paradisenutrients

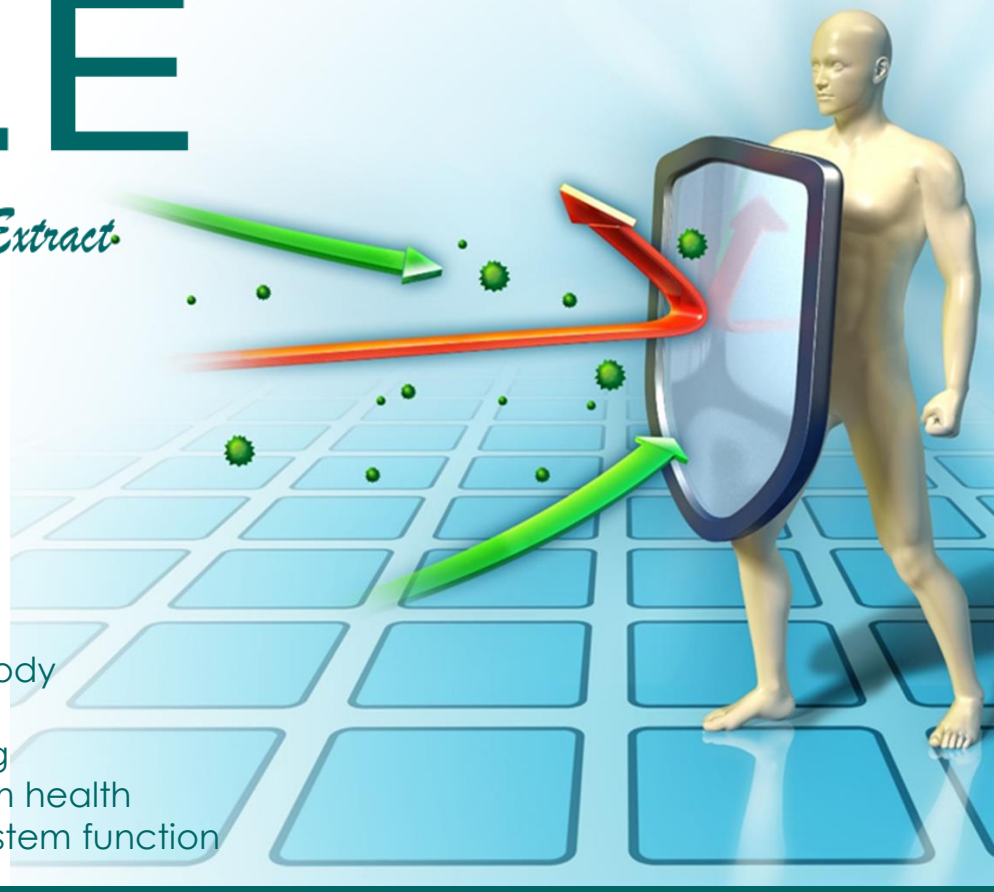
M.A.T.E

Melaleuca - Alternifolia - Tree - Extract

Immune Support

- Melaleuca Essential Oil Extract
- Zinc
- Selenium
- Antioxidant Rich

- Reduces free radicals formed in the body
- Decreases free radical damage
- Maintains and supports wound healing
- Maintains and supports immune system health
- Maintains supports healthy immune system function



Immune Support

M.A.T.E

Immune Support

M.A.T.E Immune Support is a TGA listed medicine containing powerful immune boosting minerals and micro encapsulated food safe essential edible oils. The formula is blended and distributed In 500mg vegetable glycerine capsules. Our immune system is dependant on these minerals and other ingredients on a daily basis to support, and help the immune system function properly.

Many of our aged soils lack these essential nutrients and this in turn means our foods may also be lacking these essential nutrients compromising our immune system.

It is suggested that this product also be taken in conjunction with a healthy diet and daily exercise.
Supplements supply the ingredients. It's you and your body that needs to do the work to make efficient use of the compounds that a supplement provides. Exercise is important for the immune system to function correctly.

Immune Support

Zinc

Zinc has strong antioxidant properties that help your body with free radicals such as reactive oxygen species (ROS), unstable molecules that damage cells and tissues.

Antioxidants like zinc and other minerals and counteract the oxidative stress from these free radicals. Oxidative stress over time can lead to chronic disease.

Zinc is a trace mineral and plays an important role in many wound-healing processes, including repairing membranes, coagulating blood, fixing tissues, forming scars, and importantly your body's immune defence response.

Zinc is an essential mineral that regulates your health and your body's response to stress. Zinc helps blunt the release of cortisol, one of the stress hormones.
The problem is, chronic stress depletes zinc. Which causes your body to have a harder time controlling cortisol.

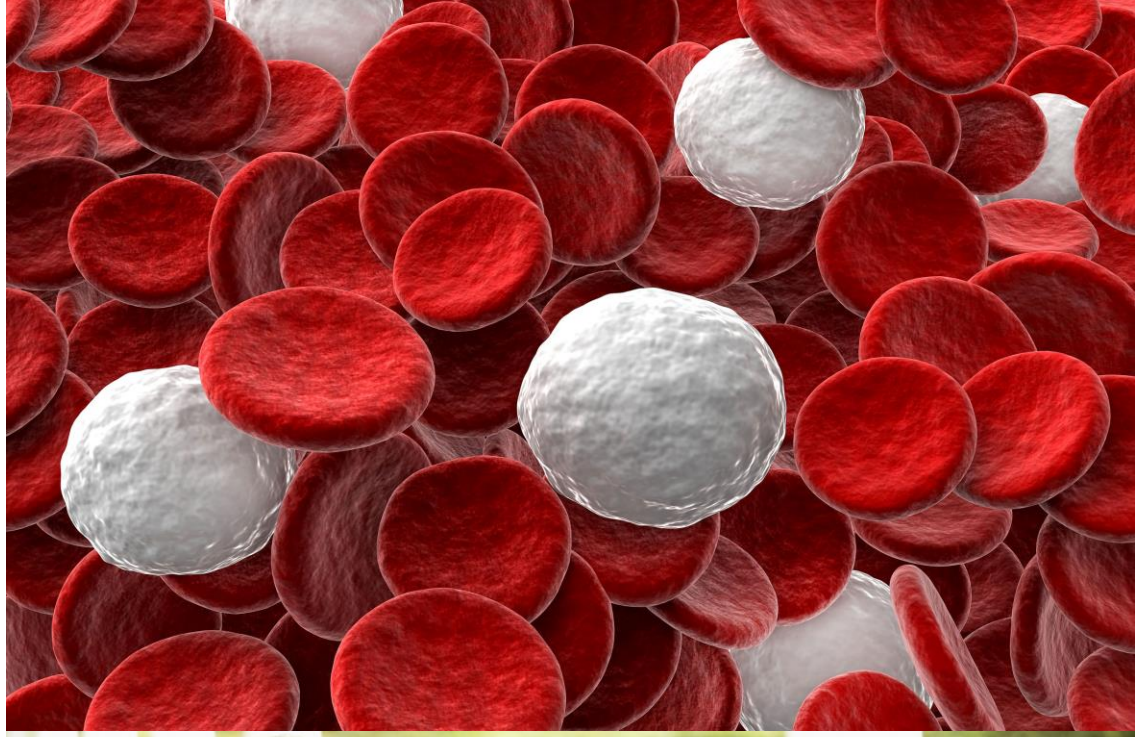
Zinc

Low zinc levels in your body can affect your immune function by increasing your risk of getting an infection.
Zinc is critical for your body's ability to make immune cells and produce antibodies that are necessary for the immune response.

