



CatWatch

Expert information on medicine, behavior and health from a world leader in veterinary medicine



INSIDE

Why They're 'Picky' Eaters 2

A study suggests that cats lack the taste receptor gene for bitterness.

Their Scratching Preference 2

Could pheromones — the scent signals from another cat — attract them?

Pros and Cons of Costumes 3

They may spark our joyous laughter, but do our cats really enjoy them?

Ask Elizabeth 8

Causes of lameness in an aging cat can range from sprains to osteoarthritis.

IN THE NEWS ...

Your 8-year-old Cat?

He's 48 in Human Years

The American Association of Feline Practitioners continues to campaign for regular veterinary checkups as the key to happy, healthy feline lives. Cats' rapid rate of aging is one compelling reason.

They reach the equivalent of approximately 15 human years in their first year and 24 human years when they reach 2 years of age, the association says. "Each year thereafter, they age approximately four 'cat years' for every calendar year."

The message is clear:

"Veterinary care is crucial because a lot can happen in four years," the group says. "Veterinarians are trained to detect many changes or abnormalities that could be overlooked and to detect many problems before they advance or become more difficult to treat."

For instance, while periodontal disease is the most common disease in cats 3 years of age and older, most affected cats still eat without a noticeable change in appetite. ♦

Is Your Cat Squinting and 'Head Shy'?

These could be subtle signs of glaucoma that require immediate veterinary treatment to avoid loss of vision

If your cat squints or his eyes are increasingly tearing, take a closer look. Does he have a red eye with a cloudy blue tint to the surface and a dilated pupil? These could be signs of glaucoma that require immediate treatment to avoid significant or complete loss of vision. Because of the subtle nature of the symptoms, some cats don't have a veterinary examination until substantial damage has occurred.

The challenge for owners is early recognition of symptoms. "Sometimes the signs of



Burmese are prone to primary glaucoma.

glaucoma can be very vague, such as the cat sleeping more or acting a little head shy when you go to pet him on the top of the head," says ophthalmologist Kenneth Pierce, DVM, MS, ACVO, at Cornell University Veterinary Specialists in Stamford, Conn.

Like a Headache. Pain can cause a cat to be wary of petting. "I typically tell owners the pain associated with glaucoma is like having a constant headache," Dr. Pierce says. "You can still function, but your head

(continued on page 4)

'Living Fully to the Last Moment'

At-home hospice care is a commitment but can provide relief from symptoms and pain, and extra time together

Whether your cat is suffering from disease or the effects of extreme old age, a time may come when medical treatment can no longer help. In the past, that might have meant euthanizing your cat.

Today, however, veterinarians increasingly suggest hospice care as an option. Some clinics offer house calls with staff members providing hospice services, while in some cases owners decide to provide care at home under veterinary supervision.

Natural Process. "Hospice is a philosophy of care that accepts dying as a

natural process and embraces quality over quantity of life," says Katherine Goldberg, DVM, a lecturer on the topic at Cornell University College of Veterinary Medicine and founder of Whole Animal Veterinary Geriatrics & Hospice Services. "Hospice prioritizes living fully until the last moment of life."

Hospice focuses on pain and symptom relief, communication and help navigating the healthcare system, Dr. Goldberg says. "In both veterinary and human palliative medicine, we view the family as the unit of care, not solely the patient."

(continued on page 6)

CatWatch

EDITOR IN CHIEF

Bruce G. Kornreich, DVM, Ph.D.,
Dipl ACVIM

EDITOR

Betty Liddick

ART DIRECTOR

Mary Francis McGavie

ADVISORY BOARD

James A. Flanders, DVM, Dipl
ACVS, Associate Professor,
Clinical Sciences

Margaret C. McEntee, DVM,
Dipl ACVIM, DACVR,
Professor of Oncology

William H. Miller, Jr., VMD, Dipl
ACVD, Professor, Clinical Sciences

Pamela J. Perry, DVM, Ph.D.
Lecturer, Clinical Sciences,
ACVB Behavior Resident



Cornell University
College of
Veterinary Medicine

For information on your cat's health,
visit the Cornell University College of
Veterinary Medicine, Cornell Feline
Health Center website at
www.vet.cornell.edu/fhc/.



