

Urovet-C ADVANCED

Nutritional support for the lower urinary tract in cases of idiopathic cystitis, infections and bladder stones.

Thanks to its exclusive formula obtained from specifically selected active ingredients, **Urovet-C Advanced** acts in different aspects of the lower urinary tract function:

- It modulates inflammatory processes
- It exerts a diuretic action
- It helps to preserve the glycosaminoglycans layer
- It supports the immune activity
- It helps to reduce stress

Composition per gram:

Fish oil (source of omega-3 fatty acids): 120 mg, **Glucosamine**: 62.5 mg, **Green tea extract**: 62.5 mg (it provides 25 mg of L-Theanine), **Cranberries** (*Vaccinium macrocarpon*): 30 mg, **Echinacea extract** (*Echinacea purpurea*): 12.5 mg, **Dandelion extract** (*Taraxacum officinale*): 10 mg, **Cat whiskers plant** (*Orthosiphon stamineus*), **Sodium ascorbate** (Vitamin C): 10 mg, Excipients csp.

N-ACETYL-D-GLUCOSAMINE

The supply of glucosamine promotes the increase in the amount of glycosaminoglycans that line and protect the internal wall of the bladder, helping to **preserve its integrity**.¹ It favours a **lower incidence of infections**, because it avoids that microbes and crystals become attached to the internal lining of the bladder. It reduces the permeability of the wall, preventing the passage of harmful substances through the urothelium.²⁻⁴

CRANBERRIES

It is rich in polyphenols, among which proanthocyanidins stand out. They exert a preventive effect regarding urinary infections as they avoid *Escherichia coli* bacteria become attached to the urothelium.⁵⁻⁹ The supply of cranberries helps to prevent and control recurring, chronic or antibiotic-resistant urinary tract infections.^{5,6,8}

FISH OIL (SOURCE OF OMEGA-3 FATTY ACIDS)

It contains high amounts of omega-3 fatty acids, such as EPA and DHA, with their remarkable role as inflammatory mediators and in the **modulation of the inflammatory response**.¹⁴ Omega-3 fatty acids are important components of the cell membranes, and therefore they help in the regeneration of the bladder mucosa.

CAT WHISKERS PLANT AND DANDELION

They are very appreciated plants because of their antioxidant and anti-inflammatory action.¹⁹ They have **diuretic** properties that favour the increase in the urine volume. As the urine is diluted, the concentration of salts is reduced, this complicating the formation of stones and grit as well as helping to eliminate them.^{20,21}



L-THEANINE FROM GREEN TEA

Amino acid that is present in high concentrations in green tea leaves. L-Theanine modulates the neuronal response implied in stress and the mood, it increases the levels of serotonin and GABA in the brain, and it reduces the glutamatergic excitatory activity.^{10,11} Stress is a triggering factor of the feline idiopathic cystitis, and several studies show that the administration of L-Theanine in the diet can be a promising strategy for **the alleviation of stress** and to **improve the anxious behaviours in dogs and cats**.^{12,13}

ECHINACEA EXTRACT

Echinacea is a plant with **anti-inflammatory, antibacterial and antiviral** properties.¹⁵ It exerts an immunomodulation effect, fostering the cytotoxic ability of macrophages, NK cells and dendritic cells when there is a threat; and it activates the regulatory T cells and anti-inflammatory cytokines when the threat has ended. Its content in polyphenols provides it with **antioxidant** properties, therefore protecting the body from the free radicals produced during the immune response.¹⁶⁻¹⁸

SODIUM ASCORBATE

It acts as an antioxidant, and it helps to neutralize the pH. Because it **acidifies the urine**, it facilitates the dissolution of the struvite stones, because they are very soluble in an acid pH. It supports the immune system function to facilitate the elimination of pathogenic bacteria in cases of infection.^{22,23}

Indications

As a nutritional support for the preservation of the integrity of the lower urinary tract:

- Feline idiopathic cystitis
- Lower urinary tract infections (+ **Floravet Complex**)
- Bladder stones: struvite, oxalate, urate...
- Prevention of the recurrence of infections or stones

Directions for use:

2 g for every 10 kg of weight, 2 times per day
1 g = 4 cm of paste

Packaging:

Tube with 100 g of paste

Urovet-RQ

Nutritional support for the preservation of the kidney function in cases of chronic kidney disease.

