

CURASOL Powder

Bioavailable Curcumin & Piperine enriched with Almond & Coconut

Composition:

Each 5gm CURASOL Powder contains:

Curcuma longa extract	1.250 g
eq to Curcumin (Standardized to 95 %)	125mg
Piper Nigrum extract	25 mg
eq to Piperine (Standardized to 95 %)	2.50 mg
Almond (Prunus amygladus)	250 mg
Nariyal (Coccus nucifera)	2500 mg

Description: *Curasol powder is formulated with natural extracts that are potent antiviral and antimicrobial agent.* Curasol powder being an herbal medicine is well-tolerated or quite effective and satisfactory unlike existing antiviral & anti microbial therapies. Herbal extracts do not cause viral resistance. Mutant viruses resistant to the existing antiviral agents arise upon treatment or these agents may cause side or toxic effects.

Curcumin & lung's viral infection:

Curcumin is effective in improving inflammation and the treatment of virus infections of lung. The development of coronavirus-evoked pneumonia is associated with excessive inflammatory responses in the lung, known as "cytokine storms," which results in pulmonary edema, atelectasis, and acute lung injury (ALI) or fatal acute respiratory distress syndrome (ARDS).

Infections from such viruses as Ebola, avian influenza, dengue, and coronavirus, can lead to cytokine storms, producing a massive amount of pro-inflammatory cytokines. The concerted action of these inflammatory mediators causes the destruction of tissues and cells, manifested by clinical syndromes such as extensive pulmonary edema, alveolar hemorrhage, ARDS, and multiple organ failures(6).

Targeting cytokine storm is considered as an essential strategy for CoV infections

Lung inflammatory diseases such as chronic obstructive pulmonary disease (COPD) are characterized by leukocyte infiltration of the airways that is regulated by a variety of mediators such as cytokines, chemokines and adhesion molecules (extrinsic inflammation).

Resulting symptoms include congestion, atelectasis, and pulmonary edema, which affects oxygen exchange in the lung and eventually lead to death (4).

Curcumin effectively inhibits viral infection, alleviates the severity of lung injury through offsetting the cytokine storm, inhibits subsequent fibrosis, and increases survival rates.

Curcumin's low toxicity and its antioxidant, anti-inflammatory, and antiviral activity, it is plausible to speculate that curcumin can be used as a therapeutic agent for viral pneumonia and ALI/ARDS.

Curcumin alleviates these diseases mainly via modulation of immune responses & could inhibit the cytokine storm induced by the viral infection.

Mechanism of action:

1. Curcumin reverses the promoting effect of intrinsic and extrinsic airway inflammation (1).
2. Curcumin exerts protective effects by regulating the expression of both pro- and anti-inflammatory factors such as IL-6, IL-8, IL-10, and COX-2, promoting the apoptosis of PMN cells, and scavenging the reactive oxygen species (ROS), which exacerbates the inflammatory response.
3. Curcumin is a potent immunomodulatory agent that can attenuate the activation of T cells, B cells, macrophages, neutrophils, natural killer cells and dendritic cells (1).
4. Curcumin also decreases expression of many other inflammatory mediators, including MCP1(CCL2), MIP11 (CCL3) etc, which regulate the activity of immune cells and inflammatory responses and promote fibrosis in the lung after infection(7).
5. Curcumin disrupts the viral infection process via multiple mechanisms, including directly targeting viral proteins, inhibiting particle production and gene expression, and blocking the virus entry, replication, and budding (8).
6. Curcumin suppresses increased levels of the neutrophil chemoattractant keratinocyte-derived chemokine by 80% and neutrophils by 87% in bronchoalveolar lavage fluid.
7. Curcumin is also reported to downregulate the expression of pro-inflammatory cytokines including tumor necrosis factor, IL-1 and IL-6 (1).

Benefits:

- In a chronic obstructive pulmonary disease, curcumin treatment effectively reduces the degree of airway inflammation and disrupts airway remodeling by inhibiting the proliferation of bronchial epithelial cells (9).
- Curcumin inhibits lung inflammation and structural remodeling of the lung.
- Curcumin can modulate the macrophage inflammatory responses.
- Curcumin helps inhibit pulmonary fibrosis.
- Curcumin significantly improves the lung index and prolongs the survival rate.
- Helps prevent pulmonary edema and release of oxidants and proteases.
- Helps prevent damage of the alveolar-capillary membrane, leakage of plasma proteins out of blood vessels.
- Helps protecting alveoli from merging, inflating and enlarging, and decreasing inflammatory exudation of proteins to alveoli spaces after infection (5).

Reference

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Other Information-

Purely Herbal, No Side Effects, Non GMO, Soy free, Vegan, Gluten free



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