Without enough zinc, your body can't make and activate immune system cells like T-lymphocytes - white blood cells that shut down infection in cells.

Zinc should be present in every cell of your body. It's involved in over 300 enzymes and 1,000 transcription factors that are essential for cell division by copying DNA. Your health could become compromised if you don't get enough zinc in your diet.

As we grow older, it becomes even more important to ensure adequate daily top-ups of zinc and other nutrients because the ageing process makes the immune system more susceptible to weakening.



How it Works

How does zinc work inside the body?
When you have an infection, your body recruits zinc to the scene. Zinc not only helps produce proteins that help in the immune response but also stops their production when they're no longer needed zinc helps regulate the "on-off" switch in the immune system.

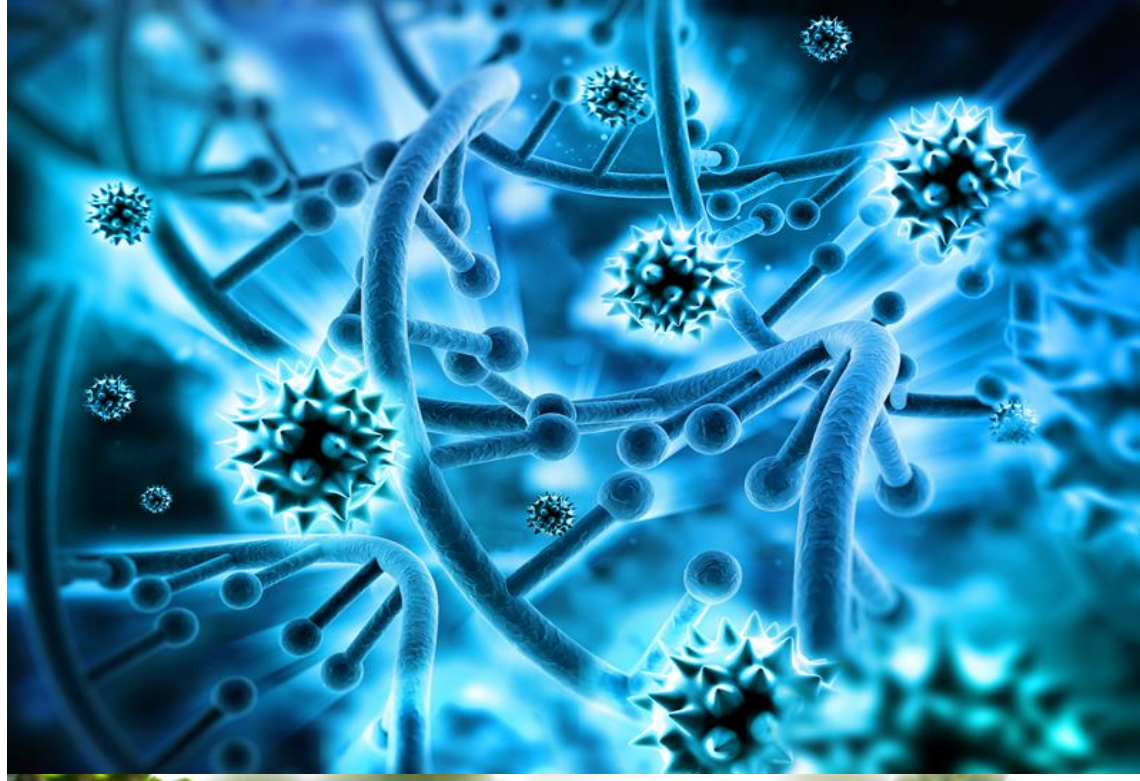
When an infection or injury occurs, so does inflammation just like swollen, red tissue near a cut. On most days, you won't have inflammation in the body, but during an infection it plays an essential immune system role.

Typically, white blood cells rush to the scene of an injury, protecting your body from bacteria or other invaders. That inflammation should stop once the body's normal immune system response has dealt with the infection.

Selenium

Selenium is a trace element that's important for immune system support. Selenium can help reduce inflammation and fight off threats like viruses and parasites. It may also improve heart health, thyroid function, brain health, and help in preventing cognitive decline. Selenium also assists the liver to function at its optimal level. Without enough selenium in your body, your immune system and liver could become compromised and vulnerable to attack from pathogens.

People who don't get enough selenium in their diet are more likely to suffer from more frequent infections and take much longer to recover from infections.
Without enough selenium, it is much easier for viruses to reproduce inside your body's cells and you are more likely to suffer fatigue, swollen glands, and become more prone to suffer from infections.



How it Works

Selenium is needed in the body to create a number of enzyme actions that limit damage to your cells from free radicals. Selenium help create Sialoproteins (a component of mineralized tissues) that is involved in creating functional T cells, which are white blood cells that help prevent infections.

Not getting enough selenium in your diet can inhibit your antibody response, since this is dependent on T cells.

Selenium also assists in the thyroid function.

Many know that iodine is necessary to keep your thyroid functioning properly but few link selenium to the thyroid. Your thyroid contains high amounts of selenium in the form of sialoproteins, which help protect the thyroid from the free radicals formed during the production of the thyroid hormones. Getting enough selenium in your diet may help minimize the effects of iodine deficiency.

Melaleuca Alternifolia

There are around 140 compounds that make up the extracts from this amazing tree. Traditionally Tea Tree Oil has been used topographically as a medical aid because of its anti- bacterial, anti-fungal, anti-viral and anti-mould properties.

The Tea Tree ingredient in M.A.T.E Immune Support contains a unique combination of compounds extracted from the Tea Tree called Melaleuca Alternifolia. These extracted compounds are from the whole Tea Tree leaf, not just the oil. Through a unique process, PN makes it into a safe consumable food grade extract.

