

Planetary Formulas® CRANBERRY BLADDER DEFENSE™



Self Defense for Your Bladder!

The tart, red cranberry has long held a respected place in botanical traditions, both for its high nutritional value and its support for the urinary tract.

Until recently, scientists lacked an explanation for cranberry's beneficial properties, but today, modern pharmacology is beginning to provide answers. Studies have confirmed cranberry's support for the urinary tract and have begun to identify how it works. Drawing on this knowledge, and Michael Tierra's more than 30 years of clinical experience, Planetary Formulas has developed a dynamic urinary tract support formula: CRANBERRY BLADDER DEFENSE.

CRANBERRY BLADDER DEFENSE combines the traditional wisdom of herbalists with modern scientific research, offering you cranberry in a highly concentrated form - *without* the sugar commonly used in juices and *with* additional herbs renowned for cleansing and tonifying the bladder.



Cranberry
(*Vaccinium macrocarpon*)

PLANETARY
FORMULAS®

More Than Herbs—Herbalism!

The Best of Science and Tradition

Cranberries were esteemed for their high nutritional value by Native Americans, who combined them with dried meat and fats into pemmican cakes. They introduced the berry to the early colonists, who enthusiastically seized on the refreshing New World fruit - but added lots of sugar to their cranberry puddings and tarts to eliminate the sourness and astringent quality. In the 1880's, cranberry was recognized for its specific benefits to the urinary tract by German physicians who noted its cleansing properties.

Cranberry's Plant Acids are the Key

Modern research has identified several important compounds associated with cranberry. Most important of these are the anthocyanins - a unique class of flavonoids that give certain plants their blue and red colors - and a family of unique plant acids. Anthocyanins are powerful antioxidants which can scavenge free radicals. Cranberry's plant acids, including quinic, malic, citric, and benzoic acids, along with ascorbic acid (vitamin C), help to reduce the pH of the urinary tract, helping to support a healthy bladder. In addition, the astringency of the plant acids, including vitamin C, helps to add tonicity to the genito-urinary tract, thereby supporting the integrity of healthy tissue.

The cranberry extract used in CRANBERRY BLADDER DEFENSE is a highly concentrated plant preparation. Because it is concentrated, it contains more of cranberry's beneficial constituents than either the actual fruit or the powdered herb. The extract also is readily absorbed into the bloodstream because it does not contain the indigestible components of the plant's cell walls.

Renowned Herbs from North America and China

CRANBERRY BLADDER DEFENSE was developed by world renowned herbalist and author Michael Tierra. It combines some of North America's finest supportive herbs including: *echinacea*, the Purple Cone Flower used for hundreds of years by Native Americans to support natural defenses; *uva ursi*, one of nature's finest urinary tract tonifiers, and *marshmallow root*, one of North America's most renowned soothing demulcents. These are then blended with specific Chinese botanicals, creating a comprehensive and dynamic approach to supporting a healthy genito-urinary tract.

CRANBERRY BLADDER DEFENSE is available in 30, 60 and 120 tablet bottles.

Planetary Formulas:

More Than Herbs—*Herbalism!*

Bibliography

- Fleet, James C. (1994). *Nutritional Reviews*, 52(5), 168-170.
- Heinerman, John. (1955). *Heinerman's Encyclopedia of Nuts, Berries and Seeds*. Parker Publishing Co: West Nyack.
- *The Lawrence Review of Natural Products*. (July 1994). Facts and Comparisons: St. Louis.
- Ofek, I., et al., (1978). *American Journal of Hospital Pharmacy*, Vol. 324, No. 22.
- Ofek, I., et al., (1978). *American Journal of Hospital Pharmacy*, Vol. 324, No. 22.
- Tyler, Varro E. (1996). *Herbs of Choice*. Pharmaceutical Products Press, an imprint of The Haworth Press: New York.

Planetary Formulas is a member of the National Nutritional Foods Association (NNFA), the American Herbal Products Association (AHPA), and the Association of Ayurvedic Product Suppliers (AAPS). These organizations are leaders in establishing codes of ethics and quality control guidelines for the manufacture of botanical supplements.



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MICHAEL TIERRA, L.Ac., C.M.D., is a clinician and world-renowned author of the best-selling *Way of Herbs* and *Planetary Herbology*. As product formulator for Planetary Formulas, he draws on 30 years of clinical experience to create formulas renowned for their dependability and effectiveness.

*The above information has not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.