~ Every journey to healing begins with a single step ~

Welcome to **Local Herbs for Modern Diseases**.

Across Southeast Asia, we are surrounded by an abundance of medicinal plants that have been used for generations to support health and wellbeing. Many of these herbs grow easily in home gardens, along roadsides, and in community green spaces, yet their traditional knowledge is gradually being lost as modern lifestyles become increasingly disconnected from nature.

At the same time, chronic conditions such as cancer, cardiovascular disease, diabetes and eczema have become some of the most significant health challenges of our time. While these conditions are complex and require appropriate medical care, there is growing interest in how traditional medicinal plants may help support overall health, resilience and quality of life alongside evidence-based medipcine.

This workshop has been designed to reconnect you with four remarkable Southeast Asian herbs that are both accessible and practical to incorporate into everyday life. Rather than attempting to cover dozens of plants, we have chosen to focus on just four herbs in depth—learning how to identify them confidently, grow them successfully, harvest them sustainably, prepare them safely, and understand both their traditional uses and the emerging scientific evidence behind them.

Throughout this handbook, each chapter begins by introducing one common chronic disease and the biological processes that contribute to its development. We then explore a featured medicinal herb that has traditionally been used to support health in relation to that condition. By understanding both the condition and the plant, our aim is to help you appreciate not only *what* these herbs are, but *why* they have been valued for generations.

Whether you are completely new to herbal medicine or already have experience growing medicinal plants, we hope this handbook becomes a practical reference that you continue to return to long after today's workshop. Most importantly, we hope it inspires you to see the extraordinary healing potential that exists in the plants growing all around us.

Thank you for joining us, and we hope you enjoy discovering the rich tradition of Southeast Asian medicinal herbs.

Meet Your Presenters

This workshop is led by two degree-qualified Medical Herbalists who are passionate about reconnecting people with the rich tradition of Southeast Asian medicinal plants.

Our approach combines the wisdom of traditional herbal medicine with contemporary scientific research, making herbal knowledge practical, evidence-informed, and accessible. Through this workshop, we hope to inspire confidence in recognising, growing, preparing, and using local medicinal herbs safely and responsibly.

John Tang [Naturopath • Medical Herbalist]

John is a degree-qualified Medical Herbalist with a deep appreciation for Southeast Asian medicinal plants and the traditions that have shaped their use over generations. His interest in herbal medicine was born from his own health journey, having experienced both severe cystic acne and an autoimmune joint condition that ultimately led him to study naturopathy and herbal medicine.

He enjoys helping people reconnect with the healing potential of local herbs by teaching practical skills in plant identification, cultivation, harvesting, and preparation. His approach combines traditional knowledge with

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contemporary scientific evidence, encouraging participants to develop both confidence and respect when working with medicinal plants.

John believes that herbal medicine is most powerful when it is grounded in careful observation, safe practice, and a lifelong curiosity about the natural world.

Wendy Ting [Naturopath • Medical Herbalist • Radical Remission Coach • Metabolic Terrain Advocate]

Wendy is a degree-qualified Naturopath and Medical Herbalist, specialising in integrative oncology care. Having witnessed the powerful role that herbal medicine can play alongside conventional treatment, Wendy is passionate about translating complex scientific research into practical, everyday knowledge that empowers people to make informed decisions about their health.

She believes that some of the most valuable medicinal plants are those growing in our own backyards, and is passionate about preserving traditional herbal wisdom while demonstrating its relevance in modern healthcare.

Our Philosophy

At Thera Sanctum, which means “our healing sanctuary”, we believe that traditional herbal knowledge and modern science are complementary rather than competing ways of understanding health. By bringing these perspectives together, we hope to empower individuals with practical skills, foster a deeper connection with nature, and inspire confidence in the safe and responsible use of medicinal plants.

We are delighted to have you join us and look forward to sharing these remarkable local herbs with you.

How to Use This Handbook

This handbook has been designed as both a companion to today's workshop and a practical reference that you can continue to use at home.

Rather than introducing a large number of medicinal plants, we have chosen to focus on four carefully selected Southeast Asian herbs. By exploring each one in greater depth, you will develop the confidence to recognise these plants, understand their traditional uses, prepare them safely, and appreciate how they may support health as part of an overall healthy lifestyle.

Each chapter follows the same format to make the information easy to navigate.

1. **Understanding the Disease**
   We begin with a simple overview of one common chronic condition, exploring what it is, why it develops, and the key biological processes involved. This background provides the context for understanding why the featured herb has traditionally been used to support health in that area.
2. **Why This Herb?**
   Every featured herb has been carefully selected because of its long history of traditional use, its suitability for growing in Singapore's climate, and the emerging scientific evidence supporting its medicinal properties.
3. **Meet the Herb**
   Learn the botanical name, common names, plant family, traditional uses, and the naturally occurring compounds that contribute to the herb's medicinal actions.
4. **Identify It**
   Correct identification is the foundation of safe herbal medicine. You'll learn the key features that distinguish each plant, including its leaves, flowers, growth habit, and any similar-looking species.
5. **Grow It**
   Discover the ideal growing conditions for each herb, including sunlight, watering, soil preferences, and practical tips for cultivating healthy plants in home gardens or containers.

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6. **Harvest It**
   Learn when and how to harvest each herb to maximise its quality while encouraging healthy, sustainable plant growth.
7. **Prepare It**
   Explore a range of traditional preparation methods, including teas, decoctions, fresh preparations, culinary uses, and topical applications where appropriate.
8. **Traditional Wisdom Meets Modern Science**
   Medicinal herbs have been used for centuries across many cultures. In this section, we explore both their traditional applications and what current scientific research tells us about their potential mechanisms of action and areas of clinical interest.
9. **Practical Application**
   Each chapter concludes with a simple recipe or practical preparation that you can confidently recreate at home using the featured herb.

Throughout the handbook, you will also find space to record your own observations and notes. Herbal medicine is both a science and a tradition of careful observation, and your personal experiences will become an important part of your learning journey.

We encourage you to use this handbook not only as a record of today's workshop, but as the beginning of a lifelong connection with the remarkable medicinal plants that grow all around us.

