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

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Stroking anxious shelter cats can ease their stress and increase immunity.

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Should Their Cat Drink Milk?
They may love it, but it offers few benefits and some potential harm.

IN THE NEWS . . . Raising Awareness About Obesity's Risks and Solutions

Despite the potential consequences of obesity, up to 59 percent of cats are overweight, according to the American Animal Hospital Association. It lists some of the effects in "Weight Management Guidelines for Dogs and Cats," published in the Journal of the AAHA: chronic inflammation caused by fat tissue releasing hormones and proteins called cytokines, skin and respiratory disorders, renal dysfunction, diabetes and orthopedic disease.

The association acknowledges that weight management is a challenge, made more difficult because it must be individualized and lifelong. The guidelines offer practical advice, such as solutions for cats' night-time vocalizing for food: Set automatic feeders for night. Provide toys with hidden food.

Aging is a significant factor in obesity, affecting metabolism and activity level, the guidelines say, adding that adult cats "may benefit from increased vigilance and perhaps a diet change to a less calorie-dense food."

Pursuing Drugs for Mammary Cancer

Cornell researchers identify an inhibitor that seems to kill cancer cells while leaving healthy cells unaffected

Researchers studying feline mammary cancer at Cornell University College of Veterinary Medicine have set an ambitious agenda. They hope that their ongoing work will lead to better diagnosis, treatment and prevention of breast tumors in cats and humans. Much of their interest lies in how a novel class of drugs affects breast cell tumors.

In a study funded by the Cornell Feline Health Center, Assistant Professor Gerlinde Van de Walle, DVM, Ph.D., and Associate Professor Scott Coonrod, Ph.D., both working at the



Siamese have twice the risk of mammary cancer as other breeds.

Baker Institute for Animal Health, have identified a promising chemical, BB-Cl-amidine, that seems to kill off feline mammary cancer cells while leaving healthy cells unaffected.

Malignant Tumors. The chemical inhibits certain enzymes, called peptidylarginine deiminase (PAD), which tend to be over expressed (increased) in feline mammary tumors. The majority of these tumors are malignant, and they're the most frequently diagnosed cancer in female cats greater than 10 years of age. The cancer can

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So You Want to Add One More Cat?

Consider expense, time and the real determinant: the impact on your household's current pet population

If you're debating whether to bring home a new cat, you may stop and wonder: Do I dare add one more? We love animals, but the point comes when we should stop adding them to our households and hearts, whether due to our current pet population, expense, time involved in caring for multiple pets or this basic point about feline nature:

"Cats are mostly happy as only cats," says animal behaviorist Katherine A. Houpt, VMD, Ph.D., emeritus professor at Cornell University College of Veterinary Medicine.

It may seem that a second cat could provide companionship for your lone feline or

that a new kitten could enliven an old cat, but Dr. Houpt cautions, "If you have a cat, there are lots of things you can do to improve the quality of his life — but getting another cat is not one of them."

Her Reason: If you look at natural feral cat populations, it's the mothers and their daughters who live more or less in harmony. They drive away anyone else. Females usually don't have friendly relationships with non-siblings. They will fight. So if you dearly want more than one cat, Dr. Houpt suggests getting littermates. Most likely they'll get along until

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Cat Watch

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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/.



CatWatch* (ISSN: 1095-9092) is published monthly for 539 per year by Belvoir Media Group, LLC, 535 Connecticut Ave., Norwalk, CT 06854-1713. Robert Englander,

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

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SHORT TAKES

Tail Vaccinations Can Save Lives, a Study Says

Vaccinations administered at the tip of cats' tails seem to be as effective as those given at traditional sites, according to a University of Florida study. What's more, researchers say, it can save lives.

More owners would be encouraged to treat cats' injection-site sarcomas when they occur because surgical intervention would be easier and less invasive, researchers say.

Veterinarians usually vaccinate cats below the elbow or knee joint in the leg. If cancer develops in those areas, it can force owners into making difficult decisions about subjecting their pet to surgery or amputation of a limb, says researcher Julie Levy, DVM, Ph.D., Maddie's Professor of Shelter Medicine at the UF College of Veterinary Medicine.

