

GI MICROB-X™

USED IN COMPLIMENTARY MEDICINE AS A SUPPORTIVE TREATMENT OF OCCASIONAL DIARRHEA
60 VEGETARIAN CAPSULES | NPN80072183 | GIX060-CN

GI Microb-XTM 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. The botanical substances in GI Microb-XTM are also commonly represented on sensitivity testing provided by the major functional laboratories performing stool analysis.

GI MICROB-X™ FEATURES:

Tribulus Extract (also known as puncture vine), a member of the Zygophy-llaceae 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. It contains 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 may have antimicrobial properties.

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. Berberine may also have antimicrobial activity against bacteria, viruses, fungi, protozoans, and helminths (worms).

Artemisinin (from Sweet Wormwood; *Artemisia annua*) may demonstrate antimicrobial effects. It has a particular historic use of being used to treat parasitic gastrointestinal infections. It is derived from the inner bark (wood) of the Artemesia annua tree and has traditionally been used to help kill parasitic worms, therefore it became known by the common name of wormwood.

Black Walnut Extract (*Juglans nigra*) also has a long history of use as an intestinal anti-parasitic (i.e., vermifuge, antihelmitic) in traditional medicine. It also possesses activity against common bacteria and fungi 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 traditionally as a diuretic, astringent, and antiseptic 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.

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.

Medicinal Ingredients (per capsule):

Tribulus (Tribulus terrestris-Leaf) (40% Steroidal Saponins 4:1)	200 mg
Magnesium caprylate (Magnesium octanoate) (120 mg Caprylic acid)	.150 mg
Bearberry (Arctostaphylos uva ursi-Leaf) (20% Arbutin 6:1)	.100 mg
Black walnut (Juglans nigra-Fruit Hull)	.100 mg
Berberine (berberine sulfate)	81 mg
Common barberry (Berberis vulgaris-Stem bark) (6% Berberine 4:1)	50 mg
Sweet wormwood (Artemisia annua-Herb top) (99% artemisinin 12:1)	15 mg
Non-Medicinal Ingredients: Hypromellose, magnesium stearate (vegetable source), mid	crocrys-
talline cellulose, silicon dioxide. Recommended Dose: Adults: Take 4 capsules per da	y on an
empty stomach, or as directed by your health care practitioner. If gastrointestinal in	rritation
occurs, take with food. For use beyond 4 days, consult a health care practitioner.	

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GI Microb-X™

Natural support for gastrointestinal health

GI Microb-X™ 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 Artemesia annua; *Black Walnut Extract*; *Grapefruit 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- $X^{\text{\tiny{TM}}}$ provide a broad spectrum of activity in order to support a healthy balance of the normal flora.

Why is it important to support the GI tract?

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.

Recommended Dose: Adults: Take 4 capsule per day on an empty stomach, or as directed by your health care practitioner. Switch to taking this product with a meal if it causes stomach upset. For use beyond 4 days, consult a health care practitioner. **Does not contain gluten.**