B
Belvoir

CatWatch® (ISSN: 1095-9092)
is published monthly
for \$39 per year by
Belvoir Media Group,
LLC, 535 Connecticut
Ave., Norwalk, CT 06854-
1713. Robert Englander,
Chairman and CEO; Timothy H. Cole,
Executive Vice President, Editorial
Director; Philip L. Penny, Chief
Operating Officer; Greg King, Executive
Vice President, Marketing Director; Ron
Goldberg, Chief Financial Officer; Tom
Canfield, Vice President, Circulation.
©2015 Belvoir Media Group, LLC.

Postmaster: Send address corrections
to CatWatch, P.O. Box 8535, Big Sandy,
TX 75755-8535.

For Customer Service
or Subscription information, visit
www.catwatchnewsletter.com/cs
or call toll free: 800-829-8893.

Express written permission is
required to reproduce, in any
manner, the contents of this issue,
either in full or in part. For more
information, write to Permissions,
CatWatch, 535 Connecticut Ave.,
Norwalk, Connecticut 06854-1713.

SHORT TAKES

Why They're 'Picky' Eaters: It May Be in Their Genes

Cats have long endured the reputation for being fussy eaters. We've known for a decade that, with some exceptions, most cats lack the taste receptor gene for sweets. Now a study suggests that they may have a legitimate reason for avoiding another flavor.

Researchers at AFB International, a pet food palatability company, and Integral Molecular, a biotechnology company, used cell-based experiments to compare two different bitter taste receptors in cats with human versions of the receptors. Their findings, reported in the journal *BMC Neuroscience*: Cats' taste receptors respond differently, sometimes less sensitively, to bitterness. They simply don't like it.

For instance, humans have the taste receptor TAS2R38 that causes a strong sensitivity to bitter compounds such as broccoli and Brussels sprouts. Compared with the human TAS2R38 receptor, the cat receptor was 10 times less sensitive to a key bitter compound called phenylthiocarbamide (PTC). A study reported in *Clinical Genetics* explains that the ability to taste PTC is "a classic inherited trait in humans," the subject of genetic and anthropological studies, which has been shown to correlate with dietary preferences.

The recent study of taste receptors is the first glimpse into how domestic cats perceive bitterness in food at a molecular level, says Joseph Rucker, Ph.D., at Integral Molecular.

Although cats are carnivores, one theory about the perception of bitter chemicals holds that it's evolutionary — it developed to avoid toxic compounds in plants. Today, pet cats may encounter bitter flavors in food and medicines.

Researchers hope their study will have an impact in both areas and other studies will follow. "We confront the challenge of 'finicky cats' every day," says study co-author Nancy Rawson at the pet food

flavor company. "It is exciting to find an unexpected receptor response to bitter compounds that has never been described in the literature for any other species. These insights and future discoveries will be invaluable in formulating appealing food for cats, as well as enhancing the acceptability of their medications."

Their Scratching Preference

If you've ever wondered why cats like to scratch certain objects — not the scratching tree but your custom-made silk curtains — John McGlone, Ph.D., has the answer. He's a professor of animal welfare and behavior in the



Cats continually apply their scent in scratching, which attracts other cats to the same object.

Department of Animal and Food Sciences at Texas Tech University College of Agricultural Sciences & Natural Resources.

Dr. McGlone and a team of researchers studied kittens' scratching various objects and theorized that cats may favor an object more because of pheromones — chemical scent signals — that were left from another cat. They presented their findings at a joint meeting of the American Dairy Science Association and American Society of Animal Science in Orlando.

The researchers used several types of scratchers — flat, rope and hemp — and made their own of cardboard, carpet and bubble wrap. Dried catnip applied to the scratchers didn't change the rate of scratching. We know when a cat grooms himself, he licks the hair all over the body, paws included, Dr. McGlone says. "We know a cat is continually applying scent, and cat hair is a much more potent stimulator of scratching than is catnip. That cat hair contains pheromones." ❖

The Pros and Cons of Holiday Costumes

They may spark our joyous laughter, but do our cats really enjoy wearing them?