"Many owners elect not to pursue the most effective treatment — radical surgical excision of the tumor — because excision of tumors in the limbs and torso is often disfiguring, painful and expensive," Dr. Levy says.

No definitive cause for this relatively rare cancer, which affects between 1 and 10 cats of every 10,000 cats vaccinated, has been identified.

UF researchers surveyed oncologists about preferred injection sites, considering the surgical treatment of sarcomas. The tail was a favored site, and the team studied 60 cats in a UF trap-neuter-return program. Results show that the cats accepted tail vaccinations, and they effectively provided immunity.

Dr. Levy and national experts in infectious disease and vaccinology collaborated on the study, published in the *Journal of Feline Medicine and Surgery*. Among them was Edward Dubovi, Ph.D., Director of the Virology Laboratory at Cornell's Animal Health Diagnostic Center, who tested serum samples collected for feline parvovirus antibodies.

Cheryl Balkman, DVM, ACVIM, Chief of Oncology at Cornell, says tail vaccinations are a great idea that owners should discuss with their cat's veterinarian. "The key is to vaccinate toward the tip of the tail and not the base where it meets the body because, if a cancer

develops near the tip, the cancer can be completely removed with surgery. If a cancer develops at the base of the tail close to the body, complete removal may not be possible."



Researchers found that gentling, the process of stroking and vocalizing, increased immunity in shelter cats.

The Power of Touch

The benefits of gentling — the use of stroking and vocalization — have been documented in several species, but studies on cats have emerged only recently. The latest is from the University of Queensland, Australia, funded by the Morris Animal Foundation and published by Elsevier.

"Emotional stress can compromise the health of cats in shelters, leading to immune suppression and upper respiratory infections (URIs)," the foundation says, adding that URI is a common cause for euthanasia in shelter cats.

Queensland researchers identified 139 cats as anxious when admitted to a shelter and divided them into a control group and a group to receive gentling. The second group was stroked on the head and neck for 10 minutes four times a day for 10 days. The results: Gentled cats were less likely to be anxious. They also had increased levels of secretory immunoglobulin A (S-IgA), which plays a vital role in immunity. In other species, emotional stress has been shown to inhibit S-IgA production.

Cats in the control group were more than two times more likely to develop URI, while gentled cats had lower rates. A number of hostile and aggressive cats responded so well to gentling that they were adopted in less than a week.

How to Handle a Fainting Episode

An immediate veterinary visit is a must to uncover the underlying cause of the loss of consciousness

One minute your cat seems fine. The next he's passed out on the floor. What should you do? Fainting, or clinically speaking, syncope, is the temporary loss of consciousness followed by a spontaneous rapid recovery.

"Rather than an illness in itself, fainting is a symptom of illness caused by a lack of sufficient flow of oxygenated blood to the brain," says cardiologist Bruce Kornreich, DVM, Ph.D., ACVIM, Associate Director of the Feline Health Center at Cornell. His advice during an episode: "Carefully monitor your cat, never put your hand in his mouth, and contact a veterinarian immediately."

Syncope (SING-kuh-pee) can occur in cats of any breed and age, although it is a rare symptom of disease in them. Be aware, however, that certain breeds, such as Maine Coons and Ragdolls, are more prone to hypertrophic cardiomyopathy (HCM), a heart disease which may cause fainting or, more commonly, symptoms that can resemble fainting. HCM is the most common heart disease in cats.

Blocked Blood Flow. "Cats with HCM tend to have problems with blood clot formation and may experience blockage of blood flow to different parts of the body, most commonly the hind limbs," Dr. Kornreich says. "Cats who experience such blockage often demonstrate acute paralysis of the hind limbs, which may cause them to stumble, fall or drag their hind limbs. This syndrome may be confused with fainting. Cats with HCM may also be more prone to cardiac arrhythmias."

