

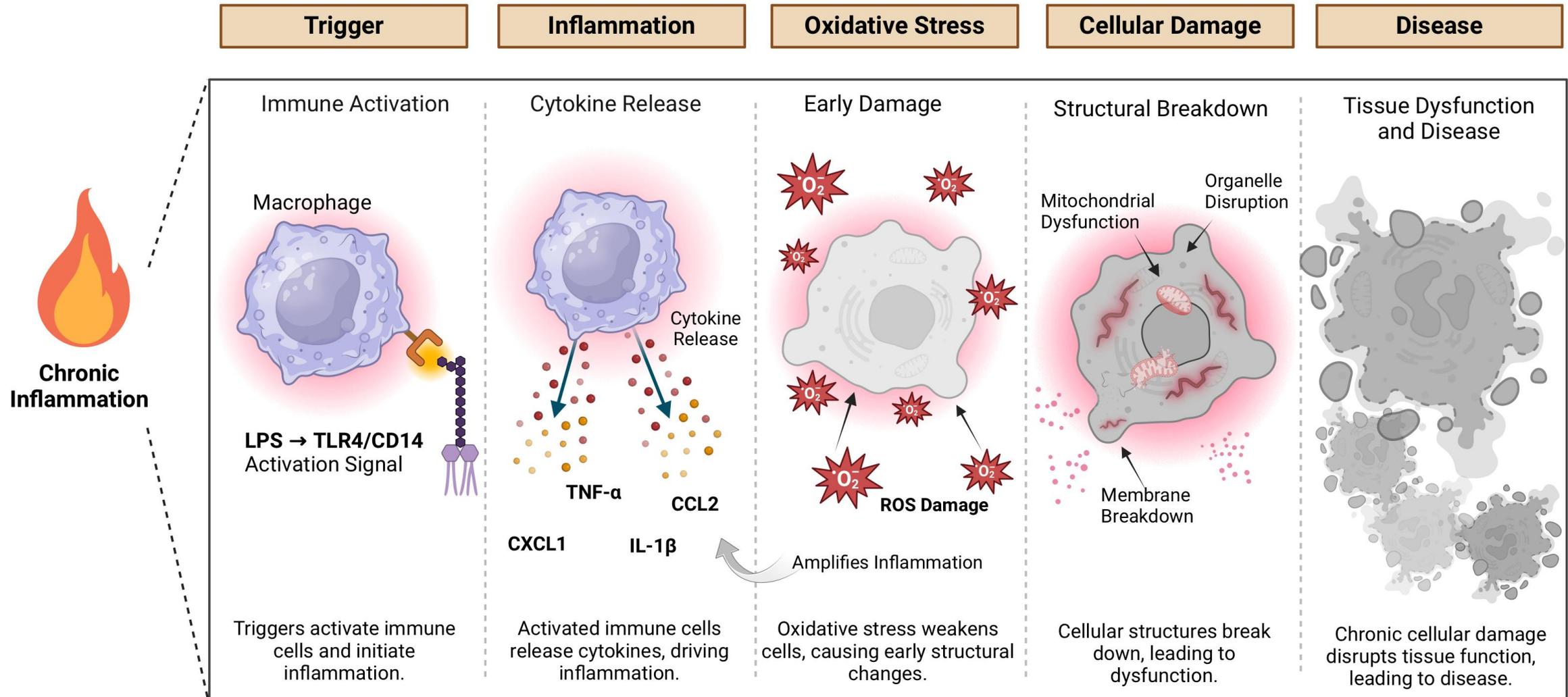


# **A Synergistic Approach to Supporting Cellular Health and Immune Function**

*Backed by Science, Inspired by Ayurvedic Roots*

<https://doi.org/10.1016/j.prp.2024.155770>

# Chronic Inflammation: The Silent Trigger Behind Disease Progression

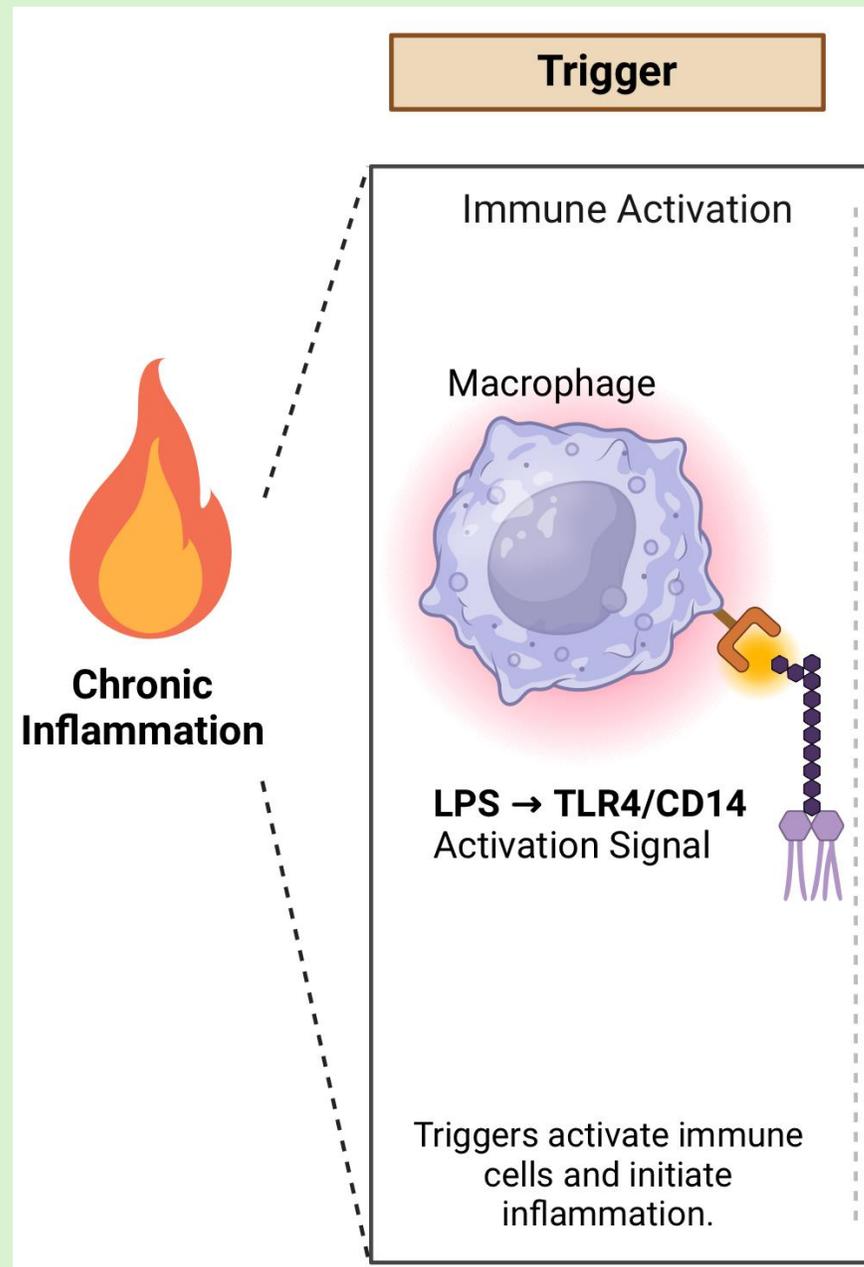


# Understanding the Impact of Chronic Inflammation on Immune and Cellular Health

Chronic inflammation caused by triggers like LPS leads to immune over-activation, creating a cascade of damage.

