CYSTISTATIN

ORTHO MOLECULAR PRODUCTS
Because Efficacy Matters

CLINICAL APPLICATIONS

- *Provides Support for Healthy Urinary Tract Function*
- *Supports Healthy Microbial Balance in the Urinary Tract*
- *Helps Maintain a Healthy Mucosal Surface in the Urinary Tract*
- *Promotes Healthy Immune Function*

IMMUNE HEALTH

Cystistatin is a unique botanical blend formulated to promote a healthy urinary tract. One of the key ingredients in Cystistatin is uva ursi extract which is standardized to contain 20% arbutin. Arbutin, particularly when combined with berberine sulfate, provides a powerful combination to help maintain healthy microbial balance in the urinary tract and bladder. In addition, marshmallow root soothes bladder and urinary tract discomfort. Celery seed extract and bladderwrack leaf are also included in Cystistatin for their ability to promote a healthy urinary passage.

Overview

The role of the urinary tract is to produce urine, the carrier of waste materials from the bloodstream, and remove it from the body through the bladder and kidneys. Bacteria can enter the urinary tract through the urethra or, more rarely, through the bloodstream. Women are generally at greater risk of this occurrence. The ingredients in Cystistatin work together to help maintain a healthy urinary system and promote a healthy mucosal lining of the bladder via microbial-balancing and immune-stimulating properties.

Uva Ursi†

The leaves of uva ursi (*Arctostaphylos uva ursi*) have been used for centuries in herbal medicine to support the health of the urinary tract. The medicinal portion of uva ursi is the dried leaves, which, in addition to providing arbutin, contain methylarbutin, flavonoids, allantoin, tannins, gallic and ellagic acids, volatile oils and a resins (urvone). Each of the components in uva ursi leaf work synergistically with arbutin to promote healthy bacteria balance in the urinary tract. Additionally, the components of the uva ursi leaf prevent the breakdown and improve absorption of the arbutin molecule. When arbutin remains intact, it is excreted through the kidneys and provides microbial support for urinary tract mucous membranes. Research has demonstrated uva ursi's ability to promote microbial balance in the bladder[1-4] and ability to flush out the urinary tract.[5] A double-blind, randomized study (57 women treated with either uva ursi or placebo for 1 month) found that, at one year follow-up, the uva ursi group demonstrated a statistically significant difference in the reoccurrence of urinary tract challenges.[6]

Berberine Sulfate†

Berberine sulfate is an alkaloid sulfate extracted from the roots and barks of many plants and possesses microbial-balancing properties. Berberine sulfate's main mechanism of action is blocking the adhesion of organisms to host cells. A study on the effect of berberine on erythrocytes and epithelial cells found berberine's promotion of microbial balance to be mediated by the selective suppression of the synthesis and assembly of fimbriae by organisms.[7] Another study found berberine to disrupt adhesion both by releasing lipoteichoic acid from the cell surface and by directly preventing or dissolving lipoteichoic acid-fibronectin complexes.[8]

Marshmallow Root†

Marshmallow root is a traditional irritation-relieving herb with a long history of use in coating the gastric lining through its mucilage polysaccharides, which swell when mixed with liquid. This provides a soothing property to mucous membranes.[9] The irritation-relieving activity of marshmallow root results in the

† 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.

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promotion of a healthy mucosal surface in the urinary tissues and membranes. Additionally, the German Commission E has approved the use of marshmallow root for promoting a healthy inflammatory process within the gastric mucosa.

Celery Seed Extract†

Part of the same family as carrots, parsley and fennel, celery seed has been used for centuries and is still in use today for its soothing and microbial-balancing qualities.[10] Research has also demonstrated that celery seed increases urine production, resulting in a flushing of the urinary tract.[11] Celery seed has been shown to reduce the membrane integrity of various microbes.[12-13]

Bladderwrack†

Bladderwrack is a perennial seaweed found along the shores of Europe and America that has been used to support urinary health. Bladderwrack has been used historically to naturally flush out urinary passages. It also promotes normal levels of inflammation in the bladder.

Directions

1-2 capsules three times per day or as recommended by your health care professional.

Does Not Contain

Gluten, yeast, artificial colors and flavors.

Cautions

Do not consume this product if you are pregnant or nursing. Consult your physician for further information.

Supplement Facts V3

Serving Size 2 Capsules
Servings Per Container 30

2 capsules contain	Amount Per Serving	% Daily Value
Uva Ursi Leaf Extract (Standardized to contain 20% Arbutin)	650 mg	*
Berberine Hydrochloride Hydrate	200 mg	*
Marshmallow Root	150 mg	*
Bladderwrack Leaf	80 mg	*
Celery Seed Extract	80 mg	*

* Daily Value not established

ID# 561060 60 Capsules

References

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