

Code: FE1079 - 90 vegetable capsules



CLEAN-FLOW is a phyto formula that can have beneficial effects on renal function. With its synergy of plants, it works as diuretic, antibiotic, tissue protector and tonic for the kidneys.

Each component has been carefully chosen to contribute to the efficacy, balance and good tolerance of this thorough and powerful food supplement.

The kidney is a primordial organ for detoxification, its function being the elimination of waste products from the blood. The management of nitrogen compounds is especially important.

Every day, several litres of blood are processed from the bloodstream by the glomerular capillaries or delicate filter membranes of each kidney. These retain white and red blood cells in circulation as well as platelets and large proteins.

The filter membranes can be damaged by immune complexes. Medications, heavy metals and other toxic substances can be especially damaging to the tubules. The entire system can be affected by infection, the crystallization of material into sand and stones, autoimmune attack as well as vectors of other ailments.

Ingredients: Cranberry extract (*Vaccinium macrocarpon*), marshmallow root (*Althea officinalis*), cat's whiskers herb extract (*Orthosiphon aristatus*), golden rod leaf (*Solidago virgaurea*), asparagus (*Asparagus officinalis*), buchu leaf (*Agathosma betulina*), ginger root extract (*Zingiber officinale*), parsley leaf (*Petroselinum crispum*), birch leaf (*Betula pubescens*), uva ursi leaf extract (*Arctostaphylos uva-ursi*), cayenne (*Capsicum annuum*), corn silk extract (*Zea mays*), juniper berries (*Juniperus communis*), piperine (black pepper extract *Piper nigrum*), anticaking agent: vegetable magnesium stearate, vegetable capsule: (glacing agent: hydroxypropylmethylcellulose; purified water).

Nutritional information:	3 capsules (2 310 mg):
Cranberry (107:1)	255 mg
Marshmallow	255 mg
Cat's whiskers (4:1)	252 mg
Golden rod	189 mg
Asparagus	153 mg
Buchu	144 mg
Ginger (10:1)	144 mg
Parsley	144 mg
Birch	126 mg
Uva ursi	126 mg
Cayenne	63 mg
Corn silk (4:1)	51 mg
Juniper berry	30 mg
Piperine (extract from black pepper)	6 mg

**Contains no:** Preservatives, artificial flavour or colour, sugar, milk or milk products, starch, wheat, soy, or yeast

## Size and format:

90 vegetable capsules.

### Recommended daily dose:

1 capsule three times daily.

Do not exceed the stated recommended daily dose.

## Indications and uses:

It can favour renal function as a whole.

The main properties in this phyto formula, each derived separately, when combined offer improved blood circulation toward the urinary tract, better urinary evacuation, the elimination of stones and infection, a reduction in pain, spasms and inflammation, and proper scarring of wounded tissue. It can be helpful for any urinary disorder, from the filter membranes to the urethra.

This formula should be supported by abundant liquid intake, rest and urine acidification with the help of ascorbic acid (vitamin C) for example. In general, diuretic plants do not cause the mineral loss or electrolyte imbalance in the blood that is typical of synthetic medications.

# **Cautions:**

Do not use if you are pregnant or breast-feeding, or if you are allergic to plants of the *Asteraceae/Compositae* family. Consult a health-care practitioner if you are treated with medication or have a special medical condition.

<u>CRANBERRY</u>: Cranberry (*Vaccinium macrocarpon aiton*) is very rich in different micronutrients, proanthocyanidins, hippuric acid and vitamin C, which justifies its antiseptic, antibacterial and disinfectant effect<sup>(1,2)</sup>. This fruit has been used since antiquity for its positive effect on urinary tract infections, including a prophylactic effect on these infections<sup>(2)</sup>. Recent studies show that the active principles in this fruit can reduce the ability of bacteria to adhere to the mucous membranes of the bladder and urethra, especially the bacteria E. Coli, which is frequently associated with urinary tract problems<sup>(3,4)</sup>. When bacteria cannot adhere to tissue, they can't divide or grow either, and they end up being eliminated with fluids. Cranberry can also reduce the level of calcium in urine, thereby preventing the formation of renal stones<sup>(5)</sup>.