Working Safely with Medicinal Herbs

Medicinal plants have been used for thousands of years across many cultures to support health and wellbeing. Many modern medicines have their origins in plants, and an increasing body of scientific research continues to explore the therapeutic properties of traditional herbal remedies.

While herbs are natural, they are also biologically active. Like prescription medicines, they contain compounds that can influence how the body functions. When used appropriately, medicinal herbs can play a valuable role in supporting health. However, they should always be used with knowledge, respect, and an understanding of their limitations.

This workshop focuses on the traditional use of four Southeast Asian medicinal herbs and the current evidence supporting their role in promoting health. The information presented is intended for educational purposes and should not be interpreted as medical advice or as a substitute for diagnosis, treatment, or care from a qualified healthcare professional.

For individuals living with chronic conditions such as cancer, cardiovascular disease, and diabetes, herbal medicine is best viewed as part of an integrative approach to health. Lifestyle, nutrition, appropriate medical care, and prescribed medications remain essential components of treatment, and any herbal therapies should be discussed with your healthcare team, particularly if you are taking prescription medicines.

General Safety Guidelines

Before using any medicinal herb, consider the following:

- Correctly identify the plant before harvesting or consuming it.
- Only harvest plants from areas that are free from pesticides, pollution, and other environmental contaminants.
- Introduce one new herb at a time so you can observe how your body responds.
- Use recommended preparation methods and avoid assuming that "more is better."
- Always test each new herb with a small amount and wait for any negative reactions. Discontinue use if you experience an allergic reaction or unexpected side effects.

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- Keep herbal preparations out of reach of young children unless specifically prepared for paediatric use under professional guidance. Check with us on safety and dosing for children and people with various conditions or who are taking pharmaceutical medication.
- Do not drink tea which has been left to stand >4 hours as they tend to go bad easily.

Extra Care Should Be Taken If You:

- Are pregnant or breastfeeding.
- Are preparing herbs for infants or young children.
- Are taking prescription medications.
- Have liver or kidney disease.
- Are scheduled for surgery.
- Have known allergies to plants or herbal products.
- Are undergoing active treatment

Herb–Drug Interactions:

Some medicinal herbs can influence the way medications are absorbed, metabolised, or eliminated from the body. Others may enhance or reduce the effects of certain medicines. For this reason, it is important to inform your doctor, pharmacist, or qualified herbal practitioner about any herbs or supplements you are taking.

Throughout this handbook, specific safety considerations and known herb–drug interactions are included for each featured herb where relevant.

A Respectful Approach to Traditional Medicine

Traditional herbal knowledge has been passed down through generations of careful observation and lived experience. While modern scientific research continues to investigate many of these plants, not every traditional use has been extensively studied in clinical trials. Both traditional knowledge and scientific evidence have value, and together they provide a richer understanding of how medicinal plants may support health.

Why Are Modern Diseases Increasing?

Never before have we had such remarkable advances in medicine, yet chronic diseases continue to rise around the world. Conditions such as cancer, cardiovascular disease, diabetes and eczema are becoming increasingly common, affecting people at younger ages and placing a growing burden on individuals, families and healthcare systems.

Although these conditions appear very different on the surface, they often share common underlying processes. Persistent inflammation, oxidative stress, poor metabolic health, environmental exposures, disrupted sleep, chronic stress, physical inactivity, and diets low in whole foods can all contribute to the development and progression of chronic disease. Our genes may influence our susceptibility, but our daily environment and lifestyle also play a significant role in shaping our health.

Medicinal herbs are not a replacement for appropriate medical care, nor are they a cure for complex diseases. However, many herbs have been traditionally used to support the body's natural healing processes and to promote resilience, balance and wellbeing. Increasingly, modern scientific research is exploring how these plants may influence pathways involved in inflammation, immune function, blood sugar regulation, cardiovascular health and oxidative stress.

As you work through each chapter, remember that herbal medicine is not simply about treating symptoms. It is about understanding the whole person, supporting the body's innate capacity to heal, and recognising that good health is built through many small, consistent choices—including the remarkable plants growing all around us.

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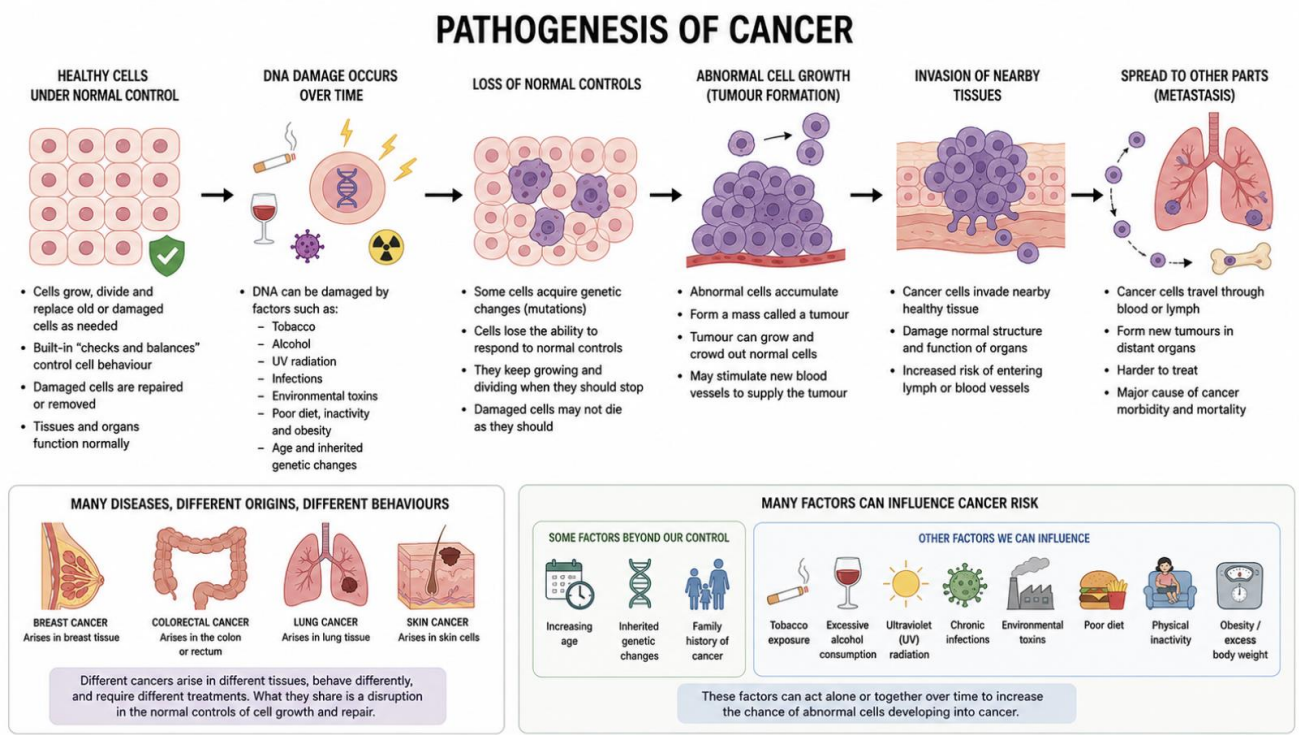
Chapter 1 - Cancer