Click on Facebook, Instagram, YouTube and other social media sites, and it won't take you long to find an orange tabby sporting a bowtie, a Scottish fold decked out in a flowery dress or an irritated Siamese attempting to paw off a tiny hat that flattens his ears and irritates his whiskers.

The pet fashion industry has escalated into a multi-million dollar business, with a whopping \$350 million spent annually for pet Halloween costumes alone, according to the National Retail Federation.

As more pet owners delight in dressing up their pets, including cats, for special occasions, family holiday photos and pet charity events, it begs the question: Why? And secondly, is it healthy or harmful to turn the family cat into a clothes hound?

"There are pros and cons in dressing up pets," says Allen Schoen, DVM, Ph.D., a pioneer in integrative animal

health care and author of *Kindred Spirits: How the Remarkable Bond Between Humans and Animals Can Change the Way We Live*. "Dressing up pets is an opportunity for some people to just be joyful, fun loving and it brings the child out in us. It can increase our laughter, which is all positive in supporting our overall health and immune system, but care must be taken to make sure that the pet also enjoys being dressed up."

Loud Meows. How can you tell if your cat welcomes accessories or prefers to stick with wearing a breakaway collar and identification tags? "Cats who do not like being dressed up will immediately try to take off the items in any way that they can," says Dr. Schoen, a graduate of Cornell University College of Veterinary Medicine. "They may meow loudly, hiss, flatten their ears and try to wiggle out of the outfits."

One important consideration is avoiding costumes that could flatten cats' whiskers. They use these tactile hairs to sense and navigate their environment. In addition to the whiskers on the sides of their nose and the back of their front legs, cats also have short whiskers above their eyes. That means foregoing decorative face masks, sunglasses and leggings.

In addition, forcing a cat to wear items against his will can sour your bond and possibly make it more challenging for him to receive veterinary care. "Some cats can become aggressive



A formal bow tie, at the left, shows that less is more for the holidays, while these zany oversized sunglasses could flatten whiskers, the sensors that help cats navigate.

or fearful of you handling them," says Dr. Schoen. "Some may go under a bed to hide from you. This insistence of putting clothes on them can make them more leery and fearful of being handled when they really need to be, such as when going to the veterinarian or receiving medication."

Accessories, Too. One thing is for certain: More owners are buying clothing and accessories for their cats and dogs. These days, pets are not just part of the family. They're major influencers in how some pet owners target their discretionary dollars, says Lauren Darr, founder of the International Association of Pet Fashion Professionals, based in New York City.

There is even a National Dress up Your Pet Day, the next one set for Jan. 14. Colleen Paige, a celebrity pet lifestyle expert and animal advocate, founded the event in 2009. It promotes pet adoption and continues to expand each year.

In Manhattan, the renowned Fashion Institute of Technology has added a pet fashion curriculum. Students can earn a certificate in pet fashion after completing three weeks of study

(continued on bottom of page 7)

WHAT YOU SHOULD KNOW

These are safety concerns in selecting holiday costumes, even for the cool cat who purrs with contentment while wearing one. Shop smartly and safely by:

- ◆ Avoiding items with buttons, ribbons, threads and other parts that could be swallowed and cause gastrointestinal blockages.
- ◆ Checking a costume's fit to make sure it doesn't limit breathing and movement.
- ◆ Scrutinizing the material to make sure it is not flammable.
- ◆ Making sure your cat's vision and mobility are not impeded.

GLAUCOMA... (continued from cover)

hurts. Some cats may show only some of the signs."

Nevertheless, glaucoma is a medical emergency. "Quick identification and presentation to the veterinarian or an ophthalmologist may save your cat's vision or eye," Dr. Pierce says.

