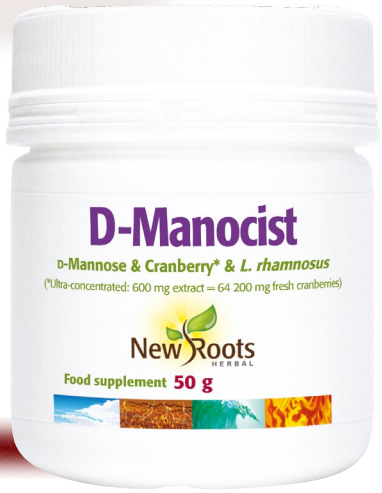
D-Manocist

D-Mannose & ultraconcentrated cranberry 107:1

TRIPLE ACTION for the SIDE EFFECT–FREE RELIEF FROM URINARY TRACT INFECTIONS



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- Exclusive information for health-care professionals-

New Roots HERBAL

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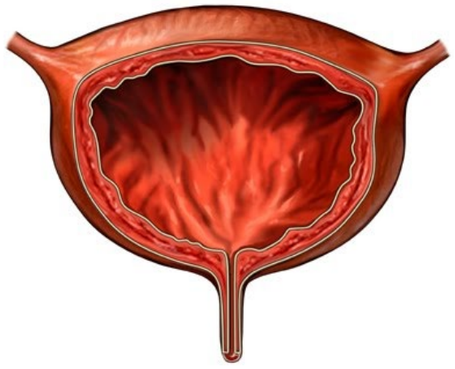
Considerations of urinary tract infection (UTI)

- Cystitis, urinary bladder infection.
- Almost 4 million women between 20-44 years of age suffer UTI during their lifetime.
- 1 in 5 women suffer from a recurring cystitis.
- *Escherichia coli* is the main bacteria responsible for 90-95% of the UTI cases. Its virulence is related to the presence of FIMBRIAE.



Fimbriaes, bacterial virulence

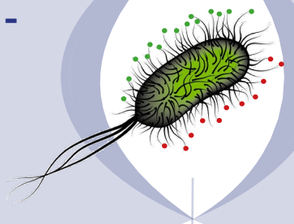
Fimbriae are a protein structure that adhere to the epithelium of the urinary bladder to initiate the infection.

There are 2 main types:

- Type-1 fimbriae -

SENSITIVE TO D-MANNOSE

RESISTANT TO TYPE A PAC´S



- Type P fimbriae -

SENSITIVE TO TYPE-A PAC'S IN CRANBERRY

RESISTANT TO D-MANNOSE

E.Coli

D-Mannose and UTI [1,2,3]

Naturally occurring sugar that reaches the origin of the infection directly, without metabolizing, and preventing type-1 fimbriated *E.Coli* from adhering to epithelial cells in the bladder, so that the bacteria are quickly excreted with the urine.

Cranberry and UTI [3,4,5]

Type-A proanthocyanidins (PAC's A) are the main active compounds inhibiting the adherence of type P-fimbriated *E.Coli* to uroepithetical cells, thus avoiding its colonization.

Probiotics and UTI [6,7,8,9]

Lactobacilli are predominant in the vaginal ecosystem and the rectum, which indirectly acts as a reservoir for the vaginal lactobacilli. Their protective role is focused on:

- Interference in the adherence of the uropathogens to the vaginal epithelium.
- Production of antimicrobial compounds (organic acids, hydrogen peroxide and bacteriocins) which also create a vaginal acidity environment (pH 4-4,5) that impedes the establishment of pathogens, which are sensitive to acidity.
- Co-aggregation of pathogens to maximize the antimicrobial effect.
- Enhancing immune response by *Lactobacillus* strains.

Triple Action

1 Fights infection

Complete formula with:

- 4 800 mg of D-Mannose.
- 600 mg of Cranberry 107:1.
- 500 million of *Lactobacillus rhamnosus* UB5115.

