For this reason outbreaks of mononucleosis are rare - they occur sporadically throughout the year.

The Epstein Barr virus can also be transmitted by blood via a needle or blood transfusion. For this reason it is important that you do not donate blood for at least 6 months after the onset of symptoms.

How can I prevent passing mononucleosis to others?

Though good personal hygiene makes sense, the Epstein Barr virus is everywhere, and exposure to it cannot be avoided entirely. Washing hands well, avoiding kissing and not sharing towels, glasses and eating utensils with infected patients is a good idea. People with mononucleosis do not need to be isolated from others. Currently there is no vaccine available to prevent mononucleosis.

What is the incubation period for mononucleosis?

Symptoms of mononucleosis appear 30 - 50 days after exposure to the virus, although some people are infected with the virus for weeks or months before any symptoms begin to appear. The incubation period may be shorter in children - it can be as short as 7-14 days.

Who gets mononucleosis?

Mononucleosis is most common in people aged 15-35 years old. It affects about 45 people in every 100,000 at any one time.

Mononucleosis has been nicknamed the “kissing disease” as it is transmitted through saliva and is common in teenagers. I see many students in my clinic who are in their final years at school coming down with this virus. Often the stress of exams plus their busy social lives make them prime candidates for picking it up. In severe cases I advise these students to defer their exams or get a medical letter of explanation for the examiners.

In children the disease seems a little less severe than in teenagers. Some children may develop the “Alice In Wonderland” syndrome where sizes, shapes and distances appear distorted during infection. In underdeveloped countries, children are exposed to the virus early in life and may not develop noticeable symptoms.

In western countries, better hygiene practices can delay the exposure of the virus and delay infections to teenagers or adults, when symptoms are more likely to develop. Adults over thirty seem to suffer the most severe and long lasting symptoms. They may take 6 months or more to recover.

It is estimated that 80 - 95% of all Americans have had mononucleosis by age 40.

How is mononucleosis diagnosed?
Infectious mononucleosis was first recognized in 1920, but it was not until 1968 that the Epstein Barr virus was identified as the cause.

Diagnosis is based on a persons age, symptoms and a physical exam. Confirmation of mononucleosis is made from laboratory tests including:

- the finding of atypical lymphocytes - a type of white blood cell, in the blood. In mononucleosis, these atypical lymphocytes make up more than 10% of total lymphocytes.

- increased total white blood cell count

- antibody tests like the mono spot test.
  The mono spot test is a quick blood test that examines the patient’s blood for antibodies present against the virus. Moderate to high levels of these antibodies, called heterophile antibodies, are seen during the first month of infection. They then decrease rapidly after week 4. This screening test can give results within a day however may be negative in the first week of infection and may need to be repeated. Be aware that in children under 8 the mono test is often negative, despite them being infected with the Epstein Barr virus. The mono spot test does not indicate the severity of the disease and how long it will last.

- additional Epstein Barr antibody tests
  Further Epstein Barr virus can be ordered to diagnose mononucleosis in patients who show symptoms but have a negative Mono test. These antibody tests can also be used in pregnant women, immune compromised patients or adolescents who have been in close contact with a person who has had mononucleosis.

There are at least 5 Epstein Barr antibodies that can help determine if a person is susceptible to the virus (VCA-IgG), or if they have had a recent infection (VCA-IgM, VCA-IgG and EA-D), or have had an infection in the past (VCA-IgA and EBNA).

<table>
<thead>
<tr>
<th>Test results most likely indicate:</th>
<th>EBV antibody test</th>
<th>Susceptible to EBV</th>
<th>Current EBV infection</th>
<th>Past EBV infection</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>VCA-IgM</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td></td>
<td>Appears first, gone in 4-6 weeks</td>
</tr>
<tr>
<td>VCA-IgG</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
<td>If negative, susceptible. It appears within a week of infection, then present for life</td>
</tr>
<tr>
<td>EBNA-IgG</td>
<td></td>
<td>Yes</td>
<td></td>
<td></td>
<td>Becomes positive in 2-4 months, then present for life</td>
</tr>
<tr>
<td>EA-D IgG</td>
<td>Yes</td>
<td></td>
<td>Yes</td>
<td></td>
<td>Positive in about a week, usually gone in 2 weeks, persists in 20% of people</td>
</tr>
<tr>
<td>Heterophile IgM (Mono test)</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td>Associated with Mononucleosis. False negatives possible in children and first week of infection. False positives sometimes with other conditions.</td>
</tr>
</tbody>
</table>
These antibody tests are expensive to run and are not usually needed for the diagnosis of infectious mononucleosis.

- **Other associated tests**

Other tests to evaluate the extent of the disease and any complications include platelet blood count, liver function tests and swabs for strep throat. Other viruses like toxoplasmosis, cytomegalovirus, adenovirus, rubella, hepatitis or HIV can produce a mononucleosis like illness, so if Epstein Barr tests appear negative these viruses may need to be investigated.

**What is the standard medical treatment for mononucleosis?**

The main approach to treating mononucleosis is to relieve symptoms. Advice normally given is to rest, drink plenty of fluids, gargle with salt water and suck on throat lozenges to relieve a sore throat. To relieve pain and fever, acetaminophen or ibuprofen may be recommended.

Antibiotics like penicillin are of no help in mono. Mono is caused by a virus, and antibiotics don’t work against viruses. If you have a bacterial infection in addition to having mono, your doctor may give you an antibiotic. Antibiotics should never be given without a positive bacterial test coming back first. Certain antibiotics like ampicillin or amoxicillin can cause a pink, measles-like rash if you take them while you have mono.

To avoid rupturing the spleen, patients are normally advised to avoid sports and exercise for about 3 to 4 weeks after the infection starts.

Corticosteroids may be prescribed in the rare cases of airway obstruction, hemolytic anemia (an auto immune process in which red blood cells are destroyed), severe thrombocytopenia (a decrease in platelets, which are clotting components in the blood), hepatitis (inflammation of the liver caused by the virus), and complications involving the heart and nerves.

**What are the hospitalization statistics for mononucleosis?**

The following are statistics from various sources collated by Department of Health, England, 2002 - 2003:

- 92% of hospital consultations for infectious mononucleosis required hospital admission
- 56% of hospital consultations for infectious mononucleosis were for men, 44% for women
- 2.7 days was the mean length of stay in hospitals
- 1% of hospital consultant episodes for infectious mononucleosis were single day episodes
- 19 was the mean age of patients
- 0% of hospital consultant episodes occurred in people over 75

Wholistic Therapy Centre, Sydney, 2009  www.WholisticTherapyCentre.com
• 0.015% (1,912) of hospital consultant episodes were for infectious mononucleosis

**What happens to your body when you get mononucleosis?**

Your body has a comprehensive defense system designed to protect you from invading organisms, foreign objects and allergens.

Your throat and nose is the forefront of this system. Firstly, your respiratory system is lined with a mucous membrane (the mucosa) whose job it is to secrete a protective layer of mucous to trap viruses, bacteria, pollen and dust. This mucous layer also has tiny hairs called cilia which sweep any organisms or foreign irritants down your esophagus and into your stomach where they can be broken down by your stomach acids.

**Your throat**

Despite this formidable defense system, some microorganisms or foreign objects can still damage the throat. When the throat tissue is invaded by a microorganism, or is injured, an inflammatory response kicks in straight away.

The affected part of the throat sends out biochemical distress signals that attract phagocytes. Phagocytes live in the blood and body tissue. They eat other cells like viruses, bacteria and cellular debris like old or dead cells. They can also release substances called pyrogens that can induce a fever.

The reason your throat becomes inflamed is that the blood vessels widen and become more permeable. This allows more white blood cells, immune substances and warmth to flood the tissue. The inflamed throat is typically characterized by redness, swelling and pain.

The pain and inflammation in your throat, is your body’s signal to rest your voice, slow down and let your body recover. If you cover the symptoms with pain killers and then use your voice normally, you may end up feeling sicker or prolonging the duration of your illness.

**Your immune system at work**

This first stage of response to an infection or irritant normally lasts about 4 or 5 hours. If it does not eliminate the infection then your body calls more white blood cells to the scene. These include lymphocytes, another type of white blood cell designed to fight infection. One type of lymphocyte, the B cell, produces antibodies against the infection. Some of the B cells turn into memory cells that remember the infection and can respond to it more quickly the next time.

Another lymphocyte is the T cell. Some of these are transformed into killer cells that destroy infected cells. Other T cells encourage the B cells to make more antibodies, while others turn into suppresser cells that turn the immune response off when the infection is cleared from the body.
**Coughing and sneezing**

Histamine may also be produced to make more mucous to trap the infection, and enhance the flooding of immune cells to the area. Histamine also creates more swelling. Nerves in your throat sense this swelling and may force you to cough, expelling mucous out of your body.

The same happens in the nose, causing you to sneeze. Your throat may become even sorer from the inflammation and coughing. If you start to mouth breath because of a blocked nose, you can worsen the irritation as your throat dries out. Viruses thrive in cool, dry air so it is important to keep the air in your throat warm and moist.

Coughing and sneezing is the body’s way of cleansing the bronchials, lungs and throat of mucous and dead viruses and bacteria. Taking cough medicines to suppress a cough can prolong the illness and lead to more serious conditions like pneumonia or bronchitis.

**Your lymph nodes**

Another symptom many people associate with mononucleosis is swollen lymph nodes or glands. These normally come up in the neck but can also be apparent in the armpits or groin. Lymph is a milky fluid that consists of protein, water and immune cells. Just like your circulatory system is made up of a network of vessels, so is the lymph. However unlike the blood system, there is no heart to pump lymph. It depends on muscle movement to move, so gentle exercise can benefit swollen glands.

The lymph nodes or glands are small masses of specialized tissue that drain the lymph of antigens and help in the production of antibodies. When the lymph nodes are swollen, it indicates that your body is working overtime to fight the attack on your body.

**Fever**

If you have a fever, it is there for a reason - it plays a critical role in fighting invading viruses and bacteria. Fever raises your body temperature to the point where viruses and bacteria cannot flourish.

Fever increases production of interferon - an anti viral protein that protects adjoining cells from infection. It also increases the activity of your white blood cells - your infection-fighting cells.

Fever will make you feel tired and lethargic, giving your body a chance to rest and divert its energy into fighting the infection.

In most cases a fever should not be lowered unless it gets too high (above 104°F or 40°C). To suppress it can make the infection linger longer. One study showed that people who took aspirin and Tylenol suppressed their body’s ability to produce antibodies to destroy the infective organism.
If your temperature exceeds 40°C (104°F) and you feel you need to lower it, rather than resorting to medication, have a luke warm bath or sponge the body with luke warm water. Avoid using cold water as this can chill the body to the point where the body starts shivering and actually elevates temperature.

Untreated fevers caused by infection will seldom go over 41°C (105°F) unless you are overdressed, or trapped in a hot place. The brain's thermostat will stop the fever from climbing above about 41°C (106°F).

Some parents fear that fevers will cause seizures or in their children. For the great majority of children, this is not the case. However, febrile convulsions do occur in some children. Always watch children carefully and make sure they are not dressed too warmly or rugged up in blankets.

Aspirin should never be used to control fever or pain in mononucleosis sufferers because of the rare association of aspirin with Reye’s syndrome, a potentially fatal disorder characterized by inflammation of the brain and liver failure. This syndrome is even more likely to occur in children and teenagers.

**Diarrhea**

Diarrhea speeds the evacuation of bugs and their toxins from the gastrointestinal tract. Medication like Lomotol can stop diarrhea temporarily but may worsen other symptoms like nausea or abdominal pains as the infection is not being eliminated. It can also prolong the length of the illness.

**Nausea and vomiting**

This is the body’s way of emptying the stomach of dangerous substances or bugs. It also makes you cut down your food intake so less energy is needed for digestion, more for fighting the infection. Avoid taking medications that suppress the symptoms and allow you to eat. This may prolong the healing process.

**Fatigue**

Fatigue is your body’s way of telling you to slow down, go to bed and sleep! In order to fight mononucleosis you need to rest your body, so any energy can go toward healing your body. If you continue to push yourself you will prolong your illness or suffer from complications.

I read once about one of the Scandinavian countries enforcing a mandatory rest period of a few weeks after being diagnosed with mononucleosis to ensure the symptoms do not become chronic. It would save a lot of suffering if this practice was adopted worldwide!
Why do some people never seem to get over mononucleosis?

**Physical blocks**
The bottom line is how healthy your immune system is. If you have had mononucleosis and still get recurrent sore throats, swollen glands or fatigue, it is nature’s way of telling you that something is wrong with your immune system.

Your immune system may be suppressed from poor eating habits, stress, smoking or a chronic underlying disease. Your genes can also make you more susceptible to disease.

How well your immune system functions is closely linked to nutrition. A deficiency of even a single nutrient can impair your immune defenses, and trigger sore throats.

Numerous studies have linked weakened immune function and subsequent diseases to deficiencies of vitamins A, C, E, zinc and selenium. The other nutrients crucial for immune function are iron, vitamin D and the B complex vitamins - they help your body make T- cells, B- cells, antibodies and other immune proteins.

Fortunately, through general lifestyle practices like a healthy diet, stress reduction, regular exercise and taking some immune boosting supplements, you can strengthen your immunity and keep the symptoms of mononucleosis at bay.

**Emotional blocks**
More recently there has been a resurgence in the belief that illness is our body’s expression of limiting beliefs and ideas.

According to Louise Hay, author of “You can heal your life”, the Epstein Barr virus that causes mononucleosis, is a stress virus caused by pushing beyond one’s limits, and a fear of not being good enough. The illness can also be caused by anger at not receiving love and attention.

In Eastern medicine, the energy centre known as the 5th chakra, is in the throat. This is the place in the body where change takes place. When we resist change or are in the middle of change, there is often a lot of activity in the throat. This may show up physically in sore throats, mucus in the throat or coughs.

The throat represents our ability to speak up for ourselves and to ask for what we want. Throat problems usually mean we feel inadequate to stand up for ourselves.

The throat is also where we express our creativity. When our creativity is stifled and frustrated, sore throats can eventuate.

These emotional blocks are often seen in people who live their lives for others. They are always trying to please their mother / father / husband / children / friends / boss etc. The sore throat is a result of them not being able to do what they want to do.
Sore throats also represent anger. Laryngitis usually means you are so angry that you cannot speak. Again this anger may come from not following your heart, and doing what you want to do in life.

Recurrent swollen glands are said to indicate a problem with being stuck in clogged, painful ideas or holding yourself back.

Ongoing fatigue can represent resistance, boredom or lack of love for what one does.

If you think that your mononucleosis has become chronic because of an emotional blockage, then it is worth chatting with a counselor or psychotherapist. We will be covering some Blockage busting techniques in the e-classes.

**When to call the doctor**

It is advisable to see a doctor if you have signs or symptoms of mononucleosis. Diagnosis of the illness by a doctor is important to make sure it is not another medical condition that may require more extensive medical evaluation and treatment.

Also call your doctor immediately if you have:
- Difficulty breathing
- A severe sore throat
- Drooling or if you are unable to swallow your saliva
- Inability to drink
- Visible pus deposits or a purulent discharge on your tonsils
- Fever over 104 degrees F (40 degrees C)
- Seizures
- Severe headaches
- Potential signs of a ruptured spleen like pain in the left upper part of your abdomen (under the left chest), feeling lightheaded, feeling like your heart is beating fast and hard, bleeding more easily than usual and having trouble breathing.

It is also advisable to get advice if:
- You have a child less than 1 year suffering from mononucleosis symptoms
- Your mononucleosis is not starting to get better after a couple of weeks

**The dangers of conventional drugs for treating mononucleosis**

Firstly, can I make it clear that mononucleosis can be a very serious disease. In some cases prescription drugs are necessary, and in fact can be potentially lifesaving.
However in the majority of mononucleosis cases, drugs will be of little use. Doctors may prescribe drugs that mask your symptoms temporarily but do nothing to get rid of the virus.

Many patients with mononucleosis end up on a medical merry-go-round, seeing doctor after doctor, and trying various drugs - all to no avail. They end up confused, frustrated and getting sicker and sicker by the day.

Today I want to discuss some of the drugs commonly prescribed for mononucleosis.

I will outline their benefits and potential side effects. Once you are armed with this vital knowledge you will be in a better position to decide which treatments to pursue.

**Pain relievers**

Pain relievers may be prescribed to relieve the headaches, muscle pains and sore throat that often accompany mononucleosis. Pain relievers help to numb the pain and may temporarily ensure a better quality, unbroken sleep.

Aspirin should never be used to control pain in mononucleosis sufferers because of the rare association of aspirin with Reye's syndrome, a serious disorder characterized by inflammation of the brain and evidence of liver failure. This syndrome is even more likely to occur in children and teenagers.

Strong pain relievers like Ultram, Loritab and Darvocet, should not be used long term as they eventually lose their effectiveness. People tend to take larger and larger dosages to get relief. This can lead to an addiction to pain killers which is extremely difficult to break. I have had several patients who have told me that breaking their addiction to painkillers was worse than the disease itself!

**Non steroidal anti-inflammatory drugs (NSAIDS)**

Non steroidal anti-inflammatory drugs (NSAIDS) like Naprosyn, Mobic and Celebrex are sometimes prescribed to reduce the fever and pain associated with mononucleosis. These drugs have potentially dangerous side effects like increasing intestinal permeability, high blood pressure, strokes and heart attacks. They have also been shown to reduce folic acid levels which may lead to anxiety and depression.

**Corticosteroids**

Corticosteroids should only be given to patients with severe complications of mono. This would include airway obstruction, myocarditis (inflammation of the heart), pericarditis (inflammation of the sac surrounding the heart) or neuralgic involvement. In these cases corticosteroids can be lifesaving.

The role of corticosteroids is to stop inflammation. They do this by suppressing the immune system. Corticosteroids can certainly relieve symptoms temporarily but if the immune system is being suppressed then the virus usually re-emerges once the drugs are stopped.
There have been reports of neuralgic complications associated with corticosteroid therapy for mononucleosis, so they are not recommended for routine cases of mononucleosis.

I had an email recently from a mother whose daughter had been prescribed corticosteroids for a sore throat associated with mononucleosis. When the drug was finished, the sore throat came back in full force and turned into a serious secondary bacterial infection. If the immune system had been allowed to run its course, this probably would not have happened.

**Antibiotics**

Antibiotics are of no use in treating viruses like mononucleosis. They are sometimes prescribed if a secondary bacterial infection like strep throat develops.

If you are not getting over acute mononucleosis it is worth getting a swab and culture done to see if you have developed a secondary infection. If you do test positive for a bacterial infection, then amoxicillin and ampicillin should not be prescribed because they may cause a measles-like rash in patients with infectious mononucleosis.

**Anti virals**

Some doctors prescribe anti viral drugs like acyclovir eg Zovirax for the treatment of mononucleosis. Acyclovir inhibits the replication of herpes viruses inside cells.

Two double-blind, placebo-controlled trials demonstrated no improvement of individual symptoms in mono patients receiving acyclovir. In both of these trials, the treatment groups had decreased shedding of Epstein Barr virus from the throat. However Epstein Barr virus replication resumed when anti viral therapy was discontinued. Duration of symptoms did not differ between acyclovir and placebo groups.

Side effects of acyclovir include nausea, vomiting, diarrhoea, or headache. Some people have reported hair loss from prolonged use. Others have reported dizziness, fatigue, skin rash, anorexia, leg pain, medication taste and sore throat.

Based on the currently available data, uncomplicated mononucleosis should not be treated with acyclovir.

**Sleep medications**

Sleeping pills may be prescribed in mono patients who have difficulty falling asleep or who wake throughout the night.

Sleep medication can have short term side effects of fuzzy thinking, sedation, muscle aches, dizziness, diarrhoea and flu-like symptoms.

Longer term use can lead to other symptoms like upset stomach, joint pain, upper respiratory infection, sore throat and heart palpitations. Don't these side effects sound just like the symptoms of mononucleosis!

**Antidepressants**
Antidepressants are sometimes prescribed to induce sedation, promote sleep, and to alleviate anxiety, depression and mental fatigue, particularly in those with chronic mononucleosis.

All antidepressants are broken down by the liver. In mononucleosis patients, whose livers are already under strain from the Epstein Barr virus, this may lead to further liver dysfunction.

There are also other potential side effects of antidepressants including weight gain, muscle pains, mental confusion, fatigue, headaches, stomach problems and mood disorders.

**Anti-anxiety medications**

Benzodiazepines like Xanax, Valium, Tegretol, Klonopin, Serax and Restoril may be used for cases of chronic anxiety. The effectiveness of these drugs wears off over time and they can become addictive. They do not promote deep, restful sleep and have been associated with drug induced tremors and mood disorders.

If you are already taking Benzodiazepines you should never stop them abruptly because withdrawal symptoms will be experienced. You need to wean off them slowly with the help of your doctor.

**The natural alternatives to prescription drugs**

Fortunately there are some wonderful supplements, foods and herbs that act as natural anti-inflammatories, pain relievers, antidepressants and sleep inducers. These come with the added bonus that they do not have the nasty side effects of prescription drugs. They work on building up the immune system so the body can fight for itself.

Natural therapies work on treating the underlying causes of an illness, not just masking the symptoms. Unlike prescription drugs which are estimated to contribute to over 100,000 deaths a year, nutritional supplements are safe when taken at the amounts recommended in my program, or as advised by your practitioner. Despite what some doctors may tell you, there are thousands of studies to validate the use of nutritional and herbal supplements to manage and correct the symptoms of poor health.

If you are currently on any prescribed medication, always consult with your doctor before reducing your medication. I recommend that you build up your immune system and stress-coping mechanisms first with the help of the Mononucleosis Support Program. Then gradually wean off your drugs with the help of your physician.

In the following chapters we'll examine how my nutritionally based protocols can help you feel good again without the use of potentially dangerous drugs.
CHAPTER 2

TARGETED SUPPLEMENTS, HERBS AND FOODS TO ELIMINATE MONONUCLEOSIS

Thirty years of research has shown that most diseases in western countries are diet related. Statistics reveal that although Westerners are consuming more nutrients per person than ever, they seem to be receiving less nourishment!

This may be attributed to:

- Soil depletion from old soil and overworked farm lands
- Pollution
- Stress
- Processed foods
- Alcohol, caffeine, illicit and prescription drugs
- Dieting
- Poor digestion or illness
- Pregnancy
- Strenuous exercise

Many of us, even those who feel they eat well, do not eat a balanced diet. Almost 40% of the calories we consume come from processed foods. These foods contain few of the vitamins and minerals we need.

No supplement can be used as a substitute for a good diet - yet a good diet alone is not always enough.

The benefits of supplements

Every bodily function depends on chemical reactions in the cells. Without adequate vitamins and minerals, together with essential proteins, carbohydrates and fatty acids, energy is reduced, vitality diminishes, and illness may occur.

Supplementing with vitamins and minerals can improve your health and reduce your risk of mononucleosis. A recent Harvard university study recommended the daily use of multivitamin and mineral supplements for all adults, and this practice is also supported by a large body of scientific research.
Some of the benefits that have been proven in taking supplements include:

- Reduces fatigue
- Improves immunity
- Helps your body cope with stress
- Less risk of heart disease, cancer and birth defects
- Reduces symptoms of premenstrual syndrome
- Less risk of dementia, learning and behavioral problems
- Balances blood sugar and helps you lose weight

Simply put, along with exercise and a healthy diet, taking appropriate vitamins and minerals, is arguably the single best and easiest decision you can take to improve your health and well being.

The importance of good nutrition for mononucleosis

How well your immune system functions is closely linked to nutrition. A deficiency of even a single nutrient can impair your immune defenses and leave you more prone to mononucleosis. Numerous studies have linked weakened immune function and subsequent diseases to deficiencies of vitamins, minerals, amino acids and essential fats. Other studies show that dietary supplements can enhance immune function.

For example an inadequate intake of vitamin B6 can affect cell reproduction and the production of antibodies. When an infection comes along you can have inadequate antibodies to fight it and so become sick. Fortunately this can be reversed by eating more B6 rich foods in the diet or taking a supplement with B6 in it.

All the B complex vitamins help with immune function - they help your body make T-cells, B- cells, antibodies and other immune proteins. Vitamins A, C, E, zinc and selenium are other nutrients crucial for immune function. For this reason a high potency vitamin and mineral supplement with all these nutrients in, is advised. Try and get one which includes flavanoids - a group of antioxidants shown to help fight viral infections.

Good nutrition, combined with sensible supplementation in the form of vitamins, minerals and essential fats can give you the edge in your recovery from mononucleosis.

The average person doesn't consume an optimal amount of all nutrients in their diet. In fact, scientific trials indicate that all adults should take supplements, even more so if you're battling a potentially serious illness like mononucleosis. You have a wonderful human body that when given the right nutrients in the right amounts can heal itself.

So let's get started on what you should be taking...
Vitamin C

There is a huge body of scientific evidence to show that vitamin C is antibacterial and antiviral and that it boosts immune function. It is essential to take if you have mononucleosis.

Studies show that vitamin C:
- Stimulates the production of lymphocytes - the white blood cells that produce antibodies against infections
- Increases the effects of phagocytes - the white blood cells that scavenge and mop up bacteria, viruses and cancer cells
- Acts as a powerful anti-inflammatory - helping to reduce pain and inflammation
- Dampens the effects of cortisol - a stress hormone which lowers immunity
- Maintains collagen - the tissue that gives skin, tendons, bone and cartilage their structure.

Vitamin C was first brought to the attention of the world in the 1970s by the late Dr. Linus Pauling - a Nobel Prize winner who spent a lot of his time researching vitamin C’s role in human health.

Dr. Linus Pauling proposed that vitamin C was essential in the treatment of infections, both viral and bacterial. In one of his studies, the addition of 1 mg of vitamin C to a growth medium, prevented the growth of bacteria responsible for causing TB. At higher concentrations, vitamin C was shown to neutralize the toxins associated with diphtheria, tetanus and staphylococcus.

Several studies support Pauling’s research and show that decreased levels of vitamin C occur in the blood of patients with infections. The worse the infection, the lower the vitamin C levels in the blood.

Evidence also shows that taking vitamin C in large doses prevents infections like the common cold from developing. It also shortens the duration and reduces the severity of the disease. Importantly, secondary bacterial infections after colds and flu were much reduced when vitamin C was taken daily.

Pauling concluded from his studies that people taking 200 - 1000 mg a day of vitamin C, had fewer infections than those given a placebo or “dummy pill”. When people did get sick from a cold, he proposed that they take 500 - 1000 mg of vitamin C every hour for several hours. Pauling himself was a huge advocate of Vitamin C taking up to 20,000 mg of vitamin C a day when he came down with an infection.

Pauling was not alone in championing vitamin C. The American biochemist, Irwin Stone did similar research and concluded that for the maintenance of good health, adults should take 1000 - 5000 mg of vitamin C a day.
Dr. Robert Cathcart, the surgeon famous for inventing the artificial hip, prescribed high doses of vitamin C for his patients. His results were astounding. He showed that it is possible to use only vitamin C, in high doses, to treat an infection successfully.

Work by Dr. Kalokerinos in outback Australia in the 1960s showed that vitamin C had the potential to be life saving. Dr. Kalokerinos observed that many Aboriginal children were dying from seemingly minor infections with symptoms of runny noses and mild coughs. The children did not respond to antibiotics or other life saving drugs. Dr. Kalokerinos realized that these children were suffering from scurvy due to a lack of vitamin C.

Scurvy is a nasty disease that causes breakdown of body tissue. Since vitamin C is required for the synthesis of collagen - the material or glue that holds us together, when collagen synthesis is reduced the tissues become weak, teeth fall out, blood vessel walls become fragile and hemorrhages can occur. Since colonization of Australia, many aborigines had abandoned their traditional vitamin C rich diet of fresh meat, berries, seeds, bush plants and legumes. Instead, their diet revolved around processed foods, white bread and sugar, with little or no fresh fruit and vegetables.

The medical profession treated Dr. Kalokerino’s work with scorn. However once Dr. Kalokerinos started injecting these sick children with vitamin C, they had fast and dramatic recoveries!

Dr. Kalokerinos also pointed out that every second aboriginal child who was vaccinated with the common childhood vaccines like polio, diphtheria and tetanus, was dying. Vaccination was obviously causing more risk than benefit to these children. Dr. Kalokerinos started giving these children vitamin C, before they were inoculated and the death rate plummeted to zero. Obviously vitamin C has a huge role to play in immunity and keeping kids healthy.

The importance of vitamin C is reflected in hundreds of research papers. A University of California study showed that people with a vitamin C intake less than 49 mg a day had a higher mortality (risk of dying) than the national average. Those taking vitamin C had a mortality much lower than the national average. It is estimated that about 15% of Australians have a vitamin C intake less than 25 mg a day. The same probably applies to Americans. These are sobering statistics that cannot be taken lightly.

