

Patient Name:

Date:

Urinary Tract Infections

The urinary tract is made up of the kidneys, bladder, the ureters and the urethra, and is responsible for producing urine and eliminating it from the body. As an important organ of elimination, a healthy urinary system is essential to the health of the entire body. Urinary tract infections (UTIs) are one of the most common bacterial infections in humans and account for a significant number of doctor visits every year. While prevention is key, sometimes treatment is needed and preventing recurrence is the goal. Since the adhesion and growth of *E. coli* is the main culprit, preventing adhesion is of utmost importance.

UTIs don't always cause signs and symptoms, however, symptoms may include:



A strong, persistent urge to urinate



Passing frequent, small amounts of urine



Strong-smelling urine



A burning sensation when urinating



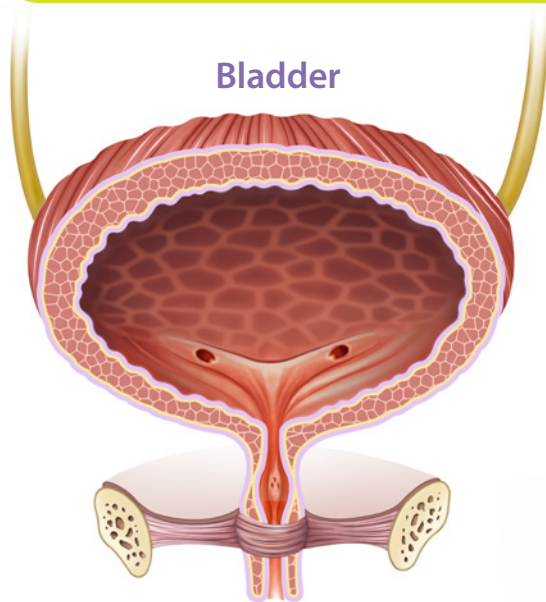
Urine that appears cloudy



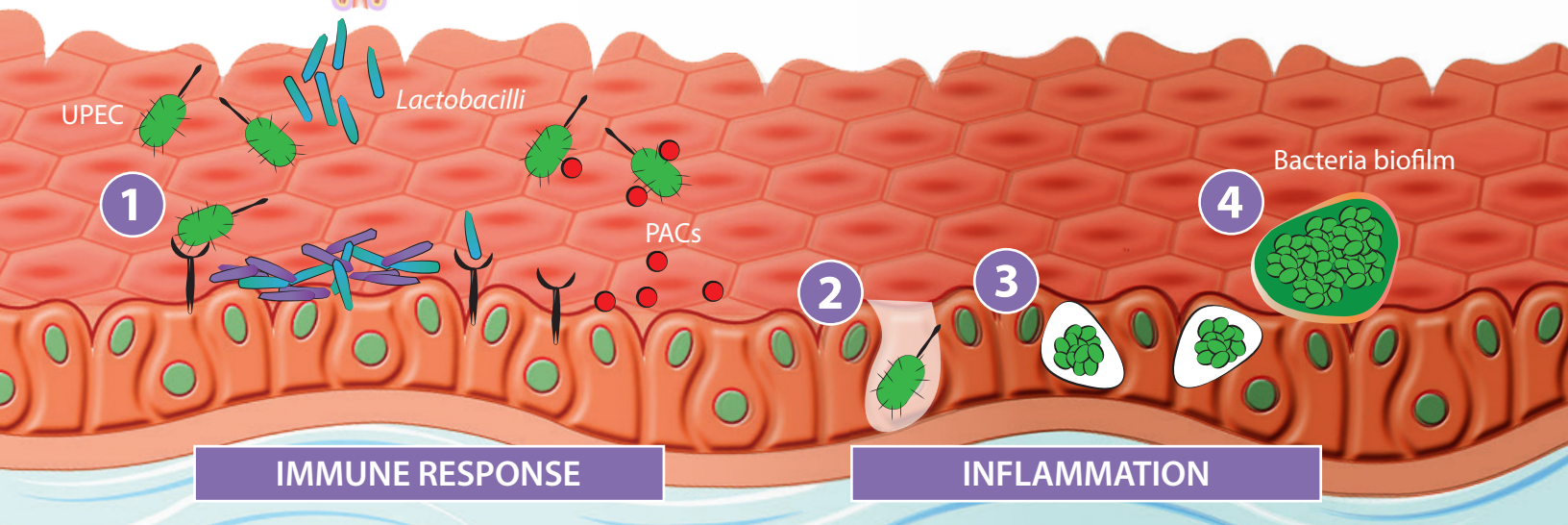
Urine that appears red, bright pink – a sign of blood in the urine



Pelvic pain



- 1 Urogenital pathogenic *E. coli* (UPEC) attachment
- 2 Bacteria invades the cells
- 3 Bacterial replications
- 4 Bacterial biofilm forms



Lifestyle Recommendations



Restroom

After using the restroom, wipe front to back.



Fruits and Veggies

Colorful fruits and veggies contain important preventative compounds.



Water

Drink water until urine is light yellow.



Sex Hygiene

Urinate after sexual intercourse.



Hygiene Products

Avoid scented hygiene products.

Nutrient Recommendations

Uva Ursi	Berberine Sulfate	Cranberry Extract	Hibiscus	Probiotics + <i>Saccharomyces boulardii</i>
Uva ursi contains arbutin, which promotes balance of the microbes in the urinary tract.	Berberine sulfate is an alkaloid sulfate shown to block adhesion of organisms to host cells.	Cranberry contains proanthocyanidins (PACs), which are shown to prevent adhesion of bacteria to the urinary tract walls.	Hibiscus contains many compounds including polysaccharides and organic acids that keep the urinary tract healthy.	Help maintain a healthy and balanced digestive tract Prevent "bad" bacteria from overgrowing Protect and preserve gut barrier function Decrease inflammation
650 mg	200 mg	36 mg PACs	200 mg	Probiotics 20-450 billion CFU* <i>S. boulardii</i> 2-10 billion CFU*

*Colony Forming Units

Recommendations:
