



HERBAL EXTRACT
COMPANY

A HERBAL MEDICINE APPROACH TO AUTOIMMUNITY

“The power of herbs lies in their ability to strengthen
the body’s own healing mechanisms.”

CHINESE PROVERB

Treatment Approaches



Conventional Treatments

Immunosuppressive Drugs:

Include calcineurin inhibitors, cytotoxic drugs, glucocorticoids, and biological agents. These can reduce inflammation but often come with serious side effects.¹



Herbal Treatments

Phytotherapies are being explored due to their significant anti-inflammatory effects and lower risk of serious side effects.¹

Causes of Autoimmune Diseases

Autoimmune diseases arise from a combination of genetic and environmental factors that disrupt immune tolerance. Key elements include:

➤ **Genetic Factors:** Mutations in genes like AIRE, Foxp3, CTLA-4, and HLA can predispose individuals to autoimmune diseases.¹

➤ **Epigenetic and Environmental Factors:** Factors such as stress, hormones, diet/nutrition, exposure to environmental pollutants and chemicals, and infections (due to molecular mimicry between pathogens and self-antigens) can influence the development of autoimmune diseases.¹

It will take time

A personalised plan that identifies specific patient symptoms that is unique to their environment, lifestyle, triggers, and history, focusing on the foundations of health including diet, lifestyle and exercise. **A good approach is to use herbs that overlap in activity.**^{iv}



Gastrointestinal Autoimmune Diseases

Ulcerative Colitis (UC):

Turmeric (*Curcuma longa*)

- Improves Clinical Activity Index (CAI)^{25,26}
- Improves Endoscopic Index (EI)^{25,26}

Ginger (*Zingiber officinale*)

- Improves Disease Activity Index (SCCAIQ) scores²⁷

Pomegranate (*Punica granatum*)

- Alleviates disease symptoms (LCAI)²⁸
- Provides a rich source of ellagic acid

Oak Bark (*Quercus robur*)

- Provides a rich source of ellagic acid²⁹

Crohn's Disease:

Turmeric (*Curcuma longa*)

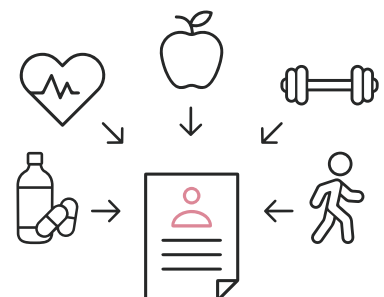
- Improves clinical remission rates (CDAI)³⁰
- Reduces anal lesions³⁰

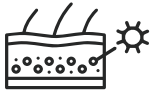
Wormwood (*Artemisia absinthium*)

- Improves clinical remission rates (CDAI)^{31,32}
- Reduces steroid use³²

Liquorice (*Glycyrrhiza glabra*)

- Noteworthy herb based on clinical observation for supporting individuals with Crohn's Disease





Skin-Related Autoimmune Diseases

Vitiligo:

Ginkgo (*Ginkgo biloba*)

- Arrests disease progression^{11,12}
- Induces skin repigmentation^{11,12}

Turmeric (*Curcuma longa*)

- Reduces lesion size (VASI)¹³
- Improves lesion repigmentation (VASI)¹³

Dong Quai (*Angelica polymorpha*)

- Used in Traditional Chinese Medicine for vitiligo treatment¹⁴

Psoriasis:

Turmeric (*Curcuma longa*)

- Reduces erythema, scaling and induration of lesions (PASI score)^{15,16}
- Reduces serum levels of IL-22, a cytokine involved in psoriasis pathogenesis¹⁵

Maritime Pine (*Pinus pinaster*)

- Reduces erythema, scaling and induration of lesions (PASI score)¹⁷
- Improves treatment time (~32% compared to standard management)¹⁷

Coleus (*Coleus forskohlii*), Sarsaparilla (*Smilax spp.*) and Heartsease (*Viola tricolor*)