In general, cats with cardiac or central nervous system diseases — both more common in older pets — are more likely to experience syncope. Among other causes:

- Cardic arrhythmia, or irregular heartbeat.
- Cardiomyopathy (HCM) and other diseases of the heart muscle, resulting

- in insufficient pressure to pump blood to the brain.
- Neurologic problems such as epileptic seizures.
- A drop in blood pressure due to certain heart medications, such as beta blockers, ACE inhibitors and calcium channel blockers, which are also used to treat a variety of other conditions.
- Low blood sugar (hypoglycemia), sometimes seen in kittens who lack adequate nutrition and fat reserves.
- System-wide infections.
- Liver disease.
- A malfunction of the parasympathetic nervous system (a branch of the autonomic nervous system), causing a drop in blood pressure, heart rate and blood flow to the brain. Excitement, stress and pain can be triggers.

If your cat has a fainting spell of any sort, make a note of the time, its length, any precipitating event and other symptoms. If possible, take a video of the episode.

Because the underlying condition may be chronic, progressive or even life threatening, diagnosis is essential, Dr. Kornreich says. "Your cat's veterinarian will review your cat's health history and perform a thorough physical examination. Baseline blood work, including an evaluation of serum biochemistry and glucose levels, will also often be recommended."

Low blood glucose (hypoglycemia) may be a cause of fainting, particularly in kittens. If brain disease is suspected, your veterinarian might recommend a CAT scan or MRI imaging to evaluate the brain structure. A sample of cerebrospinal fluid (the fluid that bathes the brain and spinal cord) may also be obtained to rule out inflammation and/or infection in the central nervous system. Because arrhythmias may be a cause of fainting, the veterinarian may recommend a device called a Holter monitor that your cat wears at home to obtain a

24-hour electrocardiogram. This monitor checks the heart's electrical function.

"Veterinary researchers are currently looking into what causes both seizures and arrhythmias, and the best means to treat them," says Dr. Kornreich. "Inappropriately rapid heart



Certain breeds, such as Ragdolls, are prone to hypertrophic cardiomyopathy, a heart disease with symptoms that can resemble fainting.

rates can be treated with drugs, while inappropriately slow heart rates — although uncommon in cats — can be corrected with pacemakers. Central nervous system disease and idiopathic [of unknown cause] epilepsy often can be controlled with one or several anti-seizure medications. If a tumor is detected, surgery to remove it may help, depending upon its location."

Alternative Medications. If the side effects of medication are responsible for the fainting episodes, your cat's veterinarian may stop those them and prescribe alternatives. While the prognosis for fainting because of heart disease is often guarded, the prognosis for other cats may be more favorable.

Fainting in cats is usually not the result of owner negligence, but you can take steps to avoid it, Dr. Kornreich says. "Schedule regular wellness checks with your cat's veterinarian, and closely monitor drugs that could cause blood pressure to drop."

To avoid stressing your cat's heart, restrict his activity and keep him as quiet as possible until you and his veterinarian determine the cause, Dr. Kornreich says. "And even if your cat has fainted only one time — and even though it might never happen again — he should be checked out by a veterinarian."

MAMMARY... (continued from cover)

also develop in younger cats and, in rare cases, male cats.

"If you can identify certain enzymes that are over- or under-expressed in tumors, those can be targets for the development of both diagnostics and treatments," Dr. Van de Walle says. "These studies are all still in vitro (occurring in a laboratory setting), but the effects of the PAD inhibitors seem consistent and definitely have potential."

Drs. Van de Walle and Coonrod have also undertaken related studies, funded by the Morris Animal Foundation, in which they are investigating a different enzyme, spleen tyrosine kinase (SYK), and its role in feline and human breast cancer. They found that the SYK gene is turned off in mammary cancer cells from cats as well as humans. If researchers can uncover why and how the gene is suppressed, they could devise a way to turn it back on.

In this regard, Dr. Van de Walle evaluated the drug 5-Azacytidine, marketed under the name Vidaza and already used in the treatment of certain human cancers. It could successfully increase the expression of SYK in both feline and human mammary cancer cells, at least under laboratory conditions.

These studies and others across North America (see sidebar on Page 7) seek to better understand the underlying



An evaluation of Vidaza at Cornell showed that the drug can increase the expression of the SYK gene, which is turned off in human and feline mammary cancer cells, at least in the laboratory. Researchers want to know why the gene is suppressed and devise a way to turn it on.



