

# D-Mannose



## Clinical Applications

- Helps Maintain a Healthy Environment for the Urinary Tract's Mucosal Surface\*

*D-Mannose features D-mannose, a simple sugar that occurs naturally in cranberries and pineapple. Research suggests that D-mannose interferes with lectin adhesion to the bladder wall, thereby supporting a healthy urinary tract.\**

All Big Sky Natural Health's Formulas Meet or Exceed cGMP Quality Standards

## Discussion

Amino acid and sugar complexes called lectins may be produced by certain organisms allowing them to adhere to the inside walls of the bladder and urinary tract, where they may continue to thrive.<sup>[1]</sup>

D-mannose is a simple sugar produced in the body and occurring naturally in certain fruits, especially cranberries and pineapples. The adult dose of D-Mannose is more concentrated in D-mannose than these fruits or juices, and studies suggest that D-mannose is ten times more effective than cranberries.<sup>[2]</sup>

Nearly all ingested mannose gets excreted through the kidneys and into the urine.<sup>[3,4]</sup> Research suggests that lectins, present in the urinary tract and bladder, adhere to the D-mannose more readily than they do to the walls of the urinary tract. This action helps support the body's ability to flush out these unwanted particles through the urine.<sup>[5]</sup> D-mannose users report that they can feel the effect in 24-48 hours.<sup>[6]</sup>

D-Mannose is not capable of killing either "friendly" or harmful bacteria. It simply supports the naturally protective "flushing out" mechanism of the urine.<sup>[6]</sup>

\*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.

## Supplement Facts

Serving Size: 1 Scoop (about 936 mg)  
Servings Per Container: About 50

	Amount Per Serving	%Daily Value
D-Mannose	900 mg	**

\*\* Daily Value not established.

**Other Ingredients:** None

## Directions

Mix one scoop in 2-4 oz of water one to three times daily, or as directed by your healthcare professional.

Consult your healthcare professional prior to use. Individuals taking medication should discuss potential interactions with their healthcare professional. Do not use if tamper seal is damaged.

## References

1. Michaels EK, Chmiel JS, Plotkin BJ, Schaeffer AJ, "Effect of D-mannose and D-glucose on Escherichia coli bacteria in rats". *Urol Res* 1983;11(2):97-102
2. Zafriri D, Ofek I, Adar R, Pocino M, Sharon N. Inhibitory activity of cranberry juice on adherence of type 1 and type P fimbriated Escherichia coli to eukaryotic cells. *Antimicro Agents Chemother* 1989; 33:92-98
3. Toyota S, et al. [article in Japanese], [Anti-bacterial defense mechanism of the urinary bladder. Role of d-mannose in urine], *Nippon Hinyokika Gakkai Zasshi*. 1989 Dec;80(12):1816-23
4. Ganda OP, et al. Metabolic effects of glucose, mannose, galactose, and fructose in man. *J Clin Endocrinol Metab*. 1970 Oct;49(4):616-22
5. Sharon N, Ofek I, "Safe as mother's milk:carbohydrates as future anti-adhesion drugs for bacterial diseases". *Glycoconj J* 2000 Jul-Sep, 17 (7-9):659-64. Review
6. Wright, Jonathan, D-Mannose and Infection, "Nutrition & Healing", June 1999, Vol 6, Issue 6
7. Amacker-Francoys I, et al. The metabolisable hexoses D-glucose and D-mannose enhance the expression of IRS-2 but not of IRS-1 in pancreatic beta-cells. *Exp Clin Endocrinol Diabetes*. 2005 Sep;113(8):423-9 [PMID: 16151975]
8. Sharon N, Ofek I, "Safe as mother's milk:carbohydrates as future anti-adhesion drugs for bacterial diseases". *Glycoconj J* 2000 Jul-Sep, 17 (7-9):659-64.[PMID: 11421356]
9. D-Mannose. [www.naturaldatabase.com](http://www.naturaldatabase.com) {accessed 3.26.07}

## Formulated To Exclude

Wheat, gluten, corn, yeast, soy, animal and dairy products, fish, shellfish, peanuts, tree nuts, egg, ingredients derived from genetically modified organisms (GMOs), artificial colors, artificial sweeteners, and artificial preservatives.

**\*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.**