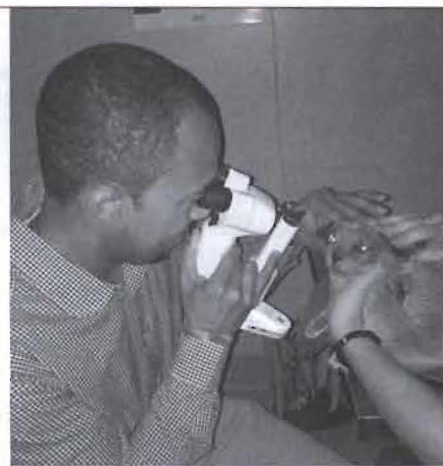
Glaucoma develops when a watery fluid called the aqueous humor in the front of the eye is unable to drain correctly. The fluid builds up within the eye and puts pressure on the retina and optic nerve leading from the eye to the brain. If the condition progresses without treatment, it is likely to result in permanent total blindness.

Glaucoma can be primary, resulting from a buildup of fluid, or secondary, occurring when other problems exist. Primary glaucoma in cats is less common and thought to be inherited. Burmese, Persian, Siamese and domestic shorthair cats are among the predisposed breeds.

Symptoms can begin early in life or may not be present until cats are middle-aged and older. A cat with primary glaucoma will inevitably develop the condition in both eyes, which is known as bilateral glaucoma.

Secondary, or acquired, glaucoma is estimated to represent 95 to 98 percent of glaucoma cases in cats. It can develop in one or both eyes, and isn't believed to be inherited. The most common cause is uveitis (inflammation of the uvea, a pigmented layer of cells in the eye), which tends to affect cats middle-aged and older. This severe eye inflammation causes changes within the eye that can result in blockage of the eye's internal drainage system. It can occur after an infection by disease such as the feline immunodeficiency virus, feline leukemia virus, feline infectious peritonitis and the protozoal disease toxoplasmosis.

Other causes of secondary glaucoma include cataracts, injuries, cancers



Ophthalmologist Kenneth Pierce, DVM, MS, uses a slit-lamp biomicroscope to microscopically examine the cat's eyes for abnormalities.

within the eye and slippage of the lens known as luxation.

Severe Inflammation. "Early warning signs are difficult to identify in cats with primary glaucoma," Dr. Pierce says. Luxation may cause severe eye inflammation, resulting in tearing or discharge from the eye, redness to the eye, and a constricted pupil.

Veterinarians begin a diagnosis by taking a medical history, including signs and possible injuries — even minor ones. They will use a tonometer to measure the pressure within the cat's eyes. "The tonometer is like a pen that measures the force required to indent a very small section of cornea," Dr. Pierce says. "Cats with glaucoma will have a higher force measurement representing the pressure within the eye." The cat is awake for the test, with the eye numbed by a topical anesthetic medication.

The next step may be a referral to an ophthalmologist for a more detailed examination. Specialty diagnostic tools include:

- ◆ **Gonioscopy** to help determine the remaining eye's predisposition to developing glaucoma when primary glaucoma is present in the other eye. The test, performed while the cat is awake, involves

ONE TELLTALE SIGN: A CHANGE IN BEHAVIOR

The symptoms of primary glaucoma, which results from improper drainage of fluid in the eye, include:

- ◆ Squinting or holding the eyes closed
- ◆ Recession of the eyeball into the head
- ◆ Redness of the blood vessels in the whites of eyes
- ◆ Cloudy appearance at front of the eye
- ◆ A dilated pupil or one that doesn't respond to light
- ◆ Vision loss
- ◆ Loss of appetite
- ◆ Change in attitude, less desire to play or interact
- ◆ Enlargement of the eyeball (in advanced cases)

Signs of secondary glaucoma, which develops because of an underlying problem in the eye, include the foregoing and these:

- ◆ Inflammatory debris visible in the front of the eye
- ◆ The iris sticking to the cornea or lens
- ◆ A constricted or misshaped pupil or iris



A cloudy appearance to the eye is a hallmark of glaucoma.

placing a special contact lens on the eye to examine the drainage angle.

◆ **Electroretinography** to test the extent of damage to the retina, the light-detecting portion of the eye. While the cat is under sedation or general anesthesia, an electrical sensor is placed on the eye to measure the electrical activity of the retina in response to a flash of light.

◆ **High-resolution ultrasonography** to identify abnormalities within the drainage system within the eye.

Cats with glaucoma typically are managed medically. The veterinarian

will prescribe multiple drugs to lower the pressure within the eye and return it to the normal range as quickly as possible to salvage vision. In cases where only one eye is affected, eye drops and pills that help decrease fluid production or increase fluid drainage from one or both eyes can help delay or halt glaucoma development in unaffected eyes.

For blind or painful eyes, the veterinarian might recommend complete removal of the eye. The empty socket can be permanently closed or filled with an orbital prosthetic for appearance's sake. If blindness develops, most cats adjust

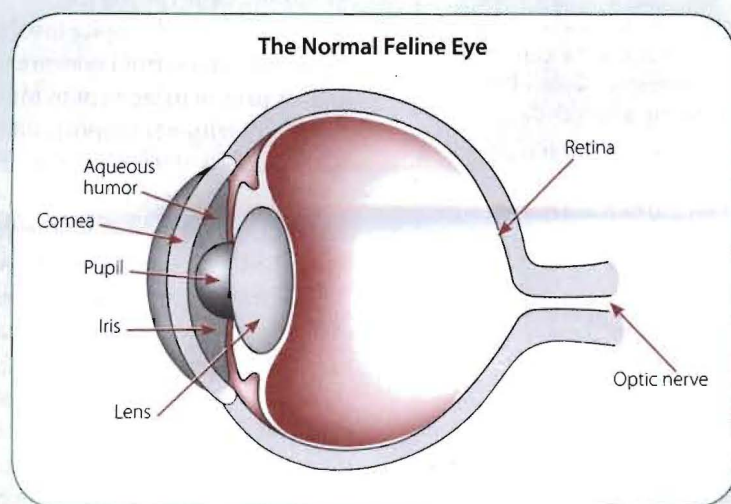
THE DISEASE MAY BE UNDER-REPORTED

Compared to dogs, in which glaucoma is more likely to strike suddenly and progress quickly, feline cases of glaucoma tend to progress gradually. Many cats mask their pain, and owners may not be aware of it. For these reasons, it's likely that glaucoma is under-diagnosed in cats and its true incidence is unknown.

According to data collected by the Veterinary Medical Databases, one in 367 cats seen at university teaching hospitals was diagnosed with glaucoma. One study found that one in 108 (.9 percent) of older cats who were screened had abnormally high intraocular pressures indicative of glaucoma. Another retrospective study found that 73 percent of cats diagnosed with glaucoma were blind at the time that they initially were examined by a veterinarian.

A GLOSSARY OF THE EYE'S ANATOMY

- ◆ **Cornea:** The transparent layer covering the eye.
- ◆ **Iris:** The colored part of the eye that helps regulate the amount of light entering the eye. When there is bright light, the iris closes the pupil to admit less light. When light is low, the iris opens the pupil to let in more light. Its anterior surface determines the eyes' color.
- ◆ **Lens:** The nearly transparent structure suspended behind the iris that focuses light on the retina.
- ◆ **Pupil:** The opening at the eye's center that admits light. It shrinks in bright light, enlarges in darkness.
- ◆ **Retina:** The innermost lining of the eye. It's sensitive to light and triggers nerve impulses that pass through the optic nerve to the brain.
- ◆ **Aqueous humor:** The fluid in front of the eye between the lens and cornea.
- ◆ **Optic nerve:** This nerve running from the back of the eye to the brain carries signals from the retina to the brain, which are interpreted as vision.



well, especially if they've been losing their vision over a period of time.

The costs associated a specialist's consultation and exam are usually slightly higher than at those with a primary veterinarian. Medication might cost \$100 to \$200 per month. "If surgery is required, fees vary based on the best surgery to make your animal comfortable and controlled long term, the surgeon (primary veterinarian vs. ophthalmologist), and the overall health status of your cat. The costs may be in the hundreds to thousand-dollar range," Dr. Pierce says.

