



# Healthy bladder, happy home

How to help your cat have both



# Hill's Pet Nutrition

## A LONG TRADITION OF INNOVATION

In the 1930s, veterinarian Mark Morris, Sr., and his patient, a guide dog named Buddy, showed that nutrition makes a difference in the health and longevity of pets. Hill's has been advancing the field of veterinary nutrition ever since.

The first time nutrition was used to help manage disease in a pet was in 1939 when Dr. Morris developed a pet food to help with Buddy's kidney disease.

Buddy's condition quickly improved. Following this success were foods to help pets lose weight, foods for dogs with heart disease, foods to help cats with feline lower urinary tract disease (FLUTD), and foods to dissolve canine urinary stones.

Developing new foods for the nutritional management of pet health is still the driving force at Hill's. Today over 150 veterinarians, PhD nutritionists and food scientists continue Dr. Morris's work to ensure that Hill's® brand pet food helps pets live better, healthier lives.



*To help enrich  
and lengthen the  
special relationships  
between people  
and their pets*

Hill's mission

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# Foreword

*By Arden Moore*

Author, editor, professional speaker, host of "Oh, Behave!" on PetLifeRadio.com

For years, I've been the cat owner whom others envy. Every cat I've had during my adult life had scored a perfect "batting average" when it came to using the litter box — never targeting my carpet, sofa or bedroom pillow.

Then one morning I discovered Callie, my 14-year-old calico, tensely crouched on the rug by the front door, next to a series of small puddles on the floor. An examination performed by my veterinarian later that day confirmed my suspicions, and Callie was diagnosed with feline lower urinary tract disease (FLUTD).

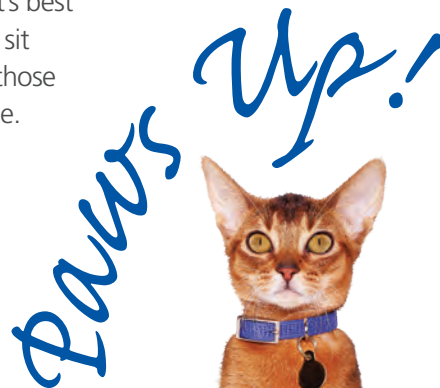
FLUTD is an umbrella term to describe a host of urinary tract conditions that can be easily overlooked by owners who may assume their cats are misbehaving. FLUTD sometimes involves a blockage in the urethra, which can be life threatening if left unchecked.

I share this with you because cats are masters at masking their pain. Felines adopt a stoic posture to disguise any physical weakness. To get the help they need, our cats rely on us to take note of any subtle or abrupt changes in their behavior.

Fortunately, we can help keep our cats at their healthy best by providing fresh water and maintaining clean litter boxes. Equally vital is what we put in our cats' food bowls. The right balance of nutrients can minimize the chance of developing FLUTD.

Callie's episode served as a reminder to re-examine her nutritional needs with my veterinarian and to make sure she undergoes twice a year wellness exams.

I invite you to read this guide and discover how you can become your cat's best health ally. Then sit back and enjoy those purrs of gratitude.



# Acknowledgements

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This guide would not have been possible without the help of Dr. Jacqueline C. Neilson, veterinary behaviorist, Animal Behavior Clinic, who provided the behavior checklist for inappropriate urination, as well as advice on enhancing the home environment for cats and breaking problem urination habits. We gratefully acknowledge her generous contributions to this guide.

We also thank Arden Moore, pet author and radio show host, for her thoughtful foreword and the additional tips and facts she provided on litter box maintenance. Her devotion to pets is an inspiration to us all.



# Introduction

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Inappropriate urination is the number one behavior problem in cats.<sup>1</sup> In fact, it's the most common behavioral reason for pet owners to give up their cats to shelters.<sup>2</sup>

But often, this problem is caused by a treatable medical condition called feline lower urinary tract disease (FLUTD). If your cat is diagnosed with FLUTD, you're not alone — this type of disorder is the most common reason pet owners take their cats to the veterinarian.<sup>3</sup>

FLUTD is serious and requires medical attention. Fortunately, you can help your cat recover from both the physical and behavioral effects of this illness with treatment from your veterinarian and the information in this guide.