- Noteworthy herbs based on clinical observation for supporting individuals with psoriasis



Joint-Related Autoimmune Disease

Rheumatoid Arthritis (RA):

Turmeric (*Curcuma longa*)

- Alleviates clinical symptoms (improves ACR, VAS and DAS28 scores)⁷
- Reduces inflammation markers (ESR, CRP)⁷
- Reduces rheumatoid factor (RF)⁷

Ginger (*Zingiber officinale*)

- Decreases disease activity (DAS-28)⁸
- Reduces T-bet & RORyt gene expression⁸
- Increases FoxP3 gene expression⁸

Sweet Wormwood (*Artemisia annua*)

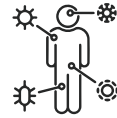
- Accelerates onset of action of DMARDs⁹
- Improves health assessment scores⁹
- Reduces corticosteroid dosage⁹

Garlic (*Allium sativum*)

- Improves Health Assessment Questionnaire (HAQ) scores¹⁰
- Decreases oxidative stress marker malondialdehyde (MDA)¹⁰
- Increases total antioxidant capacity (TAC)¹⁰
- Reduces post-activity pain¹⁰

Teasel Root (*Dipsacus asper*), Ivy Leaf (*Hedera helix*), Perilla (*Perilla frutescens*), Hemidesmus (*Hemidesmus indicus*) and Hops (*Humulus lupulus*)

- Noteworthy herbs based on clinical observation for supporting individuals with RA



Systemic Autoimmune Disease

Systemic Lupus Erythematosus (SLE):

Maritime Pine (*Pinus pinaster*)

- Reduces disease activity (SLEDAI)²
- Reduces reactive oxygen species (ROS)²
- Reduces apoptosis of lymphocytes²
- Decreases inflammation markers (ESR)₂
- Decreases anti-dsDNA antibodies²

Green Tea (*Camellia sinensis*)

- Reduces SLE disease activity (SLEDAI)³
- Increases vitality and general health³
- Decreases anti-dsDNA antibodies³

Turmeric (*Curcuma longa*)

- Decreases haematuria⁴
- Decreases proteinuria⁴

Sweet Wormwood (*Artemisia annua*) and Cordyceps (*Cordyceps militaris*)

- Prevent recurrence of Lupus Nephritis and protect kidney function⁵

Astragalus (*Astragalus membranaceus*) and Rehmannia (*Rehmannia glutinosa*)

- Reduces glucocorticoid dosage and associated adverse reactions⁶

Reishi (*Ganoderma lucidum*) and Bupleurum (*Bupleurum falcatum*)

- Noteworthy herbs based on clinical observation for supporting individuals with SLE



Neurological Autoimmune Diseases

Multiple Sclerosis (MS):

Ginger (*Zingiber officinale*)

- Improves gastrointestinal symptoms (constipation, nausea, bloating, abdominal pain)^{18,19}
- Improves EDSS scores^{18,19}
- Improves quality of life (MSIS-29 scale)^{18,19}
- Reduces neurofilament light chain (NfL) and interleukin-17 (IL-17) levels^{18,19}

St Mary's Thistle (*Silybum marianum*)

- Reduces hepatic side effects of fingolimod²⁰

Turmeric (*Curcuma longa*)

- Decreases proportion of patients with CUA lesions²¹
- Restores expression pattern of dysregulated miRNAs²²

Lion's Mane (*Hericium erinaceus*) and Saffron (*Crocus sativus*)

- Noteworthy herbs based on clinical observation for supporting individuals with MS

Alzheimer's Disease (AD):

Saffron (*Crocus sativus*)

- Improves cognitive function (ADAS-cog)²³
- Shown comparable efficacy to memantine and donepezil in reducing cognitive decline²⁴

Lion's Mane (*Hericium erinaceus*), Reishi (*Ganoderma lucidum*) and Rosemary (*Rosmarinus officinalis*)

- Noteworthy herb based on clinical observation for supporting individuals with AD