When glaucoma is identified early and the veterinarian is able to manage the condition, regular examinations will be needed to monitor the pressure within the eye. There is a risk for cats with primary glaucoma to develop complications in their unaffected eye within eight months. ♦

HOSPICE... (continued from cover)

Hospice is an alternative to the isolation of staying in intensive care or remaining at home without treatment, according to the American Association of Feline Practitioners. Even if curative treatment is no longer possible or desirable, much can be done to help a cat live comfortably for a time. If you're considering hospice once it's clear that additional treatments are unlikely to change the course of your cat's health, you and his veterinarian can discuss whether hospice is a good choice.

Individualized care may mean being able to spend more time with your cat, but it represents a big commitment. All family members should agree on it and understand how it works. Issues to discuss with the veterinarian include expenses, logistics of travel to and from treatment centers, home care techniques and training, and religious considerations.



Ramps or steps can provide easier access to furniture for cats with limited mobility.

Pet Classics

HOW TO RATE QUALITY OF LIFE IN YOUR DECISION

Assessing your cat's quality of life can help determine if hospice care is the right choice for him. This questionnaire may help. Score each question from 0 to 10. A total score of 35 or higher suggests good quality of life, while a lower score may indicate the need to make changes to improve your cat's condition.

SCORE	QUESTIONS
_____	Can medication or oxygen therapy help manage my cat's discomfort? The most severe type of discomfort involves difficulty breathing. Your cat's veterinarian can show you how to monitor your cat's respiration and comfort level and identify labored breathing. Or you may be able to provide your pet with oxygen therapy at home.
_____	Does my cat have a good appetite? The veterinarian may be able to prescribe an appetite stimulant or insert a feeding tube. Cats can accept and do well with esophageal feeding tubes. Some respond well to hand feeding or food that has been warmed to increase its aroma. Sometimes scratching a cat's head and neck can encourage him to eat.
_____	Does my cat drink enough water? A dehydrated cat may feel sick. Access to a fountain can encourage him to drink more water.
_____	Is my cat able to groom himself? Cats may groom themselves less often if they don't feel well. Certain diseases such as oral cancers can make it painful or difficult for cats to groom themselves. Gently brush or comb your cat regularly and provide other cleaning as needed.
_____	Is my cat happy? Does he still greet you and enjoy petting and other interactions? If your cat seems depressed, anxious or isolated, try to make changes in his environment, such as keeping him in a quieter area if he doesn't like noise or moving him to a place where he can enjoy being with the family if he's the social type.
_____	Can my cat get around easily? You may be able to assist him with ramps or steps to furniture or the litter box.
_____	Does my cat have more good days than bad? If he starts to have three or four bad days in a row, discuss with his veterinarian if euthanasia would perhaps be the best way to end his suffering.
_____	♦ TOTAL

Ask if the veterinary clinic has a dedicated hospice team to provide support for you and your cat. Team members can educate you on recognizing and evaluating pain levels and advancing stages of organ failure. After your cat's death, they can help provide emotional support.

Dr. Goldberg also recommends a frank discussion with the veterinarian about your goals, fears and expectations. What tradeoffs are you willing to make? Make sure you understand your cat's condition and its progression. Quality of life is the most important factor in caring for a terminally ill cat. It's a measure of how your cat is faring physically, mentally and socially.

"The philosophy of maintaining quality of life at the end of life honors the human-animal bond," says Alice Villalobos, DVM, who is considered the godmother of hospice for pets, which she calls "pawspice."

The specifics of hospice involve a variety of techniques, from noncurative care such as pain management to infection control, nutritional support, subcutaneous fluids for kidney failure, noncurative surgical procedures and hands-on attention for the cat throughout the day, not only when he's receiving medication.

If remission is unlikely in the case of a cat with cancer, the veterinarian may recommend metronomic chemotherapy. It provides chemotherapy drugs in fractionated doses — a continuous, low-dose chemotherapy. The side effects are reduced and may lead to greater survival time.