How the body's normal system of growth and repair begins to lose control

Every second of every day, your body is working quietly behind the scenes. Millions of old or damaged cells are replaced with new ones, tissues repair themselves, and an extraordinary network of checks and balances keeps everything functioning as it should.

Normally, cells know when to grow, when to divide, and when to die. This careful balance is essential for maintaining healthy organs and tissues throughout our lives.

Cancer develops when some cells lose the ability to respond to these normal controls. Instead of stopping when they should, they continue to grow and multiply. Over time, these abnormal cells can accumulate to form a tumour, invade nearby tissues, and in some cases spread to other parts of the body.



Although we often think of cancer as a single disease, it is actually a collection of many different diseases. Breast cancer, colorectal cancer, lung cancer and skin cancer all arise in different tissues, behave differently, and require different treatments. What they share is a disruption in the normal mechanisms that regulate cell growth and repair.

Cancer rarely develops because of a single cause. Rather, it is usually the result of many factors interacting over time. Some, such as age and inherited genetic changes, are beyond our control. Others—including tobacco exposure, excessive alcohol consumption, ultraviolet radiation, chronic infections, environmental toxins, diet, physical inactivity, and obesity—can influence a person's overall risk.

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Looking beyond the diagnosis

A diagnosis of cancer changes many things. Suddenly there are appointments to attend, decisions to make, and new medical terms to understand. The focus naturally shifts to treating the cancer itself—and rightly so. Modern treatments such as surgery, chemotherapy, radiotherapy, immunotherapy and targeted therapies remain the foundation of cancer care and have transformed outcomes for many people.

But while treatment focuses on the tumour, it is equally important to care for the person.

Maintaining good nutrition, preserving muscle mass, managing inflammation, supporting immune function, sleeping well, staying physically active where possible, and looking after emotional wellbeing all contribute to health during and after treatment. These are not alternatives to conventional medicine; they are complementary strategies that help support the body's resilience throughout the cancer journey.

So where does herbal medicine fit?

Medicinal plants have been used for centuries to support people through illness. Today, research is helping us understand how certain herbs may help regulate inflammation, support immune function, protect against oxidative stress, and improve quality of life when used alongside conventional cancer treatment.

At Thera Sanctum, we don't ask, *"Can this herb cure cancer?"* Instead, we ask, **"***How can this herb best support the health of the person living with cancer?"*

That philosophy guides every herb featured in this handbook—plants chosen for their traditional use, emerging scientific evidence, and their practicality as herbs that can be grown and used within the community.

Leea indica (Bandicoot Berry)

Why This Herb?

Leea indica is a traditional Southeast Asian medicinal plant that has been used for generations to support recovery from illness and promote overall wellbeing. It grows readily in Singapore, making it an ideal herb for home gardens and community use.

Botanical name: *Leea indica*

Common names: Bandicoot Berry, Memali (Malay), Yan Tuo (岩陀)

Plant family: *Vitaceae*

Parts traditionally used: the leaves

Key natural compounds:

- Flavonoids
- Gallic acid
- Methyl gallate
- Triterpenoids

These naturally occurring compounds contribute to the herb's antioxidant and anti-inflammatory properties.

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Identify It

Leea indica is a large evergreen shrub commonly found in Singapore's parks and secondary forests.





Look for:

- Large divided leaves with serrated edges
- Clusters of small pale green flowers
- Purple-black berries when mature
- Shrub growing approximately 2–5 metres tall

Grow It

Leea indica is well suited to Singapore's tropical climate.

- **Sunlight:** Full sun to partial shade
- **Water:** Keep soil consistently moist
- **Soil:** Well-drained, fertile soil
- **Propagation:** Easily grown from stem cuttings or seed

Harvest It

- Harvest mature leaves throughout the year.
- Pick leaves in the morning after the dew has dried.
- Avoid harvesting more than one-third of the plant at any one time to encourage healthy regrowth.

Prepare It

Simple Herbal Tea Recipe

Ingredients

- 7 big leaves fresh (or 3 -5 g dried)
- 1 litre water

Method

1. Bring the water to a gentle boil.
2. Add the leaves.
3. Boil 1 hour.
4. Strain and drink on same day.

Traditional Wisdom Meets Modern Science

For generations, *Leea indica* has been used throughout Singapore and Malaysia as a traditional "cooling" herb to support recovery from chronic illness. Within Chinese herbal communities, it has been particularly valued for blood disorders, especially leukaemia, earning the nickname "Nemesis of Leukaemia."

Modern research is beginning to explore whether this traditional knowledge has a scientific basis. A recent Singapore study found that *Leea indica* leaf extract enhanced the ability of natural killer (NK) cells to recognise and destroy ovarian cancer cells, and also increased the effectiveness of the chemotherapy drug oxaliplatin in laboratory studies.

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Other laboratory research has reported activity against leukaemia, colon, breast, liver, cervical and uterine cancer cells. While these findings are encouraging, they have not yet been confirmed in human clinical trials.

Take Home Message

Leea indica is best viewed as a complementary herb that may support the body's natural resilience alongside conventional cancer treatment. It is not a cure for cancer, and further human research is needed to better understand its role in cancer care.

Safety First

- Generally considered a low-toxicity herb when used traditionally.
- Avoid during pregnancy and breastfeeding unless supervised by a qualified healthcare practitioner.
- People taking diabetes medication should monitor their blood glucose, as *Leea indica* may enhance glucose-lowering effects.
- Always inform your healthcare team about any herbs or supplements you are taking during cancer treatment.

