

## Do Added Flavors Help Kitty 'Make the Medicine Go Down?'

It's no secret that cats are notoriously finicky when it comes to swallowing liquid medications or pills. In this study of 46 healthy cats, researchers set out to see if adding different flavors to the formulas might help. Find out which flavor impressed the cats the least.

**Analysis by Dr. Karen Shaw Becker**

Apr 12, 2023 • 4 min read

### STORY AT-A-GLANCE

- Feline family members are notoriously difficult to give medications (and many supplements) to
- Medicines in liquid form are often easier to administer, but the trick is using compounding to develop the flavors and consistencies most palatable to finicky felines
- Researchers at the University of Wisconsin–Madison School of Veterinary Medicine recently discovered that sweet flavors and water-based formulations get a paws-down from feline study subjects
- Future studies will look more closely at oil-based compounding flavors and compounded chewable formulas

As I often point out, cats aren't small dogs. Everything about the feline species is unique and often a bit mysterious, including what and how they eat, and the tastes that most appeal to them. If you're a cat guardian and have ever tried to pill or otherwise deliver oral medicine to your little fluffer, chances are you know first-hand how challenging it can be.

If the drug is in pill form, it is often popped into a cat's mouth in a surprise (to the cat) move, followed by holding kitty's mouth closed while gently massaging the throat. The goal, of course is to get the pill down the hatch before the cat has a chance to spit it back out.

This technique is called dry swallowing. It has significant drawbacks, such as negatively affecting the cat-human bond, increasing inflammation of the esophagus, and causing kitty to head for the hills at each future attempt.

The video below demonstrates a kinder, gentler, hopefully more effective approach for when you need to give kitty a medicine (or supplement) away from food. I recommend you practice the steps below a few times in your head prior to a real-life attempt, because the more efficient you are with your cat, the smoother the process will go.

(These instructions usually work best for right-handed people. If you're left-handed, you'll need to adjust them accordingly.)

*"Cats are incredibly difficult to medicate and there are just not a lot of good options," says Amy Nichelason, board-certified canine and feline practitioner, assistant clinical professor at the University of Wisconsin–Madison School of Veterinary Medicine, and lead author of a recent study on compounding flavors cats find acceptable.<sup>1</sup>*

## Hold the Sweets, Say the Cats

To try to address this long-standing issue Nichelason and colleagues conducted a study to see if they could improve cats' acceptance of liquid medications through compounding different flavors.<sup>2</sup>

*"Compounding is where we take a prescription drug and add or change its formulation. One reason to do this is to enhance compliance, meaning the animal will more readily accept the medicine," Nichelason says. "In this case, we were compounding it to a liquid form."*<sup>3</sup>

For the study, 46 healthy cats between 1 and 12 years of age were offered a variety of flavorings, like chicken, beef and fish, in unmedicated oil- and water-based formulas. The trials took place in the cats' homes, with their owners doing the feeding and noting which flavors their cats ate. Of course, cats being cats, no flavor was a clear favorite.

However, the researchers did note that the cats weren't fans of sweet flavors in water-based formulations. They were surprised by the finding, because felines can't taste sweetness, and so their active dislike of the sweet flavors was interesting.

(The fact is, cats have no sweet taste receptors, probably because as strict meat-eaters, they evolved without those receptors since they had no use for them. Other exclusively carnivorous animals, e.g., sea lions and spotted hyenas, have also lost the ability to taste sweet flavors.<sup>4</sup>)

## Oil-Based Flavorings (Mostly) Win Against Water-Based

Another interesting finding from the study was the cat parents weren't all that good at guessing which compounding flavor their pets would like. They'd assume for example, their cat would go for the chicken flavored formula, but instead, kitty would choose fish. Since veterinarians often use an owner's judgment to determine the flavor of a new compounded medicine, these study results suggest this may not be the best approach!

As noted earlier, while no individual flavor was a paws-down favorite, the kitties did seem to prefer oil-based over water-based flavorings. Take-home message: Cats are picky (go figure!), with 60% turning away from all the oil-based flavors, compared to 85% who turned up their noses at the water-based flavors.

*"It matches what we see in clinical practice: cats are just really hard to medicate," Nichelason says.*

## Future Studies Are Planned

Nichelason and her team believe the current study "provides a steppingstone for improving cats' compliance with medicine and guides what veterinarians should prescribe."

In future studies, the researchers plan to add medications cats are known to dislike to the preferred oil-based compounding flavors/flavor combinations and observe cats' reactions. They'll be evaluating compounded chewable formulas as well.

*"The moral of the story is to try something that has the best odds of working," Nichelason says. "What I took home from this as a veterinarian is that I should avoid sweet flavors and use oil-based flavorings when possible."*

She also offers a few general recommendations for dialing down the stress level if and when you need to give your own cat medication:

*“Try different formulations — chews, liquid or tablets — based on what your cat likes. If you aren’t sure of their preference, many compounding pharmacies have unmedicated samples owners can try giving their cats before adding the medication.”*

It can also be helpful to reward your cat with a treat or extra affection after giving medication. Providing honest feedback to your veterinarian is also extremely important.

*“If the formulation isn’t working and it is creating stress, let us know so we can work together to create a better medication plan,” Nichelason advises.*

Hopefully, these efforts will collectively ease the challenges and stress for everyone involved when it’s necessary to medicate cats.

## **Sources and References**

<sup>1,3</sup> [University of Wisconsin-Madison School of Veterinary Medicine News Release, December 19, 2022](#)

<sup>2</sup> [Nichelason, A. and Schultz, K. Journal of the American Veterinary Medical Association, Vol. 261, Iss. 1, January 1, 2023](#)

<sup>4</sup> [Science Daily, October 21, 2015](#)

---