KEEPING 15-YEAR-OLD CHELSEA PAIN FREE AROUND THE CLOCK

When Eileen Marek of Sherman Oaks, Calif., was referred to a specialist after her 15-year-old cat Chelsea was diagnosed with bone cancer of the jaw, she expected the worst. "I was thinking I would have two choices," she says, "surgery or put her to sleep. I was pretty stressed going into that appointment."

Marek did discuss surgery with Alice Villalobos, DVM, and at Chelsea's advanced age, they decided it was probably not a good option. An operation and recovery would be difficult, and they had no guarantee that Chelsea would respond well.

Then Dr. Villalobos told Marek about "pawspice," or hospice care. They could keep the gentle tabby comfortable and pain-free for what was expected to be another month or two. Dr. Villalobos made a graph showing Marek the highs and lows Chelsea would experience and discussed the quality of life scale she had developed. The graph helped Marek know what to expect, how to evaluate her emotions and ensure Chelsea's well-being.

"I monitored Chelsea by that scale every day," Marek says. She administered fluids twice daily and pain medication three times a day. Fearful at first that she wouldn't be able to perform the procedures, Marek says she found them surprisingly easy to do with training.

"The most difficult part was arranging my work schedule so that Chelsea would get her shot every eight hours. I was lucky that I had flexibility. Staying up or waking up at 1 a.m. was hard sometimes, but getting into the new round-the-clock rhythm of her care schedule became natural very quickly."

Remarkably, Chelsea lived almost a full year after her diagnosis.



Chelsea was given only months to live after her diagnosis of bone cancer of the jaw but lived almost a year with at-home hospice care.

Owner and veterinarian must find the best drugs to relieve pain and methods of delivery acceptable both to you and your cat. Multiple types of pain relievers are available and some can be used together to reduce pain to a manageable level.

Work with the veterinarian to develop a treatment plan. Have a conversation about the easiest ways for you to medicate your cat — pills, injections or liquids — as well as your work schedule and any physical limitations. For instance, people with arthritis may have difficulty opening pill bottles or manipulating small syringes.

Discuss areas where you're willing to compromise. Are you willing to give pills twice daily to your cat but unwilling to give injections? What is your cat's level of acceptance of various treatments and interventions?

Symptom management is necessary even when the causes aren't evident, for instance in cases when a pet is nauseated and an antacid or anti-nausea medication may help, Dr. Goldberg says. "Sometimes, in the absence of a diagnosis, we need to trial-treat judiciously and see if there is a clinical response. This requires excellent communication and follow-up."

There is no right or wrong decision about hospice. It's not for everyone, and that's all right. But if you choose it, you may be rewarded with additional time with your special cat and he could have a peaceful, pain-free end of life. ♦

SAFETY

COSTUMES... (continued from page 3)

that includes pattern-making and pet fashion design. "From bulldogs to American bobtails, pets are strutting designer stuff and owners are vying for best-dressed awards for their four-legged family members," the course description says, adding that ease of dressing and safety tips are considered in relation to T-shirts, winter coats and couture ensembles.

"Pet apparel is moving from being simply cute to being highly functional. It's all about unique fabrics — light and breathable, cooling or warming," says Dana Humphrey, owner of a public relations agency specializing in the pet industry whose clients include the institute.

Whether you and your cat mutually agree to turn him into a fashionista, respect that your cat is not a human

child, cautions Dr. Schoen. "There is a potential issue of becoming anthropomorphic to an extreme by treating them too much like children and possibly forgetting that they are unique animal beings with unique personalities and health issues," he says.

Dr. Schoen doesn't put clothing on his personal pets. "I do not feel a need to do so," he says. "I enjoy and love them just as they are." ♦



Elizabeth

Elizabeth is thankful for the assistance of **Bruce G. Kornreich, DVM, Ph.D., DACVIM**, Associate Director of the Cornell Feline Health Center, in providing the answer on this page.