Gerlinde Van de Walle, DVM, Ph.D., here with Scott Coonrod, Ph.D., examines stainings on mammary tissues to evaluate the effect of enzymes in their cancer research.

causes and indicators of breast cancer to apply the knowledge from one species to another. Such cross-species comparisons are possible because breast cancer occurs naturally in cats and is similar in some ways to the disease in humans.

An estimated 30 to 40 percent of cats are afflicted with cancer in their lifetimes, and nearly one-third of these cases involve malignancies in the mammary glands. More than 85 percent of feline mammary tumors are malignant. They're very aggressive, easily spreading to surrounding tissue, lymph nodes and lungs.

Mammary gland tumors are a diverse group of tumors with a wide range of biologic behaviors, says Cheryl Balkman, DVM, ACVIM, senior lecturer and Chief of Oncology at Cornell University College of Veterinary Medicine. That makes their diagnosis and treatment all the more challenging. "Researchers continue to work on classifying these tumors to better predict their behavior in the patient by investigating molecular profiles and receptor expression of these tumors, as is done in people," she says. "But as of yet, there isn't a commercial test available, and work continues."

Better Prognosis. Like breast tumors in humans, feline mammary tumors start as small lumps beneath or next to a

cat's nipple. "The most important thing for owners to know is that pets have a better prognosis when the tumors are small — under two centimeters [less than an inch] in cats," Dr. Balkman says. "It is important to for owners to take their pets to a veterinarian if they notice any lumps in the region of the mammary glands. It's also important to have a veterinarian examine their pet every six to 12 months as they get older."

Owners can play a valuable role in early detection of mammary tumors by routinely screening for lumps on their pets' undersides, particularly around the nipples. In some cases, cats might excessively lick or groom small mammary tumors, which can become infected and begin to emit a strong odor.

Often, cats with small tumors show no other symptoms of disease, but as the tumor grows and the malignancy spreads, general signs of poor health, like weight loss or lethargy, will become evident.

The underlying causes of feline mammary gland cancer are unknown.

No External Links. While researchers like Drs. Van de Walle and Coonrod continue to try to better understand the genetic abnormalities that lead to various forms of cancer, no clear link has been established between known external

cancer-causing agents — like environmental carcinogens and sunlight exposure — and mammary cancer in cats.

Breed, however, does seem to play a role. For unknown reasons, Siamese cats have twice the risk of mammary cancer as other breeds and tend to develop the disease earlier in life.

Hormones also seem to be a significant factor. Dr. Balkman notes that it is very rare for mammary gland tumors to develop in cats who have been spayed early in life, such as before the first heat cycle, which usually occurs around 6 months of age. "This is one of the best ways to prevent these tumors from developing," she says. In fact, one study found that spaying a cat before 6 months of age reduced the risk of mammary cancer by 91 percent. Spay-

ing before 1 year of age resulted in an 86 percent reduction.

When a small lump is identified, veterinarians typically use a fine-needle aspirate to determine if the mass is a mammary tumor. If cancer is suspected or confirmed, they might also perform a fine-needle aspirate of nearby lymph nodes to determine if the mass has spread. Because such tumors can spread to the lungs or other organs, chest X-rays are often taken to check for that possibility. Blood work might also be recommended as a health screen before anesthesia for surgery.

Treatment will depend on the size of the tumor, the extent to which it has spread and the cat's overall health. If the tumor is confined to the mammary glands, a veterinarian will likely recom-



A veterinary appointment is warranted if you notice lumps near your cat's mammary glands. An examination is also important every six to 12 months as a cat ages.

mend removal of the tumor or even the entire breast (mastectomy).

"Because mammary tumors in cats are highly aggressive and have a high risk of metastasis, treatment with chemotherapy is often discussed to try to slow down the spread of the cancer," Dr. Balkman says. "However, further studies are needed to determine the appropriate chemotherapy that can provide a strong survival advantage, as currently this data is limited."

The expense of diagnosis and treatment related to mammary tumors varies with each patient. Evaluation typically costs \$200 to \$600, and the cost of surgery, depending on how extensive it needs to be to completely remove the tumor, ranges from \$1,500 to \$3,000 at Cornell.

As in humans, the prognosis for cats treated for mammary gland cancer depends heavily on how soon the disease is caught. The outlook is guarded for cats with large tumors with a high degree of malignancy, especially if the cancer has spread.

However, if treatment begins early, cats have a much better survival, which can range from one to four-and-a half years if the tumor is smaller than two centimeters in diameter. As research continues at Cornell and other institutions, new advanced diagnostics and treatments could be on the horizon to improve the outlook even further.

YOU CAN HELP WITH RESEARCH

To further her research into feline mammary cancer, Gerlinde Van de Walle, DVM, Ph.D., an Assistant Professor at the Baker Institute for Animal Health at Cornell, is seeking tissue samples from cats diagnosed with mammary cancer, as well as healthy mammary gland tissue from cats who died of other causes. Learn more at the Cornell Feline Health Center website:

www.vet.cornell.edu/fhc/health_discovery/citizenscience.cfm

OTHER CANCER STUDIES UNDERWAY IN NORTH AMERICA

In addition to ongoing research into feline mammary tumors at Cornell, researchers across North America are evaluating potential diagnostic and treatment options for cats with the disease. Ongoing studies include:

- Researchers at University of Guelph's Ontario Veterinary College and McMaster University's Immunology Research Centre launched a clinical trial last fall to test the effectiveness of new vaccines in treating mammary gland cancer in cats. The vaccines, designed to stimulate a cat's immune system and kill tumor cells without harming healthy tissue, could be a groundbreaking step in treatment.
- Researchers at the University of Pennsylvania School of Veterinary Medicine are testing two human cancer drugs on cats with mammary cancer in hopes that they might decrease rates of tumor recurrence and metastasis, and increase survival time.
- A researcher at the North Carolina State University College of Veterinary Medicine is seeking to categorize the subtypes of feline mammary tumors based on abnormalities in their DNA in hopes of better predicting how tumors are likely to progress.

ONE MORE? ... (continued from cover)

they're 18 months old, and then they may begin to fight. Of course, occasionally unrelated cats can get along.

How many cats are too many? It's impossible to a name specific number

because of all the variables, but there is this expert advice: "If one cat is hiding, fighting or urinating outside the litter box, there are too many cats," Dr. Houpt says. "More than two is often too many." The average cat-owning household has 2.1 cats.

Here's a typical scenario that Dr. Houpt sees: An owner has one cat who purrs when they're alone together, but when company arrives, the pet vanishes



"If one cat hides, fights or urinates outside the litter box, there are too many cats," says behaviorist Katherine A. Houpt, VMD, Ph.D., at Cornell. "More than two is often too many."

under a bed. Instead of working with him to become more social, the owner takes in a second cat. This cat is bold and smart, but he also beats up on the original cat.

You have several ways to deal with such problems. You can increase vertical space in the home, for example, by setting up several cat trees for easy escapes. Or keep the tops of bookcases clear so that a cat can move along on a trail up high.

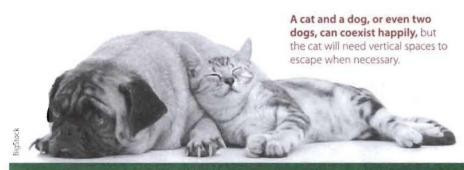
Some cats divide up territory among themselves. At the extreme, however, your current cat might urinate in the house if he's upset about a newcomer.

Evaluate Personalities. The first step when considering adding a pet is to evaluate the ones you have now. How social or shy are they? Sometimes you don't know until you try to bring another animal home.

The next step is to consider your lifestyle: The more animals you have, the more time you'll need to tend to and play with them, says Holly Putnam, DVM, program clinician in Maddie's Shelter Medicine Program at Cornell. How much free time do you have? How long are you away from home each day?

While owners may want to rely on pets entertaining each other, that isn't a substitute. In Dr. Putnam's household, which she shares with four cats and a dog, "None of my cats will lie together or groom each other. They tolerate each other." Mickey, her sensitive 12-year-old domestic shorthair, doesn't get along with the other cats and will spray urine around the house when he's upset. Dr. Putnam has concluded that she won't add more cats to her home to avoid upsetting Mickey further.

