

INTRODUCTION

NUTRAVIR®

Multi-Protease Defense | Advanced Pan-Viral Support



NUTRAVIR is a scientifically advanced formula featuring five botanical compounds that target multiple viral pro-teases and immune pathways. This comprehensive formulation combines Skullcap root extracts (standardized for both baicalin and baicalein), Black Rice anthocyanins, Gromwell root compounds, and phospholipid-enhanced delivery technology for broad-spectrum immune support.*

60 Vegetable Capsules | 30-Day Supply

MULTI-TARGETED APPROACH

Comprehensive Five-Target System

Multiple Protease Inhibition Skullcap flavonoids target diverse viral proteases including 3CLpro, RNA-dependent RNA polymerase, and TMPRSS2, disrupting the replication machinery of multiple virus families including coronaviruses and influenza.

Cell Entry Protection Baicalin and baicalein from Skullcap create a protective barrier against viral attachment to host cells, while phosphatidylserine from sunflower lecithin helps maintain cellular membrane integrity during immune challenges.

Advanced Inflammatory Regulation Black rice anthocyanins and Gromwell root compounds synergistically modulate multiple immune signaling pathways including NLRP3 inflammasome, NF-κB, and IL-6/TNF-α cascades critical in antiviral defense.

PRODUCT DESCRIPTION

What is NUTRAVIR?

NUTRAVIR is an advanced dietary supplement developed by Innovation1 Biotech that provides comprehensive immune support against a broad spectrum of viral challenges. Unlike formulas targeting a single pathway, NUTRAVIR's unique combination of botanical compounds works synergistically to support multiple aspects of the body's natural defense systems.*

Our delayed-release capsules are engineered to deliver active compounds directly to the intestinal tract for maximum effectiveness, helping to support your body's natural immune responses throughout the year.*

INGREDIENTS DETAILS (DROPDOWN FORMAT)

Premium Ingredients, Backed by Science

Our scientists have leveraged extensive research on viral proteases and immune function to create a supplement **scientifically formulated** to target multiple viral defense mechanisms simultaneously. Take a look at the powerful ingredients that make up NUTRAVIR.

Skullcap Root Extract (Scutellaria baicalensis) [Std. 85% Baicalin] A cornerstone of traditional Chinese medicine for over 2,000 years, Skullcap root is rich in baicalin, a flavonoid with remarkable abilities to inhibit multiple viral enzymes including 3CL proteases, RNA-dependent RNA polymerases, and transmembrane proteases essential for viral replication and cell entry.

Skullcap Root Extract (Scutellaria baicalensis) [Std. 98% Baicalein] This concentrated extract provides highly purified baicalein, which works synergistically with baicalin by targeting distinct viral mechanisms and inflammatory pathways. Studies have demonstrated baicalein's ability to inhibit viral replication across multiple virus families through direct enzyme inhibition.

Black Rice Extract (Oryza sativa) [Std. 25% Anthocyanins] Standardized to contain potent cyanidin-3-O-glucoside (C3G) and peonidin-3-O-glucoside (P3G), these compounds specifically suppress inflammatory responses triggered by viral

proteins through inhibition of the NLRP3 inflammasome pathway and modulation of cytokine cascades.

Sunflower Lecithin [Std. 20% Phosphatidylserine] Creates a protective phytosome structure around botanical compounds, dramatically enhancing bioavailability through improved membrane penetration. The phosphatidylserine component provides additional support for cellular membrane integrity during immune challenges.

Gromwell Root Extract (Radix lithospermi) Contains shikonin and related naphthoquinones that complement the formula's activity through targeted enzymatic inhibition and immune modulation, providing additional pathways of support during viral challenges.

SCIENCE-BASED CONTENT

The Science Behind NUTRAVIR

UNDERSTANDING VIRAL PROTEASES: UNIVERSAL VIRAL DEPENDENCIES

Viruses rely on various proteases—specialized enzymes that cleave viral polyproteins into functional units—to complete their replication cycle. These proteases represent critical vulnerabilities across multiple virus families:

- **Coronavirus 3CL proteases** cleave viral polyproteins at specific sites
- **Influenza neuraminidase** facilitates viral release from infected cells
- **HIV proteases** process viral polyproteins during virion maturation
- **Host cell TMPRSS2** enables viral entry for multiple respiratory viruses

By targeting multiple proteases simultaneously, NUTRAVIR provides comprehensive support against diverse viral challenges.*

SKULLCAP ROOT: A MULTI-TARGET DEFENDER

Historical Use in Traditional Medicine

For over two millennia, Skullcap root (Huang Qin) has been one of the most revered botanicals in Traditional Chinese Medicine. The earliest documented medical applications appear in the Shennong Bencao Jing (Divine Farmer's Materia Medica), dating to approximately 200-250 CE.

