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Pugos nutrition for prevention & control of urinary tract infection (UTI) in women

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ABSTRACT

Urinary tract infections (UTIs) are a serious health problem affecting millions of people each year. Infections of the urinary tract are the second most common type of infection in the body. Urinary tract infections (UTIs) account for about 8.3 million doctor visits each year. One woman in five develops a UTI during her lifetime. Natural remedies have been used for centuries to alleviate pain and discomfort as well as address the underlying symptoms. Natural remedies for urinary tract infections are safe and cause no side effects. They also support one's physical, mental, and emotional health, rather than simply treating UTI symptoms. A number of antibiotics can be prescribed to treat urinary tract infections. However, certain antibiotics may not be safe for these pregnant, plan to become pregnant or are breastfeeding women.

Like all medications, antibiotics have side effects. these medications can produce reactions and even serious medical complications in some women. In addition, adverse reactions to antibiotics may be more serious in women with weakened immune systems, including women with diabetes. Possible side effects of antibiotics include allergic reactions, fever, nausea and bloating.

Vaginal yeast infections are another common side effect of antibiotic use in women. Antibiotics kill bacteria, including bacteria that control the amount of other normal body organisms, such as yeast. So the reduction in bacteria can result in an overgrowth of yeast. Taking certain antibiotics during pregnancy may be a risky proposition since women who take them may deliver babies with increased risk of birth defects. The present Article reviews the role of Pugos Nutrition supplements in Preventing Urinary tract infections.

Keywords: Pugos Nutrition, Urinary tract infections.

INTRODUCTION

URINARY TRACT INFECTION (UTI)

A UTI is an infection in the urinary tract. Infections are caused by microbes—organisms too small to be seen without a microscope—including fungi, viruses, and bacteria. Bacteria are the most common cause of UTIs. Normally, bacteria that

enter the urinary tract are rapidly removed by the body before they cause symptoms. However, sometimes bacteria overcome the body's natural defenses and cause infection. An infection in the urethra is called urethritis. A bladder infection is called cystitis. Bacteria may travel up the ureters to multiply and infect the kidneys. A kidney infection is called pyelonephritis. The urinary tract is the body's drainage system for removing wastes and extra water. The urinary tract includes two kidneys, two ureters, a bladder, and a urethra. The kidneys are a pair of bean-shaped organs, each about the size of a fist and located below the ribs, one on each side of the spine, toward the middle of the back. Every minute, a person's kidneys filter about 3 ounces of blood, removing wastes and extra water. The wastes and extra water make up the 1 to

2 quarts of urine a person produces each day. The urine travels from the kidneys down two narrow tubes called the ureters. The urine is then stored in a balloon like organ called the bladder and emptied through the urethra, a tube at the bottom of the bladder. When the bladder empties, a muscle called the sphincter relaxes and urine flows out of the body through the urethra. The opening of the urethra is at the end of the penis in males and in front of the vagina in females.

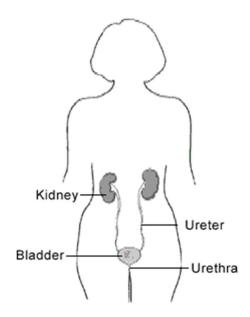


Fig. 1 The urinary tract

Causes of UTIS

Most UTIs are caused by bacteria that live in the bowel. The bacterium *Escherichia coli (E. coli)* causes the vast majority of UTIs. Microbes called *Chlamydia* and *Mycoplasma* can infect the urethra and reproductive system but not the bladder. *Chlamydia* and *Mycoplasma* infections may be sexually transmitted and require treatment of sexual partners.

The urinary tract has several systems to prevent infection. The points where the ureters attach to the bladder act like one-way valves to prevent urine from backing up toward the kidneys, and urination washes microbes out of the body. In men, the prostate gland produces secretions that slow bacterial growth. In both sexes, immune defenses also prevent infection. But despite these safeguards, infections still occur. Certain bacteria have a strong ability to attach themselves to the lining of the urinary tract.

UTIs in Womens

Urinary tract infections are the second most common type of infection in the body, accounting for about 8.1 million visits to health care providers each year. Women are especially prone to UTIs for anatomical reasons. One factor is that a woman's urethra is shorter, allowing bacteria quicker access to the bladder. Also, a woman's urethral opening is near sources of bacteria from the anus and vagina. For women, the lifetime risk of having a UTI is greater than 50 percent. UTIs in men are not as common as in women but can be serious when they occur.

Risk factors for a UTI

Although everyone has some risk, some people are more prone to getting UTIs than others. People with spinal cord injuries or other nerve damage around the bladder have difficulty emptying their bladder completely, allowing bacteria to grow in the urine that stays in the bladder. Anyone with an abnormality of the urinary tract that obstructs the flow of urine—a kidney stone or enlarged prostate, for example—is at risk for a UTI. People with diabetes or problems with the body's natural defense system are more likely to get UTIs.