## ***Milk myth?***

*It's not good for cats to drink milk. Adult cats don't produce enough of the enzyme lactase to properly digest the lactose in milk.*

# What is FLUTD?

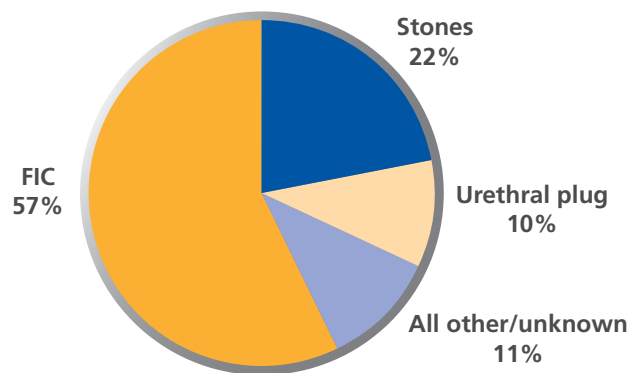
FLUTD is actually not a single disease; it's a category that includes several disorders. The most common is [feline idiopathic cystitis \(FIC\)](#). FIC involves inflammation by an unknown cause, but stress is thought to be a significant factor.

[Urinary stones](#) are another common disorder of FLUTD. Stones can be painful and very dangerous — even life threatening if they create a blockage in the *urethra*, the passageway for urine to exit the bladder.

Blockage of the urethra may also be caused by a [urethral plug](#). This very serious condition frequently occurs in male cats with FLUTD.

Less common forms of FLUTD include anatomic defects, urinary tract infections, and behavioral disorders.

## TYPES OF FLUTD CASES SEEN BY VETERINARIANS<sup>4</sup>



*A recent study shows the inflammatory disease FIC accounts for 57% of FLUTD cases.*

# What are the causes and risk factors of FLUTD?

## Nutrition

### MINERALS

Cats need the right balance of minerals to maintain good urinary tract health. Too much of certain minerals can encourage the formation of crystals in the urine, which sometimes leads to urinary stones.

### URINE pH

Food influences the pH, or acidity, of urine. Urine's acidity is directly related to urinary tract health.

### BODY WEIGHT

The pet food you feed should help your cat maintain a healthy body weight, because obesity can increase the risk of urinary tract problems.





## The home environment

Did you know a cat's surroundings can have a direct effect on urinary tract health?

### THE WATER BOWL

Not drinking enough water can increase the risk of FLUTD. Cats don't like to drink from a bowl that's too small or isn't full. They also don't like to drink from a water bowl that's too close to the litter box or noisy appliances like the washer and dryer.

### THE LITTER BOX

A cat may "hold it" rather than use a litter box that's unacceptable in some way, whether it's too dirty, shared with other cats, in a high-traffic location, or even if it's filled with the wrong type of litter for the cat's particular preference.

### STRESS

Stressors in the home can contribute to FLUTD, and especially to FIC. House guests, conflict with other pets, and a lack of suitable places to rest or hide are all examples of potential feline stressors.

#### ***A matter of taste***

*A human has more than 9,000 taste buds, but a cat has only 473.*

## LIFESTYLE

Indoor cats tend to have a higher risk for FLUTD. Possible reasons include:

### ■ Inadequate exercise

Many indoor cats don't get enough exercise. Exercise is important because it helps reduce both stress and the likelihood of gaining excess weight, and both put cats at risk for FLUTD.

### ■ Litter box aversion

When litter box conditions remain consistently unacceptable to a cat, she may abandon the litter box altogether. For an indoor cat who has no other appropriate location to urinate, the only options are to either "hold it" or urinate in an inappropriate location.



## Pet factors

Some characteristics of cats may increase the risk of specific FLUTD issues, such as a type of urinary stone called *struvite*. Primarily made of magnesium, ammonium and phosphate, struvite urinary stones are the most common type found in cats. Another common feline urinary stone is *calcium oxalate*, primarily made of calcium and oxalate.

### AGE

Younger cats are more prone to struvite urinary stones, while older cats are more likely to develop calcium oxalate urinary stones.

### BREED

Some breeds are at a higher risk for certain types of urinary tract problems.

URINARY STONES (in general)	CALCIUM OXALATE URINARY STONES	STRUVITE URINARY STONES	URINARY INCONTINENCE
Himalayan Persian Russian blue	Burmese Himalayan Persian	Siamese	Manx

### GENDER AND NEUTER STATUS

FLUTD is common in both spayed female and neutered male cats. Risks for urethral plugs and calcium oxalate stones are higher in neutered male cats.

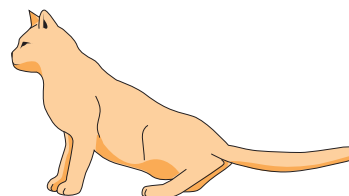
### OTHER HEALTH PROBLEMS

A cat who has a history of urinary tract disease or who has had surgical procedures on the bladder or urethra may be at a higher risk of FLUTD. Kidney disease and obesity can also increase the risk of FLUTD.

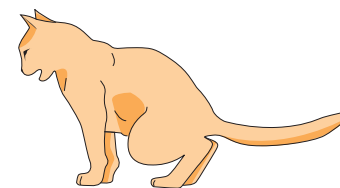
## What are the signs of FLUTD?