I have hundreds of patients taking vitamin C for their immunity. Take the case of Shirley, one of my elderly patients who has suffered from chronic asthma, recurrent sore throats, bronchitis and pneumonia for over 20 years. She had been told by her doctor that her lungs were scarred, and that she should avoid being around people with colds and infections. This advice was hard, as she spent her afternoons teaching music to children. When I first saw Shirley I advised her to go on a high potency daily combination of vitamin C (3g), zinc (30 mg) and beta-carotene (15 mg). Shirley had amazing results. Her asthma settled down, her sore throats disappeared, and for the first winter in many years, she was not hospitalized for bronchitis and pneumonia. I also told Shirley to double her supplements at the first sign of an infection. This has kept her well and she has been able to enjoy her life, and travel more freely without the worry of becoming sick.
The recommended daily amounts of vitamin C

Daily requirements of vitamin C vary considerably between individuals and from day to day in the same individual. It is known that vitamin C requirements increase with stress, smoking, infection, pregnancy, trauma, surgery and during childhood vaccinations.

The recommended daily amounts (RDA) given out by the American Academy of Sciences are only 60 mg a day. For Australia the recommended daily intake (RDI) is 30 - 40 mg. These recommended amounts for vitamin C are based on the amount needed, plus a safety factor, to prevent scurvy. It is clear that while these amounts may prevent scurvy, they are insufficient to protect individuals from degenerative diseases and ill health. Many scientists agree that this is far too low to ensure good health in the average person.

The biological roles of vitamin C of protecting against cancer, helping immune function, reducing asthma, lowering blood pressure, reducing the severity and duration of the common cold, plus minimizing secondary infections imply that we need at least 1000 - 2000 mg a day.

Humans are one of the few animal species that cannot produce vitamin C in their bodies. Other primates (gorilla, monkey, orangutan, baboon etc.) and the guinea pig, are mammals that also cannot make their own vitamin C. It is interesting to see what these animal’s requirements are for vitamin C and extrapolate them to human needs.

For example, a 200 kg gorilla in the wild consumes about 5000 mg a day of vitamin C from their everyday diet. This equates to a need of about 1600 mg in a 70 kg human. Monkeys have been found to need 2000 mg a day for good health. Scaled up from the needs of monkeys, between 1750 - 3500 mg would be required a day for humans. A similar calculation from the optimal intake for guinea pigs gives a requirement for humans of 3500 mg a day.

All these results suggest a need of 1500 - 3000 mg of vitamin C a day for humans, even under ideal conditions of no stress and good health. When you consider that in our modern times we are exposed to oxidative stress from pollution, pesticides, chlorinated water, high fat diets and processed foods, our requirements may even be higher than these estimates.

Vitamin C for mono

The average adult will need to start on at least 3000 - 5000 mg of vitamin C a day to fight mononucleosis efficiently.

Everyone's requirements are different so it is best to start taking 1000 mg of vitamin C every hour until your stools become a little loose or watery. When your stools become watery it means that your body is well saturated with vitamin C and the excess is being excreted. This point is called "bowel tolerance" and it is at this point that the vitamin C is helping your immune system most efficiently.

Don’t be alarmed if your bowel tolerance seems really high. I have had many mononucleosis patients go up to 50,000 mg before they reach bowel tolerance. In my past I have taken up to 30,000 mg a day of vitamin C for nasty infections, with no side effects.
After a particularly bad bout of bronchitis several years ago I even took up to 90,000 mg a day intravenously under a doctor's care.

Going to just under your bowel tolerance every day should be adhered to until the infection is cleared from your body. You may not see improvements in your symptoms if your vitamin C intake is too low.

When you feel better don't just drop your amount of vitamin C to nothing. Tapering the amount down to a maintenance dose of 2000 - 3000 mg over a few days is best to avoid blood levels of vitamin C dropping too suddenly. If vitamin C goes down too quickly you can become susceptible to infections again.

Longer term, when you are over your mononucleosis, I recommend you stay on a maintenance dose of 2000 - 3000 mg of vitamin C daily, in order to keep your immunity in tip top condition.

**How do you take vitamin C?**

Vitamin C is a water soluble vitamin. It cannot be made or stored by the body and any excess is excreted easily.

Good sources of vitamin C are berries, raw peppers, citrus foods, kiwi fruit, cauliflower and all the leafy greens. For therapeutic benefits a vitamin C powder, capsule or tablet is recommended as it can be hard to eat enough of these fresh foods to adequately derive enough vitamin C from the diet.

Multiple small doses or a sustained release vitamin C supplement is suggested as it provides more efficient absorption and retention of vitamin C. Because vitamin C cannot be stored by the body, it is important to take it every day.

For the best absorption and tolerance of vitamin C, you need to get a product that combines ascorbic acid with a buffered version like calcium ascorbate or sodium ascorbate.

The addition of bioflavanoids (phytochemicals found just below the rind of citrus fruits), assists the action of vitamin C. Bioflavanoids to look for on the label include rutin, quercetin and hesperidin.

You can get your vitamin C as a powder, tablet, capsule or chewable tablet.

Because vitamin C is a water soluble vitamin, it cannot be made or stored by the body. For this reason it is best to divide your dosages equally throughout the day.

**Side effects of vitamin C**

In some people, vitamin C at even a normal dose may cause diarrhoea or loose stools. The ascorbic acid form of vitamin C has the acidity of vinegar. So for people with over acid stomachs, it can temporarily irritate the stomach.
In these cases use a buffered form of vitamin C like calcium ascorbate that will minimize any irritation. A sustained release supplement, or small amounts taken often, will also help.

Chewable vitamin C in the ascorbic acid form is not recommended in large amounts because it can damage the teeth enamel. These chewable tablets are made to taste nice by the addition of sugar or stevia (a natural sweetener), so they are palatable for kids, but not at high dosages for too long.

Don't take vitamin C if you have haemochromatosis or iron overload. This rare disease causes iron to build up in the body, damaging organs and tissues. Since vitamin C aids the absorption of iron from the gastrointestinal tract and mobilizes iron from the spleen, then extra amounts can worsen cases of iron overload.

There is no risk of vitamin C causing kidney stones in the average person. Individuals who are susceptible to kidney stones may need to use care. The addition of magnesium and B6 can minimize any risk.

**Zinc**

Zinc is a mineral that stimulates your white blood cells and antibody production to fight off infection.

Zinc is found in most protein foods like meat, fish and oysters. It is also high in pumpkin seeds, wheat germ, whole grains, legumes and brewer's yeast.

Many studies show that zinc boosts immunity. Zinc has been shown to stimulate T-cell and antibody production. It also helps fuel circulation of the white blood cells that rid the body of the Epstein Barr virus. Zinc also appears to stop viruses from entering cells. It stops viruses from replicating and increases production of interferon.

Zinc is also a powerful anti-inflammatory that helps relieve the pain of sore throats, swollen glands and aching muscles that are often present with mononucleosis.

Zinc is required for the functioning of more than 300 enzyme systems. One of its most important roles is to maintain a healthy immune system and thereby help the body to fight off infections.

For example, zinc supplementation in children with diarrhea showed a reduction in duration of the illness by 24%. Zinc has also been shown to shorten the duration and severity of the common cold. Daily zinc supplementation has been shown to reduce the incidence of pneumonia by 41% and the incidence of respiratory infections in preschoolers by 45%.

**Symptoms of zinc deficiency**

Zinc depletion can cause white spots on fingernails, susceptibility to infection, poor wound healing, poor appetite, low sex drive and infertility. If you are low in zinc you lose some sense of taste and you will favor very sweet or salty foods to satisfy your taste buds.
You will avoid the more subtle tastes found in fruits and vegetables as they will appear too bland.

A CSIRO study published in 1991 showed that 85% of Australian women and 67% of Australian men were eating less than the recommended daily allowance of zinc. Surveys in the USA also show a general lack of zinc in the diet.

Vegetarians are especially at risk of zinc deficiency because the high fiber and phytic acid in grains reduce zinc’s absorption from the gut. Diabetics also have problems absorbing zinc and they excrete it excessively too. Alcoholics are usually zinc deficient as alcohol inhibits zinc uptake.

**How much zinc do you need?**

I am always amazed about how many of my patients show up as being low in zinc. On testing, at least 80% of people I see in my clinic are deficient in this essential mineral.

There is a very simple and accurate way to measure your zinc status called the zinc taste test. It involves tasting 5 ml of a solution of zinc sulfate (obtainable from your naturopath or made up by your local chemist). If you experience a strong, unpleasant taste immediately your zinc status is adequate. If you develop a dry, furry or mineral taste your zinc status is marginal. If you experience a watery or bland taste you are low in zinc.

If your zinc status is low then take zinc at 50 - 60 mg a day until a distinct, unpleasant taste is experienced with the taste test. If immune compromised I suggest 60 - 90 mg a day.

In fighting mononucleosis most of my patients start with 60 - 90 mg of elemental zinc a day.

Fiber, iron and calcium also reduce zinc absorption, so if taking these in high amounts, take your zinc separately.

**Buying your zinc**

You can easily get zinc from a pharmacy or health food shop. As a supplement, a zinc salt like zinc sulphate, or a complexed zinc like zinc citrate, zinc picolinate or zinc amino acid chelate are fine.

You can purchase your zinc as a liquid, tablet or capsule. Liquid zinc is good for kids since it can be disguised in juices or drinks. It is also absorbed well from the gastrointestinal tract.

For sore throats associated with mononucleosis, zinc taken as a lozenge has the best effect. A 1996 study showed that in patients who sucked on a zinc lozenge, sore throat symptoms disappeared 42% faster than those taking a placebo. Swallowing zinc supplements without allowing prolonged contact with the throat did not have the same effect.
This discovery came about after a little girl with leukaemia decided to suck on her zinc tablets rather than swallow them. Her father was amazed at the quick recovery she was suddenly making from sore throats and colds. He persuaded some researchers to investigate and this discovery was made.

**Side effects of excess zinc**

If you are taking liquid zinc, always take it in water or juice to avoid nausea. Dosages over 150 mg a day of zinc can interfere with iron and copper absorption, cause nausea and even suppress the immune system.

**Vitamin A and Beta-carotene**

Vitamin A and its precursor beta-carotene enhance immunity. Vitamin A has been shown to lower the rate of infections. It is essential for epithelial tissue repair and maintenance. (epithelial cells are the surface cells that line the mouth, throat and lungs). A deficiency of vitamin A allows microorganisms, like the Epstein Barr virus, to more easily penetrate mucous membranes. Vitamin A is also needed for vision, heart health and growth and reproduction.

People with poor intakes of vitamin A can suffer from poor eyesight, skin problems like acne and an increased risk of infections and cancer.

Supplementation with vitamin A has been shown to reduce the risk of respiratory infections, measles and lung complications in low weight babies. In developing countries where vitamin A deficiency is rife, supplementation can reduce childhood mortality by 30%.

Beta-carotene may increase T- cells (a form of white blood cells). A recent study showed that beta carotene improved the activity of natural killer cells in elderly men. This may improve their resistance to infections and cancer.

**Where is vitamin A found naturally?**

Vitamin A is naturally high in fish liver oils, animal livers and green and yellow fruits and vegetables. Beta carotene is abundant in yellow and orange fruit and vegetables like carrots, pumpkin, apricots and cantaloupe melon.

**How much vitamin A do you need?**

The recommended daily intake of vitamin A in Australia is 750 ug of retinal equivalents. This is equal to 2500 IU of vitamin A or about 4.5 mg beta-carotene.

Surveys in Australia indicate that 24% of men and 33% of women receive less that 70% of the recommended daily intake of vitamin A in their diet.

Health organizations recommend a beta-carotene intake of 5 - 6 mg a day. Studies in the US and UK show that the average intake of beta-carotene per person per day was 1.5 mg and 2.3 mg in each country respectively.
For immune support to fight mononucleosis, I recommend about 15 mg of beta-carotene a day. The body will convert the vitamin A it needs from this source. Alternatively 10,000 IU of vitamin A can be taken. In cases of confirmed vitamin A deficiency, I recommend at least 20,000 IU a day.

**Side effects of vitamin A**

Long term use of vitamin A in high amounts can cause toxicity since vitamin A can accumulate in the body. The acute toxic dose is 25,000 IU per kg of body weight, and the chronic toxic dose is 4000 IU per kg of body weight every day for 6-15 months.

There is the well known case of the men on one of the early trips to Antarctica eating the livers of their husky dogs when their food supply had run out. These poor men suffered from the symptoms of vitamin A toxicity, including vomiting, tiredness, constipation, bone pain, and severe headaches. Their skin acquired a rough and dry appearance, with hair loss and brittle nails.

Vitamin A should not be taken in large amounts by pregnant women as higher amounts are linked to an increased risk of birth defects. Below 10,000 IU a day is fine. Patients suffering from liver disease should also use caution. Diabetics and hypothyroid individuals should avoid beta-carotene supplements because they cannot convert beta-carotene to vitamin A.

**Buying your vitamin A**

Many of my mononucleosis patients find cod liver oil an effective and affordable source of vitamin A. There is about 2500 IU of vitamin A per 4 ml dose of cod liver oil.

As well as the vitamin A, cod liver oil is also rich in the essential fats needed for optimal immune function. Cod liver oil has a reputation for its very fishy smell. Thank goodness they now make deodorized and flavored cod liver oil which make it a lot easier to get down.

**Vitamin E**

Vitamin E has been shown to help a whole range of immune functions. It improves resistance to infection, it boosts antibody response and activates lymphocytes, phagocytes and macrophages - white blood cells responsible for killing and scavenging viruses like the Epstein Barr virus.

Studies on elderly people show that 800 IU of vitamin E daily can enhance immune response and lower the incidence of infection. Animal studies reveal the effect that vitamin E has on bacteria. For example, sheep exposed to the bacteria chlamydia did not develop the infection if they were first given vitamin E. Poultry infected with E. coli, then fed vitamin E had a lower death rate than those without the vitamin E.

Vitamin E works with vitamin C as a powerful antioxidant. Since vitamin E is a fat-soluble vitamin, it is bound up in the cell membrane, protecting the cell. Vitamin C is water-soluble so remains outside the cell.
Apart from immune function, vitamin E improves circulation, repairs tissues, reduces scarring, protects the heart and is good for hormonal conditions like premenstrual syndrome and fibrocystic breast disease.

**Where is vitamin E found naturally?**
Vitamin E is found in nuts, seeds, cold pressed vegetable oils, whole grains and legumes.

**How much vitamin E do you need?**
In Australia the recommended daily intake for vitamin E is 10 mg day for men and 7 mg day for women. A 1991 survey in USA found that the daily average intake of vitamin E was 7.3 mg day for men and 5.4 mg for women.

For optimal health and to protect against degenerative diseases, a minimum of 100 mg a day is required. With most people struggling to get even 10 mg a day, and even the best diet probably supplying only 30 mg a day, supplementation is advisable.

I recommend my patients take at least 200 - 300 mg of vitamin E daily. If you have a history of high cholesterol, then I recommend 800 mg a day.

Vitamin E requirements can vary markedly between individuals. For example people with a high intake of polyunsaturated fats from vegetable oils like margarine, will need extra vitamin E to protect themselves against the oxidation of these oils. Athletes also need extra vitamin E to quell free radicals caused by exercise.

Make sure you get the natural form of vitamin E - it is labeled as d-alpha-tocopherol (not dl-alpha-tocopherol which is a synthetic form of vitamin E).

Vitamin E is a safe vitamin, however I do recommend that people with high blood pressure start on a lose dose and increase it gradually to the desired amount. Since vitamin E is an anticoagulant it should not be taken with warfarin or those on vitamin K for coagulation defects. When having surgery it is advisable to lessen the dose to about 100 mg day to prevent blood clotting problems a week either side of surgery.

**Selenium**

Selenium is an essential antioxidant that protects the immune system by preventing the formation of free radicals. Supplementation with selenium has been shown to activate phagocytes and reduce inflammation.

Selenium acts with vitamin E to produce antibodies, to maintain a healthy heart and to prevent cancer.

**What is naturally high in selenium**
Foods naturally high in selenium include meats, grains, brazil nuts, garlic, onions and brewer’s yeast.
Some countries like New Zealand and parts of China have very low selenium in their soils, so as a consequence their produce is also low in this mineral. It is interesting to note that these selenium deficient areas also correlate with diseases where selenium plays a crucial part. For example, New Zealand which has the lowest selenium soil levels in western countries also has the highest rate of asthma, the highest rate of sudden infant death syndrome and above average rates of cancer and heart disease. Parts of Georgia and Carolina in the USA are called the stroke belt as there is such a high incidence of stroke. These areas are also distinguished by the low selenium in the soils. In China the rates of cancer of the esophagus, stomach and liver are highest in low selenium areas. The incidence of heart disease increases and life expectancy decreases with low blood selenium.

**How much selenium do you need?**
The Australian recommended daily intake for selenium is 85 ug for males, 70 ug for women and 10 ug for infants. The recommended intake in America is 50 - 200 ug a day.

A 1985 study showed that in Australia, males have an average intake of 87 ug a day, women 58 ug a day. To achieve optimum intake a supplement of 100 - 200 ug a day is suggested.

Selenium is good to take with vitamin E, as they enhance each other's absorption. For mononucleosis, a dose of 100 micrograms of selenium twice daily is effective as an immune booster. It is normally labeled as selenomethionine or selenium amino acid chelate

In Australia selenium cannot be bought over the counter, however it is available through doctors and naturopaths. It is freely available in most other western countries.

### Magnesium

One of the most debilitating symptoms of mononucleosis can be the fatigue, which in some cases can linger on for months. Magnesium is crucial to helping the adrenal glands cope with stress, and fight fatigue. It is critical to the cellular pumps which maintain the correct distribution of fluids and nutrients across the cell membrane.

A CSIRO study of Australians found the daily intake of magnesium was inadequate in 50% of men, and 39% of women. This may be due to inadequate diets or environmental factors like poor soils, air pollution and acid rain that can affect the magnesium content of foods. Significant stress has a detrimental effect on body magnesium levels. Over time this creates a vicious circle where lack of magnesium results in an even poorer stress response.

Symptoms of magnesium deficiency can include fatigue, anxiety, muscle twitches, aches and pains, headaches, poor memory and hormonal problems. Magnesium deficiency contributes to poor insulin activity, which in turn results in accelerated magnesium excretion.
Magnesium is found in fresh green vegetables, wheat germ, soybeans, milk, sea foods, nuts and seeds.

Since magnesium deficiency is so widespread it is recommended that you take a dose of 400-800 mg for at least a month or two after you have been diagnosed with mononucleosis. If you have ongoing fatigue you can take it for as long as you need.

**How to buy magnesium**

Preferably obtain your magnesium in a powdered form which is more easily absorbed by your body. Get one with the magnesium in the chelate or diglycinate form which does not dissociate in the intestines but passes efficiently into your cells.

Do not get pure magnesium oxide which will cause loose stools. Some sensitive patients react with loose stools to any form of magnesium, so if you do have problems cut your dose down to 200 mg twice a day.

For absorption reasons, magnesium is best taken in a powder form. You will often find it comes together with a high potency B complex.

Some people find that if taken too late at night, magnesium and the B complex can over stimulate the mind and body, so sleep does not come easily. If you are sensitive then take your supplements with your evening meal, not last thing at night.

**The B Vitamins**

The B vitamins are essential in the metabolism of fats, carbohydrates and proteins, for the nervous system and for the health of the gastrointestinal tract, liver, skin, hair, eyes and mouth. Supplementation with the B complex is critical in overcoming mononucleosis.

Vitamin B deficiencies may arise from over processed foods, excess sugar, alcohol, coffee and stress. A deficiency is indicated by being tired, irritable, nervous, or depressed, having falling hair, skin trouble, poor appetite, insomnia, constipation, high cholesterol and an enlarged tongue which is grooved, shiny or red.

The most important B vitamins for mononucleosis are:

- **Vitamin B3 or niacin** has also been identified as a component of GTF (glucose tolerance factor) which is essential for transporting sugars into your cells. Adequate levels of niacin are also essential to the function of insulin in your body. Symptoms of niacin deficiency can include muscle weakness, fatigue, loss of appetite, indigestion and skin eruptions. Severe deficiency can manifest as dermatitis, diarrhea, dementia and nervous disorders. Sources of niacin include lean meats, poultry, fish, nuts and legumes.

- **Vitamin B2** helps convert fat, sugar and protein into energy. It is also important for healthy hair, skin and nails. It is found in almonds, eggs, mackerel, soy beans, milk, whole meal bread and leafy greens.
Vitamin B5 (pantothenic acid) is essential for energy production and fat metabolism. Good sources are eggs, mushrooms, sprouts, lentils, organ meats and brown rice.

Vitamin B6 (pyridoxine) is essential for protein digestion and hormone balance. Soya beans, brown rice, herrings, meat, avocado and sunflower seeds are good sources.

Folate (vitamin B9) may help speed recovery from mononucleosis. Deficiency of folate may relate to fatigue and a long recovery period following a viral infection like Epstein Barr virus.

Choline is a B vitamin required for fat metabolism. It is found in peanuts, soy, eggs, liver and lecithin.

Inositol, like choline helps transport fat from the liver. Soya, eggs, nuts and whole grains are good sources.

**Buying a B complex**
The B vitamins should be taken together since they are all interrelated. If only one B vitamin is taken over a long period of time, deficiencies may occur in the rest.

To help adrenal repair and to cope with stress and fatigue, a balanced B complex is essential. You need to get one with all the B vitamins together at a dosage of 50 - 100 mg of the main B vitamins (B1, B2, B3, B5 and B6). Take this formula twice daily with meals.

Do not be alarmed if your urine turns a brighter shade of yellow when taking a B complex. This is the excess vitamin B2 (riboflavin) being excreted. If your urine remains clear you may need to increase your intake of the B complex to three times a day.

**Coenzyme Q10**

Mononucleosis patients are often deficient in Coenzyme Q10. Coenzyme Q10 plays a critical role in the production of energy in every cell in your body. In fact it is often referred to as nature's "energy spark plug".

Coenzyme Q10 is a totally naturally substance found in every body cell, particularly in the heart and liver. It acts like a catalyst, sparking the manufacture of ATP (adenosine triphosphate) - the basic energy molecule of the cell.

If your levels of Coenzyme Q10 drop, so does the conversion of food to ATP and therefore the energy supply of the cell. Poor cell function can then lead to fatigue, poor immunity, premature aging and other associated illnesses.

As well as recovery from mononucleosis, Coenzyme Q10 has been used extensively for many heart conditions, high blood pressure, immune enhancement, chronic fatigue and longevity.
Colloidal silver

Colloidal silver is a suspension of silver molecules in water. Silver has been used for thousands of years as a natural antibiotic, anti-viral and anti-fungal agent. Some people may remember their grandmother putting a silver coin in milk to prolong its freshness before the introduction of pasteurization and refrigeration.

Colloidal silver disables the enzyme that bacteria, viruses and fungi need for their oxygen metabolism. It does not harm human biochemistry. According to research back in the 1970s, colloidal silver has been quoted as “a wonder of modern medicine”, capable of killing over 650 different organisms including resistant bacteria.

Colloidal silver (at 5 parts per million) is recommended at 1 - 4 teaspoons a day as a preventative. It is safe for extended periods of time. In times of acute illness this can be increased to 3 - 12 teaspoons for up to 30 days before dropping to a maintenance dose. It can also be used on open wounds, in the nostrils, eyes or on skin affected by acne or eczema.

When taking colloidal silver for the first time, start off slowly as the killing of pathogens too quickly can cause side effects like headache, fatigue, nausea, sore muscles or cold and flu like symptoms.

I personally take colloidal silver twice a day at a maintenance dose. I will increase it to four times a day, at the first sign of an infection appearing. I also find it great for kids as you can pop it into their water or juice, and it does not really have a taste.

N-acetylcysteine (NAC)

N-acetylcysteine (NAC) is an antioxidant which acts as a precursor to glutathione - a powerful immune stimulant. It has been shown to play a protective role against toxins like cigarette smoke, car exhaust and certain herbicides.

The reason why it may be of use in mononucleosis is that it has an anti-mucous effect on the body. It has been shown to be helpful in keeping mucus fluid and thus helping the throat, sinuses and lungs to drain. If you are having problems with mucous and congestion, try at least 200 mg twice daily.
Your nutrient summary table...

Now is a good time to visit your health food shop or naturopath to stock up on the supplements you need to get over mononucleosis. Here is a summary of what you should be looking for. To get the best quality supplements, it is a good idea to ask the health food shop staff or your naturopath for advice.

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Form</th>
<th>Total Daily Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitamin C</td>
<td>Mix of ascorbic acid with calcium and/or sodium ascorbate. Added bioflavonoids like rutin, hesperidin or quercetin to help vitamin C absorption</td>
<td>Initially to bowel tolerance then 3 - 5g a day when symptoms improve</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>Vitamin A or beta carotene</td>
<td>At least 10 000 IU of vitamin A or 15 mg beta carotene a day</td>
</tr>
<tr>
<td>Zinc</td>
<td>Zinc sulphate, citrate, amino acid chelate or picolinate</td>
<td>60 - 90 mg zinc a day</td>
</tr>
<tr>
<td>Vitamin E</td>
<td>d-alpha-tocopherol</td>
<td>300 - 800 mg a day</td>
</tr>
<tr>
<td>Selenium</td>
<td>Selenomethionine or Selenium amino acid chelate</td>
<td>100 - 200 ug a day</td>
</tr>
<tr>
<td>B complex</td>
<td>Contains vitamin B1,B2,B3,B5,B6, B12 and folic acid</td>
<td>50 - 100 mg of B1,B2,B3,B5 and B6, and at least 100 ug B12 and folic acid a day</td>
</tr>
<tr>
<td>Magnesium</td>
<td>Magnesium amino acid chelate or diglycinate (not magnesium oxide)</td>
<td>400 - 800 mg of magnesium a day</td>
</tr>
<tr>
<td>Co Q10</td>
<td>Ubiquinone or vitamin Q</td>
<td>100 - 200 mg a day</td>
</tr>
</tbody>
</table>

A note on dosages...

The dosages recommended here are for adults. For children aged 4 -12, one third to one half the recommended adult dose is suggested. For infants, no more than ¼ dose should be given. Please check with your health practitioner if you need further guidance.
Healing Herbs

Astragalus

_Astragalus membranaceous_ has been used for thousands of years in Traditional Chinese Medicine. The plant’s flat, yellowish root is used as a powerful immune stimulant. It intensifies phagocytosis and stimulates the body’s natural production of interferon. Astragalus is an ideal remedy for anyone with chronic mononucleosis. It has a reputation for improving overall health by helping the body to fight off viral and bacterial infections responsible for causing mononucleosis, colds, the flu, bronchitis, and sinus infections.

Taken as a tonic, astragalus is believed to build stamina and vitality. As an antioxidant, it helps to counteract cell damage caused by unstable oxygen molecules called free radicals. Many people undergoing cancer chemotherapy or radiation take astragalus to fortify their battered immune systems.

Astragalus should not be used in children with fevers because according to Traditional Chinese Medicine, it may make the fever last longer or grow stronger.

The immune system effects of astragalus make it inappropriate while taking corticosteroids or immunosuppressive drugs or if you have an autoimmune disease.

Chinese herbs

Chinese herbs aim to balance the yin and yang, or 2 opposing forces in the body. Traditional Chinese Medicine practitioners can design a herbal mix, specifically for your constitution and symptoms. Alternatively you can buy commercially prepared formulas for specific ailments at a health food store or Chinese pharmacy.

For sore throats associated with mononucleosis, _Gao Mao Ling_ contains strong anti viral and antibacterial herbs which can bring rapid relief to a sore throat. One of our best selling remedies in the winter is _Gao Mao Ling_. Many patients swear it relieves their sore throat and other cold symptoms within 24 hours of starting it. I always carry a bottle in my handbag or briefcase and take it at the first sign of any sore throat symptoms arising. It is also good to take when you are traveling, to avoid picking up any bugs when your body is run down from the stresses of travel.

Cleavers

Cleavers is the herb of choice for the lymphatic system. It helps restore inflamed, swollen glands, especially in the tonsils and adenoids which are often associated with mononucleosis. Cleavers also helps cool down fevers and has a diuretic action.

Coriander

Coriander has been used for hundreds of years to treat fever, stomach disorders and intestinal complaints. Studies have shown that coriander may have anti-inflammatory and anti microbial properties.
When the name cilantro or Chinese parsley is used, it refers to the leaves of the plant; and when the name coriander is used, it is used in reference to the seeds.

The taste of coriander has been described as a warm citrusy flavor with a hint of sage, while cilantro has the same flavors only milder and more earthy.

**Echinacea**
Echinacea is a bitter herb with antiviral, antibiotic and anti-inflammatory properties. It stimulates the immune system and has been shown to help the lymphatic system and glandular swelling.