Natural Compound	If you are taking these medicines, speak to your doctor or pharmacist	Why it matters
Flavonoids	• Cholesterol-lowering drugs (statins) • Blood thinners (e.g. Warfarin) • Chemotherapy medicines	May slow the breakdown of these medicines, causing higher drug levels and increasing the risk of side effects or toxicity.
Gallic Acid & Methyl Gallate	• Blood thinners and antiplatelet medicines • Iron supplements • Antibiotics	May increase the risk of bleeding or reduce the absorption and effectiveness of certain medicines and minerals.
Triterpenoids	• Some chemotherapy drugs, particularly those that work by generating oxidative stress (such as Doxorubicin)	May reduce the effectiveness of certain chemotherapy medicines. This interaction depends on the specific drug being used.

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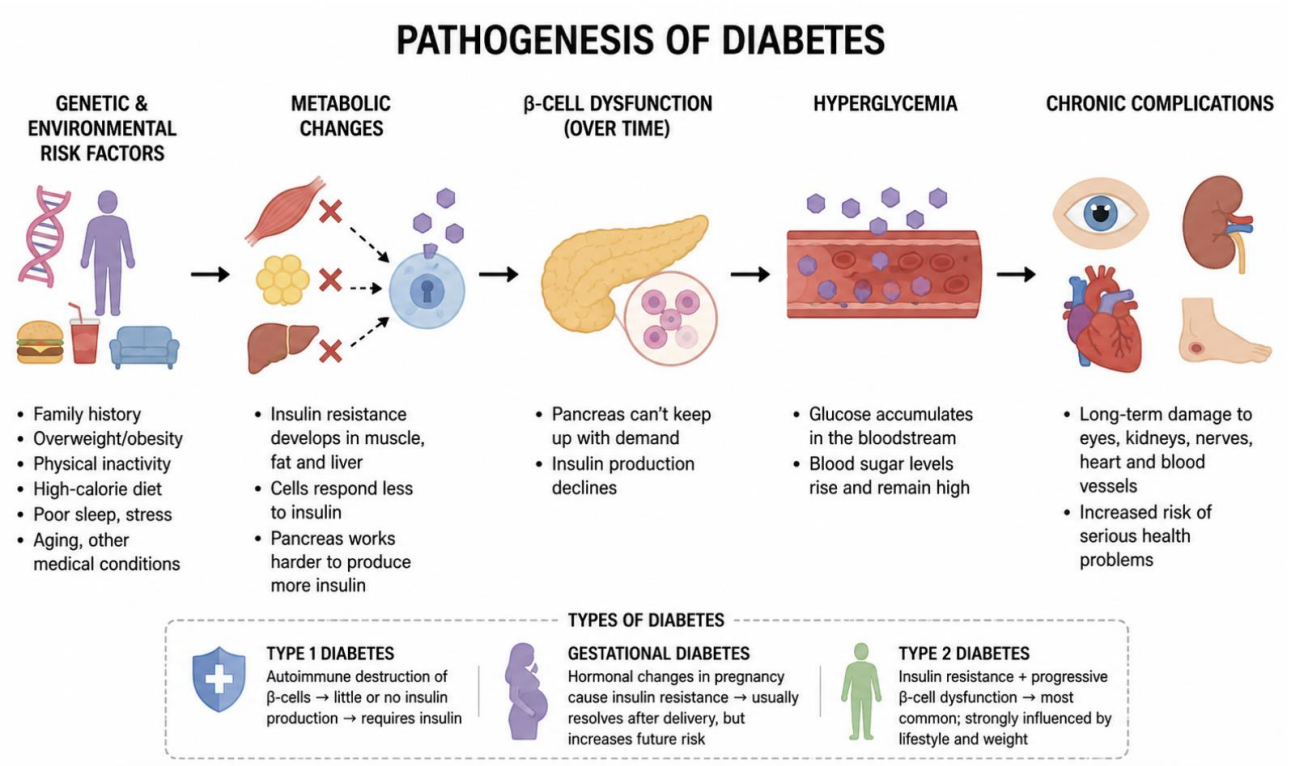
Chapter 2 - Diabetes

How the body's system for regulating blood sugar begins to lose balance

Every time you eat, your body carefully manages the amount of glucose (sugar) circulating in your bloodstream. Glucose is the body's main source of energy, supplying fuel to every organ, muscle and cell.

A hormone called insulin, produced by the pancreas, acts like a key that allows glucose to move from the bloodstream into the body's cells, where it is used for energy or stored for later. Working alongside insulin are other hormones that help keep blood sugar levels within a healthy range.

Diabetes develops when this finely regulated system no longer functions effectively. As a result, glucose remains in the bloodstream instead of entering the cells, leading to persistently elevated blood sugar levels.



Although diabetes is often spoken of as a single disease, it actually includes several different conditions. Type 1 diabetes is an autoimmune disease in which the body's immune system mistakenly destroys the insulin-producing cells of the pancreas. It is not caused by diet or lifestyle and requires lifelong insulin therapy.

Gestational diabetes develops during pregnancy when hormonal changes reduce the body's sensitivity to insulin. While it often resolves after childbirth, it increases both the mother's and child's risk of developing Type 2 diabetes later in life.

Type 2 diabetes is by far the most common form of diabetes. In this condition, the body's cells gradually become less responsive to insulin (known as insulin resistance), and over time the pancreas may no longer produce enough insulin to meet the body's needs. Unlike Type 1 and gestational diabetes, Type 2 diabetes is strongly influenced by lifestyle factors. Excess body weight, physical inactivity, diets high in refined carbohydrates and sugary foods, poor sleep, chronic stress, and certain medical conditions can all increase the risk of developing the disease. Although genetics and advancing age also contribute, healthy lifestyle choices remain one of the most effective ways to prevent or delay its onset.

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Looking beyond the diagnosis

A diagnosis of diabetes often brings significant lifestyle changes. Blood glucose monitoring, medications, dietary adjustments and regular medical reviews become part of daily life. These are essential components of diabetes care and play an important role in preventing complications affecting the heart, kidneys, eyes and nerves.