It's important to watch for these warning signs, especially if your cat is at risk of FLUTD. They may signal a problem or flare-up that needs medical attention. If you notice any of the following behaviors or signs, contact your veterinarian.

- Incontinence or "accidents" (urinating outside the litter box)
- Urinating in new or unusual places
- Behavior changes such as restlessness, listlessness or hiding away
- Refusing to eat
- Increased grooming or licking of the urinary opening
- Pink, dark or blood-stained urine
- Trying more often to urinate, without producing much urine
- Painful urination, sometimes expressed by vocalizing when urinating
- Straining to urinate, or urinating in a tense, hunched posture



Normal urinating posture



Strained urinating posture

A strained or hunched posture at the litter box may mean it's difficult or painful for your cat to urinate. If accompanied by other signs listed above, it may indicate urinary obstruction, which needs immediate medical attention.

# How you can help your cat

*"For the best success, I think it's very important to use a holistic approach for cats with FLUTD. Address **all** aspects of the problem by feeding the right nutrition, making changes to the home environment and routine, and finding constructive ways to correct behavior issues."*

Dr. S. Dru Forrester  
Associate Director, Scientific Affairs  
Hill's Pet Nutrition



## Feeding a cat with FLUTD

Good nutrition is important for any pet. When a cat has FLUTD, it is especially critical to feed the right pet food.

### ANTIOXIDANTS

*Free radicals* are atoms or molecules that can cause *oxidation*, a type of cell damage associated with many diseases. Research shows a connection between FLUTD and excess free radicals. That's why *antioxidants* are important in the nutrition fed to cats with FLUTD.

As the name suggests, antioxidants help control oxidation. Examples of antioxidants are vitamin E and beta-carotene. A pet food that's rich in these nutrients is recommended for cats with FLUTD.

### URINE pH

Your veterinarian may test the pH, or acidity, of your cat's urine. It should be moderately acidic for a healthy urinary tract, because it's harder for struvite crystals to grow in an acidic environment. The right food can help your cat achieve and maintain the ideal urine pH.



### Relief from inflammation

*Hill's® Prescription Diet® c/d® Multicare Feline pet food contains high levels of omega-3 fatty acids from fish oil and antioxidants to help break the cycle of inflammation in cats with FIC.*





### OMEGA-3 FATTY ACIDS

For cats, omega-3 fatty acids are *essential fatty acids*. Cats can't live without them, but their bodies can't produce them. That's why omega-3 fatty acids are necessary — or *essential* — in a cat's food.

One of the reasons omega-3 fatty acids are important is because they help control inflammation. Extra omega-3 fatty acids may be good for cats who have FLUTD, especially the inflammatory disease FIC.

### BODY WEIGHT

Excess weight can lead to many health problems for cats, just as it can for humans. It's one of the risk factors for FLUTD, so be sure to feed a measured amount of a healthy, balanced pet food, and don't overfeed or give table scraps, "people food" or too many treats. To determine the correct amount to feed, consult the product packaging or ask your veterinarian.

### MINERAL LEVELS

High levels of certain minerals aren't good for cats with FLUTD. Ask your veterinarian to recommend a food with appropriate mineral levels.

#### ■ Phosphorus

Too much phosphorus may contribute to the progression of kidney disease. Phosphorus is one of the main ingredients in struvite crystals, which can develop into urinary stones.

#### ■ Calcium

Too much calcium can slow the growth or limit the absorption of other beneficial minerals and increase the risk for calcium oxalate urinary stones.

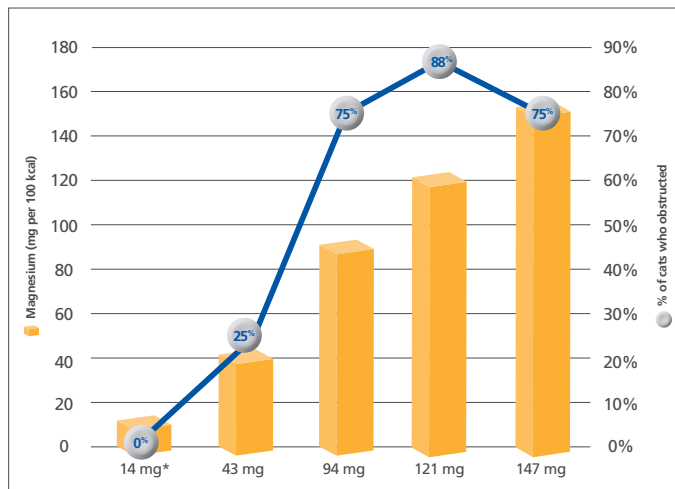
#### ***In a single bound***

*A cat can jump about seven times as high as she is tall.*


## ■ Magnesium


Too much magnesium may contribute to FLUTD. Research shows a clear connection between a cat food's level of magnesium (another main struvite component), and blockages in the urethras of cats who eat it.