Echinacea stimulates the white blood cells - particularly the macrophages which help kill viruses, bacteria and fungi in the body. It raises levels of white blood cells when they are low and increases the activity of these cells. As well as treating mononucleosis, echinacea has been used effectively to treat colds, flu, ear infections, throat infections, staph infections and urinary tract infections.

Many of my patients swear that taking echinacea as a preventative or even at the first sign of an infection, can stop the infection in its tracks or at least curtail the severity of the infection. If you are going to take it as a preventative, most herbalists recommend you take it for 8 weeks then have a break for a week or two. You can then restart it for another 8 weeks. When you take it without a break, your phagocytes - the immune cells responsible for destroying microbes can rise to peak levels but do not stay there as the body gets used to the echinacea.

Echinacea is usually taken as a tincture (in a alcohol base). It is also available in capsule or tablet form for those who don't like liquids. For severe symptoms you can take echinacea every 2 hours and gradually decrease the frequency to three times a day as symptoms improve. For maximum benefit it is good if you can get a blend of the root of Echinacea purpurea with Echinacea augustifolia.

**Fennel**
To help expel mucous from the throat and sinuses, drink a tea made from 1 teaspoon crushed fennel seeds in 1 cup of boiling water. Let it seep for 20 minutes.

**Fenugreek**
Fenugreek is a little golden seed that when crushed makes an aromatic tea with a reputation in traditional medicine for countering catarrhal conditions in the nose, throat and gastrointestinal tract.

**Garlic**
Garlic has been called the “poor person’s antibiotic” because of its role in treating a wide range of infections. It is a powerful preventative and I recommend my mononucleosis patients take a clove a day, preferably raw.
Garlic is generally very safe but in some people can cause heartburn or gas. Because it has a blood-thinning effect it should be used with caution for those on anticoagulant medication or those undergoing surgery.

**Ginger (Zingiber officinale)**

Ginger is a potent anti-inflammatory and one of my favorite foods for relieving the sore throats and inflammation associated with mononucleosis. Ginger has also been shown to stimulate the immune system and help sweat out a fever. Studies show that it can inhibit bacteria and viruses.

Ginger is a common therapeutic food, especially in China where it has been used for over 2500 years. Traditionally it is used to relieve nausea, particularly that associated with morning sickness and motion sickness. It is also good for abdominal upsets, diarrhea and arthritis.

For a sore throat, ginger is best taken as a tea, although it is delicious added to stir fries and Asian dishes.

**Ginseng**

Panax ginseng is a fantastic immune tonic which has been used for thousands of years by the Chinese to boost energy, immunity and sexuality. Research has shown that it enhances antibody response, boosts interferon production and improves the function of natural killer cells, macrophages and lymphocytes. Ginseng has been shown to prevent viral infections in animals.

Ginseng is traditionally used as a preventative, rather than when you are actually sick. Two weeks on, then 2 weeks off is the recommended pattern. It should not be used by those with high blood pressure. Those with insomnia, irritability or nervousness, should use it with caution.

Ginseng is available in all Asian shops as well as health food shops as a tea or in capsule form.

**Goldenseal**

Goldenseal is well known for its antibiotic and immune-stimulating properties. It helps dry and cleanse the mucous membranes so is good for sore throats. Evidence shows that goldenseal stimulates the macrophages that engulf and destroy viruses and bacteria.

**Horseradish**

Horseradish is a spicy root that provides temporary relief from congested sinuses which may accompany mononucleosis.

It is available fresh or as a dressing. The Japanese horseradish called wasabi is freely available in supermarkets or Asian shops. Horseradish can also be applied as an effective poultice over the throat, nose or sinuses.

**Licorice**
Licorice root has been used for centuries to soothe irritated throats and coughs. It has a soothing effect on the mucous membranes of the throat and it increases the fluidity of mucous in the lungs, throat and bronchial tubes.

Licorice is best taken as a tea, a spray or in a lozenge so that it has direct contact with the throat tissue. Swallowing licorice as a capsule or tablet will not give the same benefits.

Licorice should not be used for long periods without the supervision of a practitioner, since it can raise blood pressure. Also use caution if you are pregnant or breast feeding, or have diabetes, glaucoma or tendency for stroke.

Licorice as a candy or confectionery is not usually made with real licorice, but with anise and sugar. It is definitely not recommended!

**Marshmallow**
The roots and leaves of Marshmallow contain mucilage which soothes the lining of the throat and eases coughs. Gargling with the herbal tincture or using a throat spray made from marshmallow gives good results. Please do not confuse the herb marshmallow with the confectionery which is basically pure sugar, and not related to the herb.

**Mullein**
The leaves and flowers of the Mullein plant are known for their expectorant and mucous-reducing properties. Mullein helps break up and expel mucous which can bring relief to a sore throat.

A tea made from the dried leaves or flowers is effective, but strain it first before drinking.

**Olive leaf extract**
My personal favorite in treating mononucleosis is olive leaf extract. Over 40 medical and scientific publications now confirm the therapeutic benefits of olive leaf extract in treating health disorders.

The drinking of olive leaf tea has been done for many centuries by Middle Eastern cultures to treat disorders such as coughs, sore throat, cystitis, fever and gout. As it is a mild astringent, poultices were also made of the olive leaves to treat boils, rashes, warts and other skin problems.

Olive leaf extract can be helpful in the treatment of mononucleosis plus the common cold, flu, cold sores (herpes), ear infections, eye infections, nose and throat infections, impetigo, pink eye, parasites, and a host of bacterial, viral and fungal infections.

The main constituent of olive leaf is the phytochemical oleuropein, which has a powerful antibacterial effect. It also has the ability to interfere with critical amino acid production essential for viruses. It can even directly penetrate infected cells and stop viruses from replicating. It also stimulates phagocytosis, which is an immune system response in which white blood cells ingest harmful microorganisms and foreign matter.
Olive leaf is effective against some antibiotic-resistant bacteria, fungi and yeast strains and stops the production of micro-toxins by these organisms.

It is also a powerful antioxidant. Tests show that it is almost twice as strong as green tea and five times more powerful than vitamin C at scavenging free radicals.

Olive Leaf Extract is nontoxic, but when killing too many pathogens too quickly, a "die off" or Herxheimer's reaction may occur - which can be experienced as flu-like symptoms, loose stools, nausea, headaches, tiredness or a skin rash. A reaction like this will only last a day or so, and can be minimized or avoided by starting at a low dose and gradually increasing.

For recovering from mononucleosis, olive leaf extract can be taken as a capsule or liquid three times daily. For a preventative, twice daily is usually adequate.

**Peppermint**

The peppermint leaf contains volatile oils like menthol, which give it a pleasant aroma. Peppermint is a good gargle for sore throats. It is also used as a liniment for muscle aches and pains, and to relieve headaches, fever and fatigue. It has been used traditionally by ancient cultures like the Egyptians, Chinese and American Indians to treat indigestion, flatulence and bad breath. It can be consumed as a tea or used in small amounts as an oil in foods.

**Phytolacca or pokeweed**

Pokeweed is used as a herbal extract, a homeopathic and as an ointment to treat swollen glands and sore throats. It can be taken internally to relieve swollen glands and an inflamed throat, or it can be used externally as an ointment or in a compress.

Some people use the young shoots as greens, however the mature plant is poisonous when taken in large doses.

**Red root (Ceanothus americanus)**

This herb is used for weakness and stagnation in the lymph system and nodes, mild splenomegaly (enlarged spleen) and acute tonsillitis and pharyngitis. It also reduces an enlarged liver and helps to improve circulation to the liver.

**Sage**

Sage can ease congestion to relieve coughs and sore throats common with mononucleosis. Sage can also be used effectively in a steam or vapor tent to help relieve sinus congestion.

**Slippery elm (Ulmus rubra)**

Slippery elm powder comes from the inner bark of a South American tree. It helps soothe the pain and irritation of a sore throat, giving temporary relief. Traditionally it has been used for inflamed mucous membranes of the stomach, bowel and urinary tract.

I recommend my patients just mix a couple of teaspoons of slippery elm powder with warm water to make a paste. Honey, mashed banana or natural yoghurt can be added to
sweeten it. Let the paste dissolve in your mouth and use as necessary. Slippery elm is also available in lozenges, syrups and teas.

**St. Mary’s thistle (Milk thistle - Silybum marianum)**
This is a great herb for mononucleosis as it helps with liver damage and recovery from viral, chemical or alcohol damage. It is also useful for an enlarged spleen.

Silymarin, an extract from the seed, acts on the membranes of the liver cells preventing the entry of virus toxins and other toxic compounds and thus preventing damage to the cells. It also dramatically improves liver regeneration in hepatitis, cirrhosis, mushroom poisoning and other diseases of the liver.

**Thyme**
Thyme helps to expectorate mucous. It is also antiseptic and can help lower a high fever.

**Turmeric**
Turmeric is a yellow spice with strong anti-inflammatory properties that some say are as effective as cortisone, but without the side effects.

Ayurvedic medicine uses turmeric for treating arthritis, blood purification, skin disorders, anemia and inflammatory conditions. Modern research reveals that turmeric is showing promise with certain forms of cancer and cardiovascular disorders.

Turmeric is easily added to curries, stir fries, casseroles or soups, and gives foods a lovely yellow color.

**Foods as medicine**

Some everyday foods are a source of thousands of phytochemicals, enzymes and nutrients that boost immunity and help your body fight mononucleosis.

**The super foods for mononucleosis include:**

**Aloe vera**
Aloe vera is traditionally used as a skin healer and for digestive disorders. It is also helpful for sore throats when taken as the juice, at about 20 ml three times a day, diluted in a bit of warm water.

**Apple cider vinegar**
Vinegar is an old fashioned remedy renowned for its antiseptic and disinfectant properties. Hippocrates prescribed it to his patients, and Julius Caesar’s armies drank it mixed with water for good health.

The most beneficial vinegar for good health is apple cider vinegar. Enthusiasts claim it cures arthritis, digestion, obesity and viruses.
For mononucleosis, mix together ¼ cup apple cider vinegar with ¼ cup honey. Take 1 tablespoon every hour or as needed to soothe the throat.

**Black pepper**
Black pepper is traditionally used in Ayurvedic medicine to heat the body and enhance immune response. It is very effective for sore throats. It can be taken freshly ground with honey to form a paste or drunk as a tea. To make black pepper tea, just add 10 peppercorns to 1 cup of water. Cover and simmer for 30 minutes. Drain off the peppercorns and sweeten with honey to taste. Drink hot, up to 4 times a day.

**Blueberry**
Blueberries contain phytochemicals that are anti-viral and that also block the attachment of bacteria. They are high in natural aspirin too. Fresh blueberries are not always available, but frozen blueberries are available year round.

**Cabbage and cauliflower**
Cabbage and cauliflower are cruciferous vegetables with high antioxidant, anticancer and anti viral properties.

**Carrot**
Naturally rich in vitamin A and C, carrots are immune-boosting and infection fighting.

**Cayenne pepper**
Cayenne pepper is a fantastic throat gargle. It depletes the pain-causing chemicals produced by nerve endings in the throat. Just mix 1/8 teaspoon in ½ cup warm water and a tablespoon of salt. Gargle as needed. Cayenne can also be taken internally. Take up to ¼ teaspoon 3 times a day.

You can make an effective cayenne tea by adding 1/4 teaspoon cayenne pepper and ½ teaspoon grated ginger into boiling water. Add a little honey to taste if needed and sip slowly.

**Chicken soup**
Scientific research has confirmed what our grandmothers always knew - that chicken soup can help soothe a sore throat and other symptoms associated with viruses.

As a remedy chicken soup has been around since the 12th Century. Today even the Mayo clinic endorse the healing powers of chicken soup. Chicken soup has been shown to increase the flow of mucous from the nose, clearing mucous and stopping mucous dripping down into the throat.

The theory as to why it helps soothe sore throats and respiratory infections is that chicken is high in the amino acid cysteine. Cysteine is similar to a drug called acetylcysteine, which thins out mucous to treat bronchitis.
So dig out your favorite chicken soup recipe and start to experiment with it. Adding ginger, garlic, pepper and a handful of shiitake or maitake mushrooms will boost its expectorant properties even more.

A very basic chicken soup, which is great for busy people is:

**Spicy Chicken Soup**

**Ingredients:**
- ¼ small pumpkin
- 1 onion
- 1 chicken leg, wing or breast
- 2 cloves of garlic, crushed
- 1 cm ginger root, grated
- Pinch of natural sea salt, black pepper and cayenne pepper
- 2 cups water

Bring water to the boil and add all ingredients. Simmer for 20 minutes or so, until chicken is cooked. Remove chicken and dice it.

Blend remaining mix until smooth. Add diced chicken and reheat until piping hot.

Serve with a dollop of natural yoghurt and a sprinkling of chives.

My favorite chicken soup recipe is Chicken and Galangal Soup from Thailand. It is a delicious soup guaranteed to soothe your sore throat and comfort the soul! Most of the ingredients are easily available from Asian Food stores or supermarkets.

**Chicken and Galangal Soup**

**Ingredients:**
- 2 stalks of lemon grass
- 1 cup water
- 4 cups of coconut milk
- 8 chicken thighs or 600g (1 1/3 lb) chicken breast, diced
- 10 slices galangal (dried galangal can be used if you can’t find it fresh)
- 2 tablespoons fish sauce
- 3 small chillies
- 3 cm of ginger root, grated
- 3 bergamot leaves
- 2 tablespoons lemon juice

Garnish with 1 spring onion and 1 chilli, shredded

Cut the lemon grass into 1-inch pieces. Bring the water to the boil with half the coconut milk. Then add the chicken, lemon grass, galangal and 1 tablespoon fish sauce. Simmer for about 20 minutes or until the chicken is cooked. Less cooking time will be required for diced chicken.
Stir in the remaining coconut milk and turn up the heat. As soon as it begins to boil, toss in the whole chillies, bergamot leaves and grated ginger. Stir and remove from heat.

Serve in individual bowls. Sprinkle each with lemon juice and fish sauce to taste and garnish with slivers of spring onions and chilli.

**Chilli**
Hot chilli peppers act as natural antibacterials and antioxidants. They act as decongestants and expectorants, clearing mucous from the throat and sinuses. They can also prevent secondary infections like bronchitis from developing.

**Coconut oil**
Coconut oil has traditionally helped protect people who live in tropical areas from bacteria, fungi and viruses. However when these people have switched to polyunsaturated vegetable oils like sunflower or safflower oils, there has been a dramatic rise in intestinal and immune disorders.

Lauric acid and capric acid are the major fatty acids in coconut. They form monolaurin in the body. Monolaurin has been recognized for its antibacterial, anti viral and antiprotozoan functions.

For example, monolaurin can kill lipid-coated viruses like herpes, measles, cytomegalovirus and influenza, and bacteria like *Heliobacter pylori*, *Listeria monocytogenes* and some forms of *Streptococcus* and *Staphylococcus*. It also kills protozoa such as *Giardia lamblia* and a number of fungi and yeast like ringworm and Candida. Monocaprin has also been shown to have anti viral effects against HIV and is being tested for anti viral effects against herpes simplex and antibacterial effects against chlamydia and other sexually transmitted bacteria.

Monolaurin does not appear to upset the desirable gut bacteria - only pathogenic microorganisms.

Although high in saturated fats, coconut oil has been shown not to contribute to increased cholesterol and heart disease. It is now recognized for its use as a weight loss oil and to boost metabolic rate. Coconut oil is also exceptionally good for the skin, reducing the aging process and minimizing wrinkles. It can be used in the diet, and also directly on the skin in creams and lotions.

Coconut oil can be obtained from a health food shop. Alternatively fresh coconut, desiccated coconut and coconut cream and milk can be easily purchased, although they are not as high in the healing fat. Coconut oil is a very stable fat that does not go rancid easily. Like olive oil and butter, it can be heated without losing its health giving properties.

Coconut oil is solid at normal room temperature (although I noticed today that mine has melted due to a hot Australian summer day of 40 degrees C!).

Wholistic Therapy Centre, Sydney, 2009                             www.WholisticTherapyCentre.com
**Deep sea fish**
Deep sea oily fish, like salmon, sardines, tuna, mackerel and herrings, are a rich source of Omega 3 fats. These fats are essential for optimal immune function, and act as natural anti-inflammatories.

There is some concern these days that most oily fish like tuna and salmon are high in contaminants like mercury. For this reason, look for wild, unfarmed salmon or smaller fish like sardines, which are lower down on the food chain, and less likely to have contaminants.

Eating deep sea fish three times a week, or taking at least 2000 mg of a contaminant-free fish oil capsule daily, is recommended.

**Flaxseed oil**
Flaxseed oil (also known as linseed oil) is another good source of Omega 3 fats. When buying linseed oil, always make sure it is organically grown and cold pressed. Light, oxygen and high temperatures destroy the Omega-3 fats rapidly. Keep the oil in a fridge and consume raw within 3 - 6 weeks after opening.

The beneficial dosage is 2 - 3 dessertspoons a day. When combined with apple cider vinegar, flaxseed oil makes a very healthy dressing or it can be made into a tasty mayonnaise with the addition of an egg and some lemon juice. Add some fresh herbs or garlic for an extra zing.

**Green or red peppers**
Peppers are high in vitamin C and natural anti-inflammatories. They are good for sore throats stemming from mononucleosis.

**Green tea**
Green tea has been popular in Traditional Chinese Medicine for centuries, and is now becoming popular in western markets.

Green tea helps to boosts immunity, energize the body, promote digestion and improve mental clarity. It has recently been found to boost metabolic rate and is becoming a useful weight loss aid.

The active ingredient of green tea are substances called polyphenols which boost lymphocyte activity and have an anti viral activity. Green tea also contains small amounts of caffeine, so if taken in excess can cause insomnia or anxiety in sensitive people.

**Honey**
Honey is an expectorant that helps clear mucous, viruses and bacteria from the body. The best form is medicinal honey like *Manuka* honey which has proven antibacterial action.

Honey can be added to herb teas or taken directly off the spoon.
**Lemon**
The juice of a fresh lemon is very soothing to a sore throat. Lemons are renowned for their cleansing and alkalizing properties. I recommend to all my patients that they start their day off with the juice of half a lemon in warm or hot water first thing in the morning.

**Mushrooms**
Certain mushrooms like the Shiitake, Maitake and Reishi mushrooms have been used in Asia for thousands of years as immune-enhancing and anti viral. Extracts of these mushrooms are also believed to have anticancer activity. Shiitake and Maitake mushrooms are now available in fresh or dried forms in Asian shops or even in the larger supermarkets. Reishi mushroom is better taken in a liquid extract or capsule since the natural form has a woody, bitter taste.

**Onion**
Onions, shallots and leeks have powerful anti-inflammatory, anti viral and antioxidant properties. They create warmth, increasing blood flow to the throat. They can help relieve the symptoms associated with mononucleosis.

One of my patients swears by eating a raw onion a day to keep her chronic asthma and sore throats at bay. A more palatable way of getting the benefits of onion is to make up a onion/honey syrup. Simply place one finely chopped raw onion in a small saucepan and add enough honey to cover. Cover and cook on low heat for 40 minutes. Take 1 teaspoon every 15 - 30 minutes till symptoms subside.

**Pineapple**
Pineapple is rich in an enzyme called bromelain which is a powerful anti-inflammatory. I find a slice of raw pineapple gives instant relief to a sore throat and swollen glands. Avoid the canned pineapple or tinned juices which have been heat-treated since this natural enzyme is destroyed at high temperatures.

**Plum**
Plums are anti viral in nature but be careful as too many can have a laxative action!

**Raspberry**
Raspberries are anti viral and high in natural aspirin to give some pain relief to sore throats, swollen glands and aching muscles. If you can’t source fresh raspberries then the frozen ones are fine. They are lovely when thrown into a protein smoothie.

**Sea weed**
Sea weeds like kelp are anti viral and can help boost immune function

**Strawberry**
Strawberries have an anti viral action and are naturally high in antioxidants like vitamin C.
**Whey**

Whole milk protein is made from about 80% casein and 20% whey. During cheese making, whey protein is the clear liquid that is left after the fat and casein have been removed. Liquid whey can be dried into a powder and used to bolster the protein content of meals.

A large body of research supports the use of whey protein in general health management and immune support.

Whey protein is easily digested and rapidly absorbed. It has an excellent balance of essential amino acids. Dairy sensitive individuals can usually tolerate whey because it contains no casein and virtually no lactose.

Whey contains high concentrations of lactic acid and enzymes that help maintain the acidity of the bowel and kill off any unhealthy bacteria and fungi. Being acidic, whey is a natural antiseptic. It is also an excellent remedy for sore throats and catarrh.

One of the main benefits of whey protein is its ability to increase the body's stores of glutathione - an antioxidant and essential co-factor for cell function. Glutathione deficiency is linked to a large number of disease states including liver disease, lung disease, heart disease, HIV/AIDS, cancer, chronic fatigue and myalgia. Glutathione deficiency has been shown to cause rapid replication of endogenous pathogens like Epstein Barr Virus, *Candida albicans*, *Cytomegalovirus* and *Chlamydia pneumonia* in the body.

A component of whey, called lactoferrin, is well known for its antibacterial, anti-viral and immune stimulating abilities. Lactoferrin can even inhibit HIV and AIDS by targeting the entry process of HIV into the cell. Whey protein has also been shown to be helpful in the treatment of some cancers.

Whey is the supplemental protein source of choice for many body builders and athletes and people wanting to lose fat whilst retaining muscle mass. It stimulates the hormone that tells you that you are full, so it makes it more difficult to overeat. Whey protein also provides a steady source of fuel for the body, reducing swings in blood sugar and food cravings. I use whey powder daily in my protein shakes, or added to yoghurt and cereal to boost their protein content.

When buying whey protein be aware that the cheaper unrefined whey powder is not a good source of quality protein. I recommend the ‘instantised’ whey. It is a pleasant tasting powder and is great added to smoothies, cereals or in yoghurt.

**Yoghourt**

Yoghourt improves the efficiency of natural killer cells that attack viruses. Researchers have also found that yoghourt increases interferon. Interferon is a protein released by cells which stops neighboring cells from becoming infected.

Make sure you buy a natural sugar-free yoghourt. If you are allergic to cow’s milk, you may be able to source goat’s, sheep or buffalo yoghourt. Avoid the soy yoghourts which
are normally high in sugar. You can also make your own yoghurt simply at home - it always tastes delicious!
CHAPTER 3

THE IMMUNE BOOSTING DIET

The importance of a healthy diet

Food provides you with calories for energy, but it is much more than just that. Your diet may be the key to recovering fully from mononucleosis.

What you eat can keep you healthy. Food can modify your immune response, hormone production and the processes that lead to inflammation.

Your diet also influences cell growth and function, cell to cell communication and what circulates in your blood. Your health is affected on every level by what you put into your mouth.

A healthy diet contributes to your resistance and can help ward off lots of illnesses - everything from the common cold to cancer. Reversing illness, especially chronic disease can be difficult to do, so it makes sense to do everything possible to stay well.

The Western diet

The typical Western diet is typically low in nutrients needed for a strong immune response. Many people eat foods that are calorie rich but nutrient poor. The most commonly eaten foods in America are white bread, coffee and hot dogs!

Nutrition expert Patrick Quillin estimates that:

- 20% of Americans are clinically malnourished
- A further 70% are undernourished
- Only 10% are optimally nourished
- On a given day, 41% of Americans eat no fruit
- On a given day, 17% of Americans eat no vegetables
- On a given day, 84% of Americans do not eat any high fiber food.

These statistics are probably consistent with most Western countries. Most people are obviously not eating adequate amounts of nutritious foods.
The cleansing diet for acute Epstein Barr virus

In the initial acute stage of any infection when symptoms like fever, sore throat, swollen glands, mucous production, poor appetite and malaise are common, it is best to eat lightly. The cleansing diet is for when you have acute symptoms of Epstein Barr (mono or glandular fever), or if you experience an acute relapse of your symptoms.

If you feed your body correctly it is unlikely that your illness will progress into a secondary infection like bronchitis, pneumonia or a more serious condition like chronic fatigue.

This diet can also be used in cases of colds, flu, ear infections, gastrointestinal upsets or as a body cleanse for a couple of days when you are feeling rundown or toxic. You can also use the cleansing diet for children or other family members when they come down with an acute illness.

Water fasting versus a cleansing liquid-only diet

Water fasting for a day or two under a doctor's supervision can help to speedily resolve any threat of infection, if undertaken at the first sign of symptoms. However it can be a little harsh for the majority of mono patients, especially if they are toxic.

The other option to water fasting is a liquid-only diet of vegetable juices, broths, soups, herb teas, lemon drinks and pure water. I prefer to use a liquid-only diet with my patients, as it provides the body with adequate nutrition whilst resting the gastrointestinal tract so energy can be diverted into healing the body.

Liquids you could try might include miso soup, chicken broth, potassium broth (see recipe below) and herb teas like fenugreek, ginger, boneset and coltsfoot.

Freshly squeezed vegetable juices based around lots of green vegetables like celery, cucumber and spinach are very cleansing. You can add a small amount of carrot, parsnip or beet root to sweeten your juice, or add some ginger or garlic to give it a warming effect.

I always recommend that you water down your juice (about 50:50) so it is not too concentrated.

Garlic, ginger, cayenne pepper, turmeric, chilli peppers, and onions are great to add to your teas, broths and juices due to their powerful health benefits for the throat and respiratory system.

You will also need to eliminate your intake of all dairy products and grains, because they contribute to mucus in the body. In addition, avoid coffee, sugar, alcohol, soft drinks and artificial colors and flavorings.
Some cleansing recipes to try:

Potassium broth

4 carrots.
2 potatoes with skin.
1 onion, quartered.
2 stalks celery.
1/2 bunch parsley.
1/2 head red cabbage.
1/2 bunch broccoli.
Clove garlic, crushed.
2 cm ginger root grated
Pinch of sea salt
(or any other combination of vegetables you have)

Chop vegetables and cover with filtered water to 2" above vegetables.
Simmer gently, do not boil, for 30 minutes. Strain vegetables and drink the broth.
Excess may be stored in the fridge for up to 2 days.

Freshly squeezed juices

Alkalizing juice

½ grapefruit, peeled
1 lemon, peeled
2 stalks celery
½ cucumber
½ inch ginger root

Liver cleansing juice

1 lemon, peeled
1 apple
1 carrot
¼ beet root
½ cup broccoli
½ red onion
1 clove garlic

Mucus cleansing juice

1 lemon, peeled
1 grapefruit, peeled
1 apple
1 clove garlic
1 slice red onion
½ inch ginger root

This one is very soothing when watered down with some hot water. Add a teaspoon of Manuka honey to sweeten if desired.

**Reintroducing your foods**

When you are feeling stronger and your appetite is starting to return you can start to reintroduce some more foods.

Start with fresh lightly steamed vegetables and soups. If these are tolerated then you can add back some raw vegetables and salads. Eat small quantities of fresh fruits like pineapple, paw paw and kiwi fruit which are anti-inflammatory in nature.

Nuts and seeds, eggs, legumes, free-range meats, poultry and fish can then be introduced.

Extra virgin olive oil, coconut oil and flaxseed or linseed oil should be used to provide essential fats.

Grains should be avoided or eaten in small quantities. Choose from brown rice, whole grain breads, oats, millet, buckwheat and rye.

Remember to keep drinking plenty of pure water, herb teas and lemon juices in order to flush the microbes and toxins out of your body.

**A diet for optimal immunity**

Once you are over the acute stage of Epstein Barr you need to focus on a long term healthy diet.

For optimal immunity, make sure that you get a good supply of fresh, ripe and preferably raw vegetables and fruits a day. Aim for 9 - 14 servings of fruit and vegetables a day. These will give you the vitamins, minerals, enzymes and antioxidants to keep you well.

About two thirds of your diet should be from plant based foods like vegetables, fruits, nuts, seeds, beans, oils and whole grains.

The other third should be quality protein foods like fish, poultry, eggs, cheese, lean red meat and dairy. Protein is essential for a strong immune system and for the repair of the body. Protein will also help stabilize your blood sugar and stop you craving sugars.

Try to also include some healthy fats into your daily diet. Raw nuts, seeds, avocado, cold pressed olive or flaxseed oil and deep sea fish are all excellent choices.

Plenty of pure water or herbal or green tea is a vital part of your healthy diet.
To get the most nutrients from your food, try to buy seasonal, locally grown, organic foods. Because they are grown in healthier soil, without the use of immune-suppressing chemicals, organic foods are far better for your immune system.

Try to eat your foods as close to their natural state as possible. Heating fats to high temperatures creates free radicals and can denature proteins. Opt for raw, lightly steamed or stir fried food instead of barbecued, baked or fried foods.

**The right balance**

The balance of protein, carbohydrate and fat in each meal determines the amount and rate of sugar reaching the blood and influences your immune response.