PLEASE SHARE YOUR QUESTIONS

We welcome questions on health, medicine and behavior, but regret that we cannot comment on prior diagnoses and specific products. Please write CatWatch Editor, 535 Connecticut Ave., Norwalk, CT 06854-1713 or email catwatcheditor@cornell.edu.

COMING UP ...

❖
**MEDICAL
EMERGENCIES**

❖
**TREAT
CALORIES**

❖
**COUNTER
SURFING**

❖
**TEETH
CLEANING**

The Causes of Lameness Range From Sprains to Osteoarthritis

Q I have a domestic female kitty who turned 14 this month. I noticed several months ago that she began to walk with a slight limp in one of her hind legs. Some days are better than others, and she has become a bit quieter than in the past. Can you provide some advice?

A Thank you for contacting us about your kitty's problem. Although it is difficult to pinpoint the problem from a distance, perhaps a few points would be helpful. Of course, the most important thing for you to do is to take her to her veterinarian for an examination as the first step in diagnosing and treating her appropriately.

Lameness in cats can result from a number of problems, most commonly affecting the musculoskeletal system. This system is comprised of muscles, bones, ligaments (which connect bones to bones) and tendons (which connect muscles to bones) articulated at joints. Injuries to any of these components of the musculoskeletal system can cause lameness.

A sprain is an injury to ligaments around a joint resulting from stretching or tearing secondary to acute trauma. Treatment usually involves the use of icepacks and anti-inflammatory medications to decrease swelling and rest, with gradual return to normal usage. It is important to note that anti-inflammatory medications should never be given without consultation with a veterinarian, as some of these medications (i.e., acetaminophen) are toxic to cats.

Ligaments can be partially torn or completely severed (ruptured) by sudden twisting/bending injuries to the joints. The most common ligament rupture in cats is of one or both of the cruciate ligaments in the knee. These ligaments stabilize the femur (thigh bone) and the tibia (shin bone) in their articulation, and rupture of these ligaments may result in instability of the knee, causing inflammation and lameness. The treatment of choice in cruciate ligament rupture is usually

surgical repair, although injuries characterized by incomplete rupture may respond to more conservative therapy such as reduction of inflammation and rest.

Injuries to tendons can range from their being overstretched and partially torn to completely ruptured by sudden wrenching or twisting. Overstretched tendons are most commonly treated in a similar manner as ligament injuries. Torn and/or ruptured tendons may require surgery to repair them, depending upon the extent of the injury. It is important to consult with a veterinarian to determine the best treatment plan in the event of these more serious tendon injuries.

Bruises of muscles due to blunt trauma, overexertion or overstretching can also cause lameness and tenderness of affected muscles, and these types of injuries are most commonly treated with rest, cold packing, massage and, in some cases, physical therapy.

Another cause of lameness in cats that is being increasingly recognized is osteoarthritis (OA), a degenerative disorder that can result from age-related degeneration, injury, congenital joint abnormalities or other processes such as infectious diseases, cancer or autoimmune disease. In a recent study, 50 to 90 percent of geriatric cats showed evidence of OA. Treatment usually involves addressing the primary disease when possible while taking measures (i.e., cold packs and medication) to decrease associated inflammation.

Sometimes lameness may not be due to diseases of the musculoskeletal system at all, but may result from damage to nerves or to the formation of blood clots. These conditions often require prompt attention, and your cat's veterinarian can provide guidance on the best treatment.

It's important to note that massage and physical therapy may be of benefit to many cats with lameness, and I recommend that you discuss these options with the veterinarian.

I hope this is helpful. Please send our best to her, and keep in touch regarding her progress.

—Best regards, Elizabeth ❖

CORRESPONDENCE

The Editor
CatWatch*
535 Connecticut Ave.
Norwalk, CT 06854-1713
catwatcheditor@cornell.edu

SUBSCRIPTIONS

\$39 per year (U.S.) • \$49 per year (Canada)
For subscription and customer service information, visit www.catwatchnewsletter.com/cs or write to: CatWatch, P.O. Box 8535, Big Sandy, TX 75755-8535.
CALL TOLL FREE: 800-829-8893