The interactions between the multiple nutrients present in **Urovet-RQ** promote the preservation of the kidney function when exerting their effects regarding the following aspects:

- It favours diuresis and the elimination of urea
- It regulates the transport of ions and the osmotic balance
- It avoids the absorption of phosphorous
- It eases pain and reduces inflammation

Composition per gram:

Calcium carbonate: 150 mg, **Fish oil** (source of omega-3 fatty acids): 100 mg, **L-Arginine:** 80 mg, **Glycine:** 40 mg, **Taurine:** 80 mg, **Dandelion extract (*Taraxacum officinale*):** 25 mg, **Nettle extract (*Urtica dioica*):** 12.5 mg, **Cat whiskers plant (*Orthosiphon stamineus*):** 10 mg, **Sodium bicarbonate:** 50 mg, Excipientes c.s.p.

CALCIUM CARBONATE

It acts as phosphorous-chelating agent, reducing its absorption. Doses calculated according to the IRIS guidelines.

L-ARGININE

Amino acid that collaborates in the elimination of ammonium ions. In cases of chronic kidney disease, the production of arginine in the proximal tubules is seriously compromised.

GLYCINE

It exerts a protective effect on the kidneys, the liver and other organs against the cell death caused by hypoxia, ATP depletion or xenobiotics.

Bibliographic references:

1. Panchaphanpong, J., Asawakarn, T. & Pusoonthornthum, R. Effects of oral administration of N-acetyl-D-glucosamine on plasma and urine concentrations of glycosaminoglycans in cats with idiopathic cystitis. *Am. J. Vet. Res.* 72, 843–850 (2011). 2. Gunn-Moore, D. A. & Shenoy, C. M. Oral glucosamine and the management of feline idiopathic cystitis. *J. Feline Med. Surg.* 6, 219–225 (2004). 3. Madersbacher, H., Van Ophoven, A. & Van Kerrebroeck, P. E. V. A. GAG layer replenishment therapy for chronic forms of cystitis with intravesical glycosaminoglycans—a review. *NeuroUrol. Urodyn.* 32, 9–18 (2013). 4. Buffington, C. A. T., Blaisdell, J. L., Binns, S. P. & Woodworth, B. E. Decreased Urine Glycosaminoglycan Excretion in Cats with Interstitial Cystitis. *J. Urol.* 155, 1801–1804 (1996). 5. Colombino, E. et al. A new diet supplement formulation containing cranberry extract for the treatment of feline idiopathic cystitis. *Nat. Prod. Res.* 36, 2884–2887 (2022). 6. Mayot, G., Secher, C. & Martino, P. Di. Inhibition of adhesion of uropathogenic *Escherichia coli* to canine and feline uroepithelial cells by an extract from cranberry. *J. Microbiol. Biotechnol. Food Sci.* 7, 404–406 (2018). 7. De Llano, D. G. et al. Anti-Adhesive Activity of Cranberry Phenolic Compounds and Their Microbial-Derived Metabolites against Uropathogenic *Escherichia coli* in Bladder Epithelial Cell Cultures. *Int. J. Mol. Sci.* 16, 12119–12130 (2015). 8. Chou, H. I., Chen, K. S., Wang, H. C. & Lee, W. M. Effects of cranberry extract on prevention of urinary tract infection in dogs and on adhesion of *Escherichia coli* to Madin-Darby canine kidney cells. *Am. J. Vet. Res.* 77, 421–427 (2016). 9. Hisano, M., Bruschini, H., Nicodemo, A. C. & Srougi, M. Cranberries and lower urinary tract infection prevention. *Clinics* 67, 661 (2012). 10. Dramard, V. et al. Effect of L-theanine tablets in reducing stress-related emotional signs in cats: An open-label field study. *Ir. Vet. J.* 71, 1–7 (2018). 11. Michelazzi, M., Berteselli, G., Minero, M. & Cavallone, E. Effectiveness of L-theanine and behavioral therapy in the treatment of noise phobias in dogs. *J. Vet. Behav.* 5, 34–35 (2010). 12. Araujo, J. A. et al.