Sexual activity can move microbes from the bowel or vaginal cavity to the urethral opening. If these microbes have special characteristics that allow them to live in the urinary tract, it is harder for the body to remove them quickly enough to prevent infection. Following sexual intercourse, most women have a significant number of bacteria in their urine, but the body normally clears them within 24 hours. However, some forms of birth control increase the risk of UTI. In some women, certain spermicides may irritate the skin, increasing the risk of bacteria invading surrounding tissues. Using a diaphragm may slow urinary flow and allow bacteria to multiply. Condom use is also associated with increased risk of UTIs, possibly because of the increased trauma that occurs to the vagina during sexual activity. Using spermicides with diaphragms and condoms can increase risk even further.

Another common source of infection is catheters, or tubes, placed in the urethra and bladder. Catheters interfere with the body's ability to clear microbes from the urinary tract. Bacteria travel through or around the catheter and establish a place where they can thrive within the bladder. A person who cannot urinate in the normal way or who is unconscious or critically ill often needs a catheter for more than a few days. The Infectious Diseases Society of America recommends using catheters for the shortest time possible to reduce the risk of a UTI.³

Recurrent Infections

Many women suffer from frequent UTIs. About 20 percent of young women with a first UTI will have a recurrent infection. With each UTI, the risk that a woman will continue having recurrent UTIs increases. Some women have three or more UTIs a year. However, very few women will have frequent infections throughout their lives. More typically, a woman will have a period of 1 or 2 years with frequent infections, after which recurring infections cease.

Men are less likely than women to have a first UTI. But once a man has a UTI, he is likely to have another because bacteria can hide deep inside prostate tissue. Anyone who has diabetes or a problem that makes it hard to urinate may have repeat infections.

Research funded by the National Institutes of Health (NIH) suggests that one factor behind recurrent UTIs may be the ability of bacteria to attach to cells lining the urinary tract. One NIH-funded study found that bacteria formed a protective film on the inner lining of the bladder in mice. If a similar process can be demonstrated in humans, the discovery may lead to new treatments to prevent recurrent UTIs. Another line of research has indicated that women who are "nonsecretors" of certain blood group antigens may be more prone to recurrent UTIs because the cells lining the vagina and urethra may allow bacteria to attach more easily. A nonsecretor is a person with an A, B, or AB blood type who does not secrete the

normal antigens for that blood type in bodily fluids, such as fluids that line the bladder wall.²

Infections during Pregnancy

Pregnant women seem no more prone to UTIs than other women. However, when a UTI does occur in a pregnant woman, it is more likely to travel to the kidneys. According to some reports, about 4 to 5 percent of pregnant women develop a UTI.⁸ Scientists think that hormonal changes and shifts in the position of the urinary tract during pregnancy make it easier for bacteria to travel up the ureters to the kidneys and cause infection. For this reason, health care providers routinely screen pregnant women for bacteria in the urine during the first 3 months of pregnancy.

Signs and Symptoms of Urinary tract infections

Symptoms of a UTI vary by age, gender, and whether a catheter is present. Among young women, UTI symptoms typically include a frequent and intense urge to urinate and a painful, burning feeling in the bladder or urethra during urination. The amount of urine may be very small. Older women and men are more likely to be tired, shaky, and weak and have muscle aches and abdominal pain. Urine may look cloudy, dark, or bloody or have a foul smell. In a person with a catheter, the only symptom may be fever that cannot be attributed to any other cause. Normally, UTIs do not cause fever if they are in the bladder. A fever may mean the infection has reached the kidneys or has penetrated the prostate. Other symptoms of a kidney infection include pain in the back or side below the ribs, nausea, and vomiting.

There are many different types of bacteria and yeast normally present in the vagina. However, when the numbers of these organisms become out of balance, infection occur, causing vaginitis. The most common cause of vaginitis is an overgrowth of the naturally occurring yeast *Candida albicans*. An estimated three out of four women will have a yeast infection in their lifetime. Vaginitis can also result from reduced estrogen levels after menopause, which causes the vagina to become thinner and drier, which may lead to itching, burning, or pain. Use of vaginal sprays, douches, perfumed soaps, and spermicidal products can also cause vaginal irritation, burning, and itching.

- Change in your normal vaginal discharge and odour
- Light vaginal bleeding
- Pain during intercourse or urination
- Vaginal itching or irritation

Bacterial vaginosis typically causes a greyishwhite, fishy-smelling discharge. Yeast infections cause a thick, white discharge that resembles cottage cheese. Trichomoniasis causes a greenishyellow, sometimes frothy discharge in women. Men have itching, burning, or pain Symptoms in UTI Infections.

