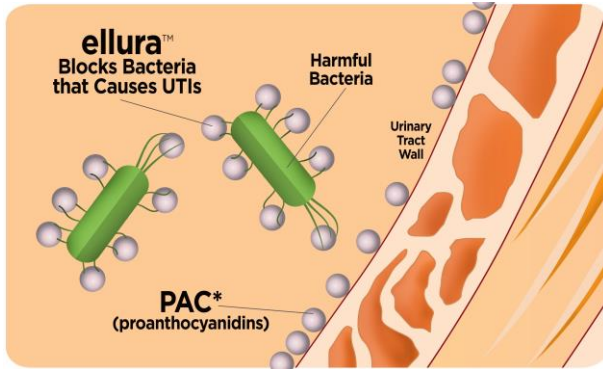


ellura[®] protects against various pathogens

PAC (proanthocyanidins) anti-adhesion activity (AAA)



If the bacteria exhibits P-fimbriae, coverage is possible. If the bacteria does not exhibit P-fimbriae, there is no coverage. Challenging cases not responding to ellura may involve these pathogens.

Primary Coverage

- **E. coli / Multiple Resistant**^{9,14,16, 21,22} – present in ~90% of UTIs
- *Enterococcus faecalis*^{24,25}
- *Helicobacter pylori* (*H.pylori*)^{5, 6, 19,23}
- *Klebsiella pneumoniae*^{4,7,8,21}
- *Methicillin-Resistant Staphylococcus aureus* (MRSA)¹⁰
- *Proteus* spp (*P. mirabilis*, *P. vulgaris*, *P. penneri*, and *P. hauseri*)^{4,7,8,21}
- *Pseudomonas aeruginosa*^{1,2,3,4,7,8, 21}
- *Salmonella typhimurium*^{4,7,8,21}
- *Staphylococcus aureus*^{1,2,3,4,7,8,16, 21,22}
- *Staphylococcus epidermidis*^{15,16}

If the bacteria does not exhibit P-fimbriae, coverage is lacking.

Most Covered

- *Proteus mirabilis*^{4,7,8} – More than 85% grow P-fimbriae
Causes ~90% of *Proteus* infections

Some Covered

- *Klebsiella oxytoca* & *Klebsiella pneumoniae*^{4,7,8} – Approximately 30% grow P-fimbriae
- *Enterobacter aerogenes* - Rod-shaped, Gram-negative bacterium that may or may not have P-fimbriae
- *Serratia Marcescens* - *Serratia Marcescens* strains can have both mannose-resistant (MR) and mannose-sensitive fimbriae.¹⁷ ellura is active against mannose-resistant fimbriae.¹⁸

Candida albicans (dimorphic fungus) - PACs have excellent *in vitro* activity against *C. albicans* biofilm formation in artificial urine. Preliminary evidence that cranberry PAC activity against *C. albicans* biofilm formation is due to anti-adherence properties and/or iron chelation.²⁰

In vitro observations point to coverage of bacteria that have P-fimbriae.

Supporting References

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Only ellura contains 36 mg PAC^{DMAC/A2} (proanthocyanidins) that express the strongest Anti-Adhesion Activity in 1 qd capsule. ellura is proven effective as a non-antibiotic alternative for UTI prevention.