LPS binds to **CD14** and **TLR-4**, activating pathways that release cytokines and inflammatory mediators.

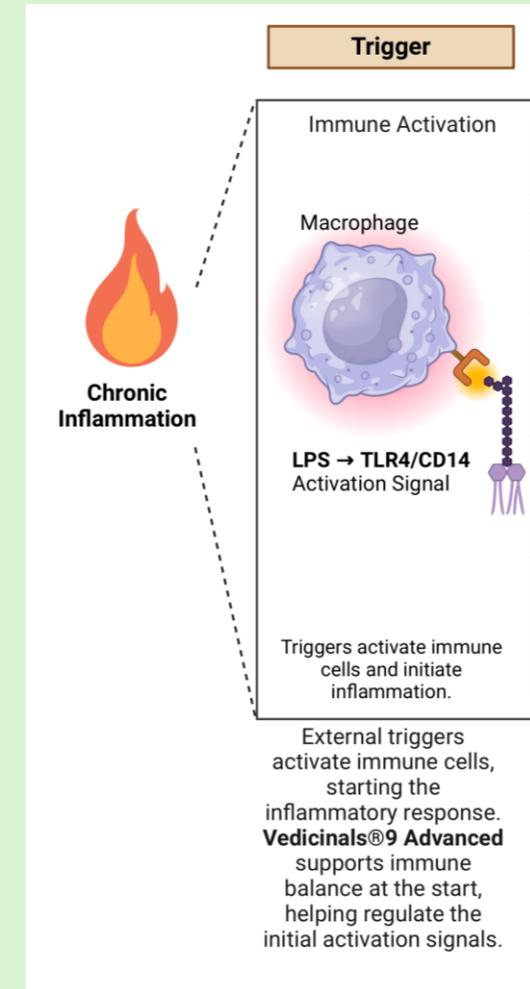
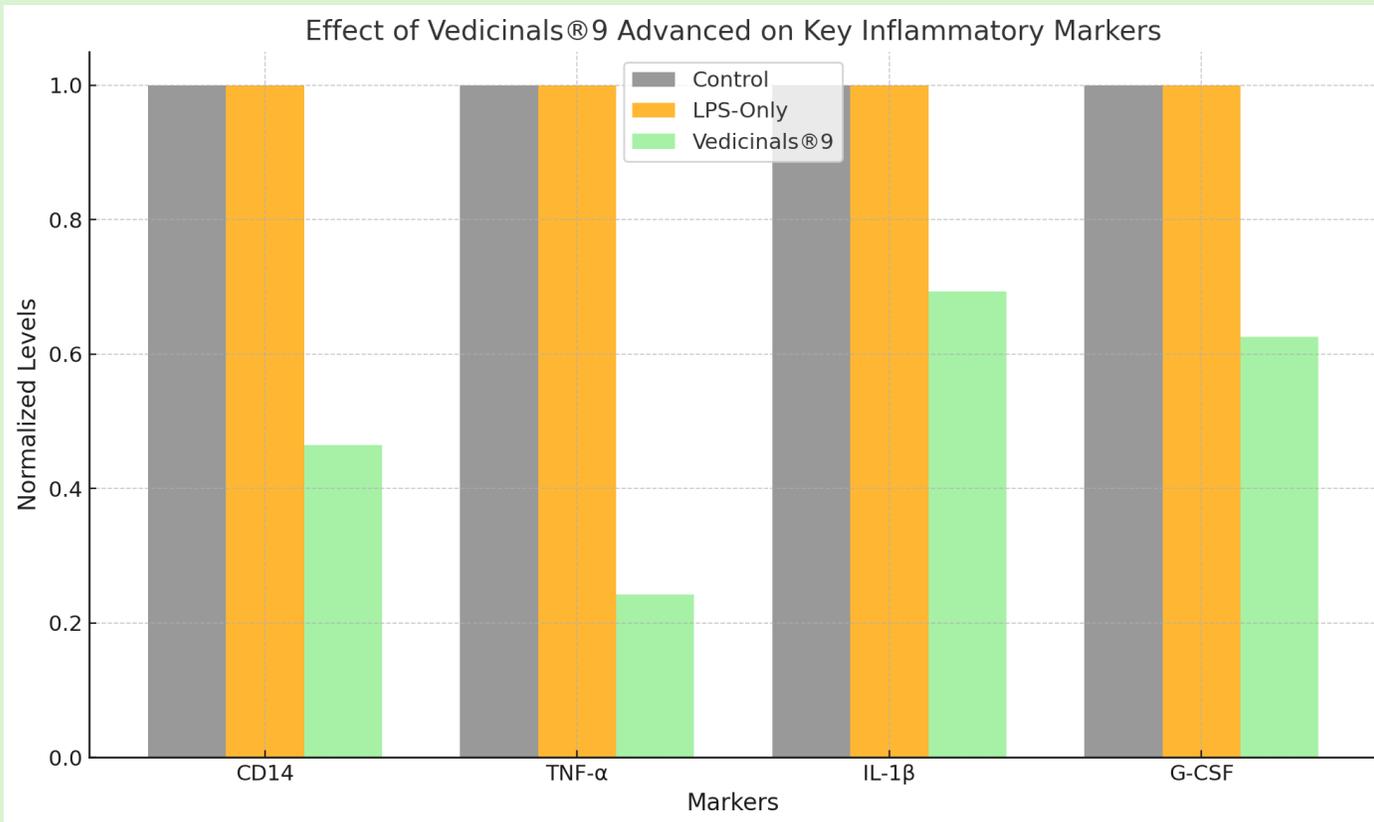
- Key markers of inflammation targeted in this study:
  - **CD14 (LPS co-receptor)**: A pivotal trigger in immune overactivation.
  - **TNF- $\alpha$  (Tumor Necrosis Factor-Alpha)**: A primary driver of inflammation.
  - **IL-1 $\beta$  (Interleukin-1 Beta)**: Promotes inflammatory responses.



