# **Bio**cidin<sup>®</sup>LSF

# BROAD-SPECTRUM LIPOSOMAL FORMULA SUPPORTS MICROBIAL BALANCE\* | DISRUPTS BIOFILMS\*

AVAILABLE IN 1.7 FL OZ (50 ML) LIQUID

What happens when microbial imbalances are hard to reach or urgent? Liposomal technology delivers. That's why we partnered with Quicksilver Scientific® – industry leader in liposomal technology – to create Biocidin® LSF.

The botanicals in Biocidin® LSF are suspended in a unique sunflower phospholipid formula for advanced absorption. Not only that, the unilamellar vesicles of 100 nm or smaller particle size are small and stable. Expanding the benefits of our legacy Biocidin® Botanical Blend to the systemic level.

Biocidin® LSF contains the same potent, broad-spectrum botanical blend as Biocidin® Liquid. But research shows the migration of liposomal Biocidin® across the cell wall (transcellular absorption) is 74% higher than Biocidin® Liquid.¹

Why is that important? Because sometimes microbial imbalances happen outside the gut. Dysbiosis can be systemic and that includes inside our cells. Biocidin® – made even more bioavailable with fast delivery throughout the body.

Need the microbial balancing activities of Biocidin® but at a deeper level? Biocidin® LSF is the powerhouse you're looking for, wherever and whenever you need it.

<sup>1</sup>Karvonen, K., & Gilbert, L. (2018). Effective killing of Borrelia burgdorferi in vitro with novel herbal compounds. General Medicine Open. 2. 10.15761/GMO.1000153.

#### **REMOVE**

Remove. Clear away obstacles. Entrenched biofilms and unwanted organisms can create an obstacle that requires outside assistance. The vital first step is to clear away irritants, unwanted microbes and biofilms – allowing the body's innate restorative ability to go to work.



PROFESSIONAL-GRADE BOTANICALS



CLINICALLY EFFECTIVE



POSITIVE INFLAMMATORY RESPONSE



MICROBIOM BALANCE





#### **Benefits**

- Rapid and systemic delivery
- Broad-spectrum activity\*
- Dismantles biofilms\*
- Supports gut health by addressing unwanted organisms\*
- Promotes mental clarity and vitality\*
- Immunomodulatory activity\*
- Promotes a healthy inflammatory response\*

#### **Features**

- Contains Biocidin® Botanical Blend, made with 99% organic ingredients
- Liposomal formula for enhanced absorption
- Professional-grade ingredients
- Laboratory tested, clinically researched, and trusted by practitioners
- Pleasant taste appeals to children and adults

### Clinical Focus: Who's It For?

- Anyone seeking help with balance across the whole body\*
- Anyone seeking to balance systemic immune function\*
- Individuals addressing longstanding, imbalanced systemic microbial ecology\*
- Those seeking to support healthy skin\* (may be used topically)
- Those with brain fog or memory concerns\*

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

# **Bio**cidin<sup>®</sup>LSF

#### **BROAD-SPECTRUM LIPOSOMAL FORMULA**

## WHY BIOCIDIN® LSF? ABSORBS QUICKLY FOR WHOLE-BODY ACTION

- Contains Biocidin® Botanical Blend in a liposomal delivery system
- Preferred choice when addressing systemic dysbiosis
- One pump of Biocidin® LSF has equivalent activity to 5 drops of Biocidin® Liquid
- Readily emulsifies in water or saline for custom usage

## Suggested Use

Start with 1 pump per day and gradually increase to three times per day or as directed by your healthcare professional. Hold under tongue 30 seconds before swallowing. May be added to water. Best taken on an empty stomach 10 minutes before meals. Best if used within 60 days of opening.