The diagnosis of Type 2 diabetes is not the end of the story. The body has a remarkable capacity to recover when the underlying causes are addressed. By combining appropriate medical care with healthy lifestyle changes, many people can greatly improve their blood sugar control, and some are able to achieve remission.

Eating a nutrient-rich diet, maintaining a healthy weight, staying physically active, preserving muscle mass, getting sufficient sleep, reducing chronic inflammation, and managing stress all help improve the body's ability to regulate glucose and support long-term health. These measures work alongside conventional medical care and form the foundation of successful diabetes management.

Strobilanthes crispa (Black Face General)

Why This Herb?

Black Face General is a is a hardy medicinal herb native to Malaysia and Indonesia, including Java, Sumatra and the Lesser Sunda Islands. Traditionally used to support metabolic health, liver function and urinary health, it thrives throughout Southeast Asia. As it grows readily in Singapore and is commonly found in home gardens, it is an accessible and practical herb for everyday community use.

Botanical name: *Strobilanthes crispa*

Common names: Black Face General, Pecah Beling, Keji Beling, Daun Jin Batu, Hei Mian Jiang Jun (黑面将军)

Plant family: *Acanthaceae*

Parts traditionally used: Leaves (primarily), stems, occasionally the whole plant

Key natural compounds:

- Flavonoids
- Phenolic acids
- Caffeoylquinic acids
- Sterols
- Saponins and tannins



These naturally occurring compounds contribute to Black Face General's antioxidant, anti-inflammatory and metabolic-supporting properties. Research suggests they may help improve insulin sensitivity, lower blood glucose levels, reduce cholesterol and triglycerides, and protect the liver from oxidative stress.

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Identify It



Look for:

- Dark green ovate to lance-shaped leaves
- Serrated leaf margins
- Rough or slightly hairy leaf surface
- Yellow tubular flowers (rarely seen in cultivated plants)
- Shrub growing approximately 0.5 – 2 metres tall

Grow It

Black Face General thrives in Singapore's warm, humid climate.

- **Sunlight:** Full sun to partial shade
- **Water:** Regular watering to keep soil moist
- **Soil:** Fertile, well-drained soil
- **Propagation:** Easily grown from stem cuttings

Harvest It

- Harvest healthy mature leaves throughout the year.
- Pick leaves in the morning after the dew has dried.
- Regular pruning encourages fresh new shoots and healthy growth.

Prepare It

Decoction Recipe

Ingredients

- 60–100 g fresh Black Face General leaves (or 15–25 g dried)
- 3 green apples (preferably organic), quartered. Leave skin on.
- Water to cover the ingredients

Method

- Place the leaves and apples into a pot (preferably a claypot, not stainless-steel pot)
- Add enough water to cover the ingredients.
- Bring to the boil, then reduce to a gentle simmer.
- Simmer for approximately 3 hours.
- Strain and drink while warm.

Traditional Wisdom Meets Modern Science

For generations, Black Face General has been used throughout Malaysia, Indonesia and Singapore as a traditional remedy for diabetes, kidney stones, liver disorders and inflammatory conditions. It has long been valued as a "cooling" herb that supports the body's natural detoxification processes and metabolic balance.

Modern research is beginning to investigate these traditional uses. Laboratory and animal studies suggest that *Strobilanthes crispa* may help lower blood glucose levels, improve insulin sensitivity, reduce cholesterol and triglycerides, and protect the liver from damage. Its rich content of flavonoids, phenolic compounds and caffeoylquinic acids also contributes to its antioxidant and anti-inflammatory activity.

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Take Home Message

Black Face General is best viewed as a complementary herb that may support healthy blood glucose regulation and overall metabolic health alongside conventional diabetes treatment. It is not a substitute for prescribed medication, and further human research is needed to better understand its role in diabetes care.

Safety First

- Generally well tolerated when used traditionally.
- Avoid during pregnancy and breastfeeding because there is insufficient safety data.
- People taking diabetes medication should monitor their blood glucose carefully, as Black Face General may enhance glucose-lowering effects.
- It may also increase the effects of medicines used for high blood pressure or as diuretics.
- Excessive use may lead to increased fluid loss, weakness or dryness.
- Always inform your healthcare team about any herbs or supplements you are taking.

Natural Compound	If you are taking these medicines, speak to your doctor or pharmacist	Why it matters
Flavonoids & Phenolic Compounds	• Diabetes medicines • Blood pressure medicines	The herb may work together with these medicines, causing your blood sugar or blood pressure to fall lower than expected. Your medicines may need to be monitored or adjusted.
Caffeoylquinic Acids	• Diuretic medicines	Taking both together may increase fluid loss, which can lead to dehydration if you are not drinking enough fluids.
Sterols, Saponins & Tannins	• Diabetes medicines • Diuretic medicines	These natural compounds may strengthen the herb's blood sugar-lowering and diuretic effects. Monitoring may be needed to ensure your treatment remains safe.

