

## **Cysto Renew®**

### **Bladder Support Formula†**

#### **DESCRIPTION**

Cysto Renew®, developed by Dr. Geo Espinosa, is a unique combination of ingredients designed to help calm the bladder and support healthy functioning of the urinary tract system.† Each ingredient researched by Dr. Espinosa, a naturopathic physician specializing in urology, contributes to the health of the bladder glycosaminoglycan layer, nitric oxide production, healthy stress response, and normal mast cell production that helps promote a healthy functioning bladder and normal urine frequency. †

#### **FUNCTIONS**

The wall of the bladder is protected by a layer of molecules called proteoglycans, also called glycosaminoglycans (GAG). Underneath the GAG layer is a layer of cells called the urothelium. In certain bladder conditions such as IC, both of the layers can be disrupted. Once they feel the trigger by an insult in the bladder, they send the message on to the submucosa, the layer right behind the urothelial cell and very rich in nerves and mast cells. Activated mast cells release histamine and cytokines in the blood, which can lead to chronic bladder irritation.

Chondroitin sulfate is a proteoglycan and has been found on the surface of the bladder lumen. It is also a mast-cell inhibitor, and can help contribute to the strengthening of the GAG layer to support healthy bladder integrity.† Research has concluded that the bladder luminal and basal proteoglycans are associated with bladder function.

Quercetin is a bioflavanoid that has positively shown in research to support bladder health by supporting the normal release of histamine from mast cells and basophils, and eliciting a healthy immune response.† Bromelain is a proteolytic enzyme that plays a role in healthy systemic inflammation and cytokine balancing.† It is often combined with Quercetin for favorable absorption and synergistic actions.

L-Arginine and L-Citrulline are both amino acids that are precursors to nitric oxide production, a substance that relaxes smooth muscles like those found in the bladder. Citrulline, an amino acid unrelated to citrus fruit, is synthesized in body from arginine and ornithine and has been found to help relax blood vessels and release nitric oxide. Studies reveal that nitric oxide levels may be decreased in certain bladder conditions.†

Bladders can be aggravated by stress and nerve signals. *Rhodiola rosea* is an herbal adaptagen that can support the adrenal function and stress response.† Lemon balm, despite its name, is not from lemon but is a perennial herb called *Melissa officinalis* that is related to the mint family. Lemon balm extract is considered to be a mild calming agent and helpful for stress support. Magnesium can help the muscles relax and function normally.† Aloe vera leaf is a type of glucosaccharide that may assist in the formation of the GAG layer in the urinary tract system.

#### **INDICATIONS**

Cysto Renew® is indicated for individuals that desire a healthy renewal and calming effect of the bladder.

#### **FORMULA (#201810-120X)**

##### **Serving size 4 capsules:**

Magnesium..... 100 mg  
(as magnesium amino acid chelate)

## Cysto Renew® Bladder Support Formula†

Chondroitin Sulfate .....600 mg  
 Quercetin dihydrate .....500 mg  
 L-Arginine .....250 mg  
 Bromelain .....160 mg  
 L-Citrulline .....150 mg  
 Proprietary blend .....300 mg  
*Rhodiola rosea* extract (root, standardized to 3% rosavins), Lemon Balm Extract (leaf), Aloe vera (inner leaf)

Other ingredients: Gelatin (capsule), cellulose, vegetable stearate and silica.

### SUGGESTED USE

Adults take 4 capsules daily or as directed by a healthcare professional.

### SIDE EFFECTS

No adverse effects have been reported.

### STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

### REFERENCES

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### For more information on Cysto Renew, visit [douglaslabs.com](http://douglaslabs.com)

† 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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