# How Vedicinals®9 Advanced Supports Immune Balance

Findings from the study demonstrate **Vedicinals®9 Advanced** reduces key inflammatory markers:

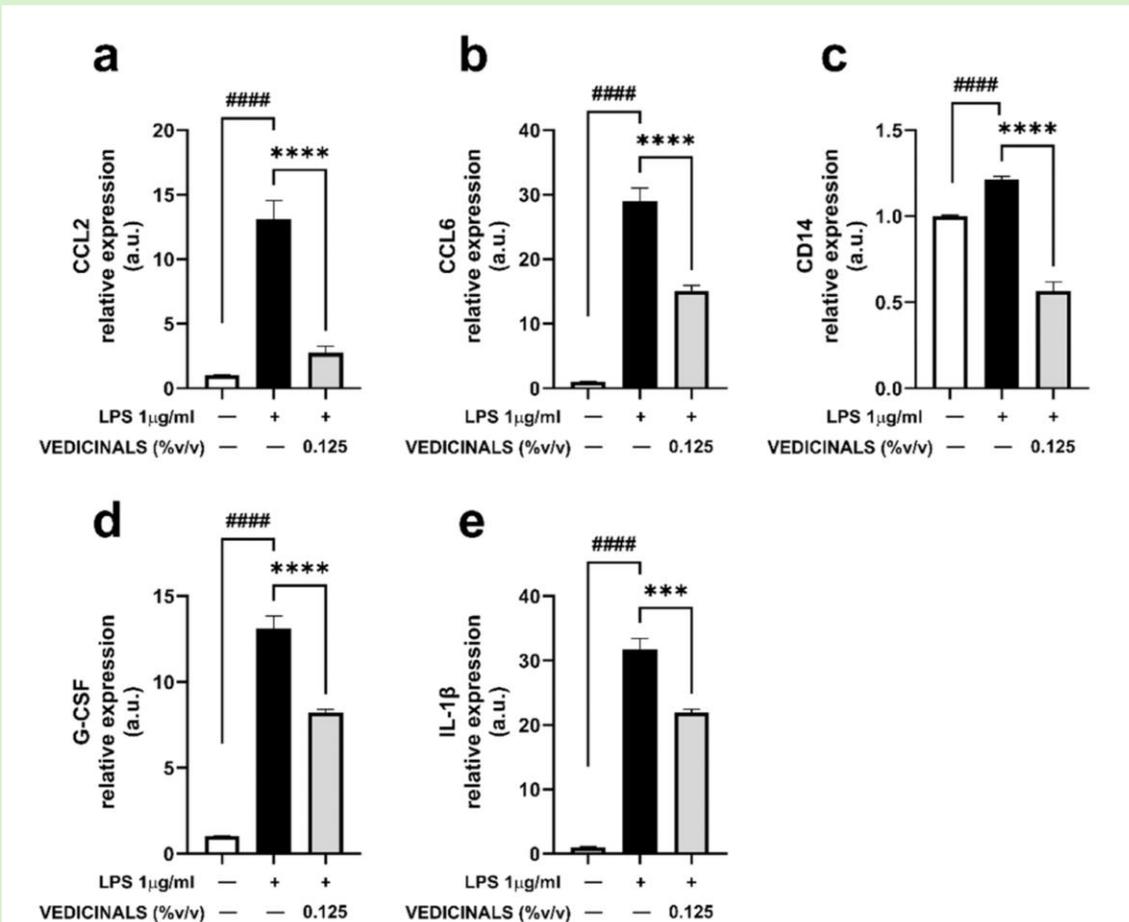
- **CD14:** Reduced by **53.5%**, modulating immune activation
- **TNF- $\alpha$ :** Reduced by **75.8%**, a major inflammation driver.
- **IL-1 $\beta$ :** Reduced by **30.7%**, a mediator of immune responses.
- **G-CSF:** Reduced by **37.4%**, involved in inflammatory cell recruitment.