Historical uses in Asian medical traditions include:

- Clearing "heat" and dampness from the body
- Supporting respiratory health during seasonal challenges
- Promoting balanced immune responses
- Providing cooling properties during febrile conditions

The root's bitter nature was traditionally associated with its ability to "clear heat-toxins," a concept that modern science now connects to its anti-inflammatory and antiviral properties.

Modern Research on Baicalin and Baicalein

Contemporary research has identified baicalin and baicalein as the primary bioactive flavonoids in Skullcap root, with remarkable multi-target activity:

1. Multiple Viral Enzyme Inhibition

- Direct binding to SARS-CoV-2 3CL protease at multiple sites
- Inhibition of viral RNA-dependent RNA polymerase (RdRp)
- Blocking transmembrane serine protease 2 (TMPRSS2) activity

2. Broad Antiviral Spectrum

- Demonstrated activity against coronaviruses (SARS-CoV, SARS-CoV-2)
- Inhibitory effects on influenza viruses (H1N1, H9N2)
- Activity against respiratory syncytial virus (RSV)
- Efficacy against enteroviruses

3. Immune Modulation

- Regulation of TLR7/MYD88 signaling pathway
- Inhibition of NF-κB transactivation
- Modulation of macrophage inflammatory responses

This multi-target profile allows baicalin and baicalein to support immune function through complementary mechanisms, providing synergistic support against diverse viral challenges.*

BLACK RICE: INFLAMMATORY PATHWAY MODULATION

Historical Significance

Black rice, known as "forbidden rice" in ancient China due to its exclusive consumption by emperors and royalty, has been valued for its medicinal properties for centuries. Traditional wisdom recognized its superior health benefits long before modern science identified its unique anthocyanin profile.

Modern Research on Anthocyanins

Recent scientific investigations have revealed that the deep purple-black pigments in black rice are primarily cyanidin-3-O-glucoside (C3G) and peonidin-3-O-glucoside (P3G). These anthocyanins specifically target inflammatory signaling pathways by:

1. Suppressing inflammatory responses triggered by viral proteins.
2. Inhibiting NLRP3 inflammasome activation.
3. Modulating IL-6 and TNF-α production.
4. Supporting cellular antioxidant defense systems.

Research has shown that black rice anthocyanins work through different mechanisms than the flavonoids in Skullcap, creating complementary pathways of support during immune challenges.*

SUNFLOWER LECITHIN: DELIVERY ENHANCEMENT AND MEMBRANE SUPPORT

NUTRAVIR's formula utilizes phospholipid complex technology to overcome the bioavailability challenges inherent to many botanical compounds. Sunflower lecithin, standardized to 20% phosphatidylserine, serves dual functions:

1. Enhanced Delivery System

- Forms protective phospholipid complexes around botanical compounds
- Improves intestinal absorption and cellular uptake
- Extends circulation time of active compounds
- Protects compounds from premature degradation

2. Cellular Membrane Support

- Phosphatidylserine provides building blocks for cellular membranes
- Supports membrane integrity during immune challenges
- Facilitates cellular signaling important for immune function

This dual action enhances both the delivery and efficacy of the formula's active compounds.*

GROMWELL ROOT: COMPLEMENTARY ANTIVIRAL SUPPORT

Gromwell root contains shikonin and related naphthoquinones that provide additional mechanisms of support through:

1. Binding to viral enzymes including 3CL protease
2. Supporting balanced inflammatory responses
3. Contributing complementary antioxidant properties

The inclusion of Gromwell root creates a more comprehensive formula with multiple layers of support.*

SYNERGISTIC MECHANISMS: THE POWER OF COMBINED APPROACHES

What makes NUTRAVIR particularly effective is the synergistic interaction between its botanical compounds. Rather than working through a single mechanism, these ingredients:

1. Target multiple stages of viral lifecycles

- Inhibit viral entry into cells
- Disrupt viral replication machinery
- Modulate host cell responses

2. Support balanced immune responses

- Regulate inflammatory signaling cascades
- Support normal immune cell function
- Maintain cellular redox balance

3. Enhance overall efficacy

- Complementary mechanisms increase overall effectiveness
- Multiple pathways help maintain support even as viruses evolve
- Diverse targets create a more comprehensive approach

This multi-targeted strategy provides broad-spectrum support for the body's natural defense systems.*

BENEFITS SECTION

Comprehensive Support for Immune Health

NUTRAVIR's formulation provides multilayered support through three distinct yet complementary mechanisms:

Pan-Viral Enzyme Targeting

NUTRAVIR contains multiple compounds that interact with various viral enzymes essential for replication across diverse virus families. This broad-spectrum approach helps support the body's natural defenses against both current and emerging viral challenges.*

Enhanced Cellular Defense

The phospholipid complex enhances the bioavailability of botanical compounds while providing phosphatidylserine for cellular membrane support. This sophisticated delivery system maximizes the effectiveness of each dose by protecting compounds from degradation and facilitating their absorption.*