Cost is another factor when weighing whether to take in another cat who may live up to 20 years. By one estimate, it costs more than \$1,200 a year to care for at least one cat. (See sidebar on Page 7). The ASPCA estimates the



DOING THE MATH: 1 CAT + 2 DOGS = HARMONY

When it comes to household harmony, animal behaviorist Katherine A. Houpt, VMD, Ph.D., emeritus professor at Cornell, offers these rules of thumb: One cat per household works best.

Beyond that, she says that one cat and a dog or two dogs in a household can live together harmoniously, but you need to provide vertical space for the cat to escape the dogs as needed. Often a kitten gets along happily with dogs, and some cats and dogs do, too. But there are exceptions. Dr. Houpt knows of a dog who didn't leave the bedroom out of fear of the cat, for example. Far more common, though, are cats living upstairs out of fear of encountering the household dog.

An adult cat living with a new puppy is a potentially bad situation, says Dr. Houpt. She has a puppy and a Lynx Point Ragdoll cat named Hadley Who Behaves Badly, a former client's cat she couldn't cure. Hadley is aggressive — you can't go near one corner of the guest room's bed because apparently she believes it is her corner. To encourage harmony among her pets and practice good manners between them, one thing Dr. Houpt does is hold salami sessions. As the cat and puppy sit nearby, she gives both small treats of cotto salami.

ANNUAL EXPENSES TOP \$1,200 FOR STARTERS

According to the 2013-2014 American Pet Products Association's National Pet Owners Survey, basic annual expenses for cat owners include:

Surgical Vet Visits \$382 Routine Vet...... \$193

Food......\$203

Food Treats.....\$36

Kennel Boarding \$337 Vitamins.....\$77

Groomer/Grooming Aids ...\$20

Toys.....\$23

*Note: These expenses aren't all inclusive. For example, they don't include litter or pet health insurance.

minimum cost is \$1,035 for the first year and around \$670 yearly thereafter, though its figures don't include kennel boarding or surgical veterinary visits.

"You shouldn't expect to pay less than this," according to ASPCA.org,

"and you should definitely be prepared to pay more." Dr. Putnam notes that healthcare costs



can rise in a pet's senior years, when, for example, periodontal problems can require expensive treatment.

Of course, all these factors are moot if you want a third cat and your apartment building, condo board or other housing situation forbids more than one or two pets. Knowing this, animal shelters commonly call landlords to check rules before signing off on an adoption for renters, Dr. Putnam says.

In the end, no matter how much you plan, chances are that life circumstances could dictate additional pets, thanks to blending two households through marriage, inheritance of Mom's two cats or a stray no one seems to want. If it turns out that you need help bringing harmony among your pets, know that you're not alone and seek advice from your pets' veterinarian.

> Multiple cats can be a challenge, but often, as in the case of adoptions, you'll enrich their lives, and they can do the same for you. .

STUDIES SUGGEST BOTH BIOLOGY AND MENTAL HEALTH FIGURE IN HOARDING

on cat toys,

according to

a national survey.

You want a fifth or 10th cat, so does that make you an animal hoarder? Actually, hoarding is not related to the absolute number of animals, despite the common perception, says Randall Lockwood, Ph.D., the ASPCA's senior vice president of forensic sciences and anticruelty projects. Someone with 50 animals may provide perfectly adequate daily care and veterinary care. Theirs is not an animal cruelty case.

Hoarding cases emerge in the news because of neglect and animal cruelty. Recent studies on animal hoarding in other countries indicate that it's found in many cultures, suggesting a potentially strong biological component and at least partly a mental health issue. "Hoarding does seem to run in families," Dr. Lockwood says.

The current thinking is that hoarding is a complex issue, perhaps related to obsessive-compulsive disorder, though hoarders don't have impulses to, say, touch a doorknob eight times and they're not willing to change. Animal hoarders see themselves as rescuers, Dr. Lockwood says. "However, they will be in complete denial of their inability to provide minimal care for these animals, and meanwhile it is clear that the animals are suffering."

Animal hoarders also seem to process some perceptual information differently from the general public. They don't see that their animals are in poor condition or even dead, "even though these are people who are otherwise functioning at a high level," Dr. Lockwood says. Doctors, lawyers, teachers and people of all types have been found to be animal hoarders.