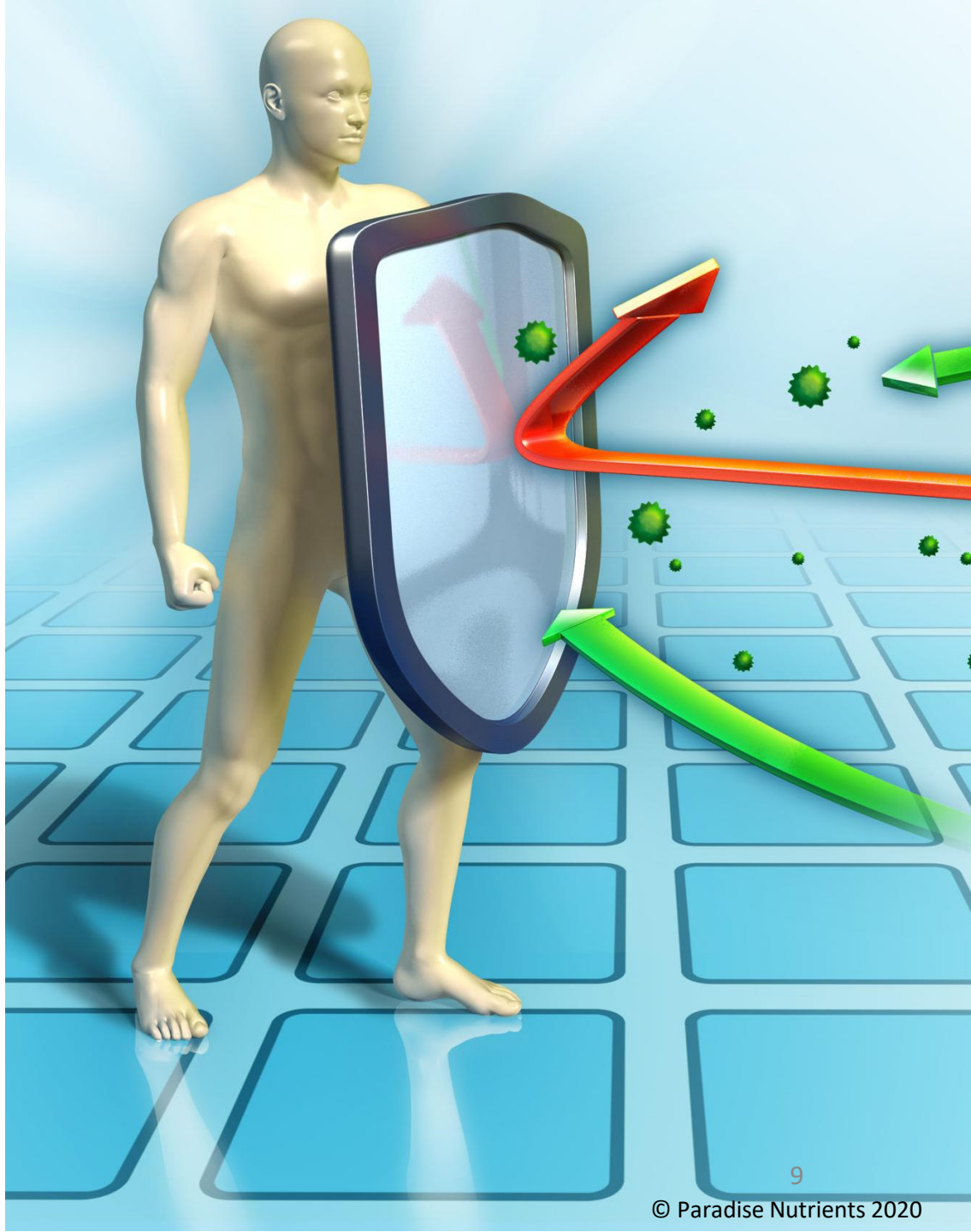
The benefits from Tea Tree are numerous as it has been proven to contain certain compounds and minerals that support a healthy immune system. It is thought that many Viruses, Bacteria, Fungus, and Mould can camouflage themselves from the immune system.
This is where M.A.T.E Immune Support may assist the immune system by exposing them to the immune system.

How it Works

Melaleuca Alternifolia (Tea Tree). Tea Tree Essential Oil is known for its anti bacterial, anti fungal, anti viral and anti mould properties. Tea tree oil is made up of 140 plant compounds, and these compounds are what make it such a unique oil. However, PN has discovered that by removing some of the more volatile compounds within the oil we are able to make it into a food safe ingredient.

At Paradise Nutrients, we not only recognise the essential oil of Tea Tree as having benefits we also know that there are some compounds in the leaves of the tree that offer some amazing benefits as a super food additive. By combining the leaf and oil extracts and fusing them with other plant extracts makes M.A.T.E Immune Support a powerful superfood to support the immune system.

Some of the minerals and compounds in the food safe Tea Tree formula assists the immune system by helping to break down the protein barrier that camouflages viruses and bacteria from the immune system. The mineral blend assists in boosting up the killer cells.



Excipients

An excipient is a substance formulated alongside the active ingredient of a medication, included for the purpose of long-term stabilization, bulking up solid formulations that contain potent or concentrated active ingredients in small amounts. These are often referred to as "bulking agents", "fillers", or "diluents", or to confer a therapeutic enhancement on the active ingredient in the final dosage form, such as facilitating drug absorption, reducing viscosity, or enhancing solubility.

Paradise Nutrients chooses excipients that are from approved natural or organic substances that are 100% digestible and add to the nutrients enhancement of the active ingredients.

The companies view is that using fully digestible certified organic approved food grade excipients assist with the digestion process and considers the gut flora.

Product Quality

Paradise Nutrients has a wide range of products from superfoods to listed medicines. From the growing of the quality Tea Tree Essential Oil, and herbal extracts through to the manufacturing of the capsules. Product quality is followed through every step of the process.

Our products are made in GMP and TGA certified facilities. The Therapeutic Goods Administration (TGA) is a Commonwealth Government agency that regulates medical devices, drugs, and listed medicines. Australian standards of quality, safety, and efficacy are included in the TGA Australian Register of Therapeutic Goods.

Paradise Nutrients M.A.T.E Immune Support is a listed medicine manufactured in accordance with the TGA standards. The TGA standards are recognised as some of the highest standards in the modern world.
The ingredients in Paradise Nutrients products are chosen for nutrient quality, integrity, honesty, and purity.

The quality process also coincides with the company's care of staff and the impact that the growing of the raw ingredients have on the environment. Paradise Nutrients is committed to sustainable farming practices minimising our carbon footprint on the environment without compromising the quality and efficacy of the products.

Original Quality and Safety

The Tea Tree oil and Melaleuca extracts used in Paradise Nutrients product is from the finest quality tea tree oil found anywhere in the world. Our oil is a genuine product, free from any harmful chemicals, additives, or synthetics. Grown "As Nature Intended"
Our products come from an area in Australia where the Mother Trees are still standing. These trees have been tested to be over 1000 years old. The compounds in these trees and their offspring where to oil comes from contains the original DNA which guarantees original quality and superior strength of the extracts.