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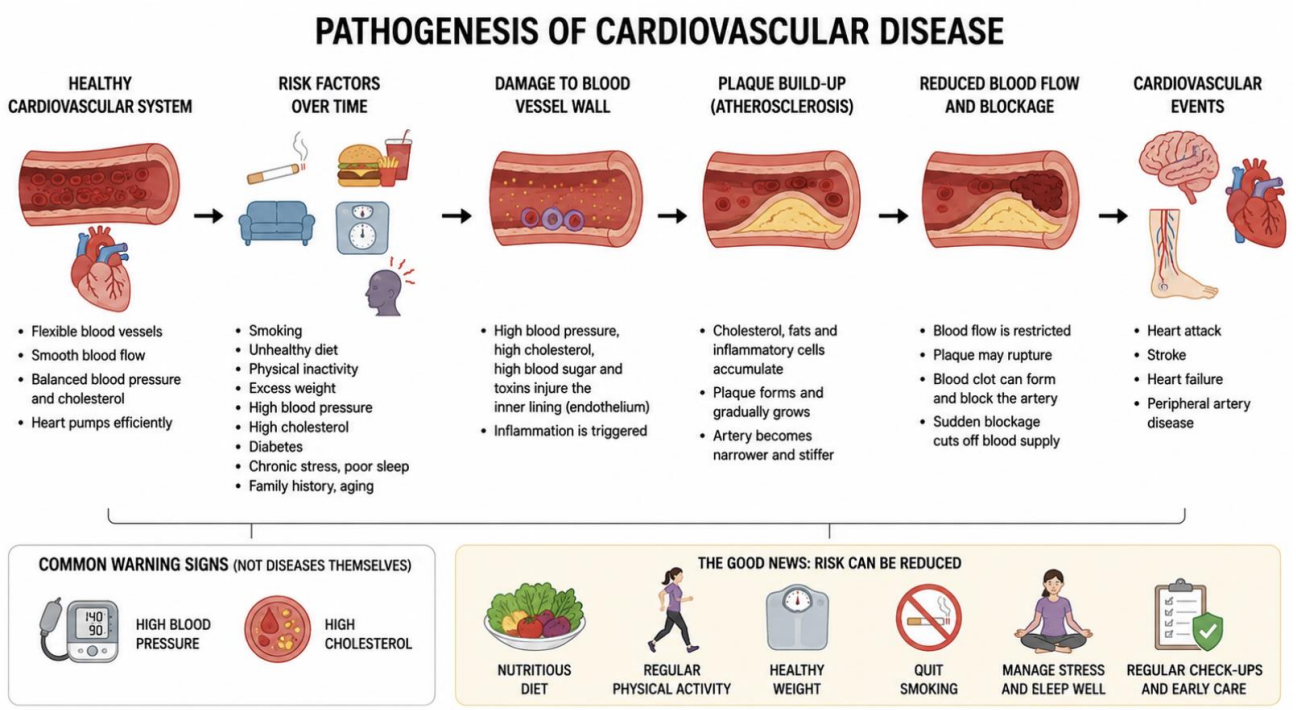
Chapter 3 – Cardiovascular Disease

How the body's circulatory system keeps every organ alive

Every minute of every day, your heart pumps blood through an extraordinary network of arteries, veins and tiny blood vessels. This circulation delivers oxygen and nutrients to every cell in the body while carrying away waste products. Healthy blood vessels are flexible, allowing blood to flow freely and efficiently to every organ.

The cardiovascular system relies on many factors working together. The heart must beat with enough strength, blood vessels must remain open and elastic, blood pressure must stay within a healthy range, and cholesterol levels need to remain balanced to prevent damage to the vessel walls.

Cardiovascular disease develops when this finely balanced system begins to break down. Damage to the inner lining of blood vessels can trigger inflammation and the gradual build-up of fatty deposits known as plaques. Over time, these plaques narrow and stiffen the arteries, making it harder for blood to flow. This process, known as atherosclerosis, increases the risk of heart attack, stroke and peripheral artery disease.



Cardiovascular disease is not a single condition but a group of disorders affecting the heart and blood vessels. Common examples include coronary artery disease, heart attack, stroke, heart failure and peripheral artery disease. High blood pressure (hypertension) and high cholesterol (hypercholesterolaemia) are not cardiovascular diseases themselves, but they are two of the most common warning signs that the cardiovascular system is under strain and major contributors to the development of heart and vascular disease.

Like many chronic diseases, cardiovascular disease usually develops over many years rather than appearing suddenly. Family history and increasing age influence risk, but lifestyle also plays a significant role. Smoking, diets high in processed foods and unhealthy fats, physical inactivity, excess body weight, diabetes, chronic stress and poor sleep can all contribute to damage within the cardiovascular system.

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Looking beyond the diagnosis

A diagnosis of cardiovascular disease often leads to pivotal changes in daily life. Medications to lower blood pressure or cholesterol, prevent blood clots or improve heart function may become part of long-term treatment. In some cases, procedures such as angioplasty or bypass surgery are needed to restore blood flow.

The heart responds remarkably well to healthy habits. Even small improvements in diet, exercise, sleep and stress management can reduce cardiovascular risk and improve long-term heart health.

Alternanthera sessilis 'Red' (Hong Tian Wu)

Why This Herb?

Hong Tian Wu is a traditional edible medicinal herb widely used throughout Southeast Asia to support healthy circulation and vascular wellbeing. It has long been valued as both a nutritious leafy vegetable and a gentle herbal tonic for maintaining healthy blood vessels. It grows easily in Singapore, making it an ideal plant for home gardens and community use.

Botanical name: *Alternanthera sessilis* 'Red'

Common names: Hong Tian Wu (红田乌), Red Carpet Weed, Sessile Joyweed, Ponnanganni, Mukunuwenna

Plant family: *Amaranthaceae*

Parts traditionally used: Whole aerial plant (leaves, stems and flowers)

Key natural compounds:

- Flavonoids (quercetin, rutin)
- Phenolic acids
- Betacyanins (red pigments)
- Vitamins A and C
- Minerals including iron and calcium
- Saponins

These naturally occurring compounds contribute to the herb's antioxidant, anti-inflammatory and vascular-supporting properties. Research suggests they may help protect blood vessels, reduce inflammation and support healthy cholesterol levels.

Identify It

Hong Tian Wu is a low-growing perennial herb widely cultivated and naturalized in Asia, Africa, and tropical Americas.

Look for:



- Reddish stems that root at the nodes
- Opposite reddish-green leaves that are oblong to lance-shaped
- Small white flowers growing in clusters
- Low spreading growth habit

Note: The Indonesian *Hong Tian Wu* has much larger leaves and thicker upright stem with roots growing out of many nodes on the stem. This variety is more medicinal than other varieties.

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Grow It



Hong Tian Wu grows well in Singapore's warm, humid climate.

- **Sunlight:** Full sun to partial shade
- **Water:** Prefers consistently moist soil
- **Soil:** Moist, fertile soil
- **Propagation:** Easily grown from stem cuttings or seeds

Harvest It

- Harvest young shoots and leaves throughout the year.
- Pick healthy leaves as needed for cooking or herbal preparations.
- Regular harvesting encourages fresh growth.

Prepare It



Decoction Recipe

Ingredients

- 1 packet fresh *Hong Tian Wu* (approximately 100-150 g fresh, or 25-38 g dried* — estimated at ~1/4 fresh weight)
- 12 red dates
- 2 slices Dang Shen (Codonopsis Pilosula)
- Water to cover the ingredients

Method

1. Wash all the ingredients.
2. Slice the dang shen.
3. Place everything into a pot and add enough water to cover.
4. Simmer gently for approximately 2 hours.
5. Strain and enjoy warm.

