



# Carel's Pharmacy & Compounding Center

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## Transdermal Gels for Cats

Transdermal delivery of medications to veterinary patients is becoming increasingly popular. An effective, non-invasive method of medicating animals is welcomed by veterinarians and owners alike.

The transdermal route is desirable in many hard to medicate feline patients. These cats fall into three basic categories. First, those animals with behavioral problems that makes handling and administering oral medications difficult. Second, animals whose health is compromised and the stress of oral administration would further aggravate medical conditions. The last category is any animal whose owners are unable to "pill" or administer oral medications to their pet.

Transdermal gels are easy to use—the dose of gel is applied to the inside surface of the ear. This area is selected because it provides sufficient surface area with little fur, and is not easily reached during grooming. Using a gloved finger, the gel is spread evenly over the entire surface to maximize absorption. Direct application and absorption at the target site can mean higher tissue levels and lower blood levels of various medications. Side effects such as GI irritation can be eliminated.

Transdermal gels offer an excellent alternative for many patients that have been difficult to treat with conventional oral medication dosage forms. Following is a listing of the most commonly requested medications for cats compounded in a transdermal gel vehicle including their uses and initial TD starting doses (When medication is absorbed directly into the bloodstream without first entering the gastrointestinal system, a smaller amount of active ingredient may be required for therapeutic effect):

<u>Drug</u>	<u>Use</u>	<u>Recommended Initial TD Dose</u>
Aminophylline	Asthma; Chronic Bronchitis	4mg/kg q8-12h
Amitriptyline	Behavior; Cystitis	1.25mg/cat q24h*
Amlodipine	Blood Pressure	0.5mg/cat q24h
Atenolol	Blood Pressure; Heart Rate	3.25mg/cat q24h
Buprenorphine	Analgesic	0.01mg/kg q8h
Butorphanol	Analgesic	0.4mg/kg q6h
Cisapride	Reflux; GI disturbances	2.5mg/cat q12h
Clomipramine	Behavior Modification	1.25mg/cat q24h
Cyproheptadine	Behavior; Appetite Stimulation	2mg/cat q12h*
Diltiazem	Blood Pressure; Heart Rate	7.5mg/cat q12h
Enalapril	Clinical Heart Failure	0.25mg/kg q24h
Glipizide	Blood Sugar Control	2.5mg/cat q12h
Methimazole	Hyperthyroidism	2.5mg/q12h
Metoclopramide	GI Motility; Vomiting	0.2-0.4mg/kg q8h
Phenobarbital	Seizure; Sedative	2mg/kg q12h