However, living with hoarder can be "worse than death" for the animals, says Holly Putnam, DVM, program clinician in Maddie's Shelter Medicine Program at Cornell, "Animals have been known to starve to death, feeding on each others' carcasses, living on waste. And then you have to wonder, too, about their social interactions. Dogs can be aggressive and pick on the poor timid ones."

Each year brings an estimated 3,000 to 5,000 new cases of animal hoarding, Dr. Lockwood says. The agency monitors about 100 cases at any given time. The latest Diagnostic and Statistical Manual of Mental Disorders added a classification of hoarding disorder, although it provides no special recognition of animal hoarding, Dr. Lockwood says. The manual estimates that 2 to 5 percent of the general population has hoarding disorders.



Elizabeth

Elizabeth is thankful for the assistance of **Bruce G**. **Kornreich**, **DVM**, **Ph.D.**, **ACVIM**, 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 ...

ANEMIA THE ABC'S OF CBC'S DESTRESS VET VISITS

Should They Regularly Feed Their Adult Cat Cow's Milk?

I have a 12-year-old calico kitty who eats a regular diet of commercial fish cat food and some assorted cat food pates. She also loves whole milk, and we give it to her after her meals on a daily basis. A friend of mine told me that I should not give her milk, as this can be harmful. Is this true?

I understand your kitty's craving for milk, as I love it, too. I also realize that popular media and historic literature have made people believe that milk constitutes a good diet for cats. While it is true that most cats love the stuff, there is little benefit and some potential harm in feeding cats cow's milk, despite what your kitty may tell you. Allow me to explain.

While it is ideal for kittens to drink their mother's milk, particularly when they are very young, to acquire the appropriate nutrition and immune protection to survive and grow, drinking cow's milk may cause a number of health issues for the average adult cat. These problems fall into two general categories: gastrointestinal intolerance and obesity.

Standard cow's milk contains a fair amount of lactose, a sugar that gives milk its sweetness and that must be broken down by lactase, a digestive enzyme produced in the small intestine of most mammals. The breakdown of lactose by this enzyme normally provides energy for growing offspring, and in the case of cow's milk, this would normally mean a calf being nursed by its mother. Cow's milk is great if you are a calf, as a calf (and many other young animals) has sufficient lactase to break down the relatively large amount of lactose present in milk.

The problem is that as animals grow, they commonly experience a decrease in the amount of lactase that their intestines produce, so many adult animals (including cats and humans) have insufficient amounts of lactase necessary to break down the lactose in cow's milk.

Failure of the breakdown of lactose in milk can lead to undigested lactose drawing fluid into the GI tract and production of gas secondary to bacteria in the gut fermenting undigested lactose. These processes can lead to the symptoms of lactose intolerance, including diarrhea, gas production, nausea, and vomiting. A kitty with diarrhea, bloating and nausea is an unhappy kitty, so this problem in and of itself is enough to recommend avoiding the regular feeding of cow's milk to cats.

The other major problem with feeding cats cow's milk is that it is relatively calorie dense. Whole milk contains approximately 150 calories per cup, and obesity is a major problem in feline health, with many owners not even recognizing that their cats are obese. Since the average cat should eat approximately 240 calories per day, and it is recommended that cats receive no more than 20 percent of their daily calories from unbalanced nutritional sources (which cow's milk is considered to be), it would be far better to have your cat eat a well balanced diet and to treat her perhaps very occasionally with a small treat of milk. That is, if she really enjoys it and can tolerate it without developing signs of lactose intolerance. Of course, making sure she gets enough exercise and is receiving the correct amount of balanced food is also very important in avoiding obesity.

I understand that you want to make your girl happy by giving her treats. Perhaps you might consider giving her small amounts of either commercially available cat treats (not too many!) or bite-sized pieces of cooked meat or fish as treats. I'll bet she will love these, and they are more in line with what she has evolved to eat. Of course, it is important that you work with her veterinarian to make sure that your kitty is receiving a well balanced and complete diet and that you are proactive about her health care.

I hope this is helpful, and although your kitty may not like not having as much milk, she will be better off in the long run!

—Best regards, Elizabeth ❖

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