It is also well documented that Tea Tree Oil contains some volatile compounds composed of terpene hydrocarbons, mainly mono-terpenes, sesquiterpene, and their associated alcohols. Terpenes are volatile, aromatic hydrocarbons and may be considered polymers.

These volatile compounds are extracted through a special process without affecting the quality of the active ingredients needed to assist and support the immune system via superfoods and food grade ingredients.

The Environment

Our tea tree extracts are grown in rich alluvial soil, nestled within the confines of this natural habitat which beams with native wildlife.
This is what gives our oil and extracts its purity and superior quality, seldom found in other oils.
By cultivating, harvesting, and distilling our oil directly on the plantation, we have the unique capability to guarantee perfection at every step of the process.

This wonderful natural oil is grown amongst the best that Australian nature has to offer in a clean, green environment. There are no factories, no pollution, no hustle and bustle, just the sweet smell of the forest and tea trees.

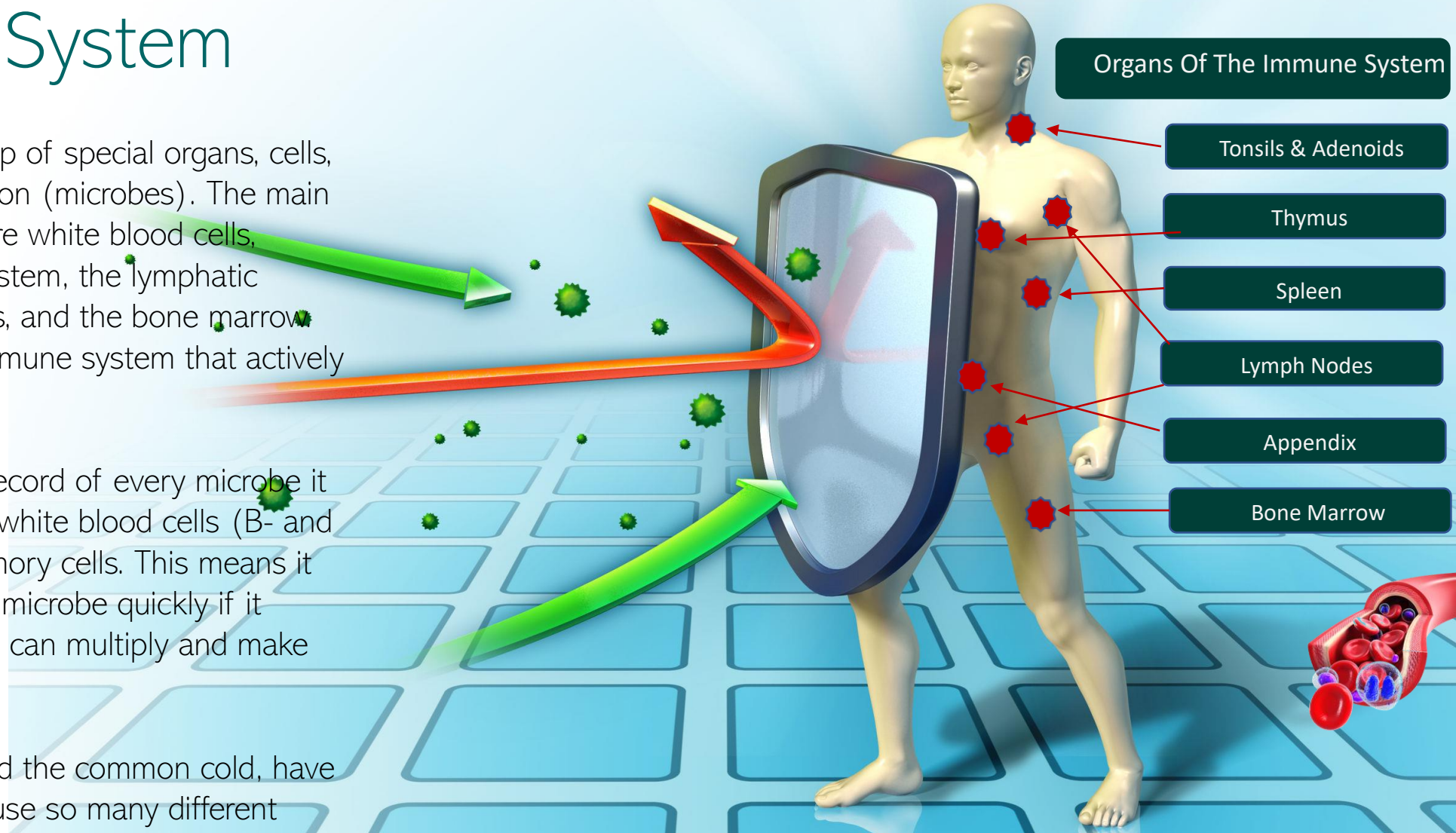
We keep our carbon footprint minimal and practice sustainable agriculture. We also protect the native animals that inhabit this distinct region, from the resident emus that live amongst the rows and rows of tea tree to the koalas that keep a watchful eye from the bordering native gum trees.

The Immune System

The immune system is made up of special organs, cells, and chemicals that fight infection (microbes). The main parts of the immune system are white blood cells, antibodies, the complement system, the lymphatic system, the spleen, the thymus, and the bone marrow. These are the parts of your immune system that actively fight infections.

The immune system keeps a record of every microbe it has ever defeated, in types of white blood cells (B- and T-lymphocytes) known as memory cells. This means it can recognise and destroy the microbe quickly if it enters the body again before it can multiply and make you feel sick.

Some infections, like the flu and the common cold, have to be fought many times because so many different viruses or strains of the same type of virus can cause these illnesses. Catching a cold or flu from one virus does not give you immunity against the others.