*Vedicinals®9 Advanced aids in modulating key inflammatory pathways to support immune balance.*

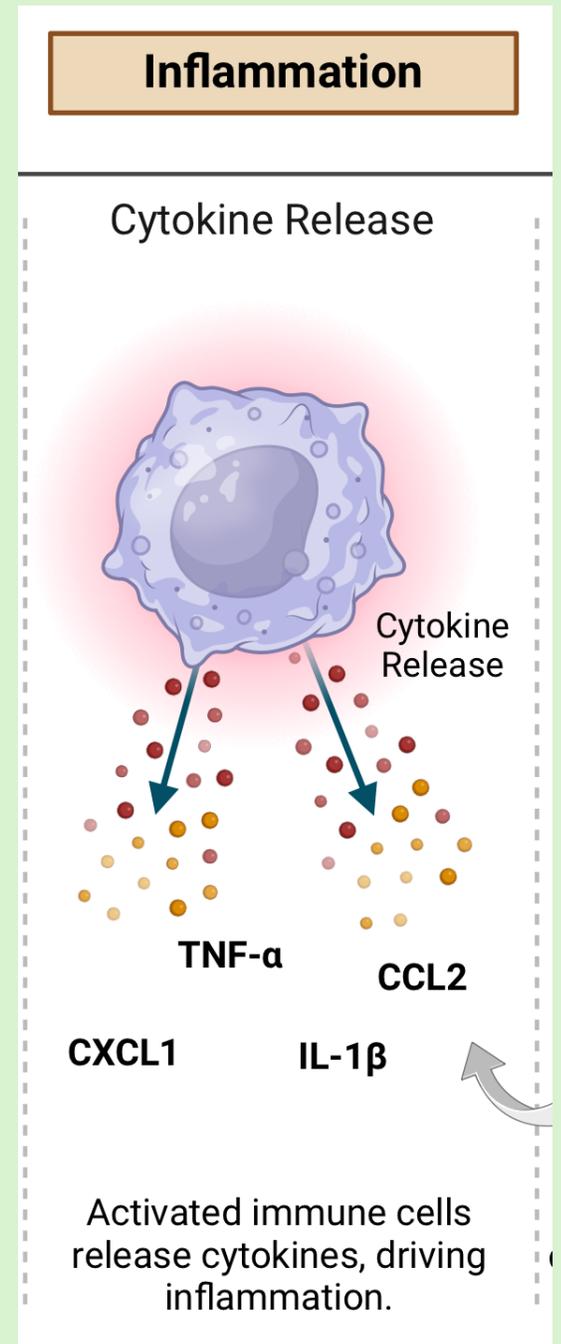
# Cytokine Release: Regulating Inflammatory Signals

Cytokines like **TNF- $\alpha$** , **IL-1 $\beta$** , and **CCL2** play a critical role in amplifying inflammation. Overproduction leads to immune imbalance and tissue stress.



- **CCL2**: Reduced by **79.0%**
- **TNF- $\alpha$** : Reduced by **75.8%**
- **IL-1 $\beta$** : Reduced by **30.7%**

*Figure 6 illustrates significant reductions in LPS-induced cytokine production, highlighting Vedicinals<sup>®9</sup> Advanced's ability to modulate inflammatory responses.*



# Reducing Oxidative Stress: Supporting Cellular Resilience

## Oxidative Stress and Its Role:

**Reactive oxygen species (ROS)** are overproduced during chronic inflammation, amplifying tissue damage and weakening immune responses.

ROS disrupt cellular structures and drive further inflammation.

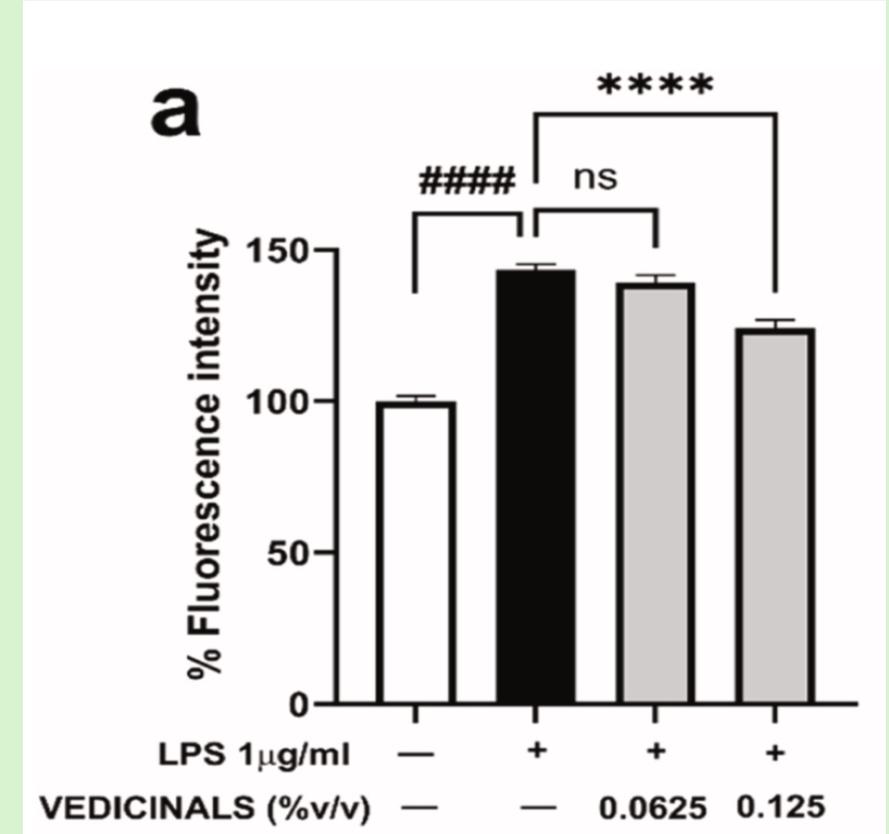
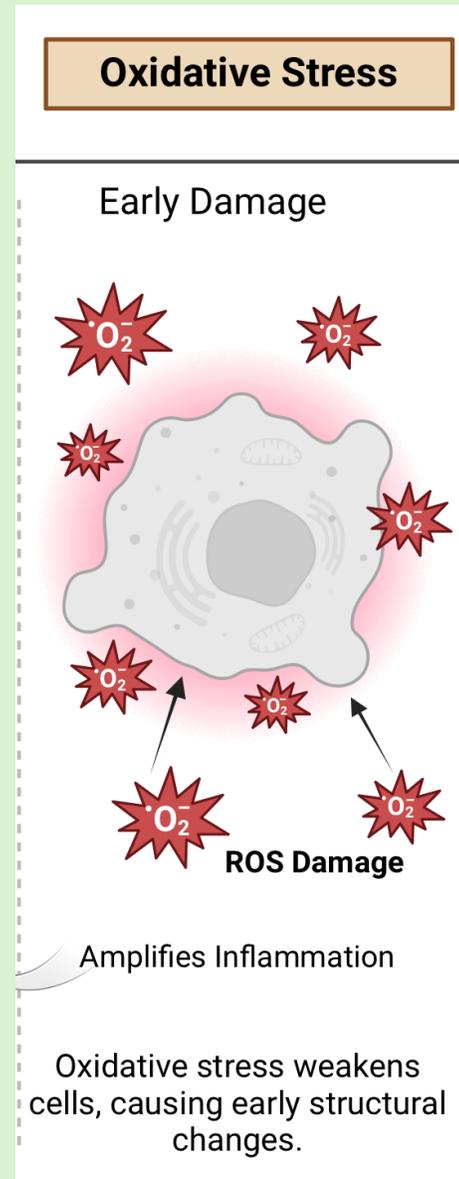
## How Vedicinals<sup>®</sup>9 Advanced Helps:

- Reduces **ROS levels by 13.4%**, helping protect cellular health

Downregulates antioxidant markers to rebalance oxidative stress:

- **GSTP1:** Reduced by **47.9%**.
- **NQO1:** Reduced by **75.8%**.

*These measurable reductions highlight the ability of Vedicinals<sup>®</sup>9 Advanced to reduce oxidative stress and mitigate cellular damage.*



*Figure 2A: Quantitative reductions in LPS-induced ROS levels after treatment with Vedicinals<sup>®</sup>9 Advanced at two concentrations (0.0625% and 0.125% v/v). ROS levels decreased by 13.4% at the higher concentration, reflecting significant mitigation of oxidative stress.*

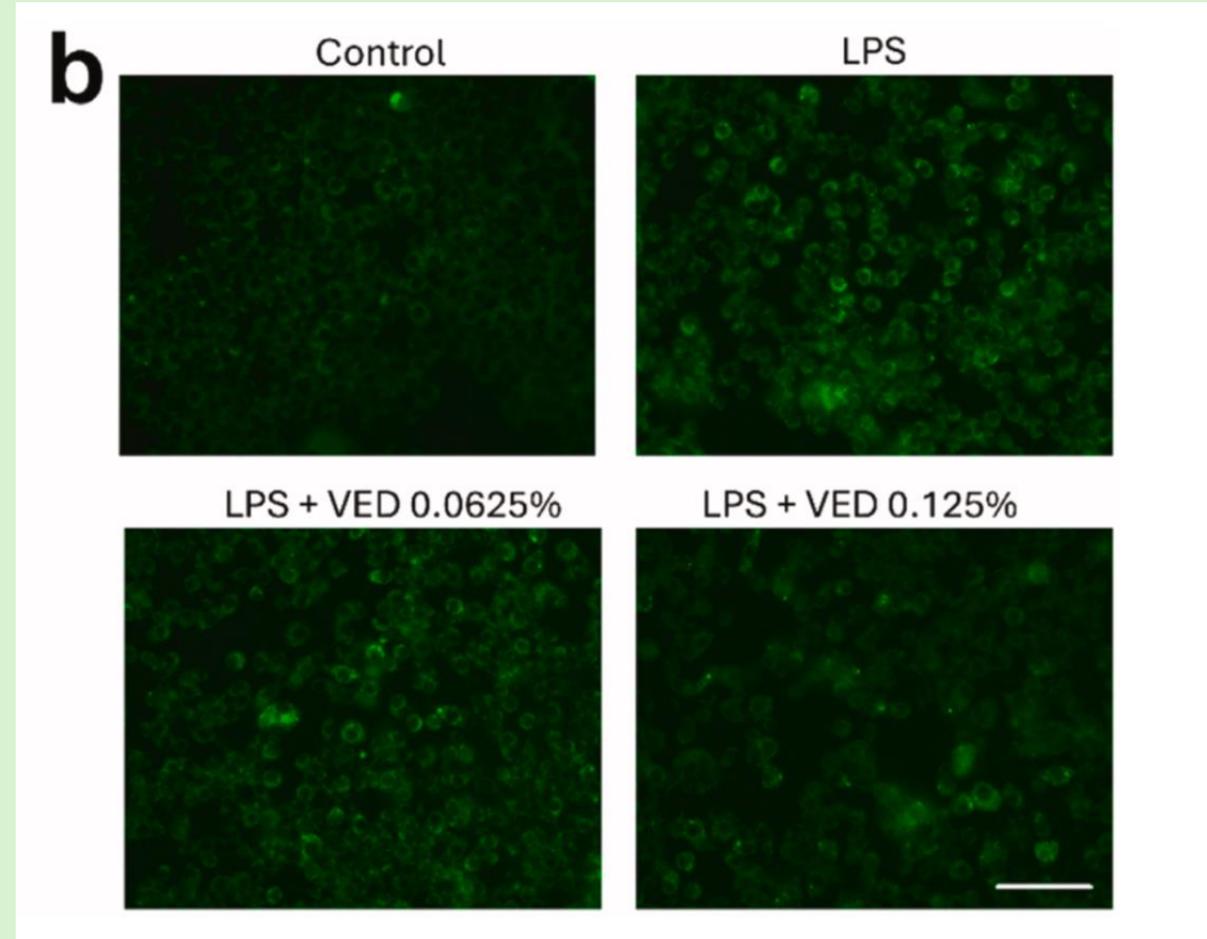
# Reducing Oxidative Stress: Protecting Cellular Health

## How Vedicinals®9 Advanced Helps:

Vedicinals®9 Advanced helps mitigate oxidative stress by reducing ROS levels, which protects cellular structures and reduces inflammation.

