



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.<sup>1</sup>



### Herbal Treatments

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

## 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.<sup>1</sup>

**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.<sup>1</sup>



## Gastrointestinal Autoimmune Diseases

#### *Ulcerative Colitis (UC):*

##### **Turmeric (*Curcuma longa*)**

- Improves Clinical Activity Index (CAI)<sup>25,26</sup>
- Improves Endoscopic Index (EI)<sup>25,26</sup>

##### **Ginger (*Zingiber officinale*)**

- Improves Disease Activity Index (SCCAIQ) scores<sup>27</sup>

##### **Pomegranate (*Punica granatum*)**

- Alleviates disease symptoms (LCAI)<sup>28</sup>
- Provides a rich source of ellagic acid

##### **Oak Bark (*Quercus robur*)**

- Provides a rich source of ellagic acid<sup>29</sup>

#### *Crohn's Disease:*

##### **Turmeric (*Curcuma longa*)**

- Improves clinical remission rates (CDAI)<sup>30</sup>
- Reduces anal lesions<sup>30</sup>

##### **Wormwood (*Artemisia absinthium*)**

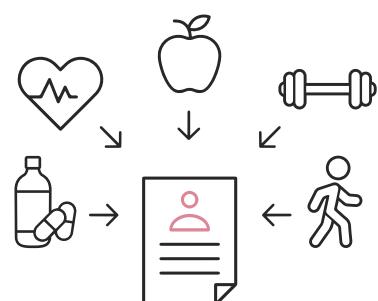
- Improves clinical remission rates (CDAI)<sup>31,32</sup>
- Reduces steroid use<sup>32</sup>

##### **Liquorice (*Glycyrrhiza glabra*)**

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

## 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.**<sup>iv</sup>





## Skin-Related Autoimmune Diseases

### Vitiligo:

#### Ginkgo (*Ginkgo biloba*)

- Arrests disease progression<sup>11,12</sup>
- Induces skin repigmentation<sup>11,12</sup>

#### Turmeric (*Curcuma longa*)

- Reduces lesion size (VASI)<sup>13</sup>
- Improves lesion repigmentation (VASI)<sup>13</sup>

#### Dong Quai (*Angelica polymorpha*)

- Used in Traditional Chinese Medicine for vitiligo treatment<sup>14</sup>

### Psoriasis:

#### Turmeric (*Curcuma longa*)

- Reduces erythema, scaling and induration of lesions (PASI score)<sup>15,16</sup>
- Reduces serum levels of IL-22, a cytokine involved in psoriasis pathogenesis<sup>15</sup>

#### Maritime Pine (*Pinus pinaster*)

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

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

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



## Systemic Autoimmune Disease

### Systemic Lupus Erythematosus (SLE):

#### Maritime Pine (*Pinus pinaster*)

- Reduces disease activity (SLEDAI)<sup>2</sup>
- Reduces reactive oxygen species (ROS)<sup>2</sup>
- Reduces apoptosis of lymphocytes<sup>2</sup>
- Decreases inflammation markers (ESR)<sub>2</sub>
- Decreases anti-dsDNA antibodies<sup>2</sup>

#### Green Tea (*Camellia sinensis*)

- Reduces SLE disease activity (SLEDAI)<sup>3</sup>
- Increases vitality and general health<sup>3</sup>
- Decreases anti-dsDNA antibodies<sup>3</sup>

#### Turmeric (*Curcuma longa*)

- Decreases haematuria<sup>4</sup>
- Decreases proteinuria<sup>4</sup>

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

- Prevent recurrence of Lupus Nephritis and protect kidney function<sup>5</sup>

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

- Reduces glucocorticoid dosage and associated adverse reactions<sup>6</sup>

#### 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)<sup>18,19</sup>
- Improves EDSS scores<sup>18,19</sup>
- Improves quality of life (MSIS-29 scale)<sup>18,19</sup>
- Reduces neurofilament light chain (NFL) and interleukin-17 (IL-17) levels<sup>18,19</sup>

#### St Mary's Thistle (*Silybum marianum*)

- Reduces hepatic side effects of fingolimod<sup>20</sup>

#### Turmeric (*Curcuma longa*)

- Decreases proportion of patients with CUA lesions<sup>21</sup>
- Restores expression pattern of dysregulated miRNAs<sup>22</sup>

#### 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)<sup>23</sup>
- Shown comparable efficacy to memantine and donepezil in reducing cognitive decline<sup>24</sup>

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

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