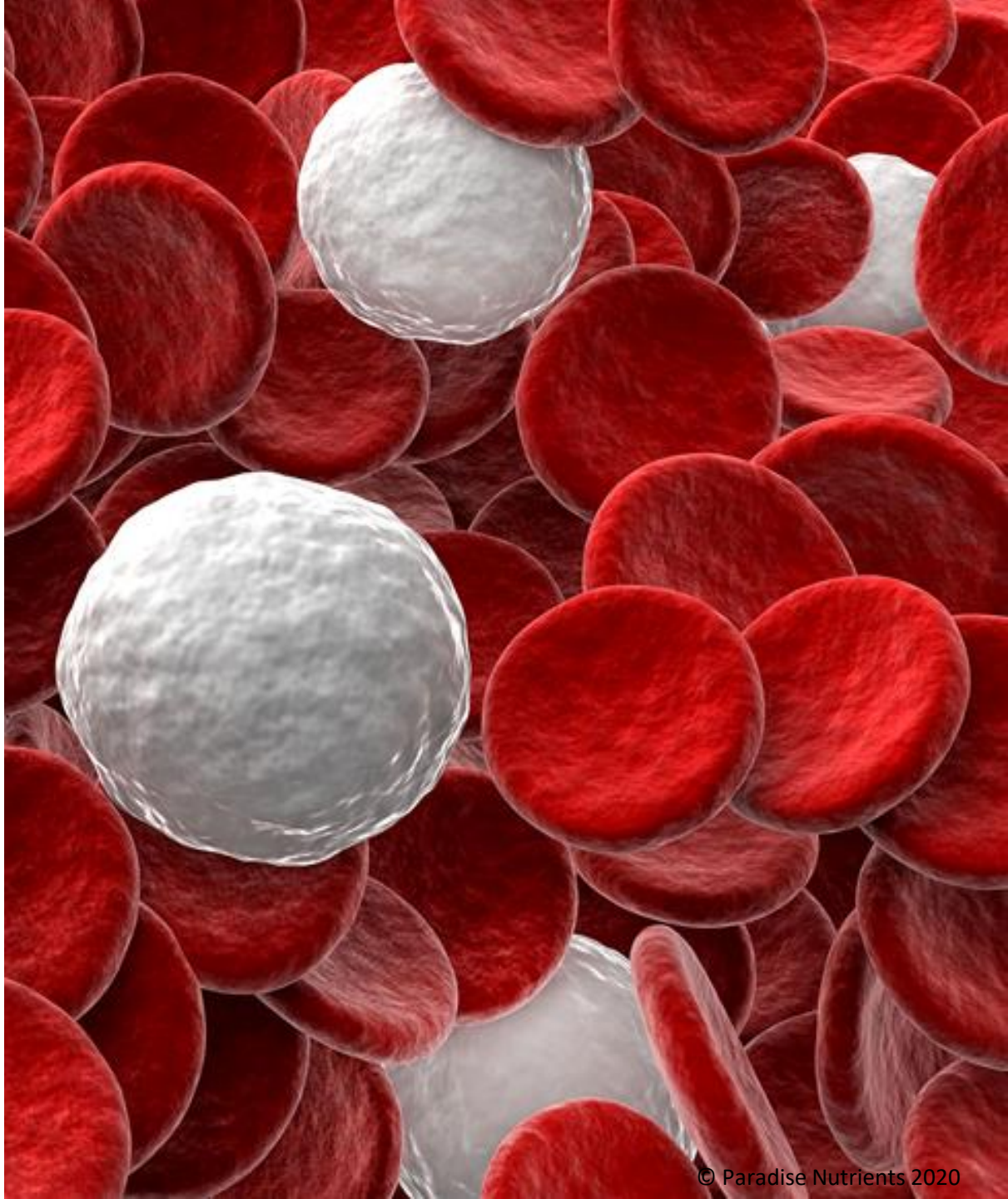
White blood cells

White blood cells are the key players in your immune system. They are made in your bone marrow and are part of the lymphatic system.
White blood cells move through blood and tissue throughout your body, looking for foreign invaders (microbes) such as bacteria, viruses, parasites, and fungi. When they find them, they launch an immune attack.

White blood cells include lymphocytes (such as B-cells, T-cells, and natural killer cells), and many other types of immune cells.

Antibodies

Antibodies help the body to fight microbes or the toxins (poisons) they produce. They do this by recognising substances called antigens on the surface of the microbe, or in the chemicals they produce, which mark the microbe or toxin as being foreign. The antibodies then mark these antigens for destruction. There are many cells, proteins, and chemicals involved in this attack.



Thymus

The Thymus gland is the main organ of the lymphatic system. Located in the upper chest, this gland's primary function is to promote the development of cells of the immune system called T lymphocytes. Once mature, these cells leave the thymus and are transported via blood vessels to the lymph nodes and spleen.

T lymphocytes, or T-cells, are white blood cells that protect against foreign organisms (bacteria and viruses) that manage to infect body cells. They also protect the body from itself by controlling cancerous cells.
T-cells contain proteins called T-cell receptors that populate the T-cell membrane and are capable of recognizing various types of antigens. (viruses and bacteria)

From infancy to adolescence, the thymus is relatively large in size. After puberty, the thymus begins to shrink, which continues with age.

Lymphatic System

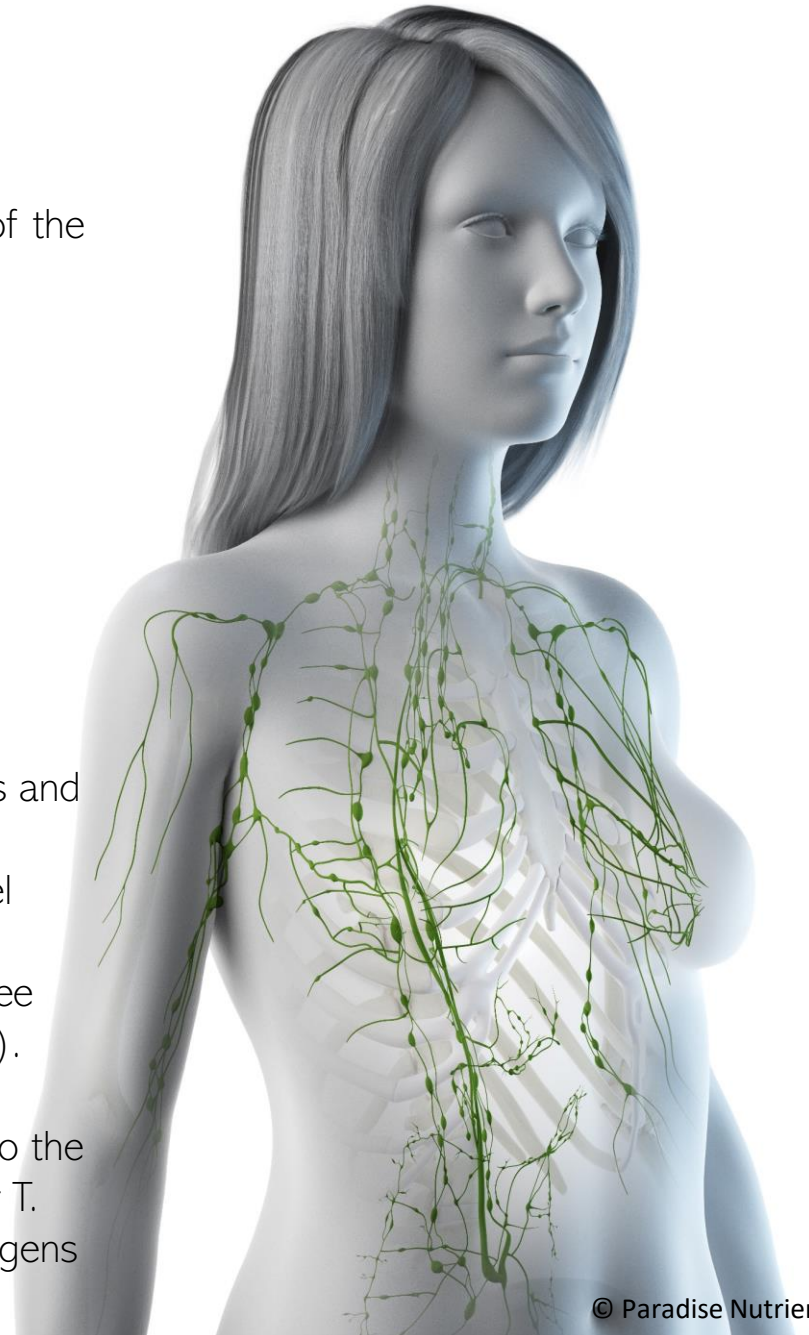
The lymphatic system is a network of delicate tubes throughout the body. The main roles of the lymphatic system are to:-