The energy or calorie ratio of carbohydrate to protein to fat should be 40:30:30. When these foods are eaten in balance your body produces correct levels of the key hormones - insulin and glucagon.

When this happens:

- Your immune system performs efficiently
- Your body burns fat as an energy source.
- As you break down fat cells, toxins are released from the body
- You maintain a good metabolic rate in which the body and mind function at peak efficiency.
- Your sugar cravings and binge eating disappear.
- Your emotions stabilize.
- You have mental clarity.
- You are protecting your body from many disease processes like inflammation, blood pressure problems and heart disease which normally accompany high insulin levels.
Selecting your protein for each meal

Every meal that passes your lips should include some protein. Protein is a critical component of your immune boosting diet, and getting you over mononucleosis.

The role of protein
I emphasize getting plenty of protein into your diet for several reasons. Firstly protein is essential for cell health and repair. It is the main structural component of our tissues and organs. Even the immune system itself is comprised of protein components like antibodies.

Protein also helps your body to burn fat and release toxins by keeping your blood sugar in balance. It also helps your body build precious muscle - something which bed ridden patients really have to work on.

Last but not least, one of the most important roles of protein is to help the body make glutathione - an important substance essential to good immune function. Glutathione helps the liver filter the blood, protect cell membranes from damage, and fuse with foreign substances like the Epstein Barr virus to clear them from the body.

Where do proteins come from?
Amino acids are the building blocks of protein. There are 20 amino acids, 12 of which can be manufactured by the body, 8 of which must be consumed through the diet. Different amino acids have specific effects on the body. For example arginine enhances lymphocyte response while glutamine is the major fuel for the lining of the gastrointestinal tract.

The whole spectrum of essential amino acids is found in protein foods like meat, fish, poultry, eggs and dairy products. Legumes, nuts and seeds also contain protein but do not contain all the essential amino acids.

How much protein to eat
At any one meal, you need to consume about as much protein food as would fit on the palm of your hand (and about as thick as your hand).

For the average woman this is about 90g of poultry, meat or fish per meal. This is equivalent to about 21 grams of pure protein. For men, increase these amounts by a third. The following table shows protein sources and how much is needed by the average person.

If you are a strict vegetarian you may have to add a protein powder to your regime. It can be hard to obtain adequate protein from beans, tofu, nuts and seeds. You must be diligent in ensuring your protein needs are met. It is a little easier if you eat eggs, cheese and dairy foods.

There are some delicious protein drinks and bars on the market. They can certainly make life easier on those busy days when you haven't got the time to make healthy snacks or meals.
Protein choices for each meal

Choose one of the following for each meal:

Meat and Poultry 90g (3 oz)
- Chicken
- Quail
- Veal
- Turkey
- Lamb
- Pork
- Duck
- Ham
- Corned Beef
- Goose
- Beef
- Lean Canadian Bacon

OR

Fish and Seafood 120g (4 oz) - fresh
OR 90g (3 oz) tinned in brine
- Any fish
- Lobster
- Scallops
- Prawns
- Crab
- Clam
- Calamari (uncrumbed)

OR

Vegetarian and Mixes
- 25g protein powder
- 1 ½ vegetarian hot dogs or sausages
- 1 ½ soy burgers
- 220g (7 ½ oz) tofu
- 135g (4 ½ oz) tempeh
- 6 egg whites
- 3 whole eggs
- 2 eggs with 30g (1 oz) low fat cheese
- 2 eggs with 10g (1/3 oz) soy powder
- 2 eggs with 30g (1 oz) of lean Canadian bacon or ham
- ½ cup legumes cooked + 60g (2 oz) low fat cheese

OR

Dairy Foods
- ¾ cup (165g) low fat cottage cheese
- ¾ cup (165g) low fat ricotta cheese
- 90g low fat cheddar/swiss/feta/mozzarella cheese
- 30g (1 oz) protein powder (whey, soy or rice protein)
- 1 cup plain low fat yoghurt + 10g protein powder
- 1 cup low fat milk with 1 egg + 10g soy powder
For snacks.....
- 1 cup low fat plain milk (a complete snack)
- 100 g low fat plain yoghurt (a complete snack).
The amounts shown in the table are an approximation only based on the average female. You may need more if you are a man or if you are pregnant, breast feeding, body building or doing regular exercise. Use the following adjustments to correct your daily protein intake if it applies:

- Pregnancy - increase protein by one third
- Breast feeding - increase protein by a quarter
- Body builders - increase by a quarter
- Light exercise - increase by a quarter
- Moderate exercise (30 minutes, 3 times a week) - increase by one third
- Heavy exercise (1 hour, 5 times a week) - increase by half
- Significantly overweight (30% for males, 40% for females) - increase by a quarter
- Men will also need to increase their portion size by about one third.

If in doubt use the palm size method described above to estimate how much protein you need.

The bottom line is that you need ample protein to strengthen your body, build up your immune system and improve your health. Start today - your body will thank you for it.

**Selecting your carbohydrate for each meal**

Did you know that many people have an intolerance to carbohydrate? Estimates range from 25 - 60% of the population.

Unfortunately, carbohydrates have always been promoted as healthy - high in fibre, low in fat, and filling. Now we know that carbohydrates in excess can be your worst enemy, causing insulin surges, inflammation and low immunity.

Certainly, carbohydrates have a place in our diet - but the key is moderation! Many of us have far too much of the wrong carbohydrates in our diets. For some people their meals are composed largely of carbohydrates. Breakfast is often a good example - cereal, toast, fruit juice, coffee and sugar. This will guarantee that you start your day off in a bad way!

Signs of carbohydrate intolerance include cravings for sweets and carbohydrates, bloating or gas, fatigue, poor concentration and difficulty losing weight.

If you are carbohydrate intolerant you will feel a lot better avoiding sugars, cookies, cakes, chocolate, breads, pasta, rice, corn and potatoes. These simple carbs are quickly absorbed into the blood stream and can cause adverse effects on your immune system. You will need to eat more complex carbs from vegetables and some fruits, and balance it with quality protein and healthy fats.

**The problems with excess carbohydrates**

Simple carbohydrates are renowned for causing fluctuating blood sugar levels. When blood sugar levels get too low (a condition called hypoglycaemia), the adrenal glands
make adrenaline and cortisol to stimulate the body to release any stored sugar. This is a stress on your body that can leave your defenses down and make you more prone to picking up infections.

When your blood sugar fluctuates too high (hyperglycaemia), often from eating excess sugar or refined carbohydrate, your immune system will be suppressed and again prone to picking up infections. High blood sugar also leads to high insulin levels which contribute to the body storing fat, gaining weight and having high triglycerides in the blood. This in turn creates immunological effects.

**How much carbohydrate to eat**
The amount of protein on your plate will help you to determine the size of your carbohydrate portion. Your carbohydrate portion should look about twice the size of your protein portion.

The total amount of pure carbohydrate allowed per meal is approximately 27 g (about 1 oz). This is equivalent to about two cups of vegetables for each of your lunch and dinner, one piece of fruit for breakfast, plus a small amount of grain from breads, cereals, pasta or rice with each meal.

As seen in the eating plan, eat no more than half to one slice of bread, 1 rice cake, 1 rye crispbread or ¼ cup of cooked rice, pasta or cereal per meal.

Some patients prefer to completely eliminate the grains from their diet. If you are overweight or suffering from a chronic disease, this is worth trying. Many of my patients report profound improvements in their health, seemingly overnight when they cut grains and sugars from their diet.

**Carbohydrate choices:**

**Vegetables**

1 - 2 cups vegetables with each lunch and dinner

<table>
<thead>
<tr>
<th>Alfalfa Sprouts</th>
<th>Leeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aubergine</td>
<td>Lettuce</td>
</tr>
<tr>
<td>Asparagus</td>
<td>Mushrooms</td>
</tr>
<tr>
<td>Bamboo Shoots</td>
<td>Okra</td>
</tr>
<tr>
<td>Beans (string)</td>
<td>Parsley</td>
</tr>
<tr>
<td>Bean Sprouts</td>
<td>Peppers (capsicum)</td>
</tr>
<tr>
<td>Bok choy</td>
<td>Pickles (dill)</td>
</tr>
<tr>
<td>Broccoli</td>
<td>Radishes</td>
</tr>
<tr>
<td>Brussels Sprouts</td>
<td>Sauerkraut</td>
</tr>
<tr>
<td>Cabbage</td>
<td>Snow Peas</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>Summer Squash (Yellow squash etc.)</td>
</tr>
<tr>
<td>Celery</td>
<td>Spaghetti Squash</td>
</tr>
<tr>
<td>Chillies (red or green)</td>
<td>Tomatoes</td>
</tr>
</tbody>
</table>
Cucumbers
Eggplant
Greens

Twice a week you may eat the starchier vegetables
Beets
Carrots
Jerusalem
corn
Peas

Fruits - 1 serving a day
Apple
Apple sauce
Apricots
Banana
Blackberries
Cherries
Fruit Salad
Grapefruit
Grapes
Honeydew melon
Kiwi fruit
Lemon
Lime

Grains - 1 serving with each meal (optional)
½ slice whole grain bread
15 gm cereal (dry)
1/3 cup cooked oatmeal
¼ whole grain muffin
¼ cup cooked pasta
¼ cup cooked rice, buckwheat, millet
1 rye cracker
½ mini pita bread, wholemeal
1 rice cake
1 taco shell
1 corn tortilla

Always use whole grain in preference to white versions of these foods. White bread, pasta and white rice are high glycaemic foods that can cause blood sugar fluctuations if eaten in excess. We will discuss the different types of glycaemic foods in the next section.
The glycaemic index of foods

As mentioned previously, some carbohydrates are worse than others for the immune system, and your recovery from mononucleosis.

Carbohydrates that enter the bloodstream rapidly, such as sugar, promote a very rapid secretion of insulin. While this helps to bring down the blood sugar, it also tells the body to store fat and keep it stored. High insulin levels can also trigger inflammation and worsen typical mononucleosis symptoms like a sore throat, aching muscles and a swollen liver.

The rate of entry of carbohydrates into the bloodstream is known as its glycaemic index. The higher the rate of absorption, the higher the glycaemic index. The highest glycaemic index is that of glucose, which is 100. All other carbohydrates are measured against this (or white bread which has a similar glycaemic index).

**TABLE 1- The glycaemic index of carbohydrates**

**Rapid inducers of insulin**
- Glucose
- Honey
- Maltose
- Puffed rice, puffed wheat, puffed millet etc.
- Corn flakes
- Rice cakes
- White bread
- Instant rice
- Instant potato
- Cooked parsnip, potato and carrots

**Moderate inducers of insulin**
- Whole wheat bread
- Rice
- Muesli
- Rye vita
- Pasta
- All-bran cereal
- Shredded wheat
- Banana
- Raisins and other dried fruit
- Melons
- Mango
- Paw paw
- Pineapple
- Beetroot
- Corn
- Sweet potato
Slow **inducers of insulin**
Whole grain rye bread
Barley
Slow cooking oats
Apple
Plum
Pear
Grapefruit
Cherries
Soya beans
Lentils
Kidney beans
Peas
Tomato
Peanuts

**High glycaemic carbohydrates** like sugar, sweets, chocolate, cakes, cookies and white bread should be totally eliminated from your diet when you are recovering from mononucleosis. These foods have no place in a healthy, immune boosting diet.

**Moderate glycaemic carbohydrates** can be eaten in small amounts, but they can also stimulate blood sugar fluctuations. They include the whole grain breads, cereals, rice and pasta. These foods unfortunately form the basis of the dietary principles which many of us were brought up with. If you are trying to boost your immune system then these foods are exactly the foods you should be limiting. These carbohydrates promote increased insulin, and as we now know higher insulin levels promote inflammation.

**Low glycaemic carbohydrates** like those found in vegetables, legumes and fruits should make up the bulk of your carbohydrate intake. These foods are not very carbohydrate dense. You have to eat a lot of them to get the equivalent amount of carbohydrate found in breads, cereals, pasta and starches. They also enter the bloodstream at a slower rate since they must first be converted into glucose in the liver.

Whole fruit is allowed since it contains fibre which slows the absorption of the fruit sugar. By itself, fruit can still cause fluctuations in your blood sugar, so have your fruit with a protein food like yoghurt, cheese or a handful of nuts. Try to eat no more than one piece of fruit in one meal. Fruit in excess will throw your blood sugar out.

Dried fruit is too sweet for your blood sugar and should be avoided temporarily. Fruit juices should be avoided, apart from a small amount of lemon or lime. Sweet vegetable juices like carrot and beetroot should also be avoided or diluted (1 part juice to 4 parts water).

**Changing the glycaemic index of a food**
The glycaemic index of a food will change according to how processed the food item is. The more processed the food becomes, the higher the glycaemic index. This is usually due to the removal of fibre which normally slows the absorption of the carbohydrate.
Take for example brown rice with a glycaemic index of 66, white rice with a glycaemic index of 72, and instant rice and puffed rice with a glycaemic index in the high 90's! Fruit juices too have a very high glycaemic index compared to the whole fruit, due to the removal of fibre during processing.

The presence of protein with carbohydrate in a food will lower its glycaemic index. Legumes like lentils or beans, which contain both protein and carbohydrate are a good example. It is the same when you add a protein to a carbohydrate food - the glycaemic index of the meal will be lowered. For this reason I do not recommend food combining diets where proteins and carbohydrates are always eaten separately. This can play havoc if your blood sugar is upset.

People who constantly produce too much insulin by eating too much carbohydrate can become insulin-resistant, which means that their cells don't respond to insulin and resist its uptake. In these situations the pancreas produces more insulin in the hope that some will get through. This results in chronically elevated insulin that continually stimulates inflammation and makes good health almost impossible.

Excess insulin will also make you feel constantly hungry, unfocused with poor concentration and perform physically at a reduced level. High insulin levels and insulin resistance are associated with diabetes, high blood pressure and cholesterol, fatigue and inflammatory conditions like allergies and arthritis.

Hopefully you are now armed with the right knowledge to make wise decisions on what carbohydrates you eat. In the next section I will share with you everything you need to know about fats - the good, the bad and the ugly.

Selecting your fat for each meal

In the past, fats were blamed for everything from heart disease to cancer to weight gain. It now appears that there are good fats and bad fats. Most westerners unfortunately get about 40% of their calories from fats - usually the unhealthy ones like margarine and the fats used in frying or in baked goods. Let’s have a look at the difference between the good fats and the bad fats, and how you can make the right choice for your health.

The benefits of good fats

The good fats are immune enhancing. They promote lymphocyte and phagocyte function. The good fats are necessary for the body’s production of powerful hormones called eicosanoids. They are also used as a structural part of the cell walls. The good fats are an important part of your eating plan since they slow the entry of carbohydrate into the bloodstream. Fats also stimulate the release of the hormone cholecystokinin, which tells your brain that you are satisfied and to stop eating. Lastly fats make food taste better!

Which fats are good fats?
The good fats to include are the omega 3 and 6 fats. These essential fatty acids are vital for keeping the cell membranes working well and allowing proper glucose and insulin transport. They are frequently lacking in immune suppressed patients.
Omega 3 fats are abundant in the deep sea oily fish like salmon, sardines, tuna and herrings. Fish oil supplements are an option for those who don't like fish. The omega 3 fats are also present in linseed (flaxseed) oil, walnuts and pumpkin seeds.

The omega 6 oils are found in evening primrose oil, borage oil and star flower oil, and in smaller amounts in the vegetable oils. Many patients benefit from taking pesticide free fish oils (omega 3) and evening primrose oil (omega 6) together as a supplement. These are best taken with some vitamin E to prevent oxidation.

The monounsaturated fats found in olive and canola oil, macadamias and avocados are also good fats, although not particularly high in the essential fatty acids. Always choose the cold pressed varieties. Vegetable cooking sprays or olive or canola oil are good choices for sautéing, baking, grilling or roasting your vegetables and meats.

The dangers of bad fats
Bad fats, like saturated fats, are immune suppressing. They increase bad cholesterol leading to hardening of the arteries, heart disease and the restriction of blood flow. When saturated fats are incorporated into cell membranes, the membranes become rigid and inflexible. This hampers the uptake of nutrients into the cells and in turn can cause insulin resistance. Saturated fats are bad for mononucleosis because they decrease the phagocytic activity of the white blood cells.

What are the bad fats?
The fats you should be avoiding are the saturated fats. These are high in organ meats, fatty red meat, chicken skin and bacon rind.

Margarine should also be eliminated - the conversion of a vegetable oil to margarine produces trans fatty acids. These are sources of free radicals and just another toxin your liver has to deal with. The trans fatty acids found in margarine, fried foods and baked goods also interfere with the ability of certain immune cells to destroy microbial invaders, leaving you more prone to picking up viruses and bacteria.

How much good fat to eat
You should aim to add at least 5g or 1 teaspoon of healthy fat to each meal. If you are underweight, pregnant, breastfeeding, have dry skin or are an athlete or labourer you will need more.

Fat choices:

1½ tbsp avocado
1 tsp cold pressed olive, flaxseed, cod liver or a nut or seed oil
9 olives
1½ tsp tahini
11/2 tsp nut butter
3 macadamia nuts
2 tsp sliced almonds/sunflower seeds
1 tsp butter (occasionally as it is a saturated fat)
1 tsp mayonnaise

Opt for raw nuts and seeds and cold pressed oils for optimal results.

Conclusion

Following the Immune Boosting Diet will ensure your body has the best possible nutrients to overcome mononucleosis and in the long term to enjoy an abundance of energy, fitness and health. Diet, like everything else is just a habit. Start changing your diet today to reap the benefits of a stronger immune system that keeps you fighting fit and looking good!

The importance of water

Did you know that.....

- Lack of fluids can parch and dry your throat, causing a sore throat and exacerbating mononucleosis symptoms like fatigue, headache and muscle aches
- Up to 75 percent of Westerners are chronically dehydrated!
- Mild dehydration will slow your metabolism down by 3 percent!
- Lack of water is the number one trigger of daytime fatigue!
- The quality of the water you are drinking, even so-called “purified” water may actually be making you sick!

Have you been keeping your body properly hydrated?

Water is the largest single component of your body. You can live weeks without food but only days without water.

Digestion, circulation and excretion cannot occur without water. Water carries nutrients to all your vital body tissues, it plays a crucial role in maintaining your body temperature, and it serves as building material for growth and repair of your body.

Drinking at least 2 litres of water a day is crucial to your recovery from mononucleosis and to your ongoing good health and well-being.

Are you drinking the best water?

It’s no secret that most municipal water supplies are a disgrace. Our tap water is known to include toxic chemicals like chlorine, fluoride and copper plus bacteria, viruses and even fecal contaminants due to runoff from sewerage plants into the catchment areas.

Filtered or bottled water, though usually better tasting, may contain impurities, or simply be ‘dead’ water due to processing or storage.
Toxic overload is now being recognized by health practitioners as a real problem.

According to John Sharp, a trained Sydney chemist, the following health problems can be caused or worsened by chemically treated or impure water;

- Headaches
- Immune suppression
- Lethargy and tiredness
- Obesity and weight gain
- Constipation and irritable bowel syndrome
- Arthritis
- Asthma and allergies
- Kidney problems.

For optimal health I recommend my patients drink at least 8 glasses (about 2 litres) of pure water a day. This can be consumed straight or mixed into herb teas or with some lemon juice if desired. It should not include fluids consumed in coffees, teas or alcohol. These are diuretics which can leach the water from your cells.

To obtain pure water you can buy it bottled from a supplier or filter your own with a filter jug or under the sink purifier. A visit to a water shop or any large department store will usually provide you with an array of options for obtaining pure water.

**Foods and substances to avoid if you have mono**

Some foods and drinks are harmful to your body and can deplete your body of essential nutrients, predisposing you to infections like mononucleosis. Many of these foods, like caffeine, sugar, alcohol and tobacco are addictive, making you feel temporarily good, but then leaving you tired and craving for more of them a couple of hours later. Addictive foods can zap your energy and make your immune system work harder at keeping you well.

It can be a challenge to overcome addictions but well worth it in terms of better health and well being. Withdrawal symptoms from excess addictive substances can include headaches, irritability, shakiness and fatigue. After a couple of days these subside and you are left with a healthier body, without the cravings.

**Sugar - sweet and dangerous**

A huge amount of sugar is consumed by adults and children in western countries. The average westerner consumes about 65 kg (140 pounds) of added sugar a year! This accounts for 18% of the average American’s calorie intake.

Studies show that sugar can suppress your immune system and make it harder to bounce back from mononucleosis.
Some of the ways sugar can affect your immunity is that it:

- Encourages the growth of several bacteria and fungi
- Acts as a growth medium for many microorganisms
- Impairs the ability of white blood cells to kill infectious organisms
- Depletes the body of certain nutrients like zinc which are crucial to immune function
- Upsets blood sugar levels causing energy highs and lows.

Blood sugar fluctuations can cause hyperactivity, anxiety, difficulty in concentration and irritability, especially in children. These blood sugar fluctuations put stress on the adrenals, pancreas and immune system. High blood sugar can also adversely affect the conversion of fatty acids so the fatty acid profile is poor.

- Sugar boosts insulin which is associated with the production of the immune-suppressing hormone prostaglandin E2. Prostaglandin E2 suppresses killer cell activity and is associated with immune suppression as well as high blood pressure, allergies, inflammation, heart attack, cancers and stroke.

Apart from immune suppression, sugar also:

- Increases tooth decay and gum disease
- Can become an addiction like alcohol and cigarettes
- Is full of empty calories taking the place of nutritious foods and contributing to the obesity epidemic
- Increases free radical activity in the body and accelerates aging
- Increases total cholesterol, triglycerides and bad cholesterol
- Feeds cancer cells and has been connected with development of cancer of the breast, ovaries, prostate, rectum, pancreas, lung, gallbladder and stomach
- Can cause gastrointestinal problems like candida overgrowth, indigestion, an increased risk of Crohn’s disease and ulcerative colitis
- Can cause autoimmune disease like arthritis and multiple sclerosis
- Can upset mineral relationships in the body, for example it can cause copper and chromium deficiency and interfere with calcium and magnesium absorption.

Sugar and its link to disease was first noted by the American Indians more than 150 years ago. They observed that sugar made white man ‘weak’ and they warned that sugar was harmful.

In the 1940s American physician Dr. Sandler observed that a high sugar intake made patients more susceptible to polio.
Studies by researcher Dale Alexander in the 1970s picked up a correlation between colds and the intake of sugar. Alexander’s theory was that chocolate and other sticky sweets, irritate the mucous lining of the throat, making it vulnerable to infection. Alexander had noticed this link in his own family. He and his wife would occasionally go to the theater where his wife would invariably buy herself a chocolate bar. Within a few days she would end up with a sore throat, cold or in several cases a more serious streptococcal throat infection.

He observed the same picture when his young son was given lollies, chocolates or cakes. Alexander studied the peak times of colds throughout the year and found that colds were more prevalent over holidays or times of celebration when lots of sugar is consumed. For example over Christmas in all western countries there is a consistent peak in colds. The same peak occurs at Valentines Day, Easter, Thanksgiving, Halloween and Independence Day when lots of sugars are consumed.

Since then hundreds of papers confirm that sugar is indeed a “deadly poison” that does suppress the immune system and general health of the body.

In one study the effect of sugar on white blood cell activity was measured. The study participants were divided into 5 groups. The first group was the control which had no sugar. The second group was given a sweetened drink containing 6 teaspoons of sugar. The other groups consumed drinks with 12, 18 and 24 teaspoons of sugar.

Blood samples were then taken from each group member. Staphylococcus bacteria was introduced into the blood samples. Scientists then studied the activity of the white blood cells under a microscope. The results were fascinating:

- Each white blood cell of the control group (without sugar), had engulfed an average of 14 bacteria.
- In the group that consumed 6 teaspoons of sugar, only 10 bacteria were engulfed per white blood cell.
- In the 12 teaspoon group, only 5 bacteria were engulfed.
- In the 18 teaspoon group, only 2 bacteria were engulfed.
- In the 24 teaspoon group only 1 bacteria per white blood cell was engulfed!

The time frame when the white blood cells were least active was between 1 - 2 hours after ingestion of the sugar. Depressed immunity was evident for up to 5 hours afterwards.

I think that most mothers realize the link between sugar and ill health in their children. I know that if my kids have too much sugar at a party, they will often come down with a snuffle a few days later.

The danger of sugar really hit me after I had seen a TV documentary about a seemingly healthy teenage boy who inexplicably had come down with a life threatening case of meningitis. They had documented his day before he had been taken ill. He was filmed joking with friends at a dinner about how much sugar he could get into his coffee. He ended up consuming about 15 teaspoons of sugar per cup of coffee! I don’t know how
much of this sugared coffee he ended up drinking but I am convinced it suppressed his immunity to the point where the meningitis infection could get a hold.

That night he was admitted to hospital with a sore throat, high fever, skin rash, nausea, neck stiffness and extreme headache. Sadly, a few days later he required amputation of his arms and legs because of the seriousness of the infection. This is an extreme case, but not that different to kids who guzzle down cans of soft drinks laden with sugar.

**Caffeine**

Caffeine is found in coffee, tea, cola drinks and chocolate. It is often added to prescription and nonprescription medication. Caffeine is used to improve energy, relieve fatigue and make the brain work faster and more clearly.

Coffee contains three stimulants: caffeine, theobromine and theophylline. The downside of coffee is that it has many side effects, especially when taken in excess. Some of the effects of coffee are:

- Diuretic effect – it flushes your body of water, vital nutrients and trace elements.
- A stimulant effect, often quickly followed by a depressing effect which encourages you to have another cup.
- Decreases iron absorption.
- Increases low density lipoproteins (bad cholesterol).
- Stimulates adrenal glands which can lead to adrenal exhaustion.
- Increases secretions of hydrochloric acid which increase your chances of gastric ulcers.
- Excites brain function.
- Increases blood pressure.
- Stimulates the kidneys
- Excess coffee can cause toxicity with symptoms like anxiety, tremor, palpitations, rapid breathing, insomnia, headaches, nausea, vomiting, restless legs, irritated stomach lining.

**Decaffeinated coffee**

Although it doesn't contain caffeine, decaffeinated coffee still contains theobromine and theophylline. These are chemicals that can over-stimulate you and disturb sleep patterns. Most products that have been decaffeinated retain unwanted chemicals. The best alternatives to coffee are grain-based, caffeine-free drinks or herbal or green teas.

**Alcohol**

Alcohol depletes many B vitamins and minerals in the body. It interferes with vitamin and carbohydrate utilization, increases our appetite and weakens our desire to eat healthy food. More importantly excess alcohol dampens immune response.

Alcohol can affect immunity by damaging the liver, inhibiting its ability to break down fats and toxins. Alcohol has also been associated with an increased risk of cancers, particularly breast cancer, depression, sleep disturbances, premature aging and hormonal problems like premenstrual tension and hot flushes.
Many mononucleosis patients suffer from an inflamed liver and do not tolerate alcohol. If you have mononucleosis I would recommend you don’t drink alcohol at all. Otherwise, no more than one serve a night is suggested.

**Milk**
A lot of people are lactose intolerant meaning they lack enough of the enzyme required to digest milk. The milk protein if undigested can affect the immune response by triggering allergies.

The folk wisdom that milk produces mucous in the body appears to be unproven scientifically. However many of my patients with recurrent sore throats, asthma, eczema or recurrent infections seem to do better without it. I would suggest that if you have mononucleosis symptoms, that you get totally off cows milk, cream and ice cream, to see if your symptoms improve. Yoghourt and hard cheeses may be tolerated better as the natural bacteria in them help to break the lactose down.

An alternative to milk is soy milk. Soy milk is high in phytoestrogens which appears to be protective against prostate cancer in men, and against oestrogen-related disorders like PMT, breast cancer, endometriosis, fibroids and fibrocystic breast disease in women.

The other possible milk alternative is goats milk, preferably raw. Goats milk does still contain some lactose, however because the fat globules in it are smaller than cows milk, it seems to be better digested and tolerated than cows milk.

**Food triggers and intolerances**
Everyone is unique in how they react to specific foods. We cover food allergies in a later chapter but it is also important to be aware of any foods that you seem to react to or have an intolerance to.

Some people for example find that the arginine-rich foods like grains, soy, chocolate and nuts can trigger their Epstein Barr symptoms. Others find that citrus foods and highly acid foods like pineapple and tomatoes, can cause hives and skin reactions. Some people find that certain foods like lemons and parsley can aggravate sunlight sensitivity and should be avoided.

Again everyone is unique, so if you think a certain food is triggering your Epstein Barr symptoms, then keep a food diary and if it repeatedly aggravates your symptoms then it is worth avoiding that food for the time being.

**Artificial additives**
The long term effects of artificial colorings, flavorings and preservatives on the body and immunity is unclear. We do know that these additives put extra strain on the liver - they are unnatural foods in the human diet. They are best avoided where possible.
**Smoking**

Smoking is probably the worst thing you can do to lower your immunity and damage your throat. Smoking is related to chronic bronchitis, emphysema, gum disease, heart disease and cancer of the throat, mouth, lung and bowel.

Several studies link it to increased susceptibility to colds. Children exposed to second hand smoke have more respiratory and ear infections than normal. Smoking has been estimated to take 10 - 15 years off your life. Each cigarette shortens your life span by five minutes.

The reason why smoking is so bad is that it introduces as many as 6000 chemicals into your body - many of them poisonous. Some of these chemicals include cadmium, carbon monoxide and benzene, all known health hazards. It is well known that smoking makes the liver and the detoxification pathways work harder.

Smoking generates massive amounts of free radicals. It depletes your body’s store of antioxidants. It also reduces the ability of your blood to deliver oxygen to your heart and brain.

The good news is that within a few hours of stopping smoking, the body can start to repair and heal itself.

Within one hour, blood pressure and pulse rate drop to normal. Blood flow to the extremities starts to improve. Within 8 hours carbon monoxide levels drop and oxygen levels return to normal. Within a couple of days the bronchial tubes relax and lung capacity increases. Cilia in the lungs grow back and the risk of picking up infections decreases.

Some of my patients report they get a mucousy cough that can last from days to weeks when they stop smoking. This can be a good sign that the body is throwing off the chemicals, toxins and debris caused by the cigarette smoke. It should not be suppressed.

**Heavy metals**

Heavy metals like lead, mercury, cadmium, arsenic, nickel and aluminum can inhibit immune function. They prevent enzymes and antioxidants from doing their work and interfere with the body’s attempts to keep viruses in check.

**Lead** poisoning can occur after inhalation of lead fumes or dust from leaded paints, lead pipes or lead petrol. Modern paints have lower levels of lead, but older homes may still contain contaminated walls and window frames, which can peel or flake, exposing the body to dangerous levels.

**Mercury** can be given off as mercury vapor from amalgam fillings, old paint work, water pipes and thermometers. It can also be found in our fish and shellfish. Mercury may cause immune suppression by decreasing T- cell counts.
**Cadmium** is found in many PVC (vinyl or polyvinyl chloride) materials including vinyl flooring and window frames. Synthetic pigments, particularly red, orange and yellow, may contain cadmium.

**Arsenic** formally was used in medicines, rat poisons and fly papers. It is now used as a wood preservative and can result in poisoning when wet treated wood is handled.

**Nickel** is found in nickel-based jewelry, cutlery, scissors, coins, zips, buckles, spectacle frames and canned foods.

**Aluminum** can be found in aluminum based deodorants, antacids, food packaging and cookware.
CHAPTER 4

OTHER SUPPORTIVE THERAPIES FOR MONONUCLEOSIS

Homeopathy
Homeopathy is a form of natural medicine that has been used safely for centuries.

Homeopathy is based on the principle that “like cures like”. It revolves around the observation that substances that cause symptoms in healthy people, can actually help sick people, if given in dilute amounts. Homeopathic remedies can be made from plants, minerals or animals. The active substances are diluted in a solution of water or alcohol, then diluted again and again - sometimes hundreds of times. Because of this dilution, homeopathic remedies are not toxic. They are safe for babies and young children.

There are a variety of homeopathic remedies available to treat mononucleosis. They can be taken individually or as a combination of remedies bought in the one pill or liquid from a homeopath, health food store or chemist. Seeing a professional homeopath is a good idea if you have chronically recurring mononucleosis. They can make a remedy to suit your constitution and help clear any deep-seated immune problems.

In the acute stages of mononucleosis, Belladonna is often prescribed to treat fever and a dry, red throat. It is often used for the first 12 - 24 hours. Ferum phosphorica and Kali muriaticum are then alternated every hour to alleviate fever, painful cough, swollen tonsils and night sweats.

Depending on your symptoms, other homeopathics like Phytolacca, for weakness and restlessness with swollen lymph glands, or Gelsemium for dullness, dizziness, drowsiness, often with a headache, may be useful.

The frequency of the homeopathic dosage depends on the severity of your symptoms. For mild symptoms take your homeopathic pill or remedy 3 times a day. For severe symptoms take one dose every 2 - 3 hours as needed. Children can use homeopathic pills or liquid quite easily. Alternatively there are homeopathic lollipops (sugar-free) for sore throats associated with colds or coughs.

When you take your homeopathic remedies, it is important to avoid strong flavors, like eucalyptus or menthol lozenges, mouth gargles or chewing gum. These can reduce the effectiveness of the homeopathics. For best results take your remedies 15 - 30 minutes away from foods, drink and cleaning your teeth.
Essential oils for mononucleosis

Essential oils are aromatic oils extracted from flowers, grasses, fruits, leaves, roots and trees. Many of them are antiviral and have immune boosting properties that help you fight the Epstein Barr virus. They also have a delightful, uplifting fragrance that helps enhance your mood - something you often need when you are battling mononucleosis!

Many essential oils are anti viral, so are great for preventing and healing mononucleosis. Some oils have pain relieving properties, some are immune-stimulating and others stimulate the lymphatic system.

You can use essential oils in a variety of ways. The most popular ways are in;

- **Inhalations** - add 6 drops of oil to a bowl of hot water. Cover your head with a towel and breathe deeply through your nose and mouth for 5 - 10 minutes.

- **Massage** - you can massage your neck, chest and behind your ears with a combination of chamomile 5 drops, Thyme 1 drop and Lemon 2 drops, diluted in 1 teaspoon cold pressed vegetable oil.

- **Baths** - add about 8 drops of your favorite oil into your bath. Soak in the bath for at least 10 minutes, relaxing and breathing deeply.

- **Diffusers or oil burners** - add 6 drops of your chosen oil to water in your oil burner or diffuser, so the oil molecules can be vaporized into the air.

- **Humidifier** - add 8 drops of your essential oil to a humidifier. Run the humidifier overnight when you are asleep to help keep your throat and mucous membranes moist. This can prevent night time coughing, and give you a good night’s sleep.

- **Pillow, hanky or tissue** - add up to 6 drops on a hanky or tissue that you can sniff when required, or on your pillow at night time.

**Buying and using essential oils**

When buying oils make sure you get “essential oils”. These are the pure oils made from the plants. “Fragrant oils” are cheaper, artificial substitutes made to mimic the real essential oils. They have no therapeutic value.

**The best essential oils for mononucleosis**

This information is extracted from the “bible” of essential oils - *The Fragrant Pharmacy* by Ann Worwood.

- **Lavender**
  Lavender oil is a natural antibiotic, antiseptic, antidepressant, sedative and detoxifier. It stimulates the immune system and contributes to the healing process. It also has a delightful fragrance and can be used as an uplifting mood tonic at any time.

- **Thyme**
Thyme has antiseptic, anti viral, antibiotic and diuretic actions which make it useful for the treatment of mononucleosis. It is a good oil to burn in a diffuser when infections are around. It also helps the elimination of toxic wastes from the body and is a stimulant of the lymphatic system.

• **Chamomile**
  Chamomile oil is antibacterial, antiseptic and disinfectant. It is also renowned for its anti-inflammatory properties. Chamomile is particularly good for calming the nerves so is the oil of choice for insomnia, irritability and depression.

When buying chamomile oil choose either German or Roman chamomile. Do not use chamomile Maroc (Ormenis multicaulis) which is not a true chamomile, and should not be used as such.

• **Lemon**
  Lemon oil is antiseptic and antibacterial and has a tonifying action on the lymphatic and digestive systems. It also has a pleasant uplifting fragrance, good for stress and tension headaches.

• **Eucalyptus**
  The Eucalyptus is an Australian native evergreen tree that is now found in warmer climates worldwide. Its leaves contain a powerful, natural antiseptic oil that also acts as an antibiotic and expectorant that clears mucous from the nose, lungs, throat and lymphatic system.

  Eucalyptus oil is the major ingredient found in cold and flu lineaments like *Vicks VapoRub* and *Tiger Balm*. It is used to rub on the chest to unclog breathing passages and give some relief to sore throats.

  The oil can also be used as an ingredient in inhalers or in a steam bath or humidifier. Lozenges made from eucalyptus oil can also be sucked for sore throat relief - just make sure they are sugar-free.

  The smell of the Eucalyptus tree is a powerful reminder to me that I am back home after overseas travels. It is a wonderful smell that most Australians love. In many parts of Australia where large tracts of eucalyptus forests remain, you can see the blue haze of the eucalyptus oil in the air. Places like the Blue Mountains west of Sydney, get their name from this blue haze.

• **Tea tree**
  The antiseptic action of tea tree oil has been used by Australian Aborigines for centuries, and is now the oil of choice for treatment of candida, athlete’s foot and thrush as well as many viruses and bacteria. It is also available in lozenges for sore throats and colds.

  There is some evidence emerging that tea tree oil may be useful against antibiotic-resistant bacteria. If you have picked up a secondary infection like strep throat it is definitely worth trying.

• **Clove**
Clove oil is a good oil for prevention of disease and infection as it is antibacterial and antiseptic. It is also a good analgesic and renowned as a quick cure for toothache. For sore throats associated with mononucleosis it is particularly useful.

**Specific recommendations for mononucleosis symptoms:**

Treatment with essential oils fights your immune battle on all fronts. Unlike chemical drugs there are no dangerous side effects, even if you combine different oils. You don’t have to worry that your oils for fatigue will clash with the oils you are using for a sore throat or a fever.

Just take each day’s symptoms as they come and treat with oils individually or in a group.

**For sore throats**

Use a steam inhalation with chamomile (2 drops), lavender (3 drops) and thyme (1 drop) to a bowl of hot water.

Cover your head with a towel and breathe deeply through your nose and mouth for 5-10 minutes.

You can also make up a massage oil of chamomile (5 drops), thyme (1 drop) and lemon (2 drops) in 1 teaspoon of vegetable oil, and massage over the neck and behind the ears.

**For tired, aching muscles**

Mix thyme (5 drops), rosemary (5 drops), cypress (5 drops) and Eucalyptus peppermint (5 drops). Dilute in 30 ml of vegetable oil and apply at least twice a day to sore or aching muscles. Other good essential oils for muscle fatigue are marjoram and grapefruit.

**For insomnia**

The best essential oils for insomnia are valerian, lemon, clary-sage, marjoram, chamomile Roman, lemon, lavender and sandalwood. Mix 5 drops of your chosen essential oil / oils to a teaspoon of vegetable oil. Massage over the whole of your body, particularly the neck and shoulders.

It is nice to then hop into a warm bath and relax before going to bed. It is even more therapeutic if you can add another 4 or 5 drops of the oil to the bath before you hop in.

**For fever**

To help lower a high fever, the best essential oils are eucalyptus, lavender, tea tree and chamomile Roman. Add 2 drops of one of these essential oils to a litre of warm water. Sponge the body or use as a compress on the forehead, groin, armpits and lower back. As soon as the compresses get too warm, soak in the water and reapply.

**For swollen glands**
Make up a blend of eucalyptus oil (5 drops), lavender oil (5 drops) and tea tree oil (5 drops) in 15 ml of vegetable oil. Rub gently to swollen glands in neck, groin and armpits.

**Buying your essential oils**

You can purchase essential oils from your local health food shop, pharmacy or supermarket. Make sure you buy ‘essential oils’, not ‘fragrance oils’. Fragrance oils are cheaper, artificial substitutes that have no therapeutic value.

You can also buy quality essential oils online from sites like Mountain Rose Herbs. Click here to go to their essential oil pages.

If you would like to read more about essential oils I would recommend Ann Worwood’s book “The Fragrant Pharmacy” from where a lot of this information has been researched.

**Massage**

**Deep tissue massage**

For mononucleosis and its associated fatigue, sore throats and swollen lymph glands, a deep tissue massage like Swedish massage can do wonders. This type of massage helps move the lymph and remove toxins from the body. It is also great for removing muscle tension in all those tight spots!

Some patients find their lymph glands in the groin, neck or under the arms become a bit sore after the massage as this is where toxins, bacteria, viruses and cell debris are filtered from the lymph. Another side effect can be feeling a bit spaced out or heady as the body is detoxifying after the massage.

**Lymphatic massage**

One of the real problem areas for mononucleosis sufferers is swollen, congested lymph glands in the throat, armpits or groin. The pain of swollen lymph glands can wake you at night and make movement difficult during the day.

Fortunately there is an answer - lymphatic drainage.

Lymphatic drainage is a gentle massage which moves the lymph towards the lymph nodes using pressure on the skin. It works specifically on the lymphatic system to drain lymph, ease congestion and remove toxins.

Many patients report that it helps to relieve throat pain, swollen glands, sinus, respiratory problems and aching legs that are commonly present with mononucleosis. It is also useful for patients with edema and cancer patients who may have had their lymph nodes removed.
Do-it-yourself lymphatic massage

You can get a lymphatic massage from a trained therapist or it can be done simply at home to encourage healing.

The lymph nodes of the face and neck run just in front of and behind the ear, then under the jaw and down the sides of the neck.

These instructions are "do-it-yourself" - or the massage may be performed by a friend.

To perform a lymphatic massage, sit or lie down with your head slightly elevated. With warm hands and a little bit of massage oil or unscented hand lotion, gently rub the oil or lotion over the front and sides of your neck.

**Step 1:**
Start about one inch up from the collarbone. Using moderate pressure stroke your fingers downward five or six times on the front and side of the neck toward the collarbone. This will open up the lower lymph vessels, making it easier to move the above fluid downward.

**Step 2:**
Repeat the procedure starting two inches higher than the collarbone and do 5 or 6 strokes on the side and front of the neck.

**Step 3:**
Repeat this massaging until your hands are up at the tonsils and you are doing long downward strokes to the collarbone.

**Step 4:**
You can then gently massage the area in front of and behind the ears using downward strokes.

**Step 5:**
If the sinuses are congested gentle downward strokes on either side of the nose can also help.

Some patients find their lymph glands in the groin, neck or under the arms become a bit tender immediately after the massage. This is because toxins, bacteria, viruses and cell debris are filtered from the lymph and into the glands. Another side effect can be feeling a bit spaced out or heady as the body is detoxifying after the massage. If you feel this way after a massage, go for a gentle walk, drink lots of fluids and let your body rest and recuperate.
**Skin brushing**

Skin brushing with a dry skin brush is a good way to get your lymph moving and relieve congestion. It is also great for your circulation and skin tone. You can get a natural bristle brush with a long handle from most chemists. (Avoid the synthetic bristles as they can irritate the skin in some people). Use the skin brush on dry skin before your bath or shower.

Always brush towards the lymph nodes in long sweeping, gentle strokes.

- The best way is to start at your feet, brushing up the legs towards the groin where the lymph nodes are.
- Then brush over the buttocks and up the lower back and sides.
- From here brush the abdomen in a circular motion in a counter clockwise direction i.e. from your right side to your left.
- Then start on the back of your hands, up your arms to your shoulder.
- Also do your palms and the underside of your arms.
- Brush up your back and your sides into the armpit where more lymph nodes are found.
- Brush down the neck, throat and chest avoiding the sensitive nipple area.
- Avoid the delicate skin on your face.

Don’t be alarmed if you see little clouds of white dust coming off your skin - these are just dead skin cells. Also be aware that when you first start skin brushing, it may feel “scratchy” or uncomfortable. As your skin gets used to it, it is very invigorating and refreshing. Finishing up with a short shower or bath after you have skin brushed is a good idea to rinse off any dead skin cells.

**Acupuncture**

Acupuncture is a form of Traditional Chinese Medicine that has been used safely for thousands of years. It has shown to be effective for bolstering immune function and treating infections like mononucleosis.

Acupuncture involves placing needles at strategic points in the body to stimulate immunity and improve health.

For example, a needle placed in a point below the knee known as Stomach 36 or Tsu San Li, will increase white blood cell count by up to 70% three hours later. Even a day later, white blood cell levels remain about 30% higher than before the acupuncture.

Studies show that acupuncture can increase the production of T-cells and the function and efficiency of white blood cells. It has also been shown to alleviate symptoms relating to immune suppression. One study of 200 immune compromised patients in New York, showed that acupuncture reduced levels of secondary opportunistic infections.

Acupuncture is a safe option for those suffering from mononucleosis or those just wanting to bolster their health.
Oxygen therapy

Oxygen therapy can help destroy anaerobic organisms like bacteria, viruses, fungi and parasites that thrive in low oxygen environments. It is particularly good for the so called “stealth” pathogens like mycoplasma - the hard to detect bacteria which can live inside our cells and do not always show up in a culture.

A burst of oxidants from oxygen therapy causes fatty acid peroxidation in the pathogen’s cell walls, membranes or lipid envelopes. This kills off the pathogens. Fortunately our own cells are well equipped to deal with oxidation. Oxidative therapy actually stimulates the body’s antioxidant defense.

Oxidative therapies has also been found to:

• Increase the engulfing of viruses and bacteria by white blood cells
• Stimulate the production of white blood cells
• Help keep cell membranes flexible, to enhance absorption of nutrients into cells
• Prevent red blood cells piling up together and to improve circulation
• Increase interferon which helps combat viruses
• Increase interleukin-2, which stimulates the immune system
• Increase tumor necrosis factor which has anticancer effects

Oxidative therapy is available from some qualified practitioners through hyperbaric oxygen chambers, intravenous hydrogen peroxide, intravenous ozone or ultraviolet radiation of the blood.

I have been in a hyperbaric chamber a few times - it is a bit like lying in a small, plastic tent. As the pressure changes, it is like going up in a plane where your ears feel pressure and may “pop”. It is actually a very relaxing way to enjoy oxygen therapy. Some patients have problems with their ears and need to learn how to equalize to avoid ear pain (keeping your mouth closed, holding your nose and blowing out the cheeks can help open the Eustachian tubes and equalize). After the treatment most patients feel relaxed, some even euphoric from the experience. I have heard about some chronic fatigue patients who have totally eliminated their chronic fatigue by doing a series of hyperbaric oxygen treatments.

If you can’t get access to oxidative therapies, you can also increase oxygen levels in your blood naturally by deep breathing (yoga is particularly good) and aerobic exercise which helps improve oxygen exchange. These need to done regularly to get maximum benefits.
CHAPTER 5

LIFESTYLE FACTORS FOR OPTIMAL IMMUNITY

People with a healthy lifestyle have measurably better immune functions. A healthy diet, regular exercise, natural sunlight, a manageable stress load and good family and friends, go a long way to getting rid of mononucleosis and then keeping your immune system in tip top condition.

A matter of balance

Studies show that natural killer cell activity - your main line of defense against bacteria and viruses, is decreased in smokers, alcoholics, and people suffering from high stress levels or excessive exercise.

However these things are not all bad if in moderation. Stress in moderation can motivate us and drive us towards our goals. However it is too much stress that will over tire us, exhaust our adrenals and lead to immune dysfunction.

Again alcohol is bad for your immunity if over consumed, while on the other hand small amounts can relax you and help you cope with stress.

Moderate regular exercise boosts immunity. However too much exercise can cause immune suppression. For example, excess exercise can lead to a decrease in natural killer cells. It is well known that athletes and people who train excessively every day are prone to recurrent infections.

Similarly, moderate sun exposure enhances immunity, but too much can cause sunburn which depresses immune function.

Let’s look at some of these important areas in more detail.

Stress

Stress, whether physical, emotional or mental is a powerful immune suppressant. During the 1920s Professor Hans Selye of the University of Prague, proposed that stress could cause imbalances within the body’s hormonal system, leading to immune suppression.

This theory that stress causes immune suppression has since been confirmed by extensive medical research. For example, it has been found that a high majority of cancer patients have experienced a period of chronic stress before the onset of their cancer. We now know that stress causes a slowing down of the immune system, thereby allowing cancer to take hold and develop.
Experiments undertaken at Oxford University in the 1970s showed that people who were constantly facing deadlines (like managers), were much more susceptible to the common cold. This was proven by a study at Carnegie Mellon University which showed that 47% of people experiencing high levels of stress, became ill after being exposed to a common cold virus, whereas only 27% of those under low levels of stress became sick.

When you feel stressed, your brain releases stress hormones, which travel to the adrenals and stimulate the production of cortisol. Cortisol can suppress white blood cells and cause the thymus gland (the master gland of the immune system) to shrink and atrophy. Cortisol is a hormone known to severely depress all aspects of the immune system. Patients who are treated with cortisol for certain medical conditions like lupus, are known to be prone to infections - often quite serious.

Adrenaline is another hormone produced by the adrenals when you are stressed. The role of adrenaline is to prepare you for a 'fight or flight' response from the stress. The effect is to increase your heart beat and blood pressure, slow digestion and release glucose from your liver to supply instant energy. This is fine for short term, occasional stress. It is when it becomes ongoing, that it becomes a problem.

Realize that stress is an everyday part of life. It would be impossible to live a stress free existence - and you wouldn't want to!

Stress adds motivation, excitement and interest to your life. For example just playing a game of tennis, watching a thriller or performing well in a demanding job, induces an adrenaline boost which makes the activity enjoyable or interesting. Experiencing a reasonable degree of stress is not a problem. It is only when stress becomes intense, long term or out of our control that it becomes a problem.

**Do you have recurrent stress in your life?**

Recurrent stress often comes from overwork, inadequate sleep, family problems, money concerns or just the stress of living in a big city - pollution, traffic jams, noise and crowds.

Most people are aware when they are suffering from negative stress. But if you are unsure, ask yourself if you experience any of the following on a regular basis:

- anger, withdrawal, crying spells, feelings of anxiety. These are emotional outlets for stress.
- not completing work, banging doors, aggressiveness, overeating. These are behavioral responses to stress.
- indigestion, insomnia, headaches, tense muscles or recurrent infections. These are physiological symptoms of stress.

If any of these sounds familiar to you, then you probably are suffering from stress and now is the time to take action!

Read on for the 7 easy ways to break the stress habit...
7 easy ways to beat the stress habit

So what can be done to deal with stress? Here is a strategy for stress busting. It is simple, feels good and will improve your health and quality of your life.

**Step 1 - Sensible supplements for stress**

Vitamins, minerals and herbs can bring excellent results when dealing with your stress. With excessive stress, your body may require larger amounts of nutrients, as many are excreted faster than usual.

The most important nutrients for stress control are magnesium (at least 400 mg per day), vitamin C (1000 - 5000 mg per day) and the B vitamins, especially B5 and B6 which are for adrenal support (at least 50 mg of each per day).

Certain herbs called “nervines” can help to reduce anxiety, tension and stress. Valerian is the best known nerve calmer and non-addictive sedative. Skullcap, hops and passionflower are also helpful. St. John’s Wort (Hypericum) is particularly good for mild depression. Ginseng is a herb famous for protecting the body against stress and fatigue. It is also renowned for improving mental alertness and athletic performance.

**Step 2 - A deep sleep to recharge your adrenals**

6 - 8 hours of deep sleep is essential for most people to reduce stress, maintain good immunity and minimize infections. Even more is needed if you have mononucleosis. I tell my patients to get 8 - 10 hours sleep if they are recovering from mononucleosis.

Inadequate sleep or sleep interruption is known to decrease the number and effectiveness of natural killer cells. This makes you more susceptible to picking up microbes that can infect you.

In 1900, the average American slept nine hours and fifteen minutes. In 2004 the average American slept six and a half hours. Some a lot less. It is estimated that 60% of westerners today are suffering from sleep deprivation.

People go to bed too late, often they don’t sleep well, and they wake up tired and unrefreshed. Their performance starts to suffer and they reach for coffee and sugar to get them through the day. Often people become irritable, grumpy and depressed. They may lose interest in their work. They often complain of getting sick at the drop of a hat.

If you are burning the candle at both ends, then please resolve to go to bed at a reasonable time - preferably around 10 p.m. Start by turning off the TV and computer a good hour before going to bed. Wind down by having a relaxing bath, listening to music, catching up with your family or reading a good book.
Aromatherapy is a great stress buster that can help you get a good night’s sleep. Lavender, chamomile, neroli, rose and sandalwood oils are all good choices. These oils can be used in an oil burner, bath or used in a massage.

Epsom salt baths are a wonderful way to relieve muscle tension, anxiety and insomnia. Epsom salts are naturally high in magnesium which you can absorb through your skin. Add at least 2 cups of Epsom salts to a hot bath and enjoy a long relaxing soak. You'll find that you might feel a bit sweaty so you can keep your head cool with a washer if you wish. These baths are great before bedtime and will almost always guarantee a good night's sleep!

If you consume caffeine or alcohol and suffer from insomnia, then eliminate them from your diet. They boost the adrenal gland's production of adrenaline and can lead to adrenal exhaustion. They also increase the production of lactic acid. Accumulation of lactic acid is associated with anxiety, panic attacks, breathlessness, and agoraphobia.

**Step 3 - Personal growth and self healing**

To reduce stress you must firstly identify the source of your stress. Is it a job you hate, an unhappy relationship, poor health or financial struggles?

Your next step is to find a solution to the cause of your stress. Brainstorm a few solutions. Ask others for their opinion or advice. Then create a plan to deal with the cause of your stress. This might include learning some positive communication skills, finding a job you love, doing a course in time management or a skills course at technical college.

If you think your mononucleosis is a result of the emotional stress of not doing what you really want to in life, or not saying what you think, then the help of a qualified hypnotherapist, counselor or psychotherapist is a good idea. We can become very set in our ways, so change can be difficult. Having someone to talk these issues through can be a good starting point.

Louise Hay’s books are a fantastic resource for those wanting to explore personal growth and self healing.

**Step 4 - Change your response to stress**

If you can't change the cause of your stress, then change the way you respond to that stress. It is your perceptions, thoughts and beliefs that determine how well you respond to stress. The more rigid and close-minded you are in your thinking patterns, the more likely you are to experience stress.

If you are stressing over an obstacle or setback in your life, rather than making yourself sick over it, see it as a challenge which will make you a stronger person. Even if you are a complete perfectionist, once you realize that you are only human and allowed to make mistakes, then the stress will start to disappear.
**Step 5 - Balance work with play**

Make play, fun and your own interests a priority in your life. You might like to plan a massage or facial, or go bike riding or walking or get away for a weekend. Find things that you enjoy and make them a regular part of your life. Research has shown that people who have absorbing hobbies or interests are happier and healthier.

If you haven't got a particular hobby, you could consider the relaxing pursuits of gardening, golf, painting, singing, dancing, yoga, tai chi or bush walking.

All types of physical exercise are good for stress relief. Exercise stimulates the release of feel good chemicals called endorphins from the brain. These create a sense of well being and relaxation. Don't you always feel good after a brisk walk or invigorating swim?

**Step 6 - Give your relationships high importance**

Strong, supportive relationships can help you deal with stress. Spend quality time with your family and people you like. Good relationships take effort. Don't take them for granted - nurture and enjoy them!

Positive and satisfying social relationships can improve immunity. One study exposed 276 volunteers to a common cold virus. The volunteers that were the most socially involved in activities like sport, church or community activities were 4 times less likely to succumb to the virus.

Researchers have found that people who help others get a surge of endorphins that boosts their immune power. These people report fewer infections, allergies and auto immune disease.

**Step 7 - Have faith**

A growing body of evidence shows that having faith in God or a higher being, can switch on your immune system. Research has shown that faith increased levels of the antibody IgA. Even watching films about Mother Teresa has been shown to boost IgA levels in viewers! Prayer has also been shown to improve immunity. This may partly be because for some people praying is meditative and relaxing.
Motivation and Inspiration for Getting Fit

As you probably know, exercise does a world of good to protect you from a number of maladies, including depression, obesity and cancer. The same can be said for the power of exercise when recovering from mononucleosis.

Benefits of exercise

Moderate exercise is a great way to bolster immune function and keep infections at bay. Exercise has been found to increase the number of leucocytes, T-cells and neutrophils in the circulation.

Apart from direct immune stimulation here are some other benefits of exercise:

- Exercise improves circulation - taking nutrients and wastes to and from all the organs and glands of your body. When there is poor circulation, blood tends to pool causing sore legs, varicose veins and fluid retention as water leaks into the surrounding tissues.
- Exercise relieves lymphatic congestion which is common with mononucleosis. Some people suffer from chronically swollen glands which usually means they are suffering from a low grade chronic infection. Exercise stimulates the flow of lymph and may be helpful in managing swollen glands.
- Exercise stimulates the release of thyroid, adrenal and pituitary hormones.
- Exercise stimulates the production of growth hormone (as does a good sleep). Growth hormone helps to repair and grow body tissue like muscle, bone, hair, nails and skin. Growth hormone also needs adequate levels of protein in the diet.
- Exercise helps get the blood sugar into the cells and reduces insulin requirements. In this way it helps reduce the risk of developing late onset diabetes. Exercise also encourages the release of glucagon, a fat burning hormone.
- Exercise releases the feel-good chemicals called endorphins. That is why it helps in dealing with stress, depression, anxiety and insomnia.
- Exercise suppresses the appetite, both during exercise and for a short period after. It raises serotonin levels and is a useful activity to help ward off binge eating.
- Exercise keeps your bowels working efficiently.
- Exercise, when done regularly, lowers cholesterol and blood pressure.
- Exercise reduces the risk of breast cancer and improves bone density.
When to start exercising

During the initial acute stage of mononucleosis, sleeping and resting is about all you can do. If you are still at this exhausted stage, then just get plenty of bed rest until you feel more energized. Your body needs rest in order to heal itself.