Fluorescence imaging confirms reduced ROS levels in cells treated with Vedicinals®9 Advanced, demonstrating its impact on oxidative stress.

*These reductions demonstrate the ability of Vedicinals®9 Advanced to help mitigate oxidative stress and support cellular health.*



*Figure 2B: Fluorescence microscopy illustrating ROS levels. Control cells show baseline fluorescence, while LPS-only treated cells exhibit elevated ROS (bright green fluorescence). Vedicinals®9 Advanced significantly reduces ROS levels, as shown by the diminished green fluorescence in the treated group (0.125% v/v)*

# Mitigating Cellular Damage: Supporting Structural and Mitochondrial Integrity

## Cellular Damage from Chronic Inflammation

Prolonged inflammation and oxidative stress disrupt cellular structures, leading to:

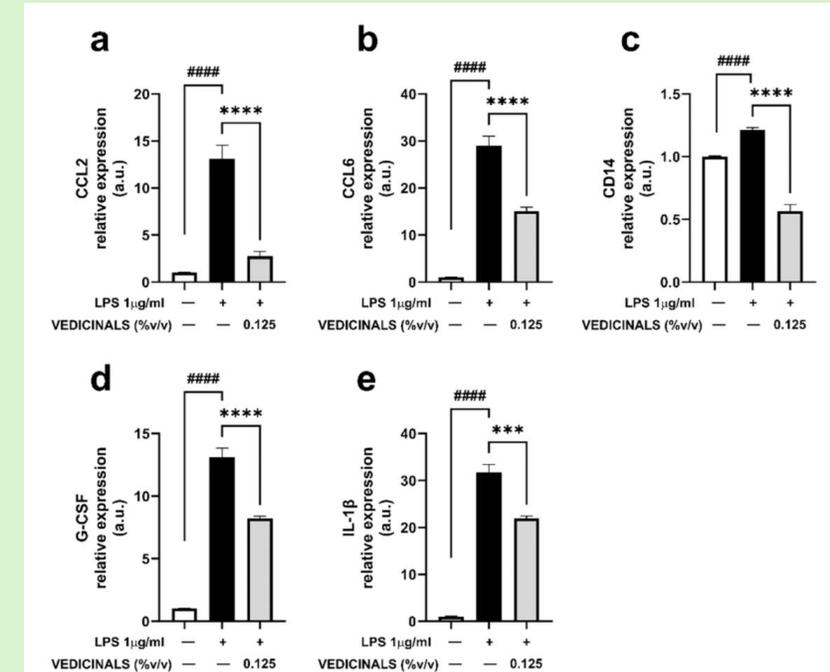
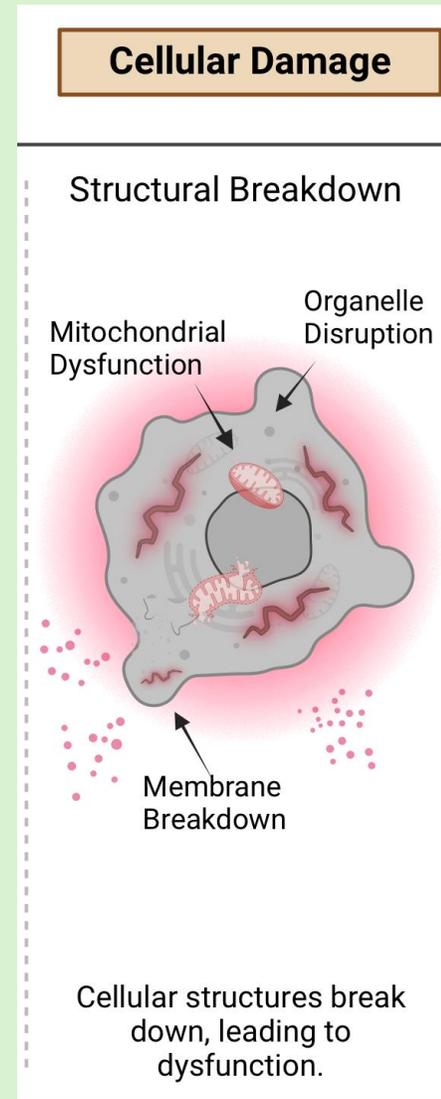
- **Mitochondrial Dysfunction:** Impairing energy production and cellular resilience.
- **Membrane Breakdown:** Weakening cell stability and contributing to tissue dysfunction.

## How Vedicinals®9 Advanced Helps

Reduces markers linked to cellular damage:

- **CD14:** Reduced by **53.5%**, modulating immune overactivation.
- **CCL2:** Reduced by **79.0%**, lowering immune cell recruitment.
- **G-CSF:** Reduced by **37.4%**, protecting cellular environments.
- Supports recovery of cellular structures and mitochondrial health.

