

# Nystatin

**Antibiotic Class:**

Polyene antifungal agent

**Antimicrobial Spectrum:**

*Candida albicans* *Cryptococcus neoformans*, *Histoplasma capsulatum*, *Coccidioides immitis*,

**Mechanism of Action:**

Induces membrane permeability by forming complexes with ergosterol located in fungal membranes, leading to intracellular leakage and cell death.

**Pharmacodynamics:**

Concentration dependant fungicidal effects in *Candida spp.*

**Pharmacokinetics:**

Absorption: Nystatin is not absorbed to any significant extent following oral, cutaneous, or vaginal administration

Distribution: No distribution studies have been published on nystatin

Metabolism: No data available

Elimination: No elimination studies have been published on nystatin due to its primary use in topical indications

**Adverse Effects:**

Gastrointestinal: Nausea, vomiting, diarrhea (following PO administration)

Dermatologic: Rare case reports of contact dermatitis, and skin eruptions have been reported

**Dosage:**

Topical: Powder 50 Million Units/10g, Cream 100,000 Units/g, Ointment, Oral pastilles 200,000 Units

Suspension: 100,000 Units/ml

Vaginal tablets: 100,000 Units

**Adults:**

Oral candidiasis: Swish and swallow 4-6mL (400,000 to 600,000 Units) PO four times daily

Topical: Apply cream or ointment two to three times daily to affected areas, OR apply topical powder to affected area two to three times daily

Vaginal infections: Insert 1 vaginal tablet into vagina at bedtime nightly x 14 days.

**Infants:**

Oral candidiasis: Using dropper, apply 1 milliliter to each buccal membrane (total of 2 milliliters OR 200,000 units) four times daily.

**Children:**

Oral candidiasis: Swish and swallow 4-6mL (400,000 to 600,000 Units) PO four times daily

Disease state based dosing:  
Renal Failure: No data available  
Hepatic failures: No data available

**Contraindications/Warnings/Precautions:**

Contraindications: Hypersensitivity to nystatin

Precautions: None

**Drug Interactions:**

None are known

**Pregnancy:**

Category C: Risk unknown. Human studies inadequate.

**Monitoring Requirements:**

Improvement in fungal infection by oral plaques, or topical improvement if applied for yeast infections of the skin

**Generic names/Brand names/Manufacturer:**

Bio-Statin – Bio-Tech Pharma;

Mycostatin® - Bristol-Myers Squibb

Nystop® - Paddock Labs

Pedi-Dri® - Pedinol

Nystatin Cream – Various manufacturers

Nystatin Ointment – Various manufacturers