It is often said that anyone who has mononucleosis, should not exercise. This advice stems from the fact that a rare but potentially life-threatening complication of mononucleosis is rupture of the spleen. The spleen is a blood-rich organ in your upper left abdomen that plays an important role in the body's immune system. The spleen becomes enlarged during mono, so much so that the organ may burst open, resulting in a massive loss of blood.

Rupture of the spleen is most likely to occur in the second or third week of illness. In about half the cases of spleen rupture, the patient had recently suffered an injury to the abdomen. I recommend that you avoid heavy exercise, contact sports, weight lifting and sit ups for at least a month after picking up mononucleosis. Always get a check-up from your doctor before doing anything too strenuous.

When you are feeling a bit stronger and your energy levels are improving, you can start doing some gentle exercise. For those suffering from a severe bout of mononucleosis, just walking to the letter box and back, may be enough to start with. Just build up slowly, taking it a day at a time.

Your exercise goals

(The following only applies if you are ready to exercise. Please don't rush it)

As you get back to normal health, your aim is to exercise at least three times a week for between 30 - 60 minutes. Five times a week is even more effective if you can tolerate it.

This will get you breathing deeply, circulate your blood, cleanse your lymph, boost your immunity, clear your head, and make you feel good.

What exercise to choose?

Most of my mono patients find that long duration, low impact exercise like walking or swimming is more beneficial than short duration, high intensity exercise like jogging or aerobics. As you get stronger and fitter you could consider the more strenuous types of exercise.

Here are some aerobic exercise ideas to get you moving:
Walking

Walking is one of the easiest, most effective and cheapest forms of exercise. It is easy on your joints and soft tissues, and can be done almost anywhere. For most people recovering from mono, it is a perfect introduction back into exercise.

It is worth investing in a good comfortable pair of shoes, preferably with a slightly elevated heel and padded arch supports.

Try to walk at a brisk pace, with a longer stride than normal, and breathe deeply. Aim to get a light sweat up.

Walking is also a great excuse to explore the outdoors. Visit your local National Parks or botanical gardens for an enjoyable way to get healthy.

Rebounding

Rebounding on a mini trampoline is a fantastic way to improve your fitness. It can be done inside, rain or shine and can be done to music or in front of television.

Rebounding is great for circulation of the lymph (which removes wastes from your cells). It is a good choice if you suffer from recurrent swollen glands. Rebounding is said to have an anti-aging effect on your cells, and is also easy on your joints. Do make sure you invest in a good quality rebounder.

Swimming

Swimming is a good choice if you have any joint or muscle problems since it is low impact.

Cycling

Cycling is easy on the joints and when done briskly burns calories and improves aerobic fitness. Get a good well-tyred bike and safe helmet or get an exercise bike to use at home.

Jogging

Jogging places greater stress on your joints and soft tissues than walking. It requires care and a good pair of running shoes. You will need to work up to it if you are unaccustomed to exercise, or have been ill for a long time.

Aerobics

Aerobic classes promote endurance, balance and flexibility. They introduce fun into your exercise program and provide motivation and support.

These days, many classes combine a cardiovascular workout with strength or resistance training. If you are recovering from mono, tell your instructor and pace yourself well.
**Team Sports**

Sports like basketball, hockey, tennis, soccer and football are an excellent way to improve your aerobic fitness if played regularly. Be careful to wear necessary pads and protective clothing in order to avoid injury. Training sessions can be strenuous, so only commit to a team sport if you feel you are up to it.

**Guidelines for an Effective Exercise Program**

Exercise needs to be a long term commitment to your health, weight and well-being. You have to decide to make exercise part of your everyday life. When you have prioritized exercise, everything else in your life will fit around it, and you will find that family and friends will respect your commitment.

If you are having trouble in arousing or maintaining your interest in exercise then try to find some reasons that might motivate you. Here are some suggestions for your list:

Exercise...

Makes me feel better

Gives me more energy

Keeps me looking and feeling young

Helps me manage stress

Keeps me well and healthy

Helps me sleep better

Improves my moods

Gives me a break from house/ work/ family etc.

Is a good role model for my children

Gives me more confidence and self esteem

Helps me burn fat

Take the time to reflect on what is important to you. These motivational forces can help you to get up and keep going!

**Start slowly**

Don’t start too aggressively with your exercise program and wear yourself out. If you haven't exercised for a while just start gently. Even 10 minutes of slow walking a day is a
good starting point. You will notice improvement in a few short days. You will find that any stiffness will ease, your breathing will improve and you will experience the feel-good rush of endorphins in your system.

Get a medical check-up

If you have a history of heart disease, chest pains, abnormal blood pressure, high cholesterol, respiratory problems or joint or muscle problems, it is worth getting a health check before you start exercising strenuously. If you are over 40 and haven't exercised for a while, or if you are on special medication it is also worth getting a health check. These problems may need monitoring.

Warm up and cool down

Doing a few minutes of stretching is a good idea to help you warm up before exercise and cool down afterwards. This will help protect you against injury. It also helps improve your muscle tone and flexibility.

Drink adequately

Drink plenty of water before, during and after exercise. Get in the habit of carrying a small water bottle with you which you can sip from as needed. If you feel really thirsty you are probably already dehydrated, which will affect your performance.

Make exercise a habit

Try to exercise every day until it becomes part of your regular routine. As the experts say “it takes 21 days to make a habit”. Then if you drop back to only 3 or 4 times a week you will still be maintaining your fitness and managing your weight.

Precautions before embarking on an exercise program.

Check with your doctor if you have any of the following conditions:

Chest pains

A swollen liver or spleen

Spells of fainting or severe dizziness

History of heart attacks

Breath shortness

Bone or joint problems aggravated by exercise

Any heart or circulation problem like blood clots, high blood pressure, angina, heart valve disease or pulmonary disease.
If you are over 40, and have not been exercising regularly

**How to monitor your fitness progress**

Most people can monitor their own fitness by being aware of how they feel and their energy levels.

A decrease in your resting heart rate over time also indicates you are improving your fitness level. You can keep a regular check on your resting heart rate, which is best taken in the morning before you get out of bed.

If you notice an increase in your resting heart rate it may indicate that you have over trained or that you have a temporary infection like a cold. On these days consider cutting back on your activity, having plenty of fluid and a good, nutritious diet. This will help to avoid any injury or damage to your body.

**A warning about excessive exercise**

Too much exercise, too soon after mono, can suppress immunity resulting in a recurrence of the virus or other infections. Studies show that excessive exercise causes measurable falls in immunoglobin levels and a slowing down of neutrophils and natural killer cells.

Heavy exercise also increases the production of free radicals, causing lipid peroxidation of cell membranes and tissue damage. Exercise-damaged muscles cannot supply enough of the amino acid glutamine, which is needed by the lymphocytes for healthy immune function.

You can minimize some of this damage to your immune system by taking glutamine and high dose antioxidants like vitamin C, E, A, zinc, selenium and CoQ10.

If you think you are ready to exercise, but are experiencing sore muscles or aches and pains after exercise, then boost your intake of magnesium and the B complex. Epsom salt baths (2 cups to a hot bath before bed) which are naturally high in magnesium can also relieve aches, and help you recover faster.

**Conclusion**

If you are ready to start exercising again but are not doing it, I hope this information motivates you to put an exercise program into action. Exercise is one of the cheapest and easiest therapies you can do. Make it a habit and your body will thank you for it.
The healing power of sunlight

We have all heard the stories of keeping out of the sun because of the risk of skin cancer. Too much sun exposure can cause permanent skin damage and skin cancer, and you do need to be careful. However, research is now showing that safe exposure to sunshine is good for your health. So much so that optimizing your sun exposure may be one of the most important steps you can take in support of your long-term health.

The benefits of sunlight have been known for thousands of years as a healing agent. Both Hippocrates and Pythagoras wrote about the healing powers of the sun. Even ancient temples were dedicated to healing people through sunlight. Ailments like TB, rickets, wounds and general convalescence were all prescribed sunlight. Today many of the sanitariums and health resorts of the world recommend sunlight to promote healing.

How can sunlight help with mononucleosis?

Sunlight has numerous beneficial effects on your recovery from mononucleosis:

- Firstly sunlight boosts your body’s production of melatonin, a powerful hormone that influences the activity of your immune system. Melatonin also regulates your sleep-wake cycle, helping you get a good night’s sleep.

- The ultraviolet rays in sunlight have been shown to kill viruses and bacteria. Sitting with your face, throat, chest and or back in the sun can help dry up secretions and kill microorganisms. It is well known that TB (tuberculosis) patients used to be sent to Arizona for its dry, sunny climate.

- If you are feeling drained and exhausted, then sunlight can stimulate your metabolism and boost your energy. It also helps to oxygenate your blood and purify your blood.

- Sunlight can lift your mood and improve the outlook on your day. Serotonin, the brain hormone associated with mood elevation, rises with exposure to sunlight. As well as lifting your mood, serotonin controls your body temperature, sex drive and sleep patterns. Prescription antidepressants like Prozac work to increase serotonin levels in the brain.

- If you have sore, aching muscles then sunlight can improve the circulation to your skin and ease some of your discomfort. I know that when I was in the midst of my mononucleosis, I had chronically cold hands and feet, which would improve after a stint in the sun.

- Sunlight on the skin helps the body produce vitamin D - an essential nutrient for strong bones, teeth and immunity. Vitamin D has been shown to reduce your risk of developing diabetes, heart disease and auto immune disease. Vitamin D can also be derived from certain foods like eggs, cheese and butter, however an average diet will only supply about 100 IU of vitamin D. The body needs about 400 IU a day of vitamin D for optimal health.
One side effect of mononucleosis can be jaundice - a yellowing of the skin and eyes due to an accumulation of bilirubin in the blood. Jaundice is usually due to liver involvement. Jaundice improves when the body is exposed to natural sunlight.

A recent ground breaking study recently showed that 600,000 cases of breast and colorectal cancer a year could be prevented worldwide by increasing levels of the sunshine vitamin - vitamin D3. This may well be true for other cancers as well.

The best way to obtain your vitamin D is by sunlight falling on your skin, without getting sun burnt. A paper published in the US journal Preventive Medicine concluded that the benefits of moderate exposure to sunlight outweigh the risk of skin cancer and premature aging.

How much sunlight do you need?

While we all need to be "sun-safe", many people get nowhere near the amount of sunlight they need for optimal health. It is estimated that 90% of westerners spend more than 90% of their time indoors.

Unfortunately windows and wearing sunglasses can block some of the sunlight’s wavelengths from reaching our retinas and nourishing the brain and body. Similarly wearing sun-block will stop the absorption of the sun’s rays.

Even in Australia where we have no problem with lack of sunshine, I am seeing patients who have been diagnosed with low levels of vitamin D.

I recommend my patients get a daily dose of 30 minutes of sunlight onto their skin. Early morning or early afternoon sunlight is best if you live in a hot area or at a high altitude. Avoid midday sun.

You don’t have to sunbathe - going for a walk or hanging the washing out in the sunshine is fine. Try to expose at least 15% of your skin - roughly equivalent to your face and arms to the sunlight. The idea is to get enough sunlight that you don’t burn. If you get burnt you have overdone it and damaged the skin.

Research shows that for people living in colder climates, for example Tasmania, up to 2 hours of winter sun may be necessary to achieve adequate vitamin D production. If you live in an area where you get long, dark or cloudy winters with no sunshine, then full spectrum lighting can be installed in your home and work place to mimic the health benefits of direct sunlight.

Studies have shown that dark-skinned people need up to six times as much sunlight to synthesize adequate vitamin D. As well, obesity, kidney disease, and aging could affect the body’s ability to turn sunlight into vitamin D.

How can I get my vitamin D levels checked?

If you are unsure if you are getting enough vitamin D, your doctor can do a blood test. This test is called the 25-hydroxyvitamin D or 25(OH)D test. The optimal value you’re
looking for is 45-52 ng/ml (115-128 nmol/l). If you are below this level, discuss with your doctor ways of increasing your vitamin D levels through sunlight, supplements and foods.

**How to start sun therapy safely**

The sun is a powerful natural support for your healing system. Please aim to enjoy it safely for the best therapeutic effects. I recommend that if you are not used to being out in the sun, that you start with a few short sessions of 10-15 minutes to see how you respond. Some people can get reactions like itchy skin, rashes or a breakout of cold sores. If you do a test run first, then these reactions will be minimized.
CHAPTER 6

DETOXIFICATION FOR A NEW YOU

Detoxification - the key to optimal health
Your health and weight is largely influenced by your ability to detoxify. Toxins are in the air you breathe, the food you eat, the water you drink and in the chemicals you come into contact with. Even your body and the bacteria that live in your intestines produce toxins. With all these toxins to contend with, it is little wonder your body has any energy left for your health and well being!

Detoxification is crucial in cases of chronic or recurring mononucleosis. Many of my mononucleosis patients have found it to be the key to eliminating their symptoms forever.

The deadly dangers of toxins
Toxins are poisonous substances that can adversely affect human health. They can be organic poisons derived from living organisms like microorganisms, or inorganic poisons derived from heavy metals, chemicals, foods or drugs. Even our own gastrointestinal tract produces endotoxins, which can poison our system.

- **Toxins can poison your whole system**
  Fat-soluble toxins can move from your gastrointestinal tract into the liver and biliary system. Once toxins unite with bile they can enter the circulation, so the body is poisoned again and again as the bile re-circulates.

- **Toxins reduce glutathione - a critical antioxidant and immune regulator**
  Toxicity will also decrease levels of glutathione in your body. Glutathione is a naturally occurring protein that acts as a critical antioxidant and immune regulator. It protects every cell, tissue and organ in your body. Although some glutathione comes from the diet, most is made by the liver. As well as neutralizing free radicals, glutathione can also fuse with foreign substances like viruses and bacteria and clear them from the body. It also helps the liver filter the blood and detoxify compounds made by the body as well as the thousands of chemicals introduced into our body through our diet and environment.

Cigarette smoke, chemicals, alcohol and medications can markedly reduce the body’s glutathione. Chronic infections can also deplete the body of glutathione. Some chronic fatigue patients are so low in glutathione that they need glutathione intravenously weekly to boost their levels.

I tried weekly glutathione injections for about 6 months when I was on a strict detox protocol. The first couple of times I had the treatments I felt absolutely exhausted and just needed to sleep. Over time I felt great and there was a definite reduction in the frequency of my sore throats and infections.
Glutathione is also available in powders, capsules or as a transdermal cream which can be applied to your skin. Taken orally, glutathione is largely broken down in the digestive process, and the majority never gets to where it is needed in the cells. If you need glutathione, taking it intravenously or as a transdermal cream is the best way.

- **Toxins increase inflammation**
  Toxicity of the body causes inflammation. This can be experienced as recurrent sore throats, chronic muscle aches, frequent joint pains and ongoing fatigue. These symptoms are typical in many of the mononucleosis and chronic fatigue patients I see.

- **Toxins damage cell membranes**
  Toxicity triggers loss of the essential fatty acids from the cell membranes. You can’t have good health and strong immunity without a healthy cell membrane. Healthy cell membranes absorb nutrients and water easily and can excrete wastes efficiently. They are an integral part of good health.

**Optimal digestion for good immunity**

Your gastrointestinal tract engages in innumerable immune battles every day. More than 50% of all your immune cells are clustered around the gastrointestinal tract. These immune cells fight antigens and microbes which are constantly taken in with your food.

Secretory IgA, is an antibody that is found in the mucosal lining of the gastrointestinal tract. An antibody’s role is to identify viruses and bacteria and inactivate them. It provides a vital immunological barrier to antigens. Research has shown that under-nutrition is associated with low levels of secretory IgA. This leads to poor gut immunity and the start of systemic illnesses like food sensitivities, auto immune problems, tumors, chronic intestinal infections and heart disease.

Undesirable bacteria or parasites in the bowel are a major source of toxicity for your body. Poor digestion is usually the start of the problem.

Poor quality foods, overeating, nutritional deficiencies, medications, eating when tired or stressed or eating too close to bedtime, can all lead to poor gastric function and incomplete digestion. When food is left lying around in the gastrointestinal tract it begins to ferment, and encourages the overgrowth of undesirable microbes.

Constipation is another symptom of poor digestion. When bowel elimination is slowed, intestinal toxins are reabsorbed into the body, invariably leading to poor health. It is very hard to feel good if your body is constantly battling toxins coming through from the gut. Constipation may be caused by numerous factors including intestinal parasites, inadequate fluid, insufficient fiber or exercise, stress, liver or gallbladder insufficiency, inadequate gastric secretions or food allergy.
Candida Yeast
In many people there is an overgrowth of a yeast called *Candida albicans* in their bowel. Candida is a normal inhabitant of the mouth, intestine and genital tract. Many modern habits and conditions like stress, excess sugar, antibiotics, the pill and chlorinated water can cause candida to multiply and weaken the natural balance of gut flora. It can also damage the gut wall if it turns into the fungal form.

A waste product of candida is acetaldehyde. This is caused by the fermentation of the yeast. It can damage cell membranes and overload the liver's detoxification mechanisms.

Karen's Story
Karen was a 39 year old mother of two who was experiencing severe bloating and gas, which would worsen as the day progressed. By the end of the day it looked like she was six months pregnant! She also had alternating constipation and diarrhea, and an insatiable appetite for sweets. Karen was 10 kg overweight. She suffered from thrush and complained of a recurrent sore throat.

Her problems had been diagnosed by her doctor as Irritable Bowel Syndrome, and she had been prescribed a high fiber diet, more fluids and stress reduction. These unfortunately were not enough to improve her symptoms.

On reviewing her case I suspected she was suffering from a candida infection in her intestines. Once she had been put on herbal antifungals, acidophilus powder and a low carbohydrate diet, Karen was amazed by how quickly she started to feel better. For the first time in twelve years she had a flat stomach with no bloating, gas or gastrointestinal disturbances. Within a week she had lost her sugar cravings, and over a couple of months had totally eliminated her sore throats and thrush. I doubt if she would have ever regained her health if she had not dealt with the health of her gastrointestinal tract first.

Do you have candida?
To assess if candida is contributing to your ill health, answer the following questions honestly:

- Do you crave sugars, sweets or carbohydrates like breads or biscuits?
- Do you have trouble losing weight?
- Do you experience bloating, gas, or an altered bowel function - especially after consuming sweet foods, white bread or alcohol?
- Do you feel tired all the time?
- Do you experience depression, irritability, poor concentration or feel 'spaced out'?
- Have you a history of vaginal or oral thrush?
- Do you get mucous membrane irritation like rashes, itching, sinus, sore throats or hay fever?
- Have you taken antibiotics and not introduced the correct bowel flora back when finished?
- Are you on the oral contraceptive pill, steroids or immune suppressant drugs?
- Are you overly stressed or eating a poor diet?
If you have answered yes to three or more of these questions it is likely that you have candida.

The next section on “How to do a bowel cleanse” will give you all the recommended foods, supplements and protocols to improve your bowel health.

**How to do a bowel cleanse**

Did you know that the Epstein Barr virus which causes mononucleosis, attacks the immune system of the gastrointestinal tract? This can explain the symptoms of bloating, wind, loose stools and/or constipation often experienced by sufferers.

Bowel detoxification must be addressed if good immunity and freedom from mononucleosis is to be achieved.

The treatment I recommend to my mononucleosis patients is called the '4R' approach. The '4R's stand for:

Remove
Replace
Reinoculate
Repair

This approach has been coined by American biochemist Jeffrey Bland and is often the forefront of treatment for digestive disturbances, allergy, inflammatory joint diseases, chronic fatigue and chronic infections.

**Stage 1 - Remove**

'Remove' stands for removal of any substances that may be damaging your gut.

Common sources include intestinal parasites such as unfriendly bacteria, fungi or parasites, drugs, alcohol, caffeine and foods to which you are intolerant or allergic. The most common foods to which intolerances arise are grains (especially wheat), dairy, citrus, alcohol and caffeine.

To reduce any populations of unfriendly bacteria, fungi and parasites, I recommend that you start by taking a herbal tonic like black walnut, wormwood, barberry, citrus seed extract, garlic or pau d'arco. I will discuss some excellent brands in the next e-class on liver cleansing.
Stage 2 - Replace

Once the pathogens have been removed, efforts to restore normal gastrointestinal function are far more likely to be successful.

'Replace' refers to the replacement of digestive factors and enzymes whose secretion may be inadequate. Replacement products may include digestive enzymes, hydrochloric acid (as a supplement) and fiber.

**Enzymes and hydrochloric acid**

If you have symptoms of burping, bloating, wind, or undigested food in your stools, it may mean that you have an inadequate supply of enzymes and/or an under-acid stomach.

An under-acid stomach means that your stomach is not producing adequate acid to break down your food. To overcome this, make sure you chew your foods well to stimulate acid production. Drink a glass of hot water half an hour before meals or a herb tea such as peppermint, ginger, cloves or aniseed with meals. A hydrochloric acid supplement may also be tried. They are usually found in combination with digestive enzymes.

If you commonly suffer from heartburn, indigestion or burning, then you may have an over acid stomach. Aloe vera juice, slippery elm powder and raw potato juice can be helpful to normalize your stomach secretions.

**Fiber**

Fiber may also be a valuable addition for optimal elimination.

If you are prone to constipation despite a good diet, then psyllium husks seem better tolerated by most patients than bran.

Stage 3 - Reinoculate

Reinoculate refers to the reintroduction of the good bowel flora back into your body. The two most commonly used and researched bacteria are Lactobacillus acidophilus (bulgaricus and thermophilus may also be helpful), and Bifidobacteria bifidus (longum, infantis, breve may be useful). Both of these strains predominate in young healthy individuals, and are known to decrease with age, antibiotics, infections, maldigestion or stress.

You can get these healthy strains in a powder, capsule or tablet form. The refrigerated brands which have a guaranteed potency in the billions of organisms are the best.

In chronic digestive cases the addition of fructooligosaccharides (F.O.S for short!) may help to support the growth of these desirable bacteria. Antibody concentrates derived from whey are another option to help the bacterial microflora to adhere to the gastrointestinal walls.
**Stage 4 - Repair**

Repair refers to the use of nutritional support to heal your gut.

Nutrients which have been shown to be vital for gastrointestinal growth and repair include:

**Zinc** - lack of zinc inhibits healing. Zinc is essential for the repair and replication of gut cells and is vital for enzyme production.

**Glutamine** - an amino acid used by the gastrointestinal tract as a fuel.

**Vitamin B5** (pantothenic acid) - stimulates protein synthesis and accelerates healing.

**Ascorbic acid** - acts as an antioxidant and is essential for cell and blood vessel development.

**Vitamin A or beta carotene** - important for the growth and function of cells lining the gastrointestinal tract. Also an antioxidant and immune booster.

**Vitamin E** - vital for antioxidant status as a free radical scavenger.

**Essential fatty acids** - for maintenance of cell membranes, cell division and growth.

**Folic acid and B12** - for tissue regeneration.

**Methionine, glycine and cysteine** - amino acids for gastrointestinal function.

**Adequate calories**, especially from proteins, are essential for the support of tissue repair.

**Super foods**

There are also many super foods which help digestion and repair the gastrointestinal lining. These include:

Aloe vera juice, slippery elm powder and raw vegetable juices which are particularly good for healing the gastrointestinal wall.

Pineapple, paw paw and kiwi fruit are helpful for breaking down protein foods because they contain the natural enzymes bromelain and papain.

Celery, ginger and sea salt can help with stomach secretions.

Herbs and spices that can give relief to digestive problems include peppermint, fennel, chamomile, ginger, garlic, dill, caraway and fenugreek.
For optimal digestion avoid overeating, eating when stressed, tired or ill, eating too late at night, eating too many foods and not chewing enough.

**Buying a good Colon Cleanser**

When you are over the acute early stage of mononucleosis, I recommend you do a yearly cleanse with one of the good colon cleansers available on the market.

For my patients I recommend a particularly good colon cleanser from Martha Volchok, an experienced Herbalist of over 25 years who co-founded the herb company - Blessed Herbs.

The Colon Cleansing Kit is a 9 day program based on frequent fibre drinks and herbs designed to remove old waste from your colon.

If you are reading this article on your computer screen you can purchase a Colon Cleansing Kit (or a more comprehensive 'Internal Cleansing Kit') using the link below:

**the Colon Cleansing Kit** - [http://www.blessedherbs.com/?af=1254&d=single&item_id=3882](http://www.blessedherbs.com/?af=1254&d=single&item_id=3882)

or check out the website www.BlessedHerbs.com

**Liver cleansing for good immunity**

In the last section we talked about the importance of your gastrointestinal health in maintaining good immunity. The liver is the second half of the equation. Gut and liver function go hand in hand.

If your gut is toxic then these toxins will be absorbed into your blood stream and overwhelm the liver. Similarly if your liver is congested or sluggish, then toxins from the gut cannot be metabolized efficiently. The subsequent build up of toxins will make you feel bloated, nauseous, tired, headachy and cranky.

The liver is the great cleanser of your bloodstream - once every 14 minutes all your blood passes through it for detoxification. Some of the many other roles of the liver are to regulate your hormones, orchestrate protein and carbohydrate metabolism, store sugars and vitamins, and produce bile for fat digestion.

Under the onslaught of alcohol, caffeine, fats, drugs, artificial colorings, preservatives, pesticides and chemicals, the liver can eventually start to malfunction. One cannot feel vital and truly alive with a sluggish liver. The liver may not be clinically diseased, as shown on liver function tests, but its inefficiency will certainly contribute to immune problems.

The majority of mononucleosis patients will suffer some sort of liver involvement. In many cases liver inflammation will result in an enlarged and tender liver. In about 5% of
sufferers, jaundice, the yellowing of the skin and eyes will occur. This is due to excess bilirubin (a bile pigment) not being broken down by the liver.

The importance of liver cleansing in mononucleosis cannot be understated. In my patients with chronic mononucleosis, liver cleansing is often the key to ridding the body of recurrent symptoms like fatigue, swollen glands, muscle aches and sore throats.

Even for my healthy patients, I recommend a liver cleanse at least once a year to keep the spring in their step and keep disease at bay.

**Benefits of liver cleansing**

The most obvious benefits my patients report after doing a cleanse are:

Relief from digestive complaints like constipation, bloating, gas and nausea

Better absorption of vitamins and minerals from their foods

A feeling of renewed energy and vigor

A lighter, slimmer body - there is usually a loss of a couple of pounds after each cleanse

Clearer skin

Relief from headaches, muscle aches and pain

Improved immunity with less infections

**How your liver deals with toxins**

The liver has two detoxification pathways that break down toxins so that the body can excrete them.

Phase 1 breaks down the toxins into intermediate products. Phase 2 forms these intermediate products into water-soluble end products that the body can excrete.

Sometimes Phase 1 and 2 get out of sync. This is often due to a lack of available nutrients. If Phase 1 proceeds too quickly or Phase 2 too slowly, then a buildup of intermediate products can occur. These intermediate products are highly reactive, causing cell and tissue damage and lowered immunity.

**Bob's Story**

Bob was an overweight, 45 year old wheat farmer from the drought-stricken Central West. His family doctor ordered him to travel to Sydney for a barrage of tests to find out why he was so exhausted. He had recurrent headaches and little or no appetite. For months he had been working hard from dawn to dusk, trying to make ends meet.
typical day involved mixing chemicals, spraying crops, dipping sheep, and relaxing with a few beers at night.

From Bob's history and symptoms I started him on a gentle liver cleanse. On the first day of the liver cleanse, Bob experienced nausea, loose stools and a bright red skin rash. He swore he could taste and smell every chemical he had ever used on his farm coming through his skin! This was a good sign that his body was starting to eliminate the multitude of chemicals that had accumulated in his liver. We persisted with the cleanse whilst supporting his body with a low chemical diet and supplements.

Within a couple of weeks, Bob had started to regain his zest for life, along with the return of his hearty appetite. He was itching to get back to his beloved farm, but this time on strict orders to wear protective clothing when anywhere near chemicals, and to stick to his healthy diet! A year later Bob popped in for a follow-up consultation (and his yearly dose of liver cleanser). He had easily shed his weight and regained his fit, youthful figure. He was looking good and said he felt fantastic!

How well is your liver working?