*By reducing key markers of cellular damage, Vedicinals®9 Advanced supports the recovery of cellular structures, mitochondrial function, and immune balance.*



*Figure 6: Reductions in cellular damage markers after treatment with Vedicinals®9 Advanced demonstrate its ability to protect and restore cellular integrity.*

# Breaking the Cycle of Chronic Inflammation and Tissue Dysfunction

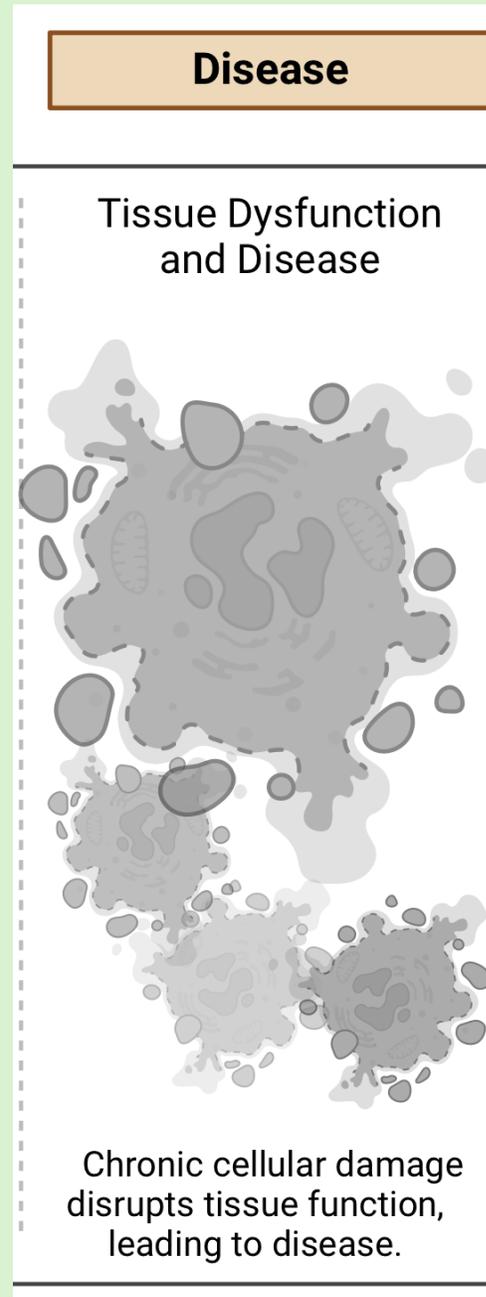
## Impact of Chronic Inflammation

Persistent inflammation and oxidative stress lead to:

- **Tissue Dysfunction:** Loss of normal tissue function due to structural damage.
- **Disease Progression:** Chronic conditions driven by prolonged cellular damage.

## How Vedicinals<sup>®9</sup> Advanced Helps:

- Mitigates key drivers of dysfunction by:
- Reducing inflammation (CD14, TNF- $\alpha$ , IL-1 $\beta$ ).
- Combating oxidative stress (ROS, GSTP1, NQO1).
- Protecting cellular structures and mitochondrial function.



Triggers (e.g., LPS, Pathogens, Environmental Toxins)

Cytokine Release (e.g., TNF- $\alpha$ , IL-1 $\beta$ )

Oxidative Stress (ROS Overproduction)

Cellular Damage (Mitochondrial Dysfunction)

Tissue Dysfunction and Disease

*Each stage of the inflammatory cascade amplifies the next, resulting in tissue dysfunction. Vedicinals<sup>®9</sup> Advanced targets key stages, mitigating the progression from inflammation to cellular damage.*

# From Science to Synergy: The Ingredients Behind Vedicinals®9 Advanced

## Comprehensive Support for Immune and Cellular Health

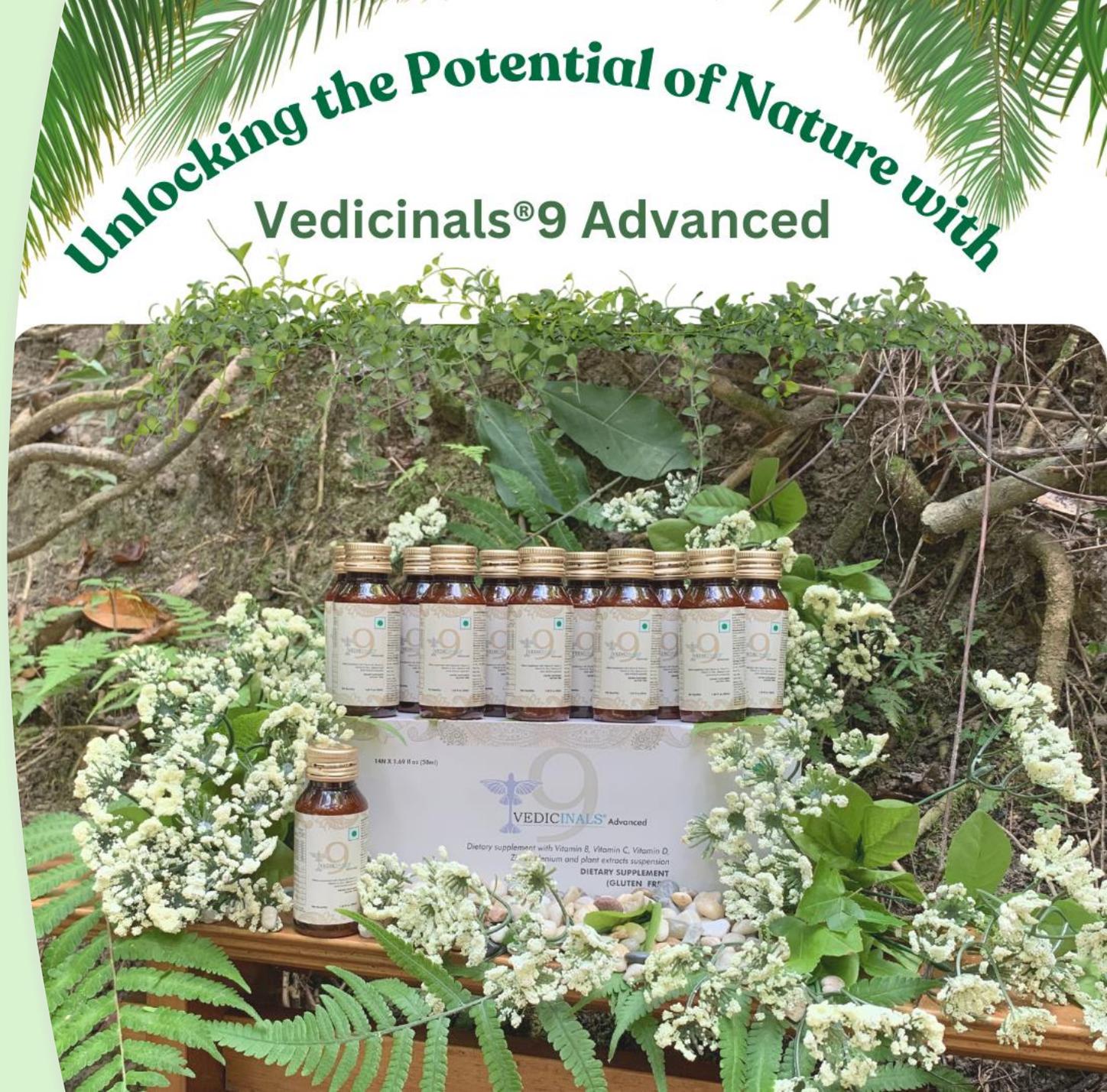
Chronic health challenges require a multi-targeted approach. Vedicinals®9 Advanced is designed to address the root causes of imbalance by:

- Modulating inflammation and oxidative stress.
- Supporting cellular repair and recovery.
- Promoting systemic resilience and wellness.

## The Power of Natural Ingredients:

Each ingredient in Vedicinals®9 Advanced is carefully selected for its scientifically-backed role in enhancing immune function, protecting cells, and promoting overall health, these compounds work together in harmony to restore balance and vitality.

Unlocking the Potential of Nature with  
Vedicinals®9 Advanced



# The Science of Nature: Natural Compounds Supporting Cellular Health

## A Synergistic Approach:

Vedicinals®9 Advanced is powered by nine carefully selected natural compounds, each offering unique benefits for immune and cellular health, promoting systemic resilience and wellness.

Together, these compounds work synergistically to address the root causes of imbalance and promote resilience.

## Key Natural Compounds in Vedicinals®9 Advanced

- **Rutin (Buckwheat):** Supports circulatory health.
- **Luteolin (Chamomile):** Enhances cognitive function.
- **Curcumin (Turmeric):** Acts as a powerful anti-inflammatory.
- **Quercetin (Apples):** Promotes immune support.
- **Baicalin (Skullcap):** Aids in liver protection.
- **Glycyrrhizin (Licorice Root):** Supports digestion and immune function.
- **Piperine (Black Pepper):** Boosts absorption of other ingredients.
- **EGCG (Green Tea):** Provides antioxidant support.
- **Hesperidin (Citrus):** Promotes vascular health.

## Natural Compounds Powering Vedicinals®9 Advanced



1. Rutin (Buckwheat) – Circulatory support
2. Luteolin (Chamomile) – Cognitive health
3. Curcumin (Turmeric) – Anti-inflammatory
4. Quercetin (Apples) – Immune support
5. Baicalin (Skullcap) – Liver protection

6. Glycyrrhizin (Licorice Root) – Digestive and immune aid
7. Piperine (Black Pepper) – Absorption enhancer
8. EGCG (Green Tea) – Antioxidant support
9. Hesperidin (Citrus) – Vascular health

# Synergistic Nutrients Enhancing Cellular and Immune Function

Vitamins and minerals play a critical role in supporting biochemical processes essential for overall health and recovery.

Each nutrient is carefully selected to complement the natural compounds, creating a comprehensive formula that:

- Supports cellular repair and energy metabolism.
- Enhances immune system function.
- Promotes antioxidant defense and systemic resilience.

*The essential nutrients in Vedicinals®9 Advanced work synergistically to optimize cellular health, immune balance, and overall vitality.*

## Essential Nutrients Found in Vedicinals®9 Advanced



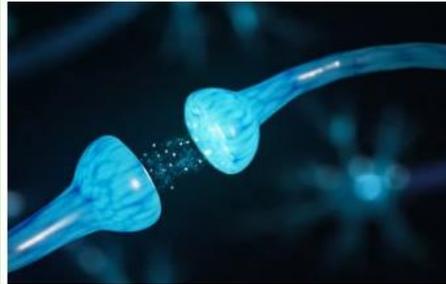
**B1 Thiamine**- Supports nerve function and energy metabolism



**B2 Riboflavin**- Supports energy production and skin health



**B5 Pantothenic Acid**- Supports stress relief and energy utilization



**B6 Pyridoxine**- Supports mood regulation and metabolism



**B12 Cobalamin**- Supports DNA synthesis and blood health



**Vitamin C**- Supports antioxidant enzymes and immune health



**Vitamin D3**- Supports bone health and sunlight absorption



**Zinc**- Supports immune protection and wound healing



**Selenium**- Supports antioxidant enzymes and thyroid health

# Support Your Body's Natural Recovery with Vedicinals®9 Advanced

Chronic health challenges require solutions that address root causes, not just symptoms. Vedicinals®9 Advanced offers a scientifically-backed formula designed to modulate inflammation, reduce oxidative stress, and protect against cellular damage. With its carefully selected natural compounds and essential nutrients, Vedicinals®9 Advanced promotes immune balance, supports cellular repair, and enhances overall vitality. Trusted by healthcare professionals and individuals alike, it provides a holistic approach to health and wellness.

To learn more or to incorporate Vedicinals®9 Advanced into your health journey, visit our website at [vedicinalsusa.com](https://www.vedicinalsusa.com) today

**Empowering Health Through Science and Nature**

<https://doi.org/10.1016/j.prp.2024.155770>

**Rooted in Nature, Synergized for Wellness:  
Vedicinals®9 Advanced**