Dietary Recommendations Foods to include:

- Eat natural (organic) yogurt with live cultures daily. Studies have shown that daily consumption of yogurt can reduce the occurrence of BV and yeast infections.
- Garlic and onions have antifungal properties.
- Bananas and other high-fiber foods can be good for urinary tract health and preventing urinary tract infections by encouraging regular bowel movements and relieving pressure on urine flow.
- Drinking plenty of water is one of the best things for your urinary and digestive systems. Drinking enough water helps flush bacteria from the urinary tract, which prevents infection and helps the digestive tract function regularly.
- Cranberries, blueberries, raspberries and other berries promote urinary tract health and provide protection against infection with an important compound that helps fight bacteria and keeps it from sticking to the lining of the urinary tract.
- Eating yogurt and other cultured dairy products regularly may decrease the risk for urinary tract infections by up to 80 percent. Yogurt contains good bacteria, active cultures that help prevent certain infections and boost the body's immune system. Yogurt is an effective way to keep digestive system in good working order.
- Lack of regular bowel movements can cause pressure in the urinary tract and block urine flow, allowing bacteria to grow. A diet high in fiber paired with drinking enough water promotes healthy digestion and regular bowel movements. Fiber won't work without enough water in the diet. Some of the best sources of fiber for are whole-grain breads,

- apples, bananas and legumes (dried beans, lentils, etc.).
- Oranges, lemons, strawberries and green leafy vegetables packed with vitamin C makes urine more acidic, which helps prevent bacteria from growing in the system. In addition, vitamin C helps cuts and wounds heal, boosts the immune system, helps gums stay healthy, keeps infections at bay and helps the body absorb iron from food sources. Vitamin C is water soluble, so any excess is flushed from the body in urine but when consumed in excess can cause an upset stomach, nausea and diarrhea.

Foods to avoid:

- Alcohol, aged cheese, and fermented foods (vinegar and soy sauce) contain yeast and moulds, which can be a problem.
- Sugar allows yeast to thrive, and can increase the likelihood of yeast infections in susceptible women. Cut down on all sugarcontaining foods.
- Food allergies are believed to be a contributory factor in some cases of recurrent irritant vaginitis.

Lifestyle Suggestions

- Wear cotton underwear and minimize or avoid wearing pantyhose. Do not wear pants that are tight at the crotch.
- Do not use deodorized products, such as tampons, douches, and feminine deodorant sprays.
- Wash the vaginal area with a mild, unscented soap.

RECOMMENDED PUGOS NUTRITION

UTI IN FEMALE: Astashine, colostramin, Curcumet, Optigision gold

UTI IN MALE : Astashine, colostramin, M-Rush, Curcumet

SUMMARY & CONCLUSION

Urinary tract infections are a serious health problem affecting millions of people each year. Infections of the urinary tract are the second most common type of infection in the body. One woman in five develops a UTI during her lifetime. Natural remedies have been used for centuries to alleviate pain and discomfort as well as address the underlying symptoms. Natural remedies for urinary tract infections are safe and cause no side effects. They also support one's physical, mental, and emotional health, rather than simply treating UTI symptoms. A number of antibiotics can be

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REFERENCES

- [1]. Schappert SM, Rechtsteiner EA. Ambulatory medical care utilization estimates for 2006. National health statistics reports; no 8. Hyattsville, MD: National Center for Health Statistics; 2008.
- [2]. Griebling TL. Urinary tract infection in women. In: Litwin MS, Saigal CS, eds. *Urologic Diseases in America*. Department of Health and Human Services, Public Health Service, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases. Washington, D.C.: GPO; 2007. NIH publication 07–5512:587–619.
- [3]. Hooton TM, et al. Diagnosis, prevention, and treatment of catheter-associated urinary tract infection in adults: 2009 international clinical practice guidelines from the Infectious Diseases Society of America. *Clinical Infectious Diseases*. 2010;50(5):625–663.
- [4]. Tolkoff-Rubin NE, Cotran RS, Rubin RH. Urinary tract infection, pyelonephritis, and reflux nephropathy. In: Brenner BM, ed. *Brenner & Rector's The Kidney*. 8th ed. Vol. 2. Philadelphia: Saunders; 2008: 1203–1238.
- [5]. Schaeffer AJ. Infections of the urinary tract. In: Walsh PC, Retik AB, Vaughan ED, Wein AJ, eds. *Campbell's Urology*. 8th ed. Vol. 1. Philadelphia: Saunders; 2002: 515–602.
- [6]. Anderson GG, Palermo JJ, Schilling JD, et al. Intracellular bacterial biofilm-like pods in urinary tract infections. *Science*. 2003;301:105–107.
- [7]. Stapleton AE, Nudelman E, Clausen H, Hakomori S, Stamm WE. Binding of uropathogenic *Escherichia coli* R45 to glycolipids extracted from vaginal epithelial cells is dependent on histo-blood group secretor status. *Journal of Clinical Investigation*. 1992;90;965–972.
- [8]. Sharma JB, Aggarwal S, Singhal S, Kumar S, Roy KK. Prevalence of urinary incontinence and other urological problems during pregnancy: a questionnaire based study. *Archives of Gynecology and Obstetrics*. 2009;279(6):845–851.