☐ Do you have a poor appetite on waking?
☐ Do you feel nauseous or 'seedy'?
☐ Do you experience indigestion on eating too much fat?
☐ Do you find that you can't tolerate too much alcohol or caffeine?
☐ Do you get bloating, gas, constipation or light colored stools?
☐ Are there pouches or dark circles under your eyes?
☐ Do you have dark markings (liver spots) on the iris of your eye?
☐ Are you prone to headaches?
☐ Is there a yellow tinge to your skin or the whites of your eyes?
☐ Do you get dry, flaky or itchy skin?
☐ Have you got brittle hair and nails?
☐ Do you experience any pain under your right rib cage?
☐ Do you have a general feeling of ill health and fatigue?
☐ Have you a history of Epstein Barr virus, gallstones, hepatitis, alcoholism, drug use (recreational or medicinal) or high cholesterol?
☐ Have you been exposed to high levels of chemicals or toxins, for example from petrol, paints, insecticides, acrylic nails, cleaning agents and similar substances?

If you answered yes to more than two of these questions, then your liver may be sluggish. This is particularly so if you have digestive problems or score high in the food allergy quiz later on. You would benefit from doing a liver cleanse on a regular basis.

How to do a liver cleanse

If you are in the acute or early stage of mononucleosis it is advisable to wait a while until you build some of your strength back up before doing a liver cleanse. Some people do experience side effects like nausea, loose stools, headaches, fatigue and muscle pain. These side effects are better coped with when you have rebuilt some of your health and vitality.
What you need to know when doing a liver cleanse:

To cleanse your liver you need to focus on:

(a) removing toxic foods, beverages, drugs and chemicals

As discussed in the last e-class you need to cut down or preferably eliminate toxic foods in your diet. This list includes coffee, alcohol, drugs, processed foods and bad fats.

Be aware of everyday chemical sources like tobacco, insecticides, paint fumes, dry cleaning fluids, plastics, carpets and cleaning agents. Many patients have difficulty in ridding themselves of persistent infections like mononucleosis or candida simply because they are chemically overloaded.

(b) supplying quality protein and adequate nutrition

In the majority of mononucleosis patients, the best approach to liver cleansing is to rest your gastrointestinal tract and liver through dietary restriction and appropriate nutritional supplementation.

There are some excellent liver cleansing programs available which ensure the body can detoxify while receiving adequate nutrition. We will discuss these at the end of this e-class.

(c) supplying increased amounts of nutrients to help eliminate toxins

Lipotropic agents like choline, inositol and methionine stop excessive fat from collecting in the liver. They detoxify the liver and help it emulsify the fat and cholesterol in the bloodstream. Lipotropic agents are available in liver-cleansing supplements, and in lesser amounts in foods like eggs, lecithin, wheat germ, lentils and rice.

Other nutrients essential for effective detoxification are zinc, magnesium, glutathione, and the sulphur containing amino acids.

The sulphur containing amino acids are found in fish, meat, eggs, onions, garlic and cruciferous vegetables like broccoli, cauliflower, Brussels sprouts and mustard greens. They are particularly important for the function of enzymes that help break down harmful chemicals in the liver.

It is a good idea to take a good high potency multivitamin to enhance your liver detoxification when undergoing a cleanse.

(d) using foods and other therapies to heal your liver

Herbs to help with liver detoxification include dandelion - a gentle liver tonic that increases bile secretion to assist digestion. Dandelion is an effective natural diuretic that allows fluid to be released without loss of valuable nutrients.
Milk thistle (Silybum marianum) is a good liver protective herb which increases the number of new liver cells while replacing old damaged cells.

Foods that support liver cleansing are lemon juice (great in warm water on rising), grapefruit, beet root, carrots, cruciferous vegetables, garlic, onions and green tea.

Providing adequate clean water is essential to help the elimination of toxins. Other helpful methods to support effective detoxification include massage, sauna, exercise and dry skin brushing.

(e) being positive

Be aware that the liver is referred to as the 'anger' organ in Chinese medicine. When you are angry, bitter or frustrated your liver function is adversely affected. You need to work on any negative emotions.

The dangers of fasting

Many people think that water fasting is the way to go when you want to cleanse your liver. However in my experience, it is too harsh for the majority of mononucleosis patients.

Water fasting is not recommended if you are very toxic. Fasting can decrease the protective agents like antioxidants, glutathione and cysteine to unsafe levels resulting in free radical damage as toxins are released.

Using a liver cleansing supplement

Instead of water fasting, you are better off doing a liver cleanse with an effective cleansing kit which provides your body with the necessary herbs and nutrients to detoxify your body.

The one I recommend to many of my patients is the Internal Cleansing Kit by Blessed Herbs. This program is designed to detoxify your intestines, liver, lungs, gallbladder, kidneys, lymph, blood and skin. This is fantastic for mononucleosis sufferers whose liver, lymph and kidneys are often compromised from the effects of the Epstein Barr virus.

If you are reading this article on your computer screen you can purchase a comprehensive 'Internal Cleansing Kit' using the link below:

the Internal Cleansing Kit
http://www.blessedherbs.com/?af=1254&d=single&item_id=3703
Lowering Your Carbohydrate Intake for Improved Detoxification and Immunity

Did you know that detoxification and your immunity are improved by dramatically lowering the carbohydrate intake in your diet?

The following information is based on the very successful "Detoxx program" devised by Dr John Foster, Dr Patricia Kane, and Dr Neal Speight from America. The program has been used by hundreds of patients with chronic mono and CFS with fantastic results. If you have chronic mono or recurring symptoms, it may be the secret to unlocking your true health potential.

The benefits of a low carbohydrate diet

High carbohydrate foods like bread, cereals, biscuits, pasta, rice, sugar, potatoes, dried and sweet fruits, can trigger inflammation in your body, worsening symptoms like a sore throat, muscle pain, fatigue and liver inflammation, which are common in mono.

A low carbohydrate diet has numerous benefits which include:

1) Lowering your carbohydrate intake stabilizes your blood sugar levels preventing sugar cravings. You will also find that your energy and stamina improve, your body performs better and your brain and memory clear.

2) Lowering your carbohydrate intake and keeping your blood sugar stable will minimize surges in insulin and keep inflammation under control.

3) A low carbohydrate diet breaks down fat cells and helps them release their toxic load. On the other hand, eating excess carbohydrate, with the subsequent insulin surge, keeps the body in fat storage mode, and makes the release of toxins biologically impossible.

4) With a low carbohydrate diet, you are also forced to eat more protein, in order to maintain adequate calories. Protein helps the body make glutathione - an important substance essential to good immune function. Glutathione helps the liver filter the blood, protect cell membranes from damage, and fuse with foreign substances like the Epstein Barr virus which can help to clear them from the body.

How much carbohydrate should I eat for optimal immunity?

A good starting point is around 20 g of carbohydrates a day.

This is equivalent to approximately 3 cups of salad vegetables or 2 cups of salad plus 2/3 cup of low carbohydrate cooked vegetables a day. To get to this amount you will need to eliminate the high carbohydrate foods like bread, cereals, biscuits, pasta, rice, sugar, potatoes, dried and sweet fruits.
I've made it a little more precise by giving you the carbohydrate content of various foods below. You can mix and match the carbohydrates according to what you like. I have also included some low carb recipes which are tasty and easy to prepare.

Table: Low carbohydrate food content

<table>
<thead>
<tr>
<th>Food</th>
<th>Portion size</th>
<th>Grams of carbohydrate (Total of 20 g allowed per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vegetables</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alfalfa sprouts</td>
<td>35 g (1 cup)</td>
<td>1</td>
</tr>
<tr>
<td>Asparagus (raw or canned)</td>
<td>4 spears</td>
<td>2.5</td>
</tr>
<tr>
<td>Avocado (peeled)</td>
<td>50 g (1/4)</td>
<td>3.5</td>
</tr>
<tr>
<td>Beans (green)</td>
<td>35 g (1/3 cup)</td>
<td>2.5</td>
</tr>
<tr>
<td>Bean Sprouts</td>
<td>35 g (1 cup)</td>
<td>1</td>
</tr>
<tr>
<td>Broccoli</td>
<td>50 g (1/2 cup)</td>
<td>3</td>
</tr>
<tr>
<td>Bok choy</td>
<td>50 g (1 cup)</td>
<td>3</td>
</tr>
<tr>
<td>Brussels Sprouts</td>
<td>35 g (1/3 cup)</td>
<td>2.5</td>
</tr>
<tr>
<td>Cabbage</td>
<td>30 g (1/2 cup)</td>
<td>1.5</td>
</tr>
<tr>
<td>Capsicum</td>
<td>40 g (1/2 cup)</td>
<td>2</td>
</tr>
<tr>
<td>Carrots</td>
<td>35 g (1/3 cup)</td>
<td>3</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>50 g (1/2 cup)</td>
<td>2.5</td>
</tr>
<tr>
<td>Celery</td>
<td>50 g (1/2 cup)</td>
<td>2</td>
</tr>
<tr>
<td>Chives</td>
<td>1 tablespoon</td>
<td>0.5</td>
</tr>
<tr>
<td>Cress (water or garden)</td>
<td>30 g (1 cup)</td>
<td>1</td>
</tr>
<tr>
<td>Cucumber</td>
<td>50 g (6 slices)</td>
<td>1.5</td>
</tr>
<tr>
<td>Eggplant</td>
<td>40 g (1/2 cup)</td>
<td>2.5</td>
</tr>
<tr>
<td>Garlic</td>
<td>3 g = 1 clove</td>
<td>0.5</td>
</tr>
<tr>
<td>Ginger</td>
<td>10 g = 1cm</td>
<td>1</td>
</tr>
<tr>
<td>Food Item</td>
<td>Serving Unit</td>
<td>Servings</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------</td>
<td>----------</td>
</tr>
<tr>
<td>Lettuce</td>
<td>75 g (1 cup)</td>
<td>2</td>
</tr>
<tr>
<td>Mung bean Sprouts</td>
<td>50 g (1/2 cup)</td>
<td>3</td>
</tr>
<tr>
<td>Mushrooms</td>
<td>35 g (1/2 cup)</td>
<td>1.5</td>
</tr>
<tr>
<td>Olives</td>
<td>20 g</td>
<td>1</td>
</tr>
<tr>
<td>Onion</td>
<td>50 g (1/2 cup)</td>
<td>2.5</td>
</tr>
<tr>
<td>Parsley</td>
<td>1 tablespoon</td>
<td>0.5</td>
</tr>
<tr>
<td>Peas (green)</td>
<td>25 g (1/4 cup)</td>
<td>3</td>
</tr>
<tr>
<td>Pumpkin</td>
<td>60 g (1/4 cup)</td>
<td>3</td>
</tr>
<tr>
<td>Radishes</td>
<td>40 g (1/2 cup)</td>
<td>2</td>
</tr>
<tr>
<td>Spinach</td>
<td>50 g (1 cup)</td>
<td>2.5</td>
</tr>
<tr>
<td>Tomato</td>
<td>60 g (1/2)</td>
<td>2.5</td>
</tr>
<tr>
<td>Zucchini</td>
<td>50 g (1/2 cup)</td>
<td>2</td>
</tr>
</tbody>
</table>

**Fruit**

<table>
<thead>
<tr>
<th>Fruit Item</th>
<th>Serving Unit</th>
<th>Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lemon, lime or grapefruit</td>
<td>1 tablespoon = 1 squeeze</td>
<td>1</td>
</tr>
<tr>
<td>Melon (cantaloupe, honey dew, watermelon)</td>
<td>80 g (1/2 cup)</td>
<td>4</td>
</tr>
<tr>
<td>Berries (blueberries, strawberries etc)</td>
<td>100g</td>
<td>4</td>
</tr>
</tbody>
</table>

**Beverages**

<table>
<thead>
<tr>
<th>Beverages</th>
<th></th>
<th>Servings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decaf coffee or tea (no milk or sugar)</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>Diet drinks – caffeine free</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>Mineral or soda water – unflavoured</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------------------------------</td>
<td>-----</td>
</tr>
<tr>
<td>Yoghurt – plain</td>
<td></td>
<td>100 g (1/2 cup)</td>
</tr>
<tr>
<td>Low carb crispbread like</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Kavli or rice crackers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sour cream</td>
<td></td>
<td>2 tbsp</td>
</tr>
<tr>
<td>Stock cube, e.g. Oxo</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Sesame seeds</td>
<td></td>
<td>1 tbsp</td>
</tr>
<tr>
<td>Butter</td>
<td></td>
<td>1 tbsp</td>
</tr>
<tr>
<td>Vegetable oil (cold</td>
<td></td>
<td>2 dstsp</td>
</tr>
<tr>
<td>pressed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apple Cider Vinegar</td>
<td></td>
<td>1 dstsp</td>
</tr>
<tr>
<td>Soy sauce</td>
<td></td>
<td>1 tbsp</td>
</tr>
<tr>
<td>Mayonnaise</td>
<td></td>
<td>1 tbsp</td>
</tr>
<tr>
<td>Curry powder</td>
<td></td>
<td>1 tsp</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Protein foods (4 to 5 servings a day)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Meat</strong></td>
<td></td>
</tr>
<tr>
<td>Bacon (lean – no sugar)</td>
<td>2 slices</td>
</tr>
<tr>
<td>Beef</td>
<td>90 g</td>
</tr>
<tr>
<td>Lamb</td>
<td>90 g</td>
</tr>
<tr>
<td>Veal</td>
<td>90 g</td>
</tr>
<tr>
<td>Pork</td>
<td>90 g</td>
</tr>
<tr>
<td>Ham</td>
<td>90 g</td>
</tr>
<tr>
<td>Mince (lean)</td>
<td>90 g</td>
</tr>
</tbody>
</table>

<p>| <strong>Poultry</strong>                          |                      |
| Chicken                              | 90 g  | 0  |
| Turkey                               | 90 g  | 0  |</p>
<table>
<thead>
<tr>
<th>Food</th>
<th>Amount (g)</th>
<th>Fat (g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duck</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>Goose</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>Quail</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>Pheasant</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>Seafood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White fish</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>Crab</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>Lobster (no shell)</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>Salmon (fresh or canned)</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>Sardines (fresh or canned)</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>Tuna (fresh or canned)</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>Prawns/Shrimp</td>
<td>90</td>
<td>0</td>
</tr>
<tr>
<td>Eggs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egg whites</td>
<td>4</td>
<td>1.5</td>
</tr>
<tr>
<td>Whole eggs</td>
<td>2 x 55</td>
<td>1</td>
</tr>
<tr>
<td>Cheese</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low fat cheddar</td>
<td>90g</td>
<td>1</td>
</tr>
<tr>
<td>Low fat Swiss</td>
<td>90g</td>
<td>1</td>
</tr>
<tr>
<td>Low fat mozzarella</td>
<td>90g</td>
<td>1</td>
</tr>
<tr>
<td>Low fat cottage</td>
<td>90g</td>
<td>2</td>
</tr>
<tr>
<td>Low fat ricotta</td>
<td>90g</td>
<td>2</td>
</tr>
<tr>
<td>Low fat feta</td>
<td>90g</td>
<td>2</td>
</tr>
<tr>
<td>Tofu</td>
<td>100</td>
<td>2.5</td>
</tr>
</tbody>
</table>
Low carbohydrate recipes

Breakfast

Cottage Cheese Pancakes

½ cup cottage cheese
2 eggs
1 tbsp (10 g) soy flour
1 tbsp butter
Mix first three ingredients. Heat butter in non-stick pan. Drop pancake mix into butter and flip over when ready.

1 serves
7 g carbohydrate

Melon Smoothie

80 g melon
50 g plain yoghurt
10 g of protein powder (i.e. 1 serve of protein powder allowance)
100 ml of pure water
Blend together and serve.
Alternatively make up protein powder with warm water, add to yoghurt and serve over melon.

7 g carbohydrate

Herbed Sardines

90-120 g sardines
½ tomato
½ cup mushroom
1 tbsp parsley
1 tbsp butter or oil
Heat oil in skillet. Pan fry sardines, tomato and mushrooms. Sprinkle with parsley and serve.

5 g carbohydrate

Old Fashioned Bacon and Eggs

2 eggs
2 slices bacon
1 tomato, halved
1 tbsp butter or oil
Pinch black pepper to taste
Heat oil in skillet. Lightly fry till cooked. Serve with pepper.

6 g carbohydrate

**Scrambled Eggs Supreme**

2 eggs
1 tbsp sour cream
½ cup baby spinach leaves
½ tomato
Freshly ground pepper and pinch herbs
Mix eggs, sour cream and seasoning. Heat butter in non-stick pan. Gently stir in eggs, mix and stir till creamy and soft. Serve with spinach leaves and tomato.

6.5 g carbohydrate

**Smoked Salmon and Cream Cheese**

60 g smoked salmon
30 g cream cheese
70 g sliced cucumber
1/2 sliced tomato
Serve cucumber and tomato slices topped with smoked salmon and cream cheese.

6 g carbohydrate

**Tofu Scramble**

100 g tofu (silken)
½ cup mushroom
50 g onions
½ tomato
30 g cheddar cheese (grated)
1 tbsp oil

9 g carbohydrate

**Lunches**

**Cream Cheese Celery Sticks**

30 g cream cheese
1 tbsp sour cream
90 g canned tuna or salmon
1 tbsp chives
2 stalks celery
6 slices cucumber
ground black pepper
Mix cream cheese, sour cream, fish, chives and pepper. Spread mix into celery stalks and onto cucumber.

6 g carbohydrate

Turkey Salad

1 cup diced turkey (or chicken)
1 cup diced celery
1 tbsp mayonnaise
2 tbsp chopped spring onion
Pinch dried parsley
75 g lettuce leaves (4 leaves)
Combine everything but lettuce leaves. Chill and serve on lettuce leaves.

7 g carbohydrate

Cream of Chicken Soup

½ celery stalk, diced
1 tbsp chopped spring onion
½ cup chopped mushrooms
1 tbsp chopped capsicum
1 tsp butter
90 ml hot water
1 chicken stock cube
60 g diced cooked chicken
30 g grated cheddar cheese
120 ml cold water
Sauté vegetables in butter till cooked. Dissolve stock cube in hot water and pour into pan with vegetables. Add chicken and cheese. Cover with cold water and simmer for 5 minutes. Blend for a thicker soup. Add water for a thinner soup.

5.5 g carbohydrate

Tuna and Herb Tomatoes

90 g tinned tuna
1 tbsp mayonnaise
¼ tsp mustard
1 tbsp chives or dill
1 tomato
1 lettuce leaf
Cut tomato in half. Scoop out seeds and combine them with tuna, mayonnaise, mustard and herbs. Fill tomato halves with tuna and serve on lettuce.
Cheese Omelette

2 eggs
1 tbsp chives
1 tbsp fresh parsley
1 tbsp sour cream
30 g grated cheddar cheese
½ tbsp butter
pinch salt
1 cup mixed salad greens

Combine eggs, sour cream, herbs and salt. Beat lightly. Melt butter in non-stick pan. Pour mix into pan. Cook for 2 minutes until edges are done. Add grated cheese. Cook for extra 1-2 minutes then flip over (into half moon shape) and serve with salad greens.

Lean Ham and Asparagus Salad

90-120 g lean ham
50 g cucumber
4 asparagus spears
½ tomato
1 tbsp sour cream or mayonnaise
pinch dill
Slice vegetables and mix with sour cream or mayonnaise. Serve with sliced lean ham.

Chicken and Avocado Salad

90-120 g cooked chicken
35 g baby spinach leaves
35 g mushroom, sliced
40 g avocado, sliced
1 tbsp parsley
1 tbsp cold pressed oil
squeeze of lemon juice
Blanch spinach leaves in hot water for 3 seconds and drain. Mix with chicken, mushroom, avocado. Pour over oil and lemon juice dressing.
Dinners

Chicken Burgers

250 g ground raw chicken
1 egg
½ tbsp soy sauce
½ tbsp dried basil
1 clove garlic
black pepper to taste
2 slices cheddar, Swiss or mozarella cheese
2 slices tomato
2 lettuce leaves
1 cup mixed greens
Combine chicken, egg, soy sauce, herbs and spices and form into burgers. Grill or pan fry
till well done. Top each with a slice of cheese and tomato. Grill till cheese melts. Serve on a lettuce leaf with mixed greens to garnish.

serves 2

6 g carbohydrate per serve

Salmon Cutlets with Lemon Dill Sauce

2 salmon cutlets
½ cup chopped celery
2 tbsp chopped dill
2 tbsp fresh lemon juice
2 tbsp cold pressed oil
2 cups mixed salad
Preheat oven to 160°C. Sauté celery and dill in oil for a couple of minutes. Add lemon
juice. Place salmon in a baking pan and pour celery mix over. Cover with foil and bake
for 20 to 30 minutes until fish flakes with a fork. Serve with salad

Serves 2

6 g carbohydrate per serve

Spicy Curry

50 g onions chopped
35 g green beans chopped
50 g cauliflower chopped
40 g eggplant chopped
50 g cucumber chopped
1 clove garlic – pressed
1 cm ginger root – grated
1 tsp curry powder
1 tbsp ghee or cold pressed oil
½ cup water
Heat oil in saucepan. Fry onions, garlic and ginger. Add vegetable pieces and sauté briefly. Add ½ cup water and cook vegetables till tender (10 minutes). Serve with meat, poultry, fish or tofu.

Serves 2
7 g carbohydrate per serve

**Vegetable Ratatouille**

50 g celery
40 g capsicum
40 g eggplant
1 clove garlic
1 tbsp parsley
60 g tomato
35 g mushroom
1 tsp dried basil
1 tbsp olive oil
Black pepper to taste
Chop vegetables. Heat oil in saucepan. Sauté vegetables and herbs lightly. Add small amount of water and simmer vegetables until cooked. Serve with red meat, poultry, fish or tofu.

Serves 2
6 g carbohydrate per serve

**Spicy Meatballs**

180 g lean minced beef
1 egg
50 g onion
1 clove garlic
pinch chilli
50 g celery
40 g capsicum
35 g mushroom
1 tsp butter
1 beef stock cube
30 ml tomato juice
Mix together meat, egg, onion, garlic and parsley. Form into small balls. Sauté celery, capsicum and mushrooms in ½ tsp butter. Remove from pan. Using other ½ tsp butter, sauté meat balls – shaking pan lightly till browned. Return vegetables. Add stock cube dissolved in ½ cup hot water and tomato juice. Cook for 3 to 4 minutes.

Serves 2
6 g carbohydrate per serve
Asian Chicken

120-180 g diced cooked chicken
1 chicken stock cube
90 ml hot water
1 clove garlic
50 g onion
30 g cabbage
35 g mushroom
50 g celery
50 g bean sprouts
50 g snow peas
1 tbsp soy sauce
1 tbsp oil
Sauté vegetables in oil till soft. Add soy sauce, diced chicken and stock cube dissolved in hot water. Stir till heated through.

Serves 2
7 g carbohydrate per serve

Salmon Bake

2 medium zucchini (170 g)
180 g tinned salmon
60 g grated cheddar cheese
50 g onions
1 tbsp parsley
60 g tomato – diced

Serves 2
7 g carbohydrate per serve

Cut zucchini in half lengthwise and scoop out flesh. Mix flesh with salmon, tomato, onions and parsley. Pile into zucchini cases, top with grated cheese and place in baking dish. Pour 1/3 cup of water into baking dish, cover with foil and bake at 180ºC for 20 minutes. Bake for 5 minutes without foil.

How long should a low carbohydrate diet be adhered to?

Patients often ask me how long a low carbohydrate diet should be followed for. For optimal results, I recommend at least 2 months. As your condition improves you can start to add fresh raw fruit, legumes, starchy vegetables and small amounts of whole grains. Some patients, who react adversely to the re-introduction of more carbs, can stay on the low carb diet indefinitely if desired.

Some people do find the low carb diet impossible to follow, especially if they eat out a lot at restaurants or away from home. In these cases you can ask for meals based around protein foods and vegetables or salad. Push the pasta, rice or potatoes to the side of the
plate, or eat only a mouthful. If you have to eat a sandwich, opt for whole grain bread, and just eat one slice with the filling. If you have a sweet tooth you can make up low carb desserts with the use of stevia - a natural sweetener. This way you won't feel you are being deprived.

Again as with anything new, monitor your individual reactions and relief of symptoms, and tailor to your needs.
CHAPTER 7

ARE YOU ALLERGIC?

Allergies and sensitivities may be the hidden culprit in cases of recurring mononucleosis symptoms. If your immune system is battling with allergies and sensitivities, there is not much energy left to deal with chronic infections.

The symptoms of allergies and sensitivities can also mimic those of mono. Allergic symptoms can include sore throat, fatigue, migraines, palpitations, digestive upsets, inflammation and swelling, muscle stiffness and discharge from the nose, eyes, ears.

To discover if allergies or sensitivities may be contributing to your symptoms, answer the following questions:

- Do specific foods cause pain, inflammation, swelling, stiffness or digestive upsets?
- Do you have a history of migraines?
- Do you experience itching of your ears, eyes, throat, nose or skin?
- Do you get a clear discharge from your nose or eyes, or are you prone to hay fever, sinus or asthma?
- Are you prone to mood swings or hyperactivity?
- Do you get heart palpitations after eating certain foods?
- Are there dark circles under your eyes or do you get puffy eyes?
- Do you get unexplained fatigue?
- Is there a certain food that you crave and eat frequently?

If you answered yes to any of the above, an allergy or sensitivity may be causing your recurrent symptoms.

How to track down a food allergy

A true allergy will cause an immunological response in the body. The immune system produces a specific antibody called Immunoglobulin E (IgE) against the allergen. The body then releases a cascade of substances like histamine and cytokines which are responsible for the irritation and inflammation that characterize an allergic reaction.

Sensitivities and intolerances may not have a measurable effect on your immune system but will still cause noticeable symptoms. There is considerable overlap between allergy triggers and sensitivity triggers, so the following recommendations cover both types of reaction.
Common food allergies

If you can ascertain which foods cause a reaction, then you are well on the way to eliminating your symptoms. The most common food allergens are dairy foods and wheat. Also consider citrus, beef, eggs, cereals, cocoa, peanuts, strawberries, tomatoes, yeast and processed foods. You may be allergic to those foods that you crave most and eat frequently. If you have a break from these foods, for example when you're on holiday, you can feel quite irritated or restless.

The Pulse Test

If you suspect you have an allergy to a certain food, a simple pulse test can help ascertain if you are on the right track. Take your normal resting pulse before eating (usually it is between 60 and 80 beats per minute).

Consume a modest amount of the food in question and retake your pulse about 15 minutes later. If your pulse has increased more than 10 beats per minute you probably have an allergy to that food.

Other allergy tests

Blood tests, scratch tests or allergy tests on the Listen System can be useful, although blood tests do not seem to be totally reliable. If you do get allergy tests taken it is preferable to detoxify and heal the digestive tract and liver beforehand. This will help minimise the number of food allergies you react to. There is a strong correlation between allergies and depressed gastrointestinal and liver function.

If you are unsure which food might be causing your symptoms, you are better off doing the elimination diet, as outlined below.

The Elimination Diet

The idea of the elimination diet is to exclude all foods and drinks which are likely allergens. When you are feeling better - usually after 2 to 4 weeks - you can start reintroducing foods to see exactly which ones you are reacting to.

On the Elimination Diet you can eat as much as you like, and as often as you like, provided you choose from the list below. Try to rotate foods - do not eat the same food twice in one day. Try to organize the elimination diet around a time when you are free from social functions. If you do consume restricted foods you will sabotage your elimination diet! Even a teaspoon full of the offending food will put you back at square one.

During the first few days of an elimination diet you may experience withdrawal symptoms like headaches, fatigue, muscle aches or irritability. It is worth persevering through these first few days. The end results are worth it! Many patients report a major boost in their energy and well-being around day five.
**Table: The Elimination Diet**

Choose from the following:

**Vegetables** all fresh vegetables except mushrooms, sprouts and tomatoes.

**Fruit** only avocado and a little fresh lemon, lime or grapefruit juice.

**Seeds and nuts** all seeds, fresh nuts and nut butters are allowed (no peanuts - they are actually legumes which may carry aflatoxins - byproducts from mould)

**Proteins** all fish, sea foods, poultry and meat (preferably organic). Tinned fish is allowed - preferably in brine.

**Fats** cold pressed olive and linseed oil.

**Carbohydrates** rice, millet, soya, lentils, beans and chickpeas or flours, breads, pancakes or pastas made from them.

**Fluids** herb teas, vegetable juices, mineral, soda and plain water (preferably pure). Soya milk is allowed as long as it is free of malt or other grain additives.

**Condiments** you may add herbs, seasonings and garlic to spice up your food.

Remember no alcohol, normal bread, pastry, pies, sweets, fruit, honey, sugar, dried fruits, milk, margarine, butter, cheese, eggs, processed foods, sauces, yeasts e.g. vegemite or vinegars, and no packaged meals.

Some meals you might like to try are stir frys, vegetable stews, bean or lentil dahls, baked dinners, soups, shepherds' pie, meat balls and salads using olive oil, lemon and herbs for a dressing.