Traditionally, this decoction is consumed twice a week to support cardiovascular health. *Hong Tian Wu* is also commonly cooked as a leafy vegetable in soups and stir-fries.

Traditional Wisdom Meets Modern Science

For generations, *Hong Tian Wu* has been used throughout Southeast Asia as both a nourishing food and a medicinal herb. Traditional herbalists have valued it for promoting healthy circulation, "cooling the blood" and helping to keep blood vessels clear. In Sri Lankan and Indian traditions, it is also eaten regularly to support liver and eye health.

Modern research found that *Hong Tian Wu* contains antioxidant compounds, including flavonoids and betacyanins, which help protect cells from oxidative stress. Animal studies have also demonstrated cholesterol-lowering effects, while laboratory research suggests the herb may help reduce inflammation within the lining of blood vessels.

Although these findings are encouraging, further human clinical studies are needed to better understand its role in cardiovascular health.

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Take Home Message

Hong Tian Wu is best viewed as a complementary herb that may help support healthy blood vessels and cholesterol levels alongside a heart-healthy lifestyle and conventional medical treatment. It is not a substitute for prescribed cardiovascular medicines, and further human research is needed to better understand its long-term role in cardiovascular care.

Safety First

- Generally considered safe when consumed as a food or traditional herb.
- People with a cold or deficiency constitution should avoid excessive use.
- If you are taking blood-thinning medicines, speak with your healthcare provider before using *Hong Tian Wu* regularly.
- Avoid if you are allergic to plants in the *Amaranthaceae family*. So how do you know? Although not a 100% reliable test, Hong Tian Wu belongs to the same plant family which also includes familiar foods such as spinach, beetroot, Swiss chard, quinoa and amaranth. People who tolerate these foods are unlikely to have a general sensitivity to this plant family. However, as with any herb, discontinue use if an allergic reaction develops and seek medical advice if symptoms are severe.
- Always inform your healthcare team about any herbs or supplements you are taking.

Natural Compound	If you are taking these medicines, speak to your doctor or pharmacist	Why it matters
Flavonoids & Betacyanins	• Cholesterol-lowering medicines • Blood pressure medicines	These compounds may support healthy blood vessels and cholesterol levels. Your healthcare provider may wish to monitor your treatment if you use both regularly.
Phenolic Acids	• Blood-thinning medicines	*Hong Tian Wu* may have a mild additional blood-thinning effect. Monitoring may be recommended if taken together with anticoagulant medicines.
Saponins	• Cholesterol-lowering medicines	These compounds may contribute to the herb's cholesterol-supporting effects. Regular monitoring helps ensure your treatment remains appropriate.

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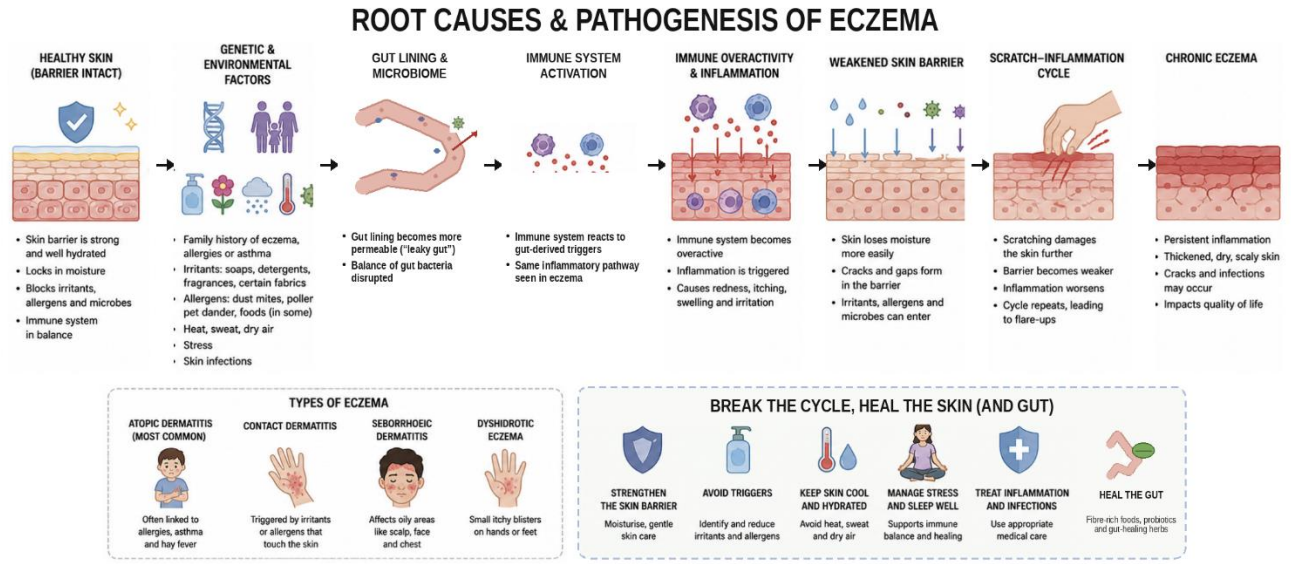
Chapter 4 – Eczema

How the skin's protective barrier begins to break down

Your skin is the body's largest organ and its first line of defence against the outside world. It acts as a protective barrier, helping to keep moisture in while preventing bacteria, allergens and irritants from entering the body. Healthy skin also plays an important role in regulating body temperature and supporting the immune system.

This protective barrier is made up of tightly packed skin cells, natural oils and proteins that work together to keep the skin strong, hydrated and resilient. When this barrier is healthy, it can repair itself quickly after minor injury or irritation.

Eczema develops when this protective barrier becomes weakened. The skin loses moisture more easily, allowing irritants, allergens and microbes to penetrate the surface. At the same time, the immune system becomes overactive, triggering inflammation that causes redness, itching and irritation. Scratching further damages the skin, creating a cycle of inflammation and impaired healing. Increasingly, this immune overreaction is understood to begin beyond the skin itself — in the gut. The gut lining works in a similar way to the skin's barrier, and when it becomes more permeable (sometimes called a "leaky gut"), it can let bacteria and food particles slip through and trigger the same kind of immune overreaction that shows up as eczema.