Code: FE1079 - 90 vegetable capsules



<u>CAT'S WHISKERS</u>: (*Orthosiphon aristatus*) This is known for its diuretic, bacteriostatic, anti-inflammatory and antioxidant properties<sup>(7)</sup>. It's used to stimulate digestive and renal elimination, and is effective at treating kidney and liver problems as well as urinary tract infections. It favours the elimination of bile, uric acid and renal stones. It is also recommended for treating cystitis and gout<sup>(7,8)</sup>.

<u>MARSHMALLOW</u>: Marshmallow (*Althaea officinalis*) acts as a calming agent and emollient, covering and protecting the delicate walls of the urinary tract against possible irritation of the mucous membranes<sup>(9)</sup>. With the help of silver birch leaf (*Betula pendula R*.) and asparagus (*Asparagus officinalis L*.) it favours the reduction of urinary stones.

<u>GOLDENROD</u>: Goldenrod (*Solidago virgaurea*) eliminates sediment and acts as a general tonic for the kidneys<sup>(10)</sup>. It also has antibacterial and antimicrobial activity<sup>(11)</sup>.

ASPARAGUS: (Asparagus officinalis L.) Asparagus has diuretic properties. It favours the reduction of urinary stones (12).

<u>BUCHU LEAVE</u>S: Buchu (*Barosma betulina*) is also a beneficial plant for the urinary tract. It favours urinary secretion and can eliminate uric acid crystals from the urinary tract. It has antiseptic and anti-inflammatory properties<sup>(13)</sup>.

GINGER ROOT EXTRACT 5% GINGEROL: Ginger root (*Zingiber officinale*) contains an active principle, gingerol, that inhibits the formation of substances responsible for inflammatory reactions. Ginger also acts as an antispasmodic and improves local blood circulation<sup>(14)</sup>.

<u>PARSLEY</u>: Parsley (*Petroselinum sativum*) improves diuresis. The antiseptic and aquaretic properties of parsley favour urinary secretion and detoxification of the organs involved in the process of elimination. The active principles in parsley leaves provide the kidneys the necessary nutrients for blood cleansing. They also strengthen tissue and stimulate the kidneys to activate urinary flow. It's one of the best diuretics, and very useful for preventing the formation of kidney stones<sup>(15)</sup>.

BIRCH LEAF: The leaf of the birch (*Betula pendula R*.) is antispasmodic, anti-inflammatory, diuretic and scar-forming, and is of great use for curing wounds such as lacerations from gallstones or kidney stones<sup>(16)</sup>.

<u>UVA URSI EXTRACT</u>: Bearberry (*Arctostaphylos uva-ursi*) is an equally good tonic. It is diuretic and antiseptic, but has a more astringent effect. It is considered a good urinary disinfectant and an aquaretic agent<sup>(17)</sup>.

<u>CAYENNE</u>: Cayenne (*Capsicum frutescens*), due to its blood circulation stimulating properties, opens capillary circulation, and due to of its anti-irritating effect, reduces pain<sup>(18)</sup>.

CORN EXTRACT 4:1: Corn (Zea mays) adds sedative properties, as well as reinforcing urine production (19).

<u>JUNIPER BERRIES</u>: Juniper berries improve blood circulation in the kidneys and have diuretic and strong bacteriostatic properties. They inhibit inflammation, and in the case of pain, have a calming effect<sup>(20)</sup>.

<u>BLACK PEPPER EXTRACT 95% PIPERINE:</u> Black pepper contains piperine, which improves the intestinal absorption of the active principles of all of the plants in the formula. It increases the formula's strength, an advantage compared to other traditional formulas<sup>(21)</sup>.

#### References:

- 1) Howell, A. B. (2002). Cranberry proanthocyanidins and the maintenance of urinary tract health. Critical reviews in food science and nutrition, 42(S3), 273-278.
- 2) Sun, I., Chu, Y. F., Wu, X., & Liu, R. H. (2002). Antioxidant and antiproliferative activities of common fruits. Journal of agricultural and food chemistry, 50(25), 7449-7454.
- 3) Lavigne, J. P., Bourg, G., Combescure, C., Botto, H., & Sotto, A. (2008). In-vitro and in-vivo evidence of dose-dependent decrease of uropathogenic Escherichia coli virulence after consumption of commercial Vaccinium macrocarpon (cranberry) capsules. Clinical Microbiology and Infection, 14(4), 350-355.
- 4) Howell, A. B. (2007). Bioactive compounds in cranberries and their role in prevention of urinary tract infections. Molecular nutrition & food research, 51(6), 732-737.
- 5) Guay, D. R. (2009). Cranberry and urinary tract infections. Drugs, 69(7), 775-807.
- 6) Hsu, C. L., Hong, B. H., Yu, Y. S., & Yen, G. C. (2010). Antioxidant and anti-inflammatory effects of Orthosiphon aristatus and its bioactive compounds. *Journal of agricultural and food chemistry*, 58(4), 2150-2156.
- 7) Shetty, K. (1997). Biotechnology to harness the benefits of dietary phenolics; focus on Lamiaceae. Asia Pacific Journal of Clinical Nutrition, 6, 162-171.
- 8) Padilla, L., del Carmen, M., Tillán Capó, J., Hernández Rodríguez, A., Cadenas Freixas, J. L., & Calzada Alvarez, S. (1996). Efecto diurético y toxicidad aguda del Orthosiphon aristatus Blume (te de riñón). Revista cubana de plantas medicinales, 1(3), 26-30.
- 9) Sarikanat, M., Seki, Y., Sever, K., & Durmuşkahya, C. (2014). Determination of properties of Althaea officinalis L.(Marshmallow) fibres as a potential plant fibre in polymeric composite materials. Composites Part B: Engineering, 57, 180-186.
- 10) European Medicines Agency (2008). Community herbal monograph on salidago virgaureal L, Herba. Doc. Ref. EMEA/HMPC/285758/2007
- 11) Thiem, B., & Goślińska, O. (2002). Antimicrobial activity of Solidago virgaurea L. from in vitro cultures. Fitoterapia, 73(6), 514-516.
- 12) Negi, J. S., Singh, P., Joshi, G. P., Rawat, M. S., & Bisht, V. K. (2010). Chemical constituents of Asparagus. Pharmacognosy reviews, 4(8), 215-220.
- 13) Skosana, B., Aboua, G., & du Plessis, S. S. (2014). Buchu–The Multi-Purpose Ethnomedicinally Important Specie and Its Benefits in the Reproductive System. In: Oguntibeju, O. (Ed.), Antioxidant-Antidiabetic Agents and Human Health (297-316).
- 14) Ali, B. H., Blunden, G., Tanira, M. O., & Nemmar, A. (2008). Some phytochemical, pharmacological and toxicological properties of ginger (Zingiber officinale Roscoe): a review of recent research. Food and chemical Toxicology, 46(2), 409-420.
- 15) Reyes-Munguía, A., Zavala-Cuevas, D., & Alonso-Martínez, A. (2012). Perejil (Petroselinum crispum): compuestos químicos y aplicaciones. *Tlatemoani: Revista Académica de Investigación*, 11, 18.
- 16) Zaragozá F, et al. (2001), Plantas Medicinales (Fitoterapia Práctica). Segunda Edición (136-138).
- 17) European Medicines Agency (2012). Assessment report on Arctostaphylos uva-ursi (L.). Doc. Ref. EMA/HMPC/573462/2009 Rev.1
- 18) Cichewicz, R. H., & Thorpe, P. A. (1996). The antimicrobial properties of chile peppers (Capsicum species) and their uses in Mayan medicine. *Journal of ethnopharmacology*, 52(2), 61-70.

  19) Australian Government Office of the Gene Technology Regulator visit (2008). The Biology of *Zea mays* L. ssp *mays*. http://www.ogtr.gov.au/internet/ogtr/publishing.nsf/content/maize-3/\$FILE/biologymaize08\_2.pdf
- 20) Łuczaj, Ł., & Szymański, W. M. (2007). Wild vascular plants gathered for consumption in the Polish countryside: a review. Journal of Ethnobiology and Ethnomedicine, 3(1), 1.
- 21) Srinivasan, K. (2007). Black pepper and its pungent principle-piperine: a review of diverse physiological effects. Critical reviews in food science and nutrition, 47(8), 735-748.