

Urinary stones ttt

| Ca Oxalate | Ca phosphate | Uric acid |
|---|--|---|
| Avoid oxalate rich foods such as tomatoes, spinach, mango, nuts or chocolate. | Acidify urine by eating cranberries . | Alkalize urine using cherries, strawberries, apple juice |
| | | Avoid purine rich foods (red meat, fish) |

According to stone types.

Early stage BPH.

Saw palmetto fruits

A.I.: lipophilic extract with unsaturated FA & plant sterols.

MOA: **inhibits 5-a-reductase**--> testosterone is not converted into 5-a-dihydrotestosterone which enlarges the prostate.

Safety: safe on men. Unknown safety for women & children.

Differential diagnosis is needed between BPH & prostate cancer. It's done through PSA measurements.

Free, high PSA level: BPH

Complete PSA: prostate cancer

Herbal urinary anti-septics

1. Uva Ursi "bearberry" leaves

A.I.: phenolic glycoside **arbutin** hydrolyzed into phenolic anti-septic **hydroquinone**.

Gallotannins: astringent compound that shrinks inflamed tissue (diuretic effect) .

Only effective in alkaline urine, so **not combined with cranberry juice**.

A.E: N/V

CI: 1. Pregnant, 2. Lactation, 3. Children <12

Standardized to **20% arbutin extract** and consumed for max 1 week to avoid **liver damage (hydroquinone)**.

Uva-Ursi + dandelions= reduced cystitis in elderly women.

Herbal urinary anti-septics

2. Cranberry juice

Only a preventative measure. Shows 75% improvement in **recurrent UTI after daily drinking for 3 weeks**.

A.I.: acids, anthocyanidins pigment, Pro-anthocyanidins (PAC), fructose.

MOA:

- **PAC** (tannin polymers) block bacterial adherence to UTI lining.

- **Acids** render urine acidic.

Standardized extract of **36 mg PAC**. Dose is **300-400 mg** caps twice daily.

Herbal urinary anti-septics

3. Buchu leaves

A.I.: **flavonoids** (rutin-diosmetin-diosmin) **V.O.** (limonene-diosphenol)

Uses: diuretic, antibacterial, anti-inflamm.

To note: causes burning sensation & minor bleeding.