

PollenBerry™: A novel UTI product containing flower pollen extract and whole cranberry powder

PollenBerry™ is a unique new dietary supplement that combines two standardized ingredients, clinically shown to help alleviate symptoms of urinary tract infections (UTIs). This new product contains the clinical dosages of both G60™ Flower Pollen Extract and cranberry powder. The synergistic effect of these ingredients acts inside the urinary tract to help support those who are especially prone to reoccurring UTIs. UTIs are most commonly caused by the bacteria Escherichia coli. This bacteria often moves from the digestive tract into the urethra, causing nearly 80% of all UTIs in adults. Symptoms can be both uncomfortable and debilitating, and may include pain or burning with urination, the urge to frequently urinate, tenderness or heaviness in the lower abdomen, cloudy or foul smelling urine, pain in the lower back, nausea and vomiting. Severe cases are treated with different types of antibiotics that have negative side effects. For longer term help with reoccurring UTIs, natural products may be the answer.

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WHAT IS FLOWER POLLEN EXTRACT?

Flower Pollen Extract is a standardized extract from targeted pollen producing species that has been used historically for over 50 years. This product is supported by a substantial amount of open, placebo-controlled and double-blind clinical trials for various health indications. The different pollens are harvested mechanically from the fields and are further processed to remove any plant material to isolate the pure pollen. The extraction process done exclusively by Graminex is completed without the use of solvents. This process allows, Flower Pollen Extracts to be used safely by people who are otherwise allergic or hypersensitive to other pollen products.

During the manufacturing process the Flower Pollen Extract is separated into two portions, a lipid soluble and water soluble portion. The water soluble portion, G60™ Flower Pollen Extract is standardized to a specific amino acid level. Due to this unique manufacturing process, G60™ is a high quality, standardized product that meets the exact specifications for amino acid content for every batch.

G60™ FLOWER POLLEN EXTRACT – STANDARDIZED WATER SOLUBLE AMINO ACIDS

G60™ Flower Pollen Extract is a clinical strength formulation of the standardized water soluble portion of Graminex Flower Pollen Extract™. This ingredient offers all the water soluble nutrients in a higher concentration, standardized to contain not less than 6% amino acids. G60™ provides the dietary and physiologically essential amino acids (Table I).

| Dietary Essential Amino Acids | Physiologically Essential Amino Acids | |
|-------------------------------|---------------------------------------|----------------|
| Histidine | Alanine | Glutamine |
| Isoleucine | Alpha-amino butyric acid | Glycine |
| Leucine | Arginine | Hydroxyproline |
| Lysine | Asparagine | Proline |
| Methionine | Aspartic Acid | Serine |
| Phenylalanine | Cysteine | Taurine |
| Threonine | Cystine | Tyrosine |
| Tryptophan | Glutamic Acid | |
| Valine | | |

Table I – Amino acid profile of Graminex G60™ Flower Pollen Extract



It also provides higher levels of bioavailable natural antioxidants. Antioxidants are important in maintaining healthy functioning bodily systems like the urinary tract. They do this by helping eliminate damaging free radicals in the human body. The level of antioxidants in a substance is calculated by performing an Oxygen Radical Absorbance Capacity Test, which gives you the ORAC value of a substance. The substances are given a "score" to rank how well it can neutralize or destroy free radicals. G60™ Flower Pollen Extract received a high score of 102.

Various clinical studies have been conducted using Flower Pollen Extract showing benefits specifically for men and women who suffer from lower urinary tract symptoms (LUTS). Two studies attribute this to the anti-inflammatory and alpha adrenergic blocking effects (1,2). The alpha adrenergic blocking effect was observed as especially useful in men suffering from LUTS and benign prostate hyperplasia (BPH). Both studies showed a consistent reduction in subjective symptoms and an overall effective rating of 75% or greater was observed. Another study looked at the effects of pollen on the bladder and urethra contractions. In this study, G60™ was able to reduce the contractions in the urethra allowing for easier urination at the appropriate time (3). All of these studies show the ability of Flower Pollen Extract to improve overall urinary tract function by reducing inflammation and easing urination. G60™ is a beneficially ingredient for any UTI product developed for cases where reoccurring LUTS, UTIs and the side effects of antibiotic treatments are too bothersome for ongoing treatments.

WHAT IS CRANBERRY POWDER?

Cranberry powder is a source for naturally occurring highly potent antioxidants. Cranberries have been widely used for their natural ability to help prevent infections caused by bacterial growth in the body, especially infections associated with LUTS and UTIs. In addition to the high levels of overall antioxidants, cranberry powder also offers specific antioxidants called proanthocyanidins. Proanthocyanidins are a type of biologically active flavonoids and are one of the most potent antioxidants found in nature. The proanthocyanidins specific to cranberries have been shown to be beneficial against UTIs. The standardized cranberry powder formulated into PollenBerry™ is supported by clinical studies showing support for urinary health and for reoccurring UTIs. This particular cranberry powder is comprised of 100% whole cranberries and is standardized to contain not less than 1.5% proanthocyanidins for each batch.

CRANBERRY POWDER – CLINICALLY SUPPORTED STANDARDIZED WHOLE CRANBERRY POWDER

Clinical studies have shown that cranberry powder has been able to significantly reduce the occurrence of *E. coli* in the urinary tract (4). This is possible because of the anti-adhesion activity of the urine after taking cranberry powder. This activity basically stops the *E. coli* or other UTI causing bacteria from adhering to the walls and uroepithelial cells lining the urinary tract. In one study, the anti-adhesion was shown to have a more prolonged effect when compared to drinking cranberry juice cocktail, with an increase in activity at 6 hours and again at 24 hours (5). Drinking cranberry juice cocktail alone only showed anti-adhesion effects for 9 hours and was completely gone at 24 hours. Cranberry powder has been shown to improve LUTS particularly for voiding dysfunction, specifically for men suffering from BPH without negative side effects on the prostate gland (6). With prolonged beneficial effects from anti-adhesion, cranberry powder is a useful ingredient for

alternative medicine UTI products designed for both men and women.

POLLENBERRY™

PollenBerry™ is a unique product for long-term urinary tract support, help with reoccurring UTIs and help with LUTS. The combination of G60™ Flower Pollen Extract and cranberry powder allows for the synergistic effects of both anti-inflammation and anti-adhesion on the urinary tract in association with LUTS and UTIs for men and women. Both standardized natural ingredients are backed by multiple clinical studies for urinary health support. While the primary treatment of UTIs and LUTS remains antibiotic therapies, an alternative therapy is more desirable both for a reduction in side effects as well as reducing the increases in resistance to antibiotics by these uropathogenic bacteria. PollenBerry™ may be safely taken daily in conjunction with an antibiotic treatment or post-antibiotic treatment to help combat reoccurring UTIs and painful or irritating LUTS.

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