Although eczema is often spoken of as a single condition, it includes several different forms. Atopic eczema is the most common and is frequently associated with allergies and asthma. Other forms include contact dermatitis, seborrhoeic dermatitis and dyshidrotic eczema. While each has different triggers, they all involve inflammation and disruption of the skin's protective barrier.

Eczema usually develops through a combination of genetic and environmental factors. A family history of eczema, asthma or allergies increases susceptibility, while irritants such as soaps, detergents, fragrances, certain fabrics, environmental allergens, heat, stress and skin infections may trigger flare-ups. The balance of bacteria in the gut appears to play a role too — early antibiotic use, a diet low in fibre and ongoing stress can all disturb this balance and weaken the gut lining, adding to the inflammation seen in the skin. Although diet can influence symptoms in some individuals, the triggers vary from person to person.

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Looking beyond the diagnosis

Living with eczema can be physically uncomfortable and emotionally exhausting. Persistent itching, poor sleep, visible skin changes and repeated flare-ups can affect confidence and quality of life. Conventional treatments such as moisturisers, topical corticosteroids, calcineurin inhibitors and other prescribed medicines play an important role in controlling inflammation and protecting the skin.

But while treatment focuses on calming the skin, healthy skin begins with addressing what is happening beneath the surface, including gut health. Maintaining healthy skin hydration, identifying and avoiding personal triggers, eating a balanced diet, managing stress, getting sufficient sleep and supporting overall health may all help reduce the frequency and severity of flare-ups. These measures complement conventional treatment and help support the skin's natural healing processes.

Vernonia amygdalina (South African Bitter Leaf)

Why This Herb?

South African Bitter Leaf is a traditional African medicinal plant that has been used for generations to support overall health, particularly during inflammatory illnesses. Although it is best known for supporting metabolic and liver health, its anti-inflammatory and antioxidant properties have also led to its traditional use for certain skin conditions, including eczema. It grows well in Singapore's tropical climate, making it suitable for home gardens and community use.

Botanical name: *Vernonia amygdalina*

Common names: South African Bitter Leaf, Bitter Leaf, 南非叶, Ewuro, Onugbu, Ndoleh

Plant family: *Asteraceae*

Parts traditionally used: Leaves (primarily), occasionally stems and roots

Key natural compounds:

- Sesquiterpene lactones
- Flavonoids
- Sterols
- Phenolic acids
- Saponins
- Essential minerals

These naturally occurring compounds contribute to the herb's anti-inflammatory, antioxidant and immunomodulatory properties, which may help support healthy skin and the body's normal inflammatory response.



Identify It

Look for:

- Dark green lance-shaped leaves with serrated edges
- Intensely bitter-tasting leaves
- Clusters of small white flowers
- Shrub growing approximately 2–5 metres tall

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Grow It

- **Sunlight:** Full sun to partial shade
- **Water:** Water regularly while establishing; drought tolerant once mature
- **Soil:** Fertile, well-drained soil
- **Propagation:** Easily grown from stem cuttings or seeds



Harvest It

- Harvest healthy mature leaves throughout the year.
- Pick leaves as needed for cooking or herbal preparations.
- Regular harvesting encourages fresh new growth.

Prepare It

Decoction Recipe

Ingredients

- 20 fresh South African Bitter Leaf leaves (or ~10 g dried)
- 1 lemon
- 1 litre water

Method

1. Wash the leaves thoroughly.
2. Place the leaves, lemon and water into a pot.
3. Bring to the boil.
4. Reduce to a gentle simmer with the lid slightly open.
5. Simmer for approximately 45 minutes.
6. If too much water evaporates, add a little more water and simmer for a further 15 minutes.
7. Strain and enjoy warm.

Traditionally, South African Bitter Leaf has been taken internally to support skin health. Some apply the cooled decoction directly to affected areas of the skin, although it should be tested on a small area first and discontinued if irritation occurs.

The fresh leaves may also be eaten raw—chew them well before swallowing. A typical starting dose is 6 leaves daily for three weeks, gradually increasing to 8–10 leaves per day if well tolerated. Reduce the dose or discontinue use if diarrhoea or other digestive discomfort develops.

Traditional Wisdom Meets Modern Science

For generations, South African Bitter Leaf has been used throughout Africa as both a medicinal plant and a food. Traditional healers have valued it for inflammatory conditions, digestive complaints, liver health and general wellbeing. Some families also use the herb as part of traditional remedies for chronic skin conditions, including eczema.

Modern research has identified a range of biologically active compounds within the leaves, including sesquiterpene lactones, flavonoids and phenolic acids. Laboratory and animal studies suggest these compounds have antioxidant,

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anti-inflammatory and immunomodulatory effects that may help reduce oxidative stress and inflammatory responses within the body.

Although these findings are encouraging, clinical studies specifically investigating eczema are lacking, and further human research is needed to better understand its role in supporting skin health.

Take Home Message

South African Bitter Leaf is best viewed as a complementary herb that may help support the body's normal inflammatory response and overall skin health alongside conventional eczema treatment. It is not a cure for eczema, and further human research is needed to clarify its role in eczema management.

Safety First

- Generally well tolerated when used traditionally.
- Avoid during pregnancy and breastfeeding unless advised by a qualified healthcare practitioner.
- People taking diabetes medication should monitor their blood glucose, as South African Bitter Leaf may enhance glucose-lowering effects.
- Stop using the herb if it causes stomach upset, excessive fatigue or other unwanted effects.
- Always inform your healthcare team about any herbs or supplements you are taking.

Natural Compound	If you are taking these medicines, speak to your doctor or pharmacist	Why it matters
Sesquiterpene Lactones & Flavonoids	• Diabetes medicines	The herb may work together with diabetes medicines, causing your blood sugar to fall lower than expected. Your medicines may need to be monitored or adjusted.
Phenolic Acids & Flavonoids	• Medicines used to treat liver conditions	These compounds may affect how the liver responds to treatment. Let your healthcare provider know if you are taking this herb regularly.
Whole Herb	• Antimalarial medicines	The herb may interact with medicines used to treat malaria. Speak to your healthcare provider before using them together.

Further Reading: The Gut-Immune-Skin CONNECTION

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