fosfomycin (foss-foe-my-sin)

*Classification*
Therapeutic: anti-infectives

*Pregnancy Category B*

**Indications**
Uncomplicated urinary tract infections in women (acute cystitis).

**Action**
Inactivates an enzyme crucial for bacterial cell wall synthesis. Decreases adherence of bacteria to uroepithelial cells. Therapeutic Effects: Bactericidal action against susceptible bacteria.

**Pharmacokinetics**

- **Absorption:** Rapidly absorbed and converted to fosfomycin, its active component, resulting in 37% bioavailability.
- **Distribution:** Distributions to kidneys and bladder wall, crosses the placenta.
- **Metabolism and Excretion:** Excreted unchanged in urine (38%) and feces (18%).
- **Half-life:** 5.7 hr

<table>
<thead>
<tr>
<th>TIME/ACTION PROFILE (bactericidal urine levels)</th>
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<tbody>
<tr>
<td>ROUTE ONSET PEAK DURATION</td>
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<td>PO rapid 2–4 hr unknown</td>
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**Contraindications/Precautions**

- Hypersensitivity: Pyelonephritis; Lactation: Lactation.
- Use Cautiously in: OB, Pedi: Pregnancy or children (safety not established).

**Adverse Reactions/Side Effects**

- CNS: dizziness, headache, weakness.
- GI: pseudomembranous colitis, diarrhea, dyspepsia, nausea.
- GU: vaginitis.

**Interactions**

- **Drug-Drug:** Urinary excretion and blood levels are decreased by metoclopramide.

**Route/Dosage**

**PO (Adults and Children ≥18 yr):** 3 g single dose.

**NURSING IMPLICATIONS**

**Assessment**

- Assess patient for signs and symptoms of cystitis (frequency, urgency, painful urination).
- Obtain urine specimen for culture and sensitivity before administration.
- Monitor bowel function, diarrhea, abdominal cramping, fever, and bloody stools should be reported to health care professional promptly as a sign of pseudomembranous colitis. May begin up to several weeks following cessation of therapy.

**Potential Nursing Diagnoses**

- Risk for infection (Indications)
- Acute pain (Indications)
- Deficient knowledge, related to medication regimen (Patient/Family Teaching)

**Implementation**

- PO: Do not take medication in dry form. Pour entire contents of single sachet into 3–4 oz (1/2 cup) water and stir to dissolve. Do not use hot water. Drink immediately after dissolving. May be administered with or without food.

**Patient/Family Teaching**

- Instruct patient on correct preparation of sachet.
- Instruct patient to notify health care professional immediately if diarrhea, abdominal cramping, fever, or bloody stools occur and not to treat with anti-diarrheals without consulting health care professional.
- Advise patient to notify health care professional of symptoms not improved or persisting more than 2–3 days after treatment.

**Evaluation/Desired Outcomes**

- Improvement in symptoms of acute cystitis within 2–3 days.

**Why was this drug prescribed for your patient?**