### FOR CATS WITH STRUVITE URINARY STONES, CAN TOO MUCH MAGNESIUM LEAD TO A BLOCKAGE?<sup>5</sup>



\*Similar to magnesium level of Hill's® Prescription Diet® c/d® Multicare Feline pet food.

 The orange bars show the amount of magnesium in each food fed to a different group of cats with struvite urinary stones.

 The gray circles show the percentage of cats experiencing blockages in each group.

As you can see, a higher magnesium level corresponds with more urinary tract blockages.

## ■ Sodium (salt)

Some pet foods sold specifically for cats with FLUTD contain high levels of salt. The reason is simple: salty food makes a cat thirsty, and a thirsty cat will drink more water, which is good for a cat with FLUTD.

But there's a big problem with this approach: What if the cat also has kidney disease?

- Often, kidney disease does not cause obvious signs until it has progressed to an advanced stage. Many cats have kidney disease for a long time before their owners and veterinarians know.
- Kidney disease is common in cats and may share some causes and risk factors with certain FLUTD disorders. Many cats with FLUTD may also have kidney disease whether their owners and veterinarians know it or not.

Excess salt can speed the progression of undetected kidney disease.<sup>6,7</sup> Salty food may encourage cats to drink more water, but the risk to their kidneys may be too great.

For better ways to get your cat to drink more water, see page 30.



## Enhancing the home environment to help your cat

Cats are very sensitive to their environments. Look around your home and try to imagine it from the cat's point of view. Is it comfortable and easy for a cat to live in? Perhaps there are small changes that could improve your cat's life, without disrupting yours.



*"Two important techniques for stress reduction are reducing specific stress triggers and creating a cat-considerate environment that provides appropriate outlets for normal feline behavior."*

Dr. Jacqueline C. Neilson  
Veterinary Behaviorist  
Animal Behavior Clinic  
Portland, OR

### REMOVING OR REDUCING SOURCES OF STRESS

Making your home more cat-friendly is especially important when your pet has FLUTD. Cats are vulnerable to stress, which is shown to have a significant impact on feline urinary tract health and urination behavior.

That's why reducing stressors in the home can help bring about noticeable improvements in the health and behavior of a cat with FLUTD, especially FIC. The table on the next page shows common stress triggers and solutions for removing or reducing them.

## FELINE STRESSORS AND SOLUTIONS\*

STRESSORS	SOLUTIONS
Indoor noise such as buzzers on appliances or loud music	<ul style="list-style-type: none"><li>• Eliminate, muffle or reduce the volume of sounds that agitate your cat.</li></ul>
External noises that are beyond your control, such as thunder	<ul style="list-style-type: none"><li>• Find an area of your home with less exposure to outdoor noise, such as an interior closet, and set it up as a quiet refuge with food and water, a litter box, and a resting perch.</li></ul>
Visitors to your home	<ul style="list-style-type: none"><li>• Create a refuge like that described above, and make it a visitor-free zone.</li></ul>
Tension, hostility or fights with other cats in the home	<ul style="list-style-type: none"><li>• Put a bell on the more aggressive cat's collar so the other cat won't be caught off guard.</li><li>• Make sure litter boxes, pet food, water and resting perches are available in several areas of the home to make it easier for the cats to avoid confrontation.</li><li>• If the problem is severe, ask your veterinarian for help.</li></ul>
Seeing unfamiliar cats outdoors	<ul style="list-style-type: none"><li>• Block the view from the window.</li><li>• Remove items such as bird feeders that may attract strange cats to your home.</li></ul>

\*Courtesy of Dr. Jacqueline C. Neilson



### CREATING A CAT-FRIENDLY HOME

Once you've addressed your cat's environmental stress triggers, consider a few extra steps to enhance your cat's surroundings. Here are some examples that can make a difference for your cat's sense of well-being.

#### ■ Exercise, toys and playtime

What are your cat's favorite toys and ways to play? Visit **The Indoor Cat Initiative** at [www.vet.ohio-state.edu/indoorcat](http://www.vet.ohio-state.edu/indoorcat) to learn more about how to identify what really inspires your cat to move. Dedicate at least five minutes twice a day to play with your cat.

#### ■ Hunting

Even the most pampered cat has an instinctive impulse to hunt. You can encourage this important mental and physical exercise by hiding your cat's food in multiple bowls throughout your home. Or hide some of the food in a puzzle toy for your cat to retrieve. Toys designed for just this purpose are available in pet stores.

#### ■ Scratching posts

Cats need to scratch for several reasons. It's a way to stretch their muscles, maintain their nails, and communicate ownership. Scratching posts provide a satisfying surface for your cat to exercise this urge — and an alternative to targeting curtains or furniture.

