



CatWatch

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



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IN THE NEWS ...

Cornell Scientist to Study Commercial Raw Meat Diets

The Food and Drug Administration has awarded Anil Thachil, BVSc, Ph.D., in the Department of Population Medicine and Diagnostic Sciences at Cornell University College of Veterinary Medicine a grant to investigate the quality of commercial raw meat diets for pets.

Whether originating from the manufacturer or the FDA, recent recalls of raw meat diets that were suspected of bacterial contamination have included beef, chicken and jerky. "Some of these raw pet foods carry harmful bacteria such as *Salmonella*, *Listeria* and *Campylobacter* that cause disease in pets and people," says Dr. Thachil, who directs the department's Bacteriology Laboratory at the Animal Health Diagnostic Center. "Our companion animals share our homes and activities, and they are an important part of our lives. We need to identify those disease agents in raw meat diets to safeguard both the public and our pets." ♦

Anesthesia Today: Safer Than Ever

Don't be alarmed when it's necessary for a periodontal treatment such as teeth cleaning — complications are rare

You may be hard-pressed to find scientific studies on this, but anecdotal evidence abounds at veterinary clinics: When owners learn their cat needs a "dental cleaning," a lay term for periodontal treatment, most of them are alarmed — specifically about the risks of anesthesia. Some even delay treatment because of their concern.



Santiago Peralta, DVM, AVDC, Section Chief of Dental and Oral Surgery at Cornell, at work on a periodontal treatment.

The reality today is that improvements in pain management, a wider variety of anesthetics and sophisticated monitoring have resulted in greater safety than ever. Most of the studies on feline mortality related to anesthesia indicate the risk is less than 1 percent.

"When administered by trained personnel, modern-day general anesthesia is very safe in dogs and cats — much

(continued on page 4)

12 Signs of Medical Emergencies

When minutes count, use a closed carrier to take your cat to the nearest clinic and remain calm to avoid his panicking

When your cat suddenly becomes ill or injured, how do you determine if he needs to go to the veterinarian or emergency hospital — STAT? It's not always easy to tell. Hiding illness is a natural instinct for cats because of their evolution as both prey and predator. They're hard-wired to cloak weakness and may exhibit only subtle signs that they're seriously sick.

On the other paw, some illnesses are obvious emergencies. Here's what you should know about recognizing and responding to them when minutes count.



The Emergency and Critical Care Service at Cornell University Hospital for Animals is open 24/7.

The most important advice from the Section Chief of Critical Care at Cornell University College of Veterinary Medicine: "Stay

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CatWatch

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SHORT TAKES

No surprise: A Survey Reveals American Cats Rule the Home

A survey of more than 10,000 pet owners in 11 countries — 3,100 of them in the U.S. — has found that U.S. owners are the most passionate about their cats. In addition to the U.S., the renovation and design firm Houzz asked owners about pets in the home in Canada, France, Italy, Spain, Sweden, Denmark, Russia, Germany, Australia and Japan.

The results showed that most U.S. owners give their cats a free pass to lounge on furniture — 78 percent compared to 35 percent in France. American owners also share their beds with their cats — 53 percent compared to 30 percent in both France and Germany.

"The French are stricter and follow their veterinarian's advice to give the pets a lower position than humans and keep them away from the sofa and beds for hygiene reasons like hair and smells," says Valerie Dramard, a veterinarian in France quoted in Houzz's report.

Pets in Spain are the least likely to sleep with their owners — 14 percent. "In general, we are very concerned with our houses being clean," says Ana Martin Fiestas, who works in the Houzz office in Spain. "It might seem silly, but I don't think in other countries people clean as much as we do. When it comes to pets, they shed and dribble and have dirty paws, so I think it's not very hygienic to have them in our beds."

Owners were united on the benefits that pets provide. A majority — 71 percent in France and 90 percent in the U.S. — say that pets make them happy. More than 70 percent in the U.S. say their pets help reduce stress. The majority of American pet owners also say that they share control of their home with their dog or cat — and cats rule more than dogs, Houzz says. Russians were least likely, along with Danes at 4 percent, to say their pets were in charge of their home.

The survey's conclusion: "Americans are particularly lenient when it comes to pets."



More than three-fourths of owners in the U.S. give their cats free reign of furniture, as evidenced by this elegant feline on a vintage velvet chair.

New Stem Cell Therapy?

Veterinarians frequently prescribe therapeutic diets and daily medication for cats with chronic enteropathy, a condition characterized by excessive loss of plasma proteins into the gastrointestinal tract. However, the regimen can have side effects, and some owners have difficulty complying with it.

A small study at Colorado State, investigating whether stem cell therapy is a safe and viable treatment, showed promising results. Researchers used feline fat cells — allogeneic adipose-derived feline mesenchymal stem cells (fMSC) — to treat seven cats with diarrhea. Four cats with a similar condition received placebos without owners' knowing the exact treatment and three more cats were treated with owners' knowledge their cats were receiving placebos.

"No adverse reactions or side effects were attributed to the fMSC therapy in any of the cats," the researchers say. Five of the seven MSC-treated cats had "significant improvement or complete resolution of clinical signs," while the remaining two had modest, persistent improvement. The placebo-treated cats had no change.