Warning: Not recommended for use during pregnancy. Consult your physician before using any supplement, especially if you are nursing, have a medical condition, or are taking medication. Discontinue use should adverse reactions occur. Keep out of reach of children. **Store in a cool, dry place.** 

### **Supplement Facts**

Serving Size: 0.5 mL (1 pump) Servings Per Container: 100 AMOUNT PER SERVING

Proprietary Herbal Blend: 50 mg<sup>†</sup>

Vegetable glycerin<sup>‡</sup>, Bilberry fruit extract, Grape seed extract, Shiitake mushroom extract<sup>‡</sup>, Goldenseal root<sup>‡</sup>, Noni fruit extract<sup>‡</sup>, Garlic bulb<sup>‡</sup>, White willow bark, Milk thistle seed<sup>‡</sup>, Echinacea purpurea herb extract, Echinacea angustifolia root<sup>‡</sup>, Raspberry fruit<sup>‡</sup>, Black walnut hull, Black walnut leaf, Lavender oil<sup>‡</sup>, Oregano oil<sup>‡</sup>, Galbanum oil, Tea Tree oil<sup>‡</sup>, Fumitory aerial parts extract, Gentian lutea root<sup>‡</sup>

**Other Ingredients:** Purified water, ethanol (sourced from sugar cane), tocofersolan, natural mixed tocopherols

**Contains walnut**. This product is made without dairy, gluten, soy, corn, animal products, artificial coloring or flavoring.

†Daily value not established.

**‡Organic** 



### Ingredient Mechanisms of Action

Scientific literature shows that the individual botanicals in Biocidin® LSF have multiple activities. Below are highlights that may account for the outcomes seen in a clinical setting.

Intracellular Delivery – Combining the power of the botanicals with liposomal delivery means that especially tough and longstanding challenges are met.

Supports Microbial Balance – Almost all of the botanicals in Biocidin® LSF impact unwanted microorganisms in the microbiome while also selectively enhancing beneficial microorganisms. Black Walnut, Garlic, Golden Seal, Lavender, and Oregano are well-documented in this category. However, Fumitory, Noni, and Bilberry also play an important role in broad-spectrum activity.

**Biofilm Disruptor –** The botanicals in Biocidin® LSF work in five different ways to inhibit biofilms.

- Inhibition of Quorum Sensing (intercellular communication initiating the production of a biofilm) – Bilberry, Garlic, Golden Seal, Oregano
- Inhibition of Initial Attachment Phase Bilberry, Grape seed, Lavender, Oregano, Tea Tree
- Inhibition of Swarming Motility (the movement of a microorganism via flagella) – Bilberry, Grape seed
- Disruption of the Microbial Lipid Bi-layer (disabling cellular activity) Black Walnut, Garlic, Golden Seal, Raspberry
- Efflux Pump Inhibition (a mechanism for resistance, and biofilm production) - Black Walnut, Bilberry, Echinacea, Garlic, Gentian, Golden Seal, Grape seed, Lavender, Oregano, Shiitake, Tea Tree

Immunomodulatory – Immunomodulation provides the benefit of simultaneously supporting healthy immune activity against unwanted organisms while downregulating damaging inflammatory pathways. Several botanicals in Biocidin® LSF – Echinacea, Noni, and Shiitake – achieve this with a range of activities, including enhancing humoral immunity (T cells and B cells), acting on the innate immune response (macrophages, natural killer cells), and beneficially modifying cytokine release.

**Supports Healthy Inflammatory Response** – Biocidin® LSF assists normalized inflammation in several ways.

- Research shows that 13 of the 18 botanicals in Biocidin® LSF support a healthy inflammatory response. Of note, Galbanum is a unique resinous ingredient mentioned in Hippocrates' most ancient herbal texts and has similar activity to Frankincense. Noni is prized in Polynesian cultures for its remarkable ability to assist immune balance.
- Addressing Dysbiosis Dysbiosis causes the production of mediators such as lipopolysaccharides (LPS), activating TLR4 receptors and the detrimental downstream cascade, affecting the whole body.

**Antioxidant** – Most of the ingredients in Biocidin® LSF have antioxidant activity, which helps protect the body by neutralizing free radicals. Of note are Bilberry, Grape seed, and Noni extracts with their high levels of oligomeric proanthocyanidin complexes (OPCs), known to support cellular health and tissue repair.