# Celasa URIMANOZA D-mannose produced in Germany POWDER FOR ORAL USE FOR THE NORMAL FUNCTION OF THE URINARY TRACT

Dietary product, food supplement, contains a sweetener

An average net weight of one bag is 4g

Active ingredients:	100g of product contains:	1 bag contains:	% RDI *
D mannose	50g	2g	/
Vitamin C (L ascorbic acid)	$2.5 \times 10^{3} \text{mg}$	100mg	125

<sup>\*</sup> RDI – recommended daily intake

**Ingredients**: D-mannose, sweetener: erythritol, cranberry aroma, vitamin C (L-ascorbic acid), acidity regulator: citric acid, lemon aroma, anti-caking agent: silicon dioxide, color: ponos 4R.

Nutritive value:	100g of product contains in average:	1 bag (4g) contains in average:
Energy (kj/kcal)	850.0/202.4	34.0/8.1
Fats (g) - of which saturated fatty acids (g)	<0.1 <0.1	<0.01 <0.01
Carbohydrates (g)	88.87	3.55
- of which sugars (g)	48.84	2.00
Proteins (g)	<0.1	< 0.01
Salt (g)	<0.1	< 0.01

Urinary tract infections are very common, especially in the female population, and with age, as well as in pregnancy, their frequency increases. **Recurrent urinary tract infections** are deemed to be two infections over six months, or three or more infections over a period of one year. Physiologically, urine is sterile, therefore it does not contain bacteria. Infection is caused by bacteria that enter the urinary system through the external urethra, but they can also enter the urinary system through blood, lymph or direct spread from other organs that are infected. The most common cause of urinary tract infection, in 95% of cases is *Escherichia coli*. This bacterium is a common inhabitant of the colon flora, and due to physiological predispositions and the fact that the urethra in women is shorter than in men, it is possible that bacteria enter urethra and the bladder and cause the symptoms of urinary infection.

# The most common symptoms of urinary infections are:

- ✓ Frequent and/or urgent urination of small amounts of urine
- ✓ pain and burning during urination
- ✓ blurred urine, often accompanied by an unpleasant smell
- ✓ general symptoms such as nausea, fatigue or increased body temperature

#### What is D-mannose?

**D-mannose** is a free sugar molecule, naturally present in fruits - cranberries, blueberries, peaches, oranges and apples. It is absorbed very slowly, about five times slower than glucose. A small portion is first translated into D-glucose in the body, while the major portion of the absorbed mannose that cannot be transformed into glycogen and deposited in the body, gets into the kidneys and is then excreted in the urinary tract.

#### **How does D-mannose act?**

D-mannose acts by attracting *Escherichia coli* bacteria by sufficient quantities in urine and by preventing them from adhering to the epithelium of the urinary tract. During the application of D-mannose, bacteria adhere to a simple sugar molecule and are then excreted from the body via urine. The anti-adhesive effect of D-mannose is explained by the binding and blocking of FemH adhesin that is responsible for colonizing the bladder wall by the bacteria. As a competitive inhibitor of bacterial binding, in sufficient concentrations in urine, mannose prevents their binding to receptors on the epithelium of the urinary tract.

**Vitamin** C is an essential nutrient for humans. Its most important property is that it is an antioxidant. In addition, it is recommended in the prevention of recurrent urinary infections because it increases urine acidity. Some studies have shown a bacterial effect that results in the reduction of urinary nitrites in reactive nitric oxides.

#### It is recommended to use:

- ✓ in acute infections and urinary tract infections caused by bacteria *Escherichia coli*
- ✓ as prevention of frequent and recurrent urinary tract infections caused by bacteria Escherichia coli
- ✓ after surgeries on the urogenital tract due to possible contamination of the urinary tract with *Escherichia coli* bacteria from the colon.

### **Method of Administration:**

To help eliminate the factors causing disorders:

- ✓ Adults, pregnant women and nursing mothers 1 bag dissolved in half a glass of water every 4 hours during the day. After 45 minutes or an hour of administration, start with taking a lot of fluid, preferably water.
- ✓ Children older than 3 years half of the bag 3 days at every 4 hours

The product should be taken longer than 3 days. If there is no improvement within 72 hours, it is necessary to contact a doctor as soon as possible.

As an auxiliary agent in preserving the normal function of the urinary tract:

- ✓ Adults, pregnant women and nursing mothers 1 bag 2 times a day
- ✓ Children over 3 years half a bag 1 to 2 times a day. For this purpose, the preparation can be used for a longer period of time.

## Notes:

Food supplements are not a substitute for healthy and balanced nutrition. Keep out of reach of children.

# Warnings:

Before using this product, a physician should be consulted, especially if the product should be administered to a diabetic, pregnant and nursing women, children, elderly men. It is not recommended for children younger than 3 years and persons hypersensitive to any of the ingredients of the product. The preparation should not be used by people with chronic kidney disease. Rarely, pain in the upper part of the abdomen, interference in the digestive organs and vertigo may occur. If there is no improvement in the condition during 3 days of taking the preparation, it is necessary to consult a doctor. Excessive use can produce a laxative effect (it contains a sweetener). The recommended daily dose should not be exceeded.

**Storage**: Store at the temperature of up to 25°C.

**Shelf life**: 3 years.

**Packaging**: 10 x 4 g bags

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