While stem cells appear to be safe and potentially effective in treating chronic enteropathy, the researchers say their preliminary results require significant follow-up study. ♦

When They Lose a Sense of Balance

Disorientation, darting eyes and tilting the head can result when vestibular syndrome develops

Seeing your once-graceful cat suddenly stumbling with his head tilted and eyes darting wildly can be frightening. These signs are associated with vestibular syndrome, a fairly common problem with a variety of causes and occasionally only temporary signs.

Darting eye movements can be present at birth in blue-eyed color point breeds — those having a darker color on their tail, legs, ears and face, such as Siamese and Himalayan, but they are not related to vestibular syndrome. In the case of the syndrome, the eye movements are more likely due to an underlying condition such as infection, polyps, stroke, cancer, inflammation or drug toxicity, especially to certain antibiotics.

Middle Ear Impact. Aging cats seem particularly susceptible. “We tend to see more vestibular issues among middle-aged or older animals, as cancer and strokes tend to affect those animals,” says Emma S. Davies, BVSc, MSc, ECVN, Senior Lecturer in Neurology at Cornell University College of Veterinary Medicine. “However, cats can have ear infections throughout their lives. And cats develop polyps that can affect the middle ear more commonly when they are 1 to 5 years old and both can lead to this syndrome.”

Vestibular syndrome is a balance system problem that causes cats to lose orientation. “The nervous system is similar to the wiring in a car,” Dr. Davies says. “For example, if there’s an issue in the car’s light circuit, the problem can occur anywhere in the circuit. However, what we see is that the lights do not work. By testing parts of the circuit or nearby circuits in animals with problems affecting the vestibular system, we can often work out whether the problem is outside or inside the brain.”

In addition to ear infections and inflammation, the parasite cuterebra

can cause the sudden onset of vestibular syndrome. In areas where cuterebra larvae of the adult botfly are endemic — primarily in the Northeast — the larva can enter through the nose and move to the brain, where it may cause neurological damage. Outdoor cats are particularly at risk, but indoor cats can be affected. A cuterebra infection is treatable with veterinary-prescribed anti-parasitic and other medications.

Viral Causes. In some young cats, feline infectious peritonitis (FIP), a viral disease caused by certain strains of the feline coronavirus, may result in vestibular syndrome. “This difficult, largely fatal disease is transmitted via other infected cats and is more common among purebreds,” Dr. Davies says. “Although the coronavirus is common, it mutates to cause FIP only in a small proportion of cats.”

When ear disease is the cause of the cat’s disorientation, he may have a history of ear infections. The signs of ear infection include head shaking and occasional dis-



Some cats may have residual head tilting after treatment for vestibular syndrome. They can run and play, but their balance may be somewhat affected.

CONNECTING THE EARS, BRAIN, EYES AND MUSCLES

The vestibular system, located deep within the cat’s inner ear, consists of three fluid-filled canals, along with receptors that connect to nerves leading to the medulla — a part of the brain situated at its base and attached to the front of the spinal cord.

The receptors respond to changes in fluid movement within the ear canals as the cat’s head changes position. Corresponding signals are simultaneously sent to the brain, eyes and to the muscles on the sides of the body that keep the cat upright.

charge from the ears. Otherwise, the earliest sign of vestibular disease may be falling, anorexia, staggering, hypersalivation and vomiting. “Often, all the symptoms start simultaneously,” Dr. Davies says.

Owners should take their cat for a veterinary examination as soon as they see any of these signs. “Regardless of the cause, pets can benefit from anti-nausea medications,” Dr. Davies says. “Affected animals feel terribly sick as a result of their lack of balance. I imagine it’s like being on an amusement park ride that whirls you around 10 times in a row.”

Neurology Referral. A primary care veterinarian can examine the ear canal for signs of polyps or infection; however, these signs are not always visible. The owner may be referred to a veterinary neurologist for a CT or MRI scan. Images of the patient’s head may reveal polyps or provide further clues, such as evidence of a stroke. An MRI can also rule out other causes.

“Even if an MRI is not affordable, a simple observation by a veterinary neurologist may be able to give you some ideas about what’s going on with your pet,” Dr. Davies says. A spinal tap of cerebrospinal fluid after imaging might be the next diagnostic step to look for inflammatory or cancer cells.

(continued on bottom of page 7)

ANESTHESIA... *(continued from cover)*

safer than many owners think," says Santiago Peralta, DVM, AVDC, Section Chief of Dental and Oral Surgery at Cornell University College of Veterinary Medicine.

Rare Complications. Furthermore, age is not usually considered a significant risk factor in healthy cats, Dr. Peralta says. "Systemically sick animals of any age are always at higher anesthetic risk compared to healthy individuals. Some diseases represent a higher risk than others — for example, cardiac disease. In order to minimize or be able to anticipate and be better prepared for anesthetic complications, a complete physical examination and diagnostic tests as determined by the individual's medical history, physical examination findings and clinician's discretion are performed prior to anesthesia. The result is that serious anesthetic complications rarely occur."



Santiago Peralta, DVM, AVDC, Section Chief of Dental and Oral Surgery at Cornell, here with Sharon Harvey, LVT, VTS, takes X-rays of a patient.

SIGNS AND CONSEQUENCES

Lack of proper