#### ■ Resting perches

Elevated, upholstered resting perches provide places for your cat to sleep, escape, survey the territory, and feel safe.

#### ■ Resources

Provide each of your cat's essential resources — food, water, perches, scratching posts, litter boxes — in multiple locations throughout your home. A good guideline to ensure sufficient access is to provide as many stations as there are cats, plus one, for each resource.

#### ■ Pheromone therapy

Cats produce chemicals called *pheromones* that convey information to other cats. Some provoke a specific response — for example, reassurance. A man-made version of a calming pheromone can also produce this effect. It's sold in pet stores and is available as a spray or refillable plug-in diffuser.

## ■ Maintain an inviting litter box\*

Cats tend to be particular in their litter box preferences and habits. Here are some basic guidelines to start with:

- Fill the box with litter to a depth of three inches.
- Avoid perfumed litters — they may smell good to you, but most cats don't like flowery scents. And don't use a plug-in air freshener in the area; try a box of baking soda instead.
- Clean out deposits every day.
- Wash each litter box at least once a month with warm, soapy water and allow it to dry completely.
- Avoid moving litter boxes to new locations.
- Never place a litter box next to a cat's food or water bowl. Cats don't like to eat close to where they eliminate.
- Keep litter boxes away from noisy appliances such as the washer and dryer.

\*Adapted from *Happy Cat, Happy You*  
by Arden Moore. 2008, Storey Publishing, LLC.



## How to manage your cat's behavior and routine

*If your cat is urinating in inappropriate locations, complete this checklist\* and show it to your veterinarian.*

	YES	NO
Does your cat seek out certain targets for urination?	<input type="checkbox"/>	<input type="checkbox"/>
Do these targets have a common quality (e.g., all soft, absorbent materials, certain room, always slick surfaces)?	<input type="checkbox"/>	<input type="checkbox"/>
Does your cat defecate outside the litter box?	<input type="checkbox"/>	<input type="checkbox"/>
Does your cat ever use the litter box?	<input type="checkbox"/>	<input type="checkbox"/>
Does your cat dig in its litter when using the litter box?	<input type="checkbox"/>	<input type="checkbox"/>
Is there more than one cat in the household?	<input type="checkbox"/>	<input type="checkbox"/>
Are the litter boxes all in the same room, area or level of the home?	<input type="checkbox"/>	<input type="checkbox"/>
Total number of cats in the home	_____	
Total number of litter boxes in the home	_____	
How many are covered?	_____	
How many are: <b>SMALL</b> _____ <b>MEDIUM</b> _____ <b>LARGE</b> _____		
How many use a plastic liner?	_____	
How many use scented litter?	_____	
How many boxes have each type of litter?		
_____ Clumping (sand-like)	_____ Recycled paper (pellets)	
_____ Crystal (silica)	_____ Nonclumping clay	
_____ Wheat, clumping	_____ Corn, clumping	
_____ Pine	_____ Other	
How often do you scoop the litter boxes?		
<input type="checkbox"/> More than once a day	<input type="checkbox"/> Once a week or less	
<input type="checkbox"/> Once a day	<input type="checkbox"/> Twice a week	
<input type="checkbox"/> Every other day		
How often do you wash the litter boxes?		
<input type="checkbox"/> Daily	<input type="checkbox"/> Monthly	<input type="checkbox"/> Every year or more
<input type="checkbox"/> Weekly	<input type="checkbox"/> Every 2-3 months	<input type="checkbox"/> Never
<input type="checkbox"/> Every two weeks	<input type="checkbox"/> Every 3-6 months	

\*Courtesy of Dr. Jacqueline C. Neilson



## Breaking problem urination habits

When a cat has rejected the litter box in favor of an alternate location to urinate during an episode of FLUTD, in some cases the inappropriate urination may continue even after the medical issue is resolved. There are three main problems at the root of this behavior, and different solutions to each of them.

### PROBLEM: UNPLEASANT ASSOCIATIONS

If an episode of FLUTD causes pain or discomfort during urination, then your cat may form an association between the litter box and the unpleasant experiences that happened there. The association may continue even after the physical discomfort is resolved.

### SOLUTION

After your cat has recovered from the FLUTD episode, change the box in some way to break your cat's connection between using the litter box and experiencing pain. You can try moving it to a new location, replacing it with a different style of box, or switching to another type of litter.

*"Pay attention to how much water your cat drinks, and try to encourage more water drinking. Ask your veterinarian about trying a canned food to increase your pet's moisture intake."*

Dr. Larry Adams  
Professor, Small Animal Internal Medicine  
Purdue University School of Veterinary Medicine

### PROBLEM: LITTER BOX AVERSION

A cat with FLUTD may need to use the litter box more often, so it may be more difficult to keep it clean. If your cat's litter box is not kept as clean as she's used to, she may develop a distaste for it and avoid it even when it is clean.

