



DR. SHADE'S BITTERS® NO. 9



Supplement Facts

Serv. Size: 1.0 mL (2 Pumps)	Amount	% Daily
Serv. Per Container: 50	Per Serving	Value
Phosphatidylcholine	35mg	**
(from purified sunflower seed lecithin)		
Proprietary Blend	271mg	**
Liquid extracts of Dandelion aerial parts, Milk Thistle aerial parts, Gentian root, Burdock root, and Solidago virgaurea aerial parts, Essential oil of sweet orange, Myrrh, Juniper and Clove.		
**Daily Value (DV) not established		
Other Ingredients: Glycerin, Water, Ethanol, Vitamin E (as Tocopherol and Natural Mixed Tocopherols), and Acacia Gum		

Bitters No. 9 is a premium blend of nine bitter herbs and essential oils that orchestrate optimal digestion and detoxification via the liver, gallbladder, and kidneys. Designed with the sensitive patient in mind, our botanical bitters blend gently facilitates bile flow and toxin elimination, minimizing the risk of adverse detoxification reactions.

BILE FLOW: THE MISSING LINK IN DETOXIFICATION

Detoxification is a complex, multi-step process that moves toxins out of cells, into the liver and gallbladder and out of the body via the digestive tract and kidneys. For decades, detoxification protocols have primarily addressed the intestine and kidneys, overlooking the critical role of the gallbladder and bile flow in facilitating successful detoxification.

Bile is a fluid produced in the liver and secreted by the gallbladder that both aids in the digestion of dietary fats and transports toxins into the intestine so they can be excreted from the body. Bile is comprised of bile acids, salts, phospholipids, cholesterol, and water. Fascinating research indicates that the cellular transporters that move bile acids and salts in and out of the intestine also transport toxins.^{1,2} Therefore, sluggish bile flow, also known as cholestasis, slows toxin efflux and impedes successful detoxification. Various factors contribute to cholestasis, including gallstones, biliary disease, chronic liver disease, certain medications, excess estrogen, and endotoxin, also known as lipopolysaccharide or LPS.^{3,4}

In addition to having a direct negative impact on detoxification, poor bile flow contributes to gastrointestinal dysbiosis and conditions such as small intestinal bacterial overgrowth (SIBO).⁵

Insufficient bile flow may also promote the formation of intestinal biofilm, a consortium of microorganisms embedded in a sticky matrix that allows pathogens to evade antibiotics and the immune system, enhancing their infectivity.⁶ Dysbiosis, SIBO, and intestinal biofilm exert negative feedback on detoxification by increasing LPS and inflammatory cytokines, creating a vicious cycle of bile stagnation and GI distress.⁷

BITTERS NO. 9 AND BITTER X: WHAT'S THE DIFFERENCE?

Bitters No. 9 is the predecessor to our newer bitters formula, Bitter X. While the powerful stimulatory effects of Bitter X on bile flow and toxin elimination are ideal for many patients, Bitters No. 9 is perfect for individuals who need to move bile and toxins in a gentler, more gradual manner. For your highly-sensitive patients, Bitters No. 9 is the essential bitters formula for promoting bile flow and toxin elimination at the cellular and systemic levels.

A SUITE OF BITTER BOTANICALS FOR GENTLE DETOXIFICATION

This blend of bitter herbs in Bitters No. 9 has a gentle activating effect on the transporters necessary to move bile and toxins from the liver and gallbladder into the intestine. Dandelion, milk thistle, gentian, burdock root, and Solidago comprise the foundation of our formula. Myrrh, juniper, and clove essential oils complement the bile flow-promoting properties of the primary

BENEFITS & APPLICATIONS:

- Supports bile flow and detoxification^{8,11,17,26}
- Inhibits biofilm formation and induces biofilm detachment from the gut wall⁶
- Promotes digestion
- Anti-inflammatory^{9,16,19,21,22,23,24,25,31}
- Anti-microbial^{22,28,30,32}
- Upregulates antioxidant activity^{9,12,31}

herbs, while sweet orange oil adds a touch of sweetness. These potent herbs and essential oils are delivered together in a liposomal formula, offering unparalleled bioavailability.

Dandelion supports diuresis, enhancing urinary elimination of toxins. It also protects the liver, enhances bile flow, inhibits LPS-induced inflammation, and upregulates antioxidant pathways such as Nrf2.^{8,9,10}

Milk thistle is a time-honored botanical in traditional Western herbalism. Silymarin, the primary bioactive constituent of milk thistle, increases bile flow.¹¹ It supports phase II detoxification by activating the Nrf2 pathway, which ultimately enhances glutathione production.¹²

A true multi-purpose detoxification promoter, silymarin and its sister compound, silychristin, also stabilize MRP2 and BSEP transporters, bile acid transporters involved in phase III detox that usher bile and xenobiotics, such as mercury and mycotoxins, out of the body.^{13,14} Last but not least, milk thistle alleviates hepatic inflammation induced by exogenous and endogenous toxins.^{15,16}

Gentian, a full-bodied bitter botanical, also promotes healthy bile flow. Two of its bioactive compounds, gentiopicroside and gentiactone, have been found to protect the liver from cholestasis-induced liver damage, inhibit LPS-induced toxicity, and upregulate antioxidant enzyme activity.^{17,18,19}

Solidago, a flowering plant with tiny, bright yellow blossoms, has a long history of use in traditional herbalism for supporting the urinary tract. It promotes diuresis and toxin elimination while simultaneously increasing the activity of glutathione S-transferase, a critical enzyme in phase II detoxification.^{20,21} The bioactive polyphenols in Solidago also have antimicrobial activities against Staphylococcus aureus and Candida albicans, common infectious organisms in humans.²²

Burdock root is a hearty root vegetable that has been used for thousands of years in Traditional Chinese Medicine and Western folk herbalism. It is revered for its cooling, decongesting effects on the liver and digestive system, mediated by its bitter principles. Modern-day science indicates that burdock root has potent anti-inflammatory properties, while also protecting against xenobiotic-induced liver injury.^{23,24,25}

The **essential oil of myrrh**, a resinous substance derived from the Commiphora mukul tree native to India, supports healthy bile flow by increasing the expression of the human bile salt export pump and promotes a healthy microbial balance.^{26,27} **Juniper essential oil** has anti-inflammatory and antimicrobial properties.^{28,29} **Clove essential oil** contains eugenol, a potent antimicrobial agent with a pleasant, spicy scent. **Sweet orange essential oil** offers antioxidant and antimicrobial properties and imparts a delicately sweet taste to our formula.^{30,31,32}

For those who want a gentle but effective bitters formula, Dr. Shade's® Bitters No. 9 is the ideal choice for supporting critical processes necessary for detoxification.

Quicksilver Delivery Systems® improves upon liposomal and emulsification technology with smaller, more stable particles made from the highest-grade ingredients available. In addition to exceptional absorption rates, these tiny liposomal and nanoemulsified particles increase diffusion across mucous membranes, enhance lymphatic circulation of nutrients and support cellular delivery.^{33,34} The liposomes in this formula contain pure phosphatidylcholine, a lipid that is the primary building block of all cell membranes.³⁵

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