You may find that a low reactive protein powder can help in doing the elimination diet. These powders will not irritate the intestines, liver or immune system. They also prevent the usual breakdown of tissue found in traditional fasts. They are mixed with water and drunk as snacks or easy meals.

**Re-introducing your foods**

After 2 to 4 weeks on the elimination diet you should be feeling a lot better. Now reintroduce one new food at a time to see how you react. Try one food every 2 to 3 days in small, frequent portions. If you react to the food, avoid it for another month before trying it again. Reactions to look out for are sore throat, bloating, upset digestion, headache,
rapid pulse or palpitations, fatigue, sinus, asthma, skin problems, mouth ulcers and mood swings like hyperactivity or depression.

Once you have identified which foods cause your allergies it is worth avoiding them for a couple of months. On reintroduction, as long as you do not suffer uncomfortable reactions, you may then include these foods in your diet on a rotational basis. Do not consume the same food every day.

**Nutrients to minimise allergic responses**

If you do still suffer from severe reactions, then desensitisation injections, vaccines or phenolics may help. If you do experience flare ups of your symptoms the use of vitamin C, bioflavonoids and the anti-inflammatory herbs like turmeric, ginger and boswellia can help. Reishi mushroom and vitamins B5 and B6 are also worth trying for acute care. For long term allergy support, vitamins A, C, E, B complex, zinc, magnesium and the essential fatty acids are essential. If you can ascertain which foods cause a reaction, then you are well on the way to eliminating your symptoms.

**How to track down an environmental allergy or sensitivity**

Many environmental substances can trigger allergies, intolerances and respiratory irritation. Constant exposure to these environmental allergies can drain your immune system and make your battle with Epstein Barr much harder.

Your symptoms when exposed to these allergens are your best guide to finding out if you have an allergy to them. Typical symptoms are sneezing, runny nose, red puffy eyes, sore throat, chronic cough, asthma, and itchy ears, nose or throat.

Let’s have a look at the most common environmental allergens and how to minimize their effect on your health.

**Dust mite**

House dust mite are the single, most important cause of environmental allergies.

It is actually the droppings of the dust mite that triggers symptoms like a sore or itchy throat, chronic cough, asthma, runny nose, sore eyes or itchy skin.

Dust mite are only microscopic. They live on dead skin flakes in mattresses, pillows, blankets, sofas, carpets, curtains and furry toys. They thrive in the modern home where temperatures remain stable around 25 degrees C and humidity at 70 - 80%. The droppings of the dust mite are easily airborne and inhaled when bedding and furnishings are disturbed.
It is impossible to totally eradicate dust mite but you can reduce their levels to the point where they do not trigger sore throats and other symptoms.

**Important steps to lower dust mite levels include:**

Ventilate your home well

Keep humidity low

Clean carpets regularly or better still, replace carpet with wooden floor boards or tiles

Replace wool or feather doonas with synthetic fabrics where dust mite cannot thrive

Enclose your mattresses and pillows in a zipped cover. The best covers are made from cotton-polyester fabric, which just feel like a sheet and allow water vapour to escape. Avoid the cheaper plastic covers which can be noisy to sleep on and cause you to sweat.

Wash your bedding weekly in hot water. Dust mites are killed at high temperatures of 55 - 60 degrees C (130 - 140 degrees F). Adding essential oils like eucalyptus or tea tree oil can also kill dust mite. Drying bedding in hot sun for a couple of hours has been shown to kill them too.

Replace curtains with blinds that can be wiped, or alternatively, use light cotton curtains that you can wash frequently

Minimize dust by storing clothes in enclosed drawers or cupboards

Minimize shelving and ornaments that gather dust in the bedroom

Dust surfaces regularly with a damp cloth

You can buy nontoxic sprays from health food shops to spray on carpets and bedding. Avoid toxic chemical sprays.

If you want to start afresh you can buy a new mattress, pillows and cover or get a specialist allergy company into your home to heat treat your bedding.

**Pets**

Pets are the second most prevalent cause of indoor allergens. For cats and dogs, the allergen comes from the animal’s saliva, as well as dead skin cells and fur. For birds the allergen comes from their feathers. In guinea pigs and hamsters, an allergen is produced in the urine. All these allergenic particles are very fine so they float up into the air whenever the animal moves. They can remain airborne for several hours and are easily inhaled. In some cases allergens can remain on furnishings and walls, and trigger allergies weeks or months after the pet has been removed.
The best way to avoid pet allergens is not to keep a pet! If you can’t do without a pet, then you can reduce allergens by:

Keeping the pet outside, or at least out of your bedroom

Washing the pet weekly in a tea tree based shampoo

Washing the pet’s bedding weekly in hot water and airing in the sun

Keeping the pet well groomed so that it won’t shed dander in the house. If possible get a non-allergenic person to wash and groom the pet, or wear a mask and glasses to cover your nose, mouth and eyes. Choose a pet with short fur that does not shed hair profusely.

Special note: If you have grown up with dogs or cats as a child then you may have an advantage. Research is suggesting that kids who share their household with pets have a good chance of developing a strong immune system, and may be less likely to develop allergies or asthma symptoms.

Moulds

Moulds can produce millions of microscopic spores that can become airborne and trigger allergies. Moulds thrive in moist environments like damp walls or floors, shower curtains, fridge seals, moist mattresses, pot plant soils and dirty air conditioners or vaporisers.

You can usually see the mould as a green, blue or black growth on surfaces, and smell it as a musty smell, especially after rain. You can even arrange for mould plates to be left around your home to measure the extent of the mould problem.

To reduce mould levels:

Maintain a well ventilated, low humidity home. Open doors and windows whenever possible. Keep the laundry and bathroom doors shut when using them, and get an external window or ventilation fan to extract moist air out of the room.

In damp rooms or mouldy basements a dehumidifier is a good idea.

Clean visible moulds off damp walls, fridge seals, bathroom crevices, shower curtains and humidifiers

Ultimately get rid of any rising damp by fixing building faults, broken plumbing or poor areas of runoff. Try to locate your bedroom against a sunny outside wall which will help minimize mould.
Cockroaches

Cockroach allergen is found on the insect’s body and in their droppings. The allergen can be picked up by food or utensils contaminated by cockroaches or it can be inhaled in the air.

Cockroaches are exceptionally good at thriving in the modern home. It does not take many of them to reproduce quickly to large populations. It is said that they can even survive a nuclear explosion!

To keep cockroach populations down:

Store food in air tight containers

Wipe up bench tops, sinks and floors at night, when cockroaches are most active

Keep cupboards clean and dust free

Do not store cardboard boxes, paper or old books in the home - cockroaches will eat these too!

Mix borax with brown sugar and flour and leave in corners or near appliances where cockroaches thrive. They will take the mix back to their nests where the borax will contaminate and kill the colony (keep this mix away from kids and pets since borax can be poisonous)

Try to avoid toxic sprays. I have found that a natural citrus cleaner will kill cockroaches on contact.

Poison baits or traps made from sticky paper can be used, but again, keep away from kids and pets.

Natural pest companies can heat treat the areas where cockroaches are thriving. They also use a natural nontoxic gel in crevices and cracks which will kill the cockroaches when eaten.

Pollen

Pollen allergies from flowers, trees and grasses typically peak in spring and summer when pollen counts are highest. Pollen levels are also high on windy days or in the late morning or early evening.

The best advice for pollen sufferers is to stay inside when pollen counts are high. Wearing wrap-around sunglasses or a scarf over your mouth and nose can help. Remove any plants or flowers that irritate you from your garden. Some of my patients choose to live by the sea where the sea breeze keeps pollen levels down. Another option might be the desert, where flowering plants are minimal - but these are desperate measures! By supporting
your immune system with the right nutrients and herbs you can dramatically reduce your reaction to pollens and other allergens.

**Your indoor air**

Clean air that is free from pollutants and contaminants is one of the best investments you can make for your long term health and to minimize sore throats, fatigue and infections. You can buy whole books on this subject, so I’ll just outline the most important points.

**Reducing combustible pollution**

Make sure your heating and cooking appliances are properly installed, so that gas or smoke does not escape into your home.

Use an extractor fan to extract gases and pollutants outside.

Try and avoid using open fires - an airtight one with a good seal is fine.

Never burn painted or treated wood, plastics or colored paper like magazines in a fire, as they can release toxic pollutants.

Keep windows and doors open as much as possible to allow good ventilation of your home.

**Furniture**

Buy solid wood furniture instead of plywood, particle board or fiber board.

Avoid strong varnishes and oil-based paints.

Avoid chemical wood treatments - try natural oils and resins.

**Paints**

Use water-based products or those that contain natural plant based materials.

You can buy natural paints with no or low amounts of toxic chemicals like benzene, toluene, cadmium and formaldehyde.

Avoid solvent-based paint strippers and opt for pine oil or phenol-based surfactants which are much safer. Good old-fashioned sand paper is another option.

**Floor coverings**

Avoid carpets as they outgas poisonous fumes and can harbor dust mite.

If you can’t avoid carpet, opt for natural fibres like cotton, sea grass or sisal. Always make sure the carpet underlay is also made from natural ingredients.
If you do decide on carpet, keep it vacuumed frequently. You can also buy natural dust mite sprays and nontoxic carpet sealers that stop fumes from out gassing. After new carpet has been installed, ventilate your house well, since a lot of fumes outgas in the first couple of days. Try to avoid sleeping there for a few days after it has been laid.

Hardwood timber floors, ceramic tiles, natural linoleum, or granite, slate, quartzite, limestone or marble are good alternatives to carpet.

If you have a timber floor then use a natural oil or bees wax rather than chemical based waxes and polishes. When my oldest child was about 9 months old and still crawling, we made the mistake of having our wooden floor boards coated with a glossy varnish. To our horror, the baby’s hands and knees came up with an angry red rash whenever he crawled on the newly varnished floor. Not long after, we moved house!

**PVC (polyvinylchlorine)**

PVCs are found in vinyl, vinyl wallpaper, plastic window frames, plastic packaging, plastic home furnishings, vinyl car furnishings and some building materials. PVC contains at least 6 poisonous chemicals.

Some home furnishing companies like Ikea have withdrawn PVCs from their products. There are many safer alternatives - either wood or polyolefin-based plastics.

**Cleaning products**

Go through your home and discard all your toxic chemical cleaners. Replace with biodegradable environmentally friendly products which are now widely available. I use a biodegradable citrus cleanser which is based on orange oil. It is free from harsh fumes like bleach, ammonia and chlorides, and can be used to clean bench tops, sinks, fridges, ovens, glass, tiles, chrome and walls.

You can also use the “do it yourself” cleaners like baking soda, white vinegar, borax, washing soda, cornstarch and lemon juice.

**Air fresheners**

Avoid commercial air fresheners and sprays and replace with an essential oil burner. I know that when I stay in hotels that use air fresheners or chemical sprays in their rooms, I will get hay fever or sore throats almost immediately.

**Dry cleaning**

Avoid dry cleaning your clothes if possible. If you do need to have important items dry cleaned, then make sure the clothes have dried before you take them home. Airing them in a well ventilated room or on the washing line is a good idea before you wear them.
Other chemicals

You need to consider all possible chemical sources in your environment that may be triggering your symptoms. This could include chlorine from pools or long hot showers, nail polish, car fumes, pesticides, herbicides, strong glues, gas, fly sprays, hair sprays, synthetic fabrics, mothballs, whiteout, felt marking pens, petrol, diesel, cigarette smoke, mineral turps, perfumes, photocopying fumes etc.

You may find that keeping a diary of when your symptoms appear may help pinpoint the problem chemicals for you. For example, I have noticed that swimming in a chlorinated pool gives me a sore throat in a matter of seconds. The ocean or my salt water pool at home is fine. Similarly, when I walk down the supermarket aisle which stocks all the dishwashing and cleaning products, I start to sneeze and get a scratchy throat.

Other nutrients and therapies to minimize the impact of environmental allergies

Once you have worked out your environmental allergens and sensitivities, it is important to reduce your exposure to them. Sometimes it is impossible to completely avoid these substances in your environment. Trying to keep your home and work place clean is a great starting point. There are numerous books recommending natural alternatives to eliminating environmental allergens without the use of harsh chemical products.

Eating organic food is also a good idea if you are chemically or environmentally intolerant. Taking fish oils, probiotics and a good antioxidant formula with vitamin C, A and zinc can also improve your resistance to environmental and chemical sensitivities.
CHAPTER 8

YOUR MONONUCLEOSIS ACTION PLAN

The strategies in the book are proven weapons in your quest to stay healthy. Use them consistently and they will make a difference.

Obviously you can’t put everything I’ve mentioned in the book into your mononucleosis treatment plan but you can choose what foods, supplements and strategies are easily manageable for you, and get fantastic results.

Here I’ve summarized 2 programs.

The first program shows you how to build up your immune system to help prevent mononucleosis. This is important if you have never had mono and are in close contact with someone with it. It will help you reduce the chance of picking it up.

The second program is for the treatment of mononucleosis.
First Program: Summary of strategies to help prevent mononucleosis

1) Avoid contamination
To avoid picking up the Epstein Barr virus, avoid sharing drinking glasses, eating utensils, towels, lipsticks or toys. Avoid kissing anyone who has or has had a recent infection.

Mononucleosis can be transmitted from mouth to hand so washing hands well is important. Wash your hands before you eat, after you get home, after you have used the bathroom and after touching surfaces like railings in public places.

2) Keep your hands away from your face.
Consciously try to reduce touching your nose, eyes, mouth and face. Touching your face transports viruses onto your face where they can then move into your nose or mouth and infect you. Try to discourage children from sucking their thumb or picking their nose.

3) Ensure adequate ventilation
Make sure there is adequate ventilation in your home and work place. Research shows that in a stuffy, stagnant atmosphere the mucous membranes of the nose and throat become swollen, congested and covered with a thick secretion, the perfect breeding ground for viruses.

4) Increase humidity
Low humidity impairs the immune responsiveness of the mucous membranes in your throat. Over time low humidity can create tiny fissures in your mucous membranes that allow viruses or bacteria to penetrate the throat tissue below. Low humidity has also been found to impair your body’s production of IgA, an antibody needed to fight infections.

To combat low humidity, open a window or use a humidifier, oil burner or diffuser or even a pan of hot water near your heater. Keeping some natural water loving plants in your home or office can also help.

5) Keep yourself well hydrated
A dry throat is more vulnerable to infection by viruses. The mucous membrane lining your throat needs to be moist to protect the cells and trap viruses and bacteria.

To stay well hydrated, it is best to sip liquids throughout the day, preferably filtered or bottled pure water. Avoid coffee, tea, alcohol and sodas, which can dehydrate you further. Alcohol also slows down your neutrophil (white blood cell) activity.

6) Clear your nose and throat frequently
Blow your nose and cough up any phlegm when you can. This helps to eliminate the viruses from your body. Try to avoid sniffing or swallowing mucous.
7) Gargle frequently
Gargle some warm water with added salt to soothe your throat, reduce inflammation and
flush away any viruses, bacteria or mucous which may be irrita...
Include some healthy fats like cold pressed olive oil, flaxseed oil, avocado and deep sea fish. Aim for at least 8 glasses of pure water or herb tea a day.

For tip top immunity include specific immune boosting foods like berries, cayenne, coconut oil, fennel, garlic, ginger, horseradish, lemon, peppers, onion, pineapple, papaya, turmeric, whey protein and yoghurt.

Eliminate sugar from your diet. Avoid or minimize coffee, alcohol, artificial additives and processed foods. Identify and eliminate any allergens or sensitivities from your diet.

15) Have a regular massage
Get into the enjoyable habit of having a regular massage to help detoxify and relax you. Weekly or fortnightly is best. Alternatively a daily skin brush can do wonders.

16) Burn essential oils
Burn essential oils in your home or workplace whenever possible. For keeping infections like mononucleosis at bay, you could try lavender, lemon, lime, eucalyptus or tea tree oil.

17) Use complementary therapies
Consider using natural therapies like hydrotherapy, acupuncture or oxygen therapy to build up your resistance and stamina and keep infections like mononucleosis away.

18) Lower your stress levels
Reduce your stress with regular relaxation like meditation or yoga. Start writing out some goals and affirmations to help create optimal health. Take time for family, friends, holidays and hobbies. Make sure you have fun in your day - lots of laughter is a great immune stimulant.

19) Make exercise a part of your life
Regular exercise will boost your immunity, improve your circulation, reduce stress and make you feel good about yourself. Aim for 30 - 60 minutes, three to five times a week.

20) Enjoy some daily sunshine
Aim to get 30 minutes of sunshine onto your skin daily. If you live in a hot area, avoid the hours around midday, when the sun can burn. If you live in a colder area you may need more sunshine, or the use of full-spectrum lights to mimic the effects of sunlight.

21) Do a regular detox
Every 6 months to a year, aim to do a gastrointestinal and liver cleanse. This can be through a diet, supplements or powders. On a daily basis start your day with ½ fresh lemon squeezed into some warm or hot water.

If you get sick...
If you have followed the above strategies well, you should find that you do not get mononucleosis or if you have had it, that it does not recur. If you do come down with
mononucleosis symptoms - then don’t despair! Follow the next strategies to nip it in the bud...
Second Program: Summary of strategies to help treat mononucleosis

Immediate action
If you have been diagnosed with mononucleosis or suspect you have it (or a recurrence), then take immediate action:

- Gargle with ½ teaspoon sea salt and a pinch of cayenne pepper in ¼ cup warm water
- Take 1000 mg of vitamin C
- Take some beta-carotene (6 mg), or vitamin A (5,000 IU). Vitamin A is fat soluble, so is toxic in large amounts. The acute toxic dose is 25,000 IU per kilogram of body weight, and the chronic toxic dose is 4000 IU per kilogram of body weight every day for 6-15 months).
- Suck on a zinc lozenge or tablet containing 10 - 20 mg of zinc. Allow it to dissolve slowly in the mouth
- Take an immune-boosting tonic like Echinacea, Olive Leaf extract and/or the Chinese herbal tonic Gao Mao Ling.
- Drink extra fluids, especially hot teas. Choose from ginger, black pepper, sage, thyme and/or garlic. Add lemon and/or honey to taste. Hot liquids like herbal teas, green tea, broths, lemon water and soups are very soothing for sore throats. They can loosen phlegm and bring instant relief. In cases of severe sore throats where even swallowing can be painful, I suggest my patients suck on ice chips or ice cubes. This numbs the throat temporarily and allows an adequate fluid intake to be maintained.
- Eat light meals according to your appetite. If you overburden your body with too much food, your energy will be directed towards your digestion, not healing your mononucleosis.
- Rest as much as you can.

The first days
Whilst you are suffering from mononucleosis symptoms then every 2 - 3 hours during the day take:

- 1000 mg of vitamin C
- 10 - 20 mg zinc lozenge - sucked on, not swallowed
- 5,000 IU vitamin A, or 6 mg beta-carotene (for pregnant women do not exceed 10,000 IU of vitamin A a day. Vitamin A is fat soluble, so is toxic in large amounts. The acute toxic
dose is 25,000 IU per kilogram of body weight, and the chronic toxic dose is 4000 IU per kilogram of body weight every day for 6-15 months).

- 1 dose of an immune-boosting tonic like echinacea, olive leaf extract or Chinese herbs
- A sea salt and cayenne pepper gargle
- A hot throat-soothing tea
- If your liver is swollen and painful or your spleen is enlarged add the herb St. Mary’s Thistle
- If your glands are swollen or sore add the herb cleavers or Red root to your regime
- If you feel like eating, make yourself a hot chicken soup and add some onions, garlic, ginger, black or cayenne pepper and some Shiitake or Maitake mushrooms if you have them available.
- Rest your body and voice as much as possible. Make sure you get adequate rest. Don’t overtax your energy reserves. The energy needed to fight mononucleosis has been compared to hard physical labor! So listen to your body and rest up!
- If you have a health, healing or relaxation CD, play it daily or spend 15 minutes meditating or visualizing your body healing itself.
- Avoid excess exercise when sick. Once you start feeling better you can resume your exercise program gently. If your mononucleosis is accompanied by swollen glands, a gentle walk can help move the swollen lymph, and bring some relief. Alternatively, a lymphatic massage can help. You can even do your own lymphatic drainage massage at home.
- If you have ongoing fatigue or muscle aches, then add a good B complex with magnesium into your regime.
- Watch a funny video or comedy to get you smiling, increase your tolerance to pain and to boost your white blood cell activity
- Have a hot Epsom bath, sauna or spa before retiring at night. Viruses cannot thrive at high temperatures, so these remedies will get you feeling good faster. Epsom salts are high in magnesium and great for aching muscles and fatigue
- Burn some essential oils like eucalyptus, tea tree, lavender or lemon oil, or add them to your bath
- Use a humidifier with one of these oils to your bedroom at night if you have trouble breathing
- Get at least 8 hours sleep. Some people may have trouble sleeping because of the discomfort in their throat or glands. In this case taking a herbal or homeopathic sleep
remedy is a good idea. For throat discomfort at night, try dissolving a eucalyptus or menthol lozenge in your mouth when you go to sleep. Wrapping a heated wheat bag around the neck or using a liniment on the neck is very comforting and can bring you some relief so you can sleep.

A note on dosages...

The dosages recommended here are for adults. For children aged 4 -12, one third to one half the recommended adult dose is suggested. For infants, no more than ¼ dose should be given. Please check with your health practitioner if you need further guidance.

If your mononucleosis lingers

If your mononucleosis continues then repeat the above until you feel better. Be patient - it can take a good month or more to get over a bad bout of mononucleosis.

Usually the longer you have been sick for, the longer it will take to get better. I tell my patients that in most cases it takes about 1 month for every year you have been sick. For example, if you have been ill for 3 years, it can take about 3 months to recover.

It is important that you do not get angry, frustrated or upset by your symptoms. See this as a time to rest your body and mind. Keep positive and perhaps make it a special time to write up your goals or do a neglected activity like putting together your photo album or writing some letters. Catching up on funny videos or reading some good books can also be a good way to enjoy this time when your body is healing itself.

If you do not make good progress on the program then you may need to clarify if you have any other infections like mycoplasma, Lyme's or Chlamydia pneumonia which are complicating your recovery. It is also important to test for other conditions like anaemia, allergy, low blood sugar, underactive thyroid, exhausted adrenals, liver problems, sarcoidosis etc that can mimic Epstein Barr.

Need more help?

If you feel your health needs further attention it is worth finding a good natural health practitioner who can work with you on your condition. If you are in Sydney, then private naturopathic consultations are available through:

The Wholistic Therapy Centre
Suite 5 / 169A Pacific Highway, Hornsby NSW 2077
Suite 10 / 876A Pittwater Road, Dee Why NSW 2099
Phone 1300 650 169
www.wholistictherapycentre.com

Elizabeth Noble
Naturopath
Director
Wholistic Therapy Centre
Member of the Complementary Medicine Association
GLOSSARY

**Allergen** - any substance that causes allergy. Allergens are diverse and affect different organs and tissues. For example pollens, furs, molds and dust may cause hay fever or asthma; dyes and cosmetics may cause dermatitis or skin rashes; certain foods may cause diarrhea or gastrointestinal upsets.

**Antibody** - a protein produced by the immune system that identifies a foreign body like a virus or bacteria, inactivates it and marks it for destruction by white blood cells.

**Antigen** - a substance that identifies a foreign body and causes the body to form an antibody that responds to it specifically.

**Antioxidant** - a molecule made by the body or consumed in food that prevents oxidation of cells by free radicals. Vitamins A, C and E are some of the best known antioxidants.

**B-cell**
A type of white blood cell that matures in the bone marrow, and produces antibodies. B- cells circulate in the blood, constantly alert for invading organisms.

**Bacteria** - single-celled microorganisms. Some cause disease, others are harmless, whilst others are beneficial to the health of the human body.

**Bronchitis** - inflammation of the mucous membranes in the lungs.

**Cortisol** - a sterol secreted by the adrenal glands in times of stress. High amounts of cortisol can suppress immunity.

**Demulcent** - a medicine or food that soothes irritated mucous membranes.

**Epstein Barr virus** - the virus that is the causative agent of mononucleosis or glandular fever.

**Expectorant** - a medicine or food that helps expel mucous or phlegm from the throat and lungs.

**Free radical** - an unstable molecule that can damage cells. Free radicals lack an electron in their molecular structure so steal electrons from other molecules in the body, thus damaging cells. Free radicals are found in cigarette smoke, air pollution, UV radiation and certain foods like fried foods. They are also produced during normal bodily activities like eating and exercising.

**Histamine** - a substance released by cells as part of the immune response to a foreign body or allergen. Histamine causes inflammation, increased blood flow and mucous production.
**Immunoglobulins** - Five antibodies that fight off infection by attaching to, and killing bacteria and viruses. Immunoglobulin A is the most common, and is found in the body’s mucous membranes.

**Immune system** - the body’s system of resistance to disease. It is composed of various types of white blood cells and the lymphatic system which includes the thymus gland, lymph tissue and spleen.

**Interferon** - a protein released from cells when under attack from a virus. It protects neighboring cells from infection.

**Interleukin** - a protein of the immune system that activates T-cells and macrophages. It also stimulates inflammation and fever.

**Leucocyte** - a term referring to the whole class of white blood cells

**Lymphocyte** - a type of white blood cell that fights infection. B-cells and T-cells are the 2 major type of lymphocytes.

**Macrophage** - a large white blood cell that patrols the body, engulfing and killing foreign substances like bacteria and viruses.

**Minerals** - inorganic substances, many of which are essential for health. Examples of minerals are calcium, zinc, magnesium and selenium.

**Mucosa** - mucous membranes that line the inside surfaces of air passages. The mucosa contain mucous glands that secrete mucous.

**Natural killer cells** - T-cells that destroy germs and certain cancer cells.

**Neutrophil** - a type of white blood cell that ingests and kills bacteria. It is an important defence against infection.

**Phagocyte** - a white blood cell that engulfs and ingests harmful microorganisms or substances. It also mops up the debris after other immune cells have done their job.

**Phytochemicals or phytonutrients** - a group of chemicals found in fruits and vegetables that benefit health. Two major classes are carotenoids and flavanoids.

**Placebo** - a pill containing no active ingredients. Also known as a “dummy pill”.

**Platelet** - a small round cell involved in blood clotting.

**Spleen** - a large dark-red ovoid organ situated on the left side of the body, below and behind the stomach. The spleen produces lymphocytes in the newborn, and contains phagocytes - white blood cells that remove worn-out red blood cells and other foreign bodies.
**T-cell** - a type of white blood cell that matures in the thymus gland. T-cells constantly patrol the body to destroy foreign substances and cancer cells.

**Thymus gland** - a gland in the chest that helps produce white blood cells.

**Virus** - a tiny bundle of genetic material surrounded by a protein capsule. Viruses invade living cells, using them to replicate thousands of copies of themselves.

**Vitamins** - essential nutrients needed for proper body function.

**DISCLAIMER**
This book’s intention is to inform and educate. It is not to replace medical advice given by your health professional. It is recommended that you consult your doctor or health professional before following any therapeutic advice, especially if you have a pre-existing medical condition. Never reduce or discontinue your prescribed medication without the consent of your doctor. The author cannot take medical or legal responsibility for illness arising out of the failure to seek medical advice from a doctor.
REFERENCES

www.anyvitamins.com/olive_leaf_extract.htm
www.ageless.co.za/herbal-encyclopedia.htm
www.holistic-online.com/cancer/cancer_home-herb-rem.htm - 20k
www.holistic-online.com/Remedies/Flu/default.htm (great info for colds/flu)
www.future-world.com/cgi-bin/category/24710/5530/3/ (cold resource)
www.mayoclinic.com (good resource for any ailment)
www.wrongdiagnosis.com
www.e-lyte.com
www.wisegeek.com
www.alternative-medicine-and-health.com
www.healingdaily.com
www.ralphmoss.com/coff.html - 12k
www.mesupport.bigstep.com
Http://healthyherbs.about.com/cs/herbfaqs/p/pftumeric.htm
www.familydoctor.org
www.healthline.com

Sahelian, Ray and Dolby Toews, Victoria, The Common Cold Cure, 1999, New York, Avery Publishing Group
Bruning, Nancy Pauline, Natural Medicine for Colds and Flu, 1998, New York, Dell Publishing
Foster, John, Kane, Patricia and Speight, Neal, The Detoxx Book, 2005
Plasse, Harvey and Masline, Shelagh Ryan, Sinusitis Relief, 2002, New York, Henry Holt and Company, LLC.
Gellatley, Ron, Internal Health - the Key to Eternal Youth and Vitality, 1999, Sydney, Cargell Press.
Soames, Petrene, The Essence of Self Healing, 2000, Spring, Texas, FleetStreet Publications.
Teitelbaum, Jacob, From Fatigued to Fantastic, 2001, New York, Avery.