### SOLUTION

Your cat may go back to using a litter box if there's always a clean one to use, so provide extra litter boxes, clean them more often, or try doing both. And if you do this as soon as you realize your cat is experiencing an FLUTD episode, you may avoid this problem entirely.



## PROBLEM: INAPPROPRIATE PREFERENCE

Has your cat developed a new preference for urinating in a particular place on your floor or furniture? This can happen with cats who develop a litter box aversion and need to find an alternative site to urinate. It can also happen when a cat with FLUTD has an “accident” and finds the accident site preferable to the litter box.

## SOLUTION

Where practical, try placing the litter box on the new preferred spot.

Make the inappropriate site less attractive (for example, by placing double-sided tape on the surface) or inaccessible.

Make the litter box more attractive by keeping it clean and in a suitable location. Also, most cats prefer large, uncovered boxes with clumping (scoopable) litter.

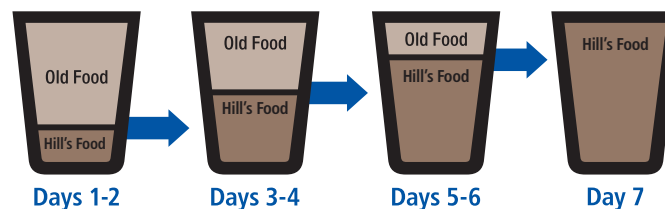
You can identify your cat’s individual preferences by offering a “litter box cafeteria.” Temporarily set up litter boxes of various styles or containing various types of litter, and observe which setup your cat chooses to use.



## Changing your cat’s food or feeding routine

### TRANSITIONING TO A NEW FOOD

If your veterinarian has recommended a Hill’s® Prescription Diet® therapeutic pet food for your cat’s urinary tract health, gradually transition to the new food over *at least* seven days by mixing more of the Hill’s® pet food with less of the old food every day.



A gradual transition is important because it’s not uncommon for cats to resist a new food or suffer from an upset stomach if the change is abrupt. In fact, some cats need several weeks to adjust, so don’t worry if the transition takes a little longer. If your cat seems reluctant to eat the new food, try these tips:

- Try offering the new food in a separate dish next to the old food, instead of mixing the two foods.
- Warm canned food by placing it in a microwave-safe dish and heat on the *high* setting for 5-7 seconds. Be careful not to overheat the food. Do not place the can in the oven.
- Try adding warm water or a little bit of low-sodium broth to dry food.
- If you’re switching from a dry food to a canned food, feed your cat from a shallow dish instead of a bowl. Most cats dislike having their whiskers brush the sides of a bowl.
- Visit [www.vet.ohio-state.edu/indoorcat](http://www.vet.ohio-state.edu/indoorcat) for more feeding tips.

## WHEN THERE'S MORE THAN ONE CAT TO FEED

If you live in a multi-cat household, it would be ideal to feed all of your cats the same food. However, it may not be advisable because they may not all have the same nutritional needs.

When one or more cats are on a therapeutic pet food for FLUTD, but there are other cats who aren't, it can be challenging to ensure that each cat eats the right food. If you find this difficult, try these tips:

- Some therapeutic pet foods for FLUTD, such as Hill's® Prescription Diet® c/d® Multicare Feline pet food, may also be suitable for healthy cats. Ask your veterinarian if there's a Hill's Prescription Diet pet food that will help maintain the urinary tract health of the cat with FLUTD, yet provide appropriate nutrition for your other cats as well.
- If you currently feed your cats free-choice (food is available to them at all times), switch to meal feeding to make it easier to monitor the cats' food intake. Another advantage of meal feeding is that it decreases obesity, which is a risk factor for FLUTD.
- Segregate the cats at feeding time. For example, provide their meals in separate rooms with closed doors.



## SWITCHING FROM FREE-CHOICE TO MEAL FEEDING

Your cat may not find it easy to make the transition from free-choice feeding to eating meals at specific times. For a successful switch, have patience and follow these steps:

1. Start by limiting food access to two hours in the morning and two hours in the evening for at least a week. Feed half of the cat's recommended daily amount of food at each meal, but remove the dish and any uneaten food after two hours.
2. When your cat is used to this schedule, cut each feeding time by 30 minutes.
3. As your cat adjusts, keep cutting down the feeding times until the food is available for only 30 minutes in the morning and 30 minutes in the evening.

