

# GI-CLR



## Clinical Applications

- Supports a healthy microbial balance in the gastrointestinal (GI) tract \*

*GI-CLR is a blend of botanical extracts with a long history of use as natural antimicrobials. The ingredients provide a broad spectrum of activity against the most common pathogens present in the human GI tract in conditions of dysbiosis, while being relatively sparing of normal flora.*

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## Discussion

**GI-CLR** is a proprietary blend of botanicals that can help support a healthy microbial balance in the gastrointestinal (GI) tract. Each ingredient in this product has a long history of use for supporting healthy gut flora. These botanicals include: Tribulus Extract, a flowering plant also known as the Puncture Vine, which is native to warm temperate and tropical regions; Berberine Sulfate, found in roots, rhizomes and the stem bark of plants such as barberry, goldenseal, goldenthread and tree turmeric; Sweet Wormwood, derived from the inner bark of the *Artemisia annua*; Black Walnut Extract; Bearberry Extract; and Caprylic Acid. Aging, exposure to antibiotics, poor diet, and stress can all compromise the good gastrointestinal bacteria and disrupt the microbial balance. Combined, the ingredients in GI Microb-X™ provide a broad spectrum of activity in order to support a healthy balance of the normal flora.

A healthy digestive system is critical to our overall health. Seventy percent of the body's immune system resides in the digestive tract and it is here where food is broken down into absorbable nutrients. Billions of bacteria live and work in the intestines, affecting our metabolism, nutrient absorption and immune function. They ferment foods, prevent the growth of harmful bacteria, and work to manufacture hormones and produce vitamins such as K, B12, and other B vitamins. The presence of specific bacteria can even have an effect on weight management, as gut microbes aid in the breakdown of carbohydrates and in the absorption of dietary fats. Bacteria also work to enhance the protective barrier function of the intestines, in order to support the immune system. They serve as a line of resistance against invasive bacteria and can even trigger the production of what are called 'T cells,' which are important immune system boosters. Therefore, it is vital to our health to help foster the healthy bacteria that live in the gut.

### GI-CLR includes:

**Tribulus Extract** (also known as puncture vine), a member of the Zygophyllaceae family, is an annual herb found in many tropical and moderate areas of the world, including the US and Mexico, the Mediterranean region, and throughout Asia. Its health and medicinal effects are the result of active phytochemicals steroidal saponins currently referred to by medical researchers and physicians as X steroidal saponins. These X steroidal saponins have the ability to influence the entire immune system of the body and have been shown to have antibacterial and antiviral effects.

**Berberine** is a bitter-tasting, yellow, plant alkaloid with a long history of medicinal use in Chinese and Ayurvedic medicine. Berberine is present in the roots, rhizomes and stem bark of various plants including *Berberis aquifolium* (Oregon grape), *Berberis vulgaris* (barberry), *Hydrastis canadensis* (goldenseal), *Coptis chinensis* (coptis or goldenthread), and *Berberis aristata* (tree turmeric). Berberine has also been used historically as a dye, due to its yellow color. Varma first documented the use of berberine in 1933 for the eye infection chronic trachoma. There is clinical evidence to support berberine's use in the treatment of bacterial diarrhea. Berberine has also shown antimicrobial activity against bacteria, viruses, fungi, protozoans, helminths (worms), and chlamydia.

**Artemisinin** (from Sweet Wormwood; *Artemisia annua*) demonstrates significant antimicrobial effects and has been traditionally used even in the treatment of malaria. It has a particular historic use of being used to treat parasitic gastrointestinal infections. It is derived from the inner bark (wood) of the *Artemisia annua* tree and it kills parasites (worms), therefore it became known by the common name of wormwood.

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**Black Walnut Extract** (*Juglans nigra*) also has a long history of use as an intestinal anti-parasitic (i.e., vermifuge, anthelmintic) in botanical medicine. It also possesses activity against common bacterial and fungal pathogens that occur in GI dysbiosis.

**Bearberry Extract** (*Arctostaphylos uva-ursi*) is grown throughout Asia, North America, and Europe and has a long history of medicinal use dating back to the 13th Century. The leaves have been used worldwide as a diuretic, astringent, antiseptic and treatment for urinary tract and gastrointestinal infections. A tea brewed with the leaves has also been used as a laxative. Arbutin, the main chemical constituent of uva ursi, is a phenolic glycoside that becomes hydrolyzed to hydroquinone. Both chemicals contribute to the antiseptic effects in the urinary and GI tracts. Other active constituents include tannins, mono and triterpenes, and flavonoids. Arbutin alone has also been reported to relieve pain from kidney stones, cystitis and nephritis.

**Caprylic Acid** is the common name for the eight-carbon straight chain fatty acid known by the systematic name octanoic acid. It is found naturally in palm and coconut oil, and in breast milk. Health care practitioners often recommend caprylic acid for use with candidiasis and bacterial infections. Due to its relatively short chain length it has no difficulty in penetrating fatty cell wall membranes, hence its effectiveness in combating certain lipid-coated bacteria, such as *Staphylococcus aureus*, various species of *Streptococcus*, and intramucosal *Candida*. Caprylic acid may affect the fluidity of viral and fungal cell membranes. The lactoperoxidase system in combination with caprylic acid can inhibit the growth of *Escherichia coli* and *Staphylococcus aureus* in food. Studies have reported that dietary caprylic acid inhibits the growth of *Candida albicans* and other opportunistic fungi in both the small and the large intestine. At the same time, caprylic acid does not seem to adversely affect the growth of beneficial intestinal microflora.

<b>Supplement Facts</b>	
Serving Size 1 capsule	
Amount Per Serving	% Daily Value
Tribulus Extract ( <i>Tribulus terrestris</i> )(aerial) [standardized to contain 40% saponins]	200 mg *
Magnesium Caprylate (yielding 120 mg caprylic acid; 10 mg magnesium)	150 mg *
Berberine Sulfate ( <i>Berberis aristata</i> )(root)	100 mg *
Bearberry Extract ( <i>Arctostaphylos uva-ursi</i> )(leaf) [standardized to contain 20% arbutin]	100 mg *
Black Walnut Powder ( <i>Juglans nigra</i> )(hull)	100 mg *
Barberry Extract ( <i>Berberis vulgaris</i> )(bark) [standardized to contain 6% berberine]	50 mg *
Artemisinin (from Sweet Wormwood) ( <i>Artemisia annua</i> )(herb)	15 mg *

\*Daily Value not established.

**Suggested Use**

As a dietary supplement, take one capsule per day on an empty stomach, or as directed by a health care practitioner.

**Caution**

Keep out of reach of children.



**Other Ingredients:** Cellulose (capsule), vegetable stearate, silicon dioxide.

**Contains tree nuts (walnuts).**

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