*per service

2 Avoids relapses

- **D-Mannose and cranberry**, a combination that acts effectively on the two fimbriae types associated to its virulence.
- **D-Mannose** reduces biofilm formation which represent a reservoir of future infections.
- **Lactobacillus rhamnosus** has been shown to reduce recurrent UTIs by 73% by creating some hostile conditions for the growth of the pathogens.

3 Reinforces the immune system

In addition to its benefit in recurrence prevention and restoring the vaginal environment, the *Lactobacillus rhamnosus* UB5115 increases the expression of factors which enhance immune response.

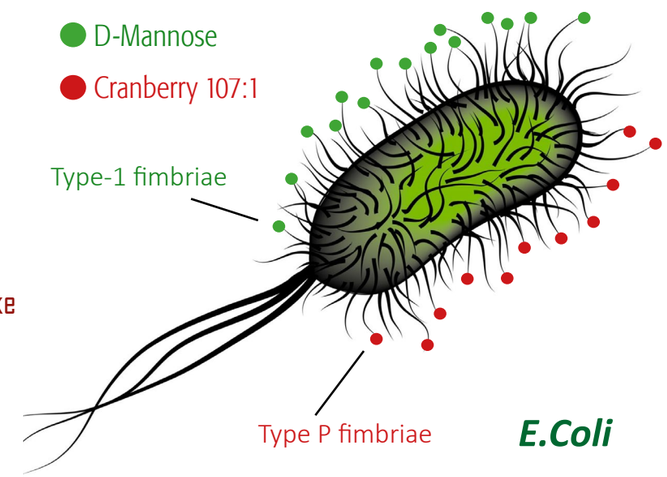
More benefits

FAST-ACTING

Symptoms improve within 24 hours of intake

WIDE SECURITY PROFILE

May be given to pregnant women, children, and diabetics



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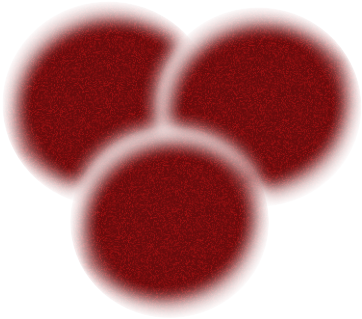
Highlights:

- **Unique combination with 4 800 mg of D-Mannose, 600 mg of the most powerful cranberry extract on the market (107:1) and 500 million of *Lactobacillus rhamnosus* UB5115 per service.**
- **Triple anti-adherent effect to prevent adhesion of *E. Coli* to the urothelium.**
- **Fast-acting within 24 h.**
- **Contains probiotics to prevent new infections (resistant to stomach acids).**



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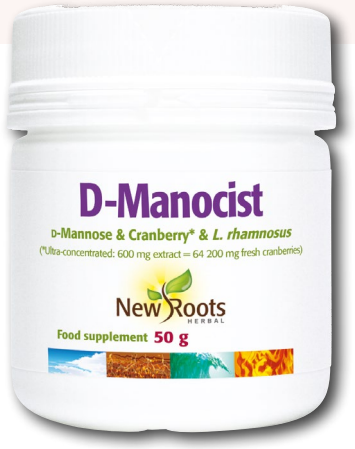
Ingredients: D-Mannose, cranberry fruit extract (*Vaccinium macrocarpon*), *Lactobacillus rhamnosus* UB5115.

Nutritional information:	2 scoops (5,4 g)
D-Mannose	4 800 mg
Cranberry (107:1)	600 mg
Lactobacillus rhamnosus	500 million CFU



Indications and uses:

- Prevention and treatment of lower urinary tract infections and recurring cystitits.

Recommended daily dose:

Acute episodes: Mix 2 scoops (approx. 5,4 g) in water or juice twice daily for two days, then 2 scoops (approx. 5,4 g) in water or juice once daily.
Prevention: Stop intake for a week. Then mix 2 scoops (5,4 g aprox) in water or juice once daily until the container is empty.

References:

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