### Early exposure

*"The moisture in canned food adds to a cat's water intake, which is good for cats with FLUTD. Feed canned food to your cat as an occasional treat, starting when she's a kitten, so she'll be more likely to accept it if she needs it later in life."*

Dr. Kayann Stables  
Associate Manager, U.S. Marketing  
Hill's Pet Nutrition

## Encouraging your cat to drink more water

All cats need access to clean, fresh water at all times. It's especially important for a cat with FLUTD to drink plenty of water. Try these tips to encourage your cat to drink more water.

- Add a small amount of water to moist food.
- Divide daily food into several smaller meals to promote more frequent drinking.
- Place ice cubes in the water or provide cold water.
- Use a non-reflective bowl that's wide enough for your cat to drink from without her whiskers touching the sides.
- Offer water in dishes of various materials, shapes, sizes or depths to determine your cat's preferences.
- Some cats prefer moving water, so try letting your cat drink from a dripping faucet or a fountain with circulating water.
- Try giving your cat bottled or filtered water, or ask your veterinarian about using an additive in your cat's water to improve the taste. Adding flavor to water can increase intake by 74%<sup>8</sup>
- Feeding canned food is a great way to increase water intake in cats, and it may especially help cats with FIC.



*A source of moving water such as Drinkwell® The Original Pet Fountain® may encourage your cat to drink more.*

## More cat behavior resources

Visit these websites to learn more about feline behavior or to seek professional assistance.

[www.HillsPet.com/HappyBladder](http://www.HillsPet.com/HappyBladder)

Visit this Hill's Pet Nutrition website to learn about FLUTD and why the right pet food can make a difference. Read success stories from pet owners who have helped improve their cats' urinary tract health by feeding Hill's® Prescription Diet® therapeutic pet foods.

[www.vet.ohio-state.edu/indoorcat](http://www.vet.ohio-state.edu/indoorcat)

This well-researched website developed for cat owners by The Ohio State University College of Veterinary Medicine offers fascinating insights on how cats think, how their natural instincts influence their preferences and behavior, and ways you can use this knowledge to help keep your cat healthy and happy.

[www.AnimalBehavior.org](http://www.AnimalBehavior.org)

The website of the Animal Behavior Society explains what a Certified Applied Animal Behaviorist (CAAB) is and what these professionals do. A directory lists the names and contact information of practitioners who have this special certification.

[www.iaabc.org](http://www.iaabc.org)

The International Association of Animal Behavior Consultants is a professional association for the animal behavior consulting field. The website offers a user-friendly searchable database of practitioners who are certified by the IAABC.

[www.tufts.edu/vet/behavior](http://www.tufts.edu/vet/behavior)

The website of the Cummings School of Veterinary Medicine at Tufts University offers general information and guidance for common pet behavior issues, as well as a fee-based online behavioral consultation service.

# How to be your cat's best health ally

## Advocating for your cat

Of course, pets can't speak for themselves, so you have to speak on your cat's behalf. A veterinary clinic can be a busy place and it's easy to get distracted. Your veterinarian wants you to understand your pet's condition and instructions for managing it.

Here are some tips for being a good advocate for your cat's health.

Don't be afraid to ask your veterinarian questions or to ask for clarification.

When your veterinarian gives you instructions on caring for your cat, be sure to write them down or ask for them in writing.

Find out when your veterinarian wants you to bring your cat back for a follow-up, and schedule the appointment before you leave the clinic.

If your veterinarian recommends a special pet food or medication for your cat, pick it up before you leave the clinic so you don't have to make a special trip for it later.

## Monitoring your cat

Even after your cat's FLUTD episode is over, continue to watch for these signs of recurrence or a flare-up. Contact your veterinarian if you notice any of these warning signs.

- ☐ Incontinence or "accidents" (urinating outside the litter box)
- ☐ Urinating in new or unusual places
- ☐ Behavior changes such as restlessness, listlessness or hiding away
- ☐ Refusing to eat
- ☐ Increased grooming or licking of the urinary opening
- ☐ Pink, dark or blood-stained urine
- ☐ Trying more often to urinate, without producing much urine
- ☐ Painful urination, sometimes expressed by vocalizing when urinating
- ☐ Straining to urinate, or urinating in a tense, hunched posture

If your cat doesn't seem to be passing urine at all, it may indicate a blockage.