Balanced Inflammatory Response

The synergistic combination of flavonoids and anthocyanins helps maintain normal inflammatory processes by modulating multiple signaling pathways. This helps support a balanced immune response during seasonal and everyday challenges.*

SUPPORTING SECTIONS

Scientific Publications

Our formula is supported by extensive research on the molecular activity of its key compounds:

1. Discovery of baicalin and baicalein as novel, natural product inhibitors of SARS-CoV-2 3CL protease in vitro (2020)
2. Baicalein and Baicalin Inhibit SARS-CoV-2 RNA-Dependent-RNA Polymerase (2021)
3. Cyanidin-3-O-glucoside and Peonidin-3-O-glucoside-Rich Fraction of Black Rice Suppresses Inflammatory Responses from SARS-CoV-2 Spike Glycoprotein S1-Induction (2022)
4. Antiviral Properties of Baicalin: a Concise Review (2021)
5. Baicalin inhibits TLR7/MYD88 signaling pathway activation to suppress lung inflammation in mice infected with influenza A virus (2014)

Recommended Use

Adults: Take 2 capsules one to three times daily for general wellness support or as recommended by your healthcare practitioner.

Children under 18 years of age: Consult a physician before use.

Supplement Facts

SUPPLEMENT FACTS		
Serving Size: 2 Capsules		Servings Per Container: 30
	Amount Per Serving	%DV
Proprietary Blend	820mg	†
Black Rice Extract (<i>Oryza sativa</i>) [Std. 25% Anthocyanins], Sunflower Lecithin [Std. 20% Phosphatidylserine], Skullcap Root Extract (<i>Scutellaria baicalensis</i>) [Std. 85% Baicalin], Skullcap Root Extract (<i>Scutellaria baicalensis</i>) [Std. 98% Baicalein], Gromwell (<i>Radix lithospermii</i>) Root Extract		
† Daily Value (DV) not established		

Other Ingredients: Powdered Cellulose, HPMC Capsule (Delayed Release), Silicon Dioxide, Magnesium Stearate.

Common Questions About NUTRAVIR

What makes NUTRAVIR different from other immune support supplements?

NUTRAVIR utilizes a multi-targeted approach, combining five botanical compounds that support diverse aspects of immune function. While many formulas focus on a single mechanism, NUTRAVIR provides comprehensive support through multiple complementary pathways.*

How does NUTRAVIR work?

NUTRAVIR contains baicalin and baicalein from Skullcap root that have demonstrated inhibitory effects on multiple viral enzymes in laboratory studies. These are complemented by anthocyanins from black rice that help modulate inflammatory pathways, all delivered via an advanced phospholipid complex that enhances absorption and bioavailability.*

When should I take NUTRAVIR?

For daily immune support, take 2 capsules once daily. During periods when additional support is desired, the dosage can be increased to 2 capsules three times daily, or as recommended by your healthcare professional.

How soon can I expect results?

Individual experiences may vary. Some users report noticing effects within days, while for others, it may take consistent use over several weeks to experience the full benefits of the formula.

Is NUTRAVIR safe?

NUTRAVIR contains natural botanical ingredients with excellent safety profiles. The formula has been developed following rigorous quality standards. As with any supplement, consult with your healthcare provider before use, especially if you are pregnant, nursing, have a medical condition, or are taking medications.

How does NUTRAVIR compare to NUTRAVID?

While NUTRAVID is specifically formulated to target the SARS-CoV-2 3CL protease through shikonin from Gromwell root, NUTRAVIR provides broader support through multiple botanical compounds that target various viral enzymes and immune pathways. NUTRAVIR is designed for year-round immune support against diverse challenges.*

Is NUTRAVIR suitable for vegetarians/vegans?

Yes, NUTRAVIR is formulated with plant-based ingredients and is suitable for both vegetarians and vegans. The capsules are vegetable-based rather than gelatin.

Clinical Research Foundation

NUTRAVIR's formula builds upon the extensive research conducted with Tollovid, our clinically-studied 3CL protease inhibitor. While Tollovid focused specifically on the SARS-CoV-2 3CL protease, NUTRAVIR expands this approach with additional botanical compounds to create a more comprehensive formula targeting multiple viral mechanisms.

For information about our clinical research with Tollovid, which informs the development of NUTRAVIR, please visit our clinical studies page.

Quality Commitment

NUTRAVIR is manufactured in a cGMP-certified facility in the USA, ensuring the highest standards of quality and purity. Each batch undergoes rigorous testing for potency, purity, and quality.

- **cGMP Certified Manufacturing**

- **Made in the USA**
- **Standardized Botanical Extracts**
- **Third-Party Tested**

*These statements have not been evaluated by the Food and Drug Administration.
This product is not intended to diagnose, treat, cure, or prevent any disease.