NEW
FORMULA



TAURINE

Essential amino acid for cats. It prevents the lipid peroxidation of the mesangial cells in the renal glomeruli. It regulates the transport of ions and the osmotic balance.

FISH OIL (SOURCE OF OMEGA-3 FATTY ACIDS)

They exert anti-inflammatory and antioxidant effects to promote optimal kidney function. The protective effect of omega-3 helps slow the progressive damage to kidney structures.

CAT WHISKERS PLANT, NETTLE AND DANDELION

Plants with a great diuretic effect. They facilitate the elimination of urea and uric acid.

SODIUM BICARBONATE

It neutralizes acidosis and greatly delays the progression of the kidney disease.

Indications

- Chronic kidney disease
- Fluid retention

Directions for use:

2 g for every 10 kg of weight, 2 times per day

1 g = 4 cm of paste

Packaging:

Tube with 100 g of paste

ANXITANE® tablets reduce fear of human beings in a laboratory model of anxiety-related behavior. *J. Vet. Behav. Clin. Appl. Res.* 5, 268–275 (2010). 13. Fan, Z. et al. Dietary Strategies for Relieving Stress in Pet Dogs and Cats. *Antioxidants* 2023, Vol. 12, Page 545 12, 545 (2023). 14. Burri, L., Hoem, N., Banni, S. & Berge, K. Marine Omega-3 phospholipids: Metabolism and biological activities. *International Journal of Molecular Sciences* 13, 15401–15419 (2012). 15. Hudson, J. B. Applications of the Phytomedicine *Echinacea purpurea* (Purple Coneflower) in Infectious Diseases. *J. Biomed. Biotechnol.* 2012, 16 (2012). 16. Catanzaro, M., Corsini, E., Rosini, M., Racchi, M. & Lanni, C. Immunomodulators Inspired by Nature: A Review on Curcumin and Echinacea. *Molecules* 23, (2018). 17. Nagoor Meeran, M. F. et al. Can Echinacea be a potential candidate to target immunity, inflammation, and infection - The trinity of coronavirus disease 2019. *Heliyon* 7, (2021). 18. Barnes, J., Anderson, L. A., Gibbons, S. & Phillipson, J. D. Echinacea species (*Echinacea angustifolia* (DC.) Hell, *Echinacea pallida* (Nutt.) Nutt., *Echinacea purpurea* (L.) Moench): a review of their chemistry, pharmacology and clinical properties. *J. Pharm. Pharmacol.* 57, 929–954 (2010). 19. Ashraf, K., Sultan, S. & Adam, A. Orthosiphon stamineus Benth. is an Outstanding Food Medicine: Review of Phytochemical and Pharmacological Activities. *J. Pharm. Bioallied Sci.* 10, 109 (2018). 20. Clare, B. A., Conroy, R. S. & Spelman, K. The diuretic effect in human subjects of an extract of *Taraxacum officinale* folium over a single day. *J. Altern. Complement. Med.* 15, 929–934 (2009). 21. Adam, Y. et al. Diuretic properties of *Orthosiphon stamineus* Benth. *J. Ethnopharmacol.* 124, 154–158 (2009). 22. Trinchieri, A. Urinary calculi and infection. <https://doi.org/10.5301/uro.5000073> 81, 93–98 (2014). 23. Sakly, R. et al. [The effects of high-dose ascorbic acid administration on the factors of lithogenesis in the rat]. *Ann. Urol. (Paris)* 25, 242–245 (1991).