**The blockage of urination by a urinary stone can be life threatening. It is an emergency that demands *immediate* medical attention.**





*"My cat George had been on c/d® Multicare Feline pet food for FLUTD once before, and when he was doing better I went back to his regular grocery store pet food. I didn't make that mistake after his second FLUTD episode — I kept him on c/d® Multicare Feline this time. I really believe in it because I've seen the difference it can make."*

Randy L. Royal  
George's owner  
Basin, WY

## Feeding instructions

If your veterinarian has recommended a Hill's® Prescription Diet® therapeutic pet food for your cat's urinary tract health, following this nutritional recommendation is a very important part of your cat's care. Be sure you:

- Understand all recommendations and instructions completely, including how much to feed every day.
- Write down the instructions or ask for them in writing instead of relying on memory alone.
- Follow your veterinarian's feeding instructions closely.
- Be sure to accurately measure your cat's food with a measuring cup. Use one provided by your veterinarian or one for cooking that's marked with standard fractions of a cup, so you don't have to guess.
- Do not feed your cat anything other than the food your veterinarian has recommended. Topping or supplementing your cat's recommended food with another food can dilute the effect of the therapeutic pet nutrition.
- Feed the therapeutic pet food for as long as your veterinarian recommends; in most cases, long-term therapeutic nutritional management is necessary.

## Frequently asked questions

**Q: After this episode is over, will my cat's FLUTD come back again?**

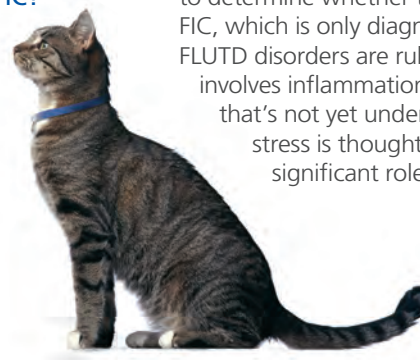
**A:** Even with the best care, some cats may have recurring signs or episodes of FLUTD. Many pet owners see improvements in their cats' health and discontinue the care and nutrition recommended by their veterinarians, often resulting in another FLUTD episode. However, it is important to continue to feed the recommended pet food and monitor your cat closely.

**Q: My veterinarian says my cat has a urinary stone. Does this mean she will need surgery to remove it?**

**A:** Not necessarily. Depending on the type of stone, it may be possible to dissolve it by feeding a therapeutic pet food such as Hill's® Prescription Diet® s/d® Feline — designed to dissolve struvite stones in cats in as few as 14 days.<sup>9,10</sup> Other methods of stone removal are also available. Ask your veterinarian about all of your cat's treatment options.

**Q: How can my veterinarian tell if my cat has FIC?**

**A:** First your veterinarian must examine your cat for urinary stones and other possible urinary tract diseases in order to determine whether the problem is FIC, which is only diagnosed after other FLUTD disorders are ruled out. FIC involves inflammation by a cause that's not yet understood; however, stress is thought to play a significant role.



**Q: My veterinarian recommended a therapeutic pet food to help manage my cat's urinary tract health. How long will I need to feed this food?**

**A:** Because FLUTD is a recurring disease, it may require you to feed the recommended therapeutic pet food long-term.

It's important to continue to feed Hill's® Prescription Diet® pet food recommended by your veterinarian to help your cat get the maximum benefit from the food and minimize the risk of a recurrence.

Clinical studies show the nutrition in Hill's® Prescription Diet® c/d® Multicare Feline pet food helps minimize the risk of recurrence of both struvite urinary stone and calcium oxalate urinary stone formation, and is appropriate for long-term feeding.



## Urinary tract health checklist

Signs that prompted the veterinary visit: \_\_\_\_\_

Date I first noticed the signs: \_\_\_\_\_

Date of veterinary appointment: \_\_\_\_\_

Tests performed: \_\_\_\_\_

Diagnosis: \_\_\_\_\_

Food recommended: \_\_\_\_\_

Feeding instructions: \_\_\_\_\_

Medication recommended: \_\_\_\_\_

Other care and instructions: \_\_\_\_\_

Follow-up appointment date: \_\_\_\_\_

My cat's condition at follow-up: \_\_\_\_\_

Veterinarian's instructions: \_\_\_\_\_



# Hill's Pet Nutrition offers a complete line of therapeutic pet foods for urinary tract health



## Hill's® Prescription Diet® c/d® Multicare Feline

For the nutritional management of cats with struvite- or calcium oxalate-related urinary tract disease or feline idiopathic cystitis

## Hill's® Prescription Diet® s/d® Feline

To help dissolve struvite urinary crystals and stones in cats

Hill's guarantees Hill's® Prescription Diet® pet foods for quality, consistency and taste. If you are not completely satisfied with any purchase of Hill's® Prescription Diet® pet food for any of these reasons, simply return the unused portion to your veterinarian for a full refund or replacement.

To learn more about Hill's Prescription Diet pet foods for urinary tract health, call Hill's Consumer Affairs at 1-800-445-5777 or visit [HillsPet.com](http://HillsPet.com).



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<sup>10</sup> Osborne CA, Lulich JP, Kruger JM, et al. Medical dissolution of feline struvite uroliths. *J Am Vet Med Assoc*. 1990;196:1053-1063.

<sup>11</sup> Data on file. Hill's Pet Nutrition, Inc.