- ✓ Manage fluid levels in the body
- ✓ React to bacteria
- ✓ Deal with cancer cells
- ✓ Deal with cell products that otherwise would result in disease or disorders
- ✓ Absorb some of the fats in our diet from the intestine.

The lymphatic system is made up of:-
Lymph nodes (also called lymph glands) - which trap microbes.

Lymph vessels - tubes that carry lymph, the colourless fluid that bathes your body's tissues and contains infection-fighting white blood cells (lymphocytes).
When established into the marrow, lymphocytes enter the lymph nodes. Lymphocytes travel between each node via lymphatic channels. Lymphatic channels meet in big channels that empty into the blood vessels. Lymphocytes get into the blood through these channels. Three main types of lymphocytes play an important role in B cells in the immune system (B cells).

These cells come from the bone marrow. They form proteins called antibodies that attach to the external of the microorganisms that cause infection. Generally, they have the shape of Y or T. Each type of antibody reacts to different microorganisms, adhering to molecules called antigens that are on the surface of the microorganism.

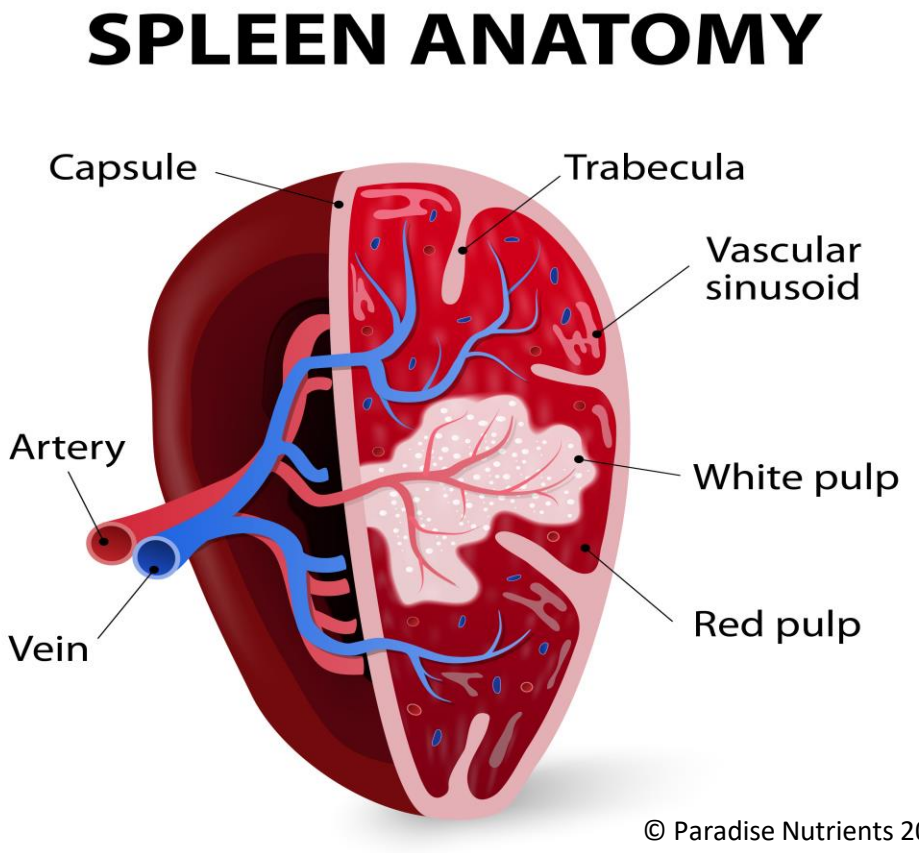


The Spleen

The spleen is a blood-filtering organ that removes microbes and destroys old or damaged red blood cells. It also makes disease-fighting components of the immune system (including antibodies and lymphocytes).

The spleen is the largest organ of the lymphatic system. The spleen acts primarily as a blood filter to remove old and damaged red blood cells, cellular debris, and pathogens such as Bacteria and viruses and plays an important role in regard to and the immune system. It removes old red blood cells and holds a reserve of blood–which can be valuable in case of haemorrhagic shock–and also recycles iron.

The spleen also houses and aids in the maturation of immune system cells called Lymphocytes. Lymphocytes are white blood cells that protect against foreign organisms that have managed to infect body cells. Lymphocytes also protect the body from itself by controlling cancerous cells.
The spleen is valuable to the immune response against antigens and pathogens in the blood.



Bone Marrow

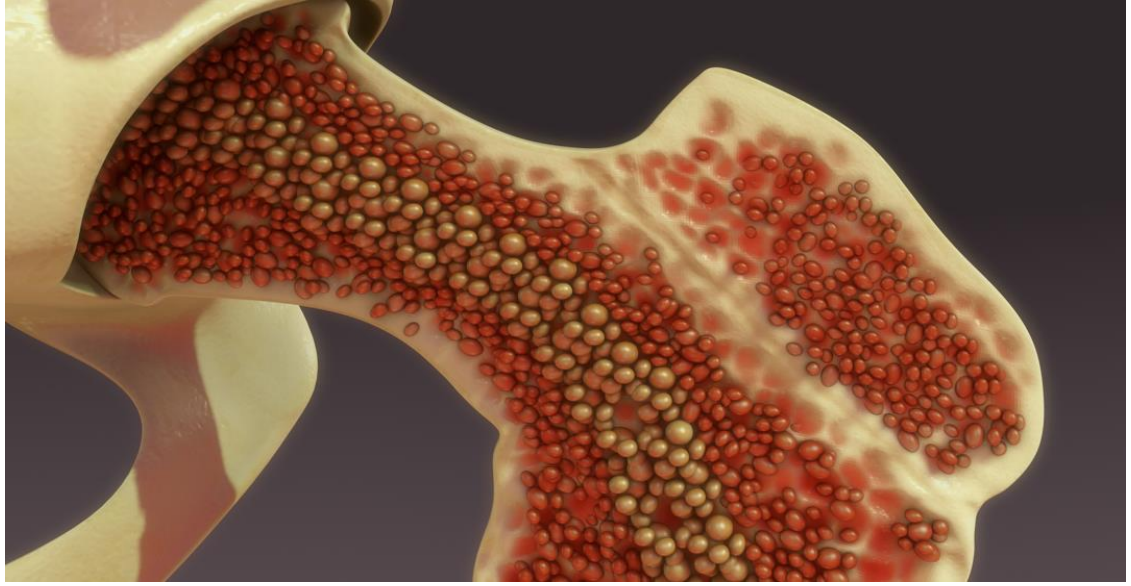
Bone marrow is the spongy tissue found inside your bones. It produces the red blood cells our bodies need to carry oxygen, the white blood cells we use to fight infection, and the platelets we need to help our blood clot.

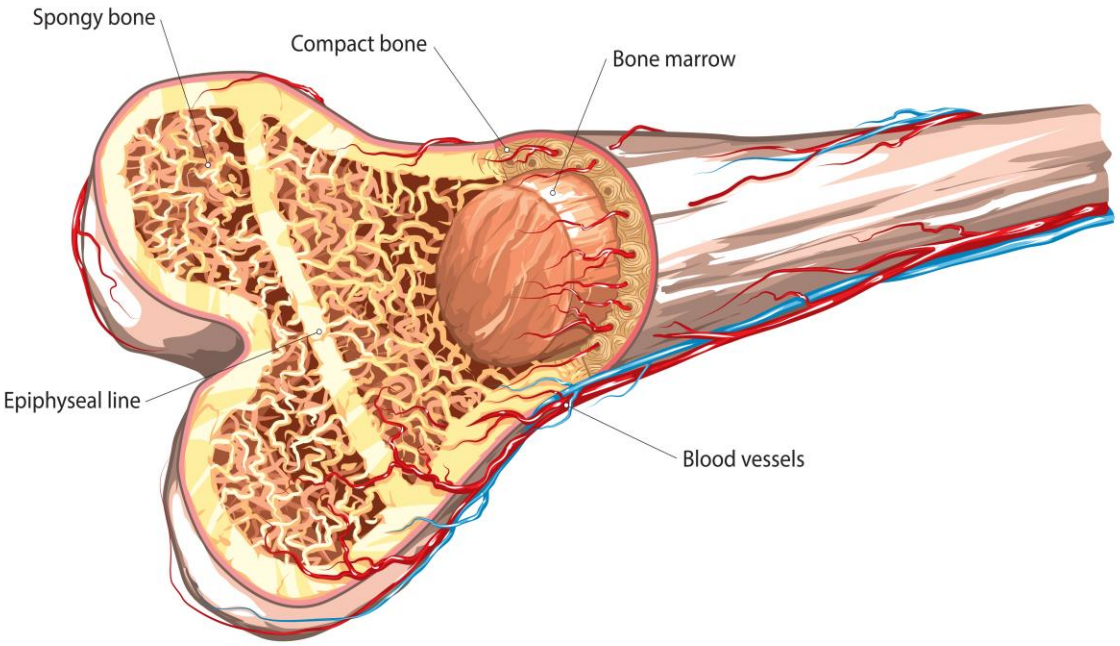
Inside the bone marrow, blood cells establish as young, immature cells called stem cells. When they produce, blood cells do not live in our bodies for a long time. That's why it keeps producing all three types of blood cells to keep us healthy.

Oxygen and carbon dioxide attach to the iron in haemoglobin, allowing the blood cells to transport oxygen to the body. Red blood cells get rid of the carbon dioxide that leaves your body through the lungs when you exhale.

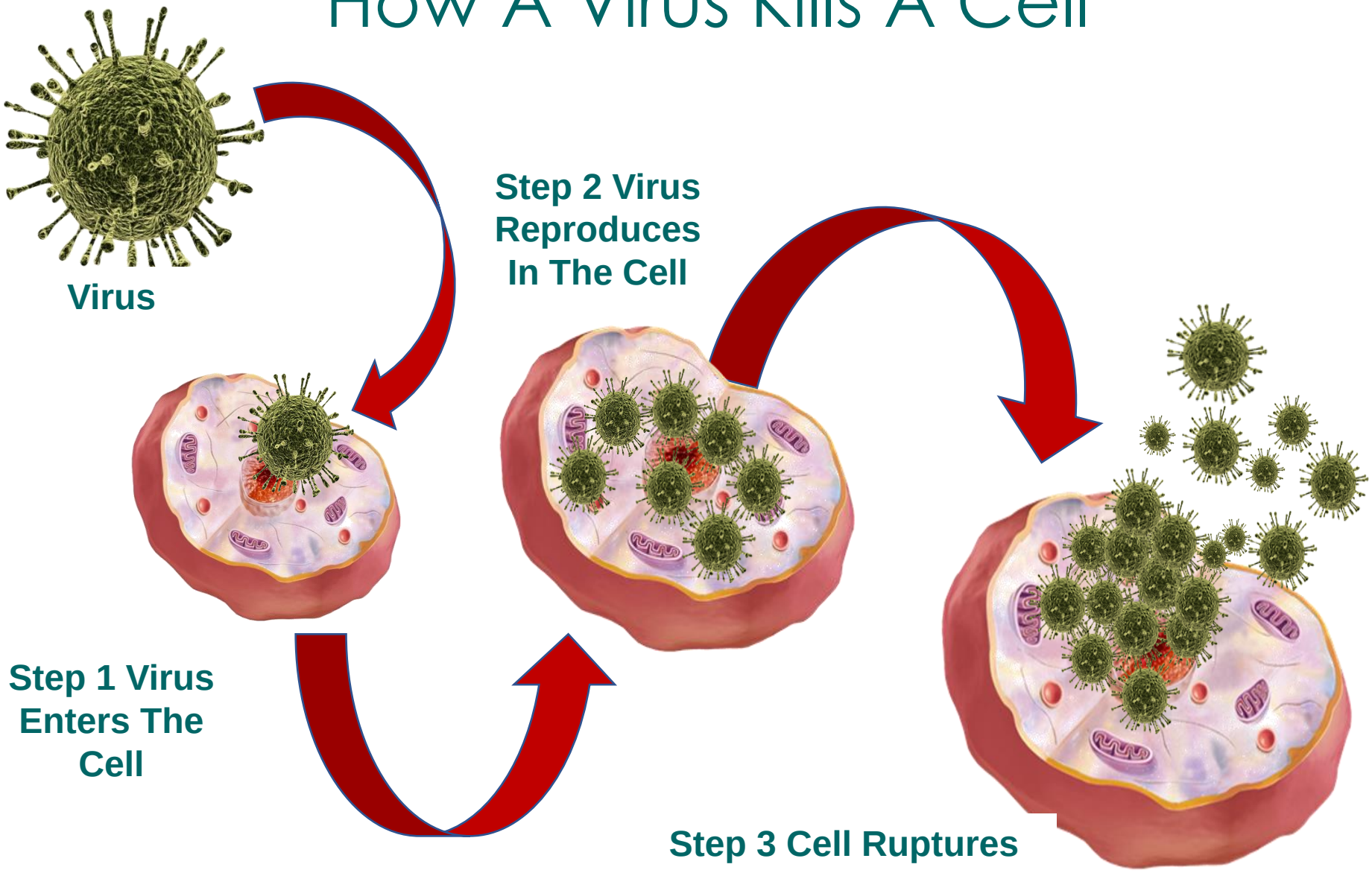
White blood cells help the body fight infection. There are many different types of white blood cells that include: lymphocytes, neutrophils, and monocytes. These white blood cells fight against attackers with bacteria, viruses, or fungi to help destroy the infection.

Platelets are blood cells that assist to clot blood (stick together) to terminate bleeding in areas of the body that have been cut or wounded.

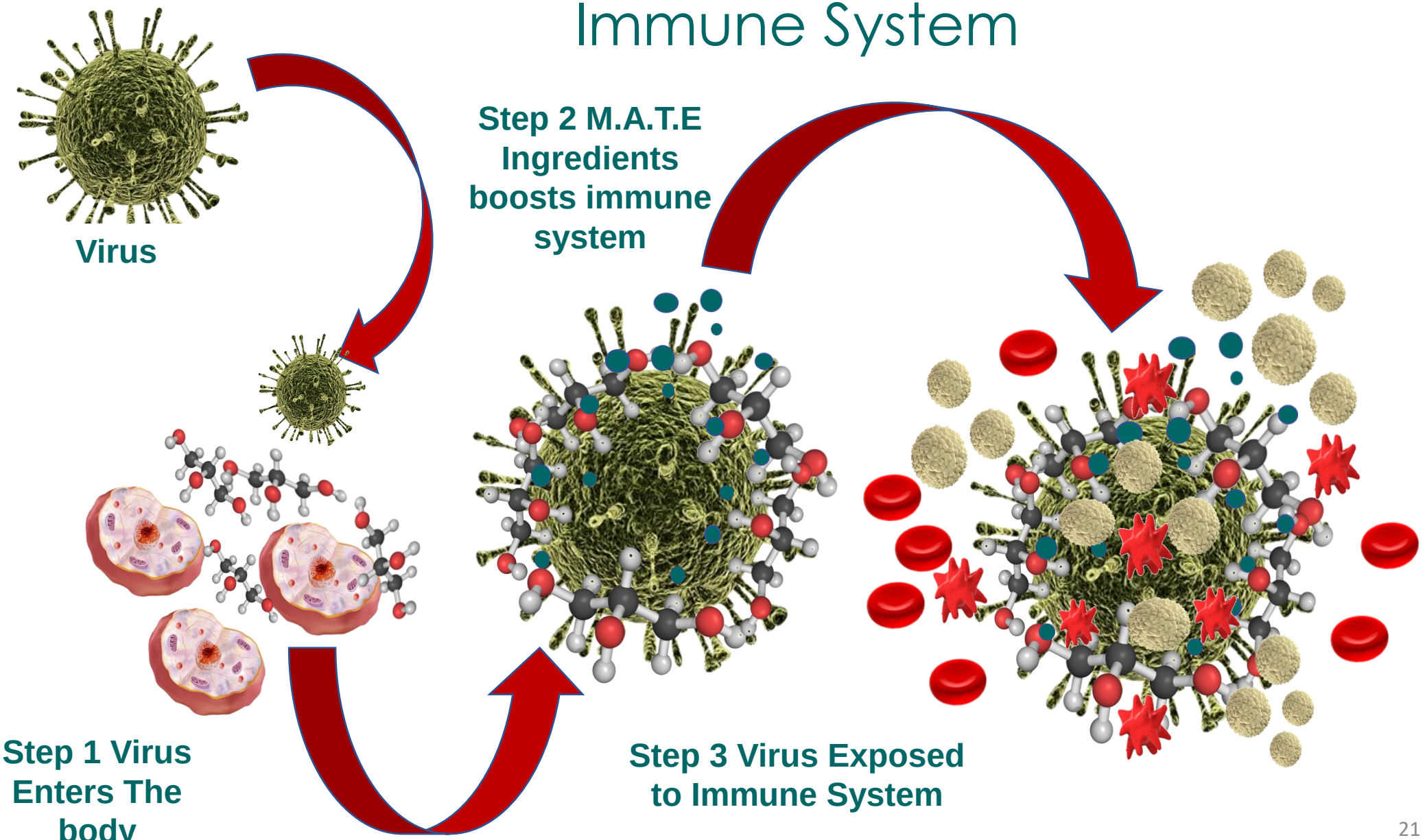




How A Virus Kills A Cell



How M.A.T.E. May Assist The Immune System



Lett Appl Microbiol. 2009 Dec;49(6):806-8. doi: 10.1111/j.1472-765X.2009.02740.x. Epub 2009 Sep 18.

In vitro antiviral activity of Melaleuca alternifolia essential oil.

Garozzo A[1], Timpanaro R, Bisignano B, Furneri PM, Bisignano G, Castro A.

Author information

Abstract

AIMS: To investigate the in vitro antiviral activity of Melaleuca alternifolia essential oil (TTO) and its main components, terpinen-4-ol, alpha-terpinene, gamma-terpinene, p-cymene, terpinolene and alpha-terpineol.

METHODS AND RESULTS: The antiviral activity of tested compounds was evaluated against polio type 1, ECHO 9, Coxsackie B1, adeno type 2, herpes simplex (HSV) type 1 and 2 viruses by 50% plaque reduction assay. The anti-influenza virus assay was based on the inhibition of the virus-induced cytopathogenicity. Results obtained from our screening demonstrated that the TTO and some of its components (the terpinen-4-ol, the terpinolene, the alpha-terpineol) have an inhibitory effect on influenza A/PR/8 virus subtype H1N1 replication at doses below the cytotoxic dose. The ID(50) value of the TTO was found to be 0.0006% (v/v) and was much lower than its CD(50) (0.025% v/v). All the compounds were ineffective against polio 1, adeno 2, ECHO 9, Coxsackie B1, HSV-1 and HSV-2. None of the tested compounds showed virucidal activity. Only a slight virucidal effect was observed for TTO (0.125% v/v) against HSV-1 and HSV-2.

CONCLUSIONS: These data show that TTO has an antiviral activity against influenza A/PR/8 virus subtype H1N1 and that antiviral activity has been principally attributed to terpinen-4-ol, the main active component.

SIGNIFICANCE AND IMPACT OF THE STUDY: TTO should be a promising drug in the treatment of influenza virus infection.

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This information should not be used to diagnose or replace any prescribed medications.
This product is made in a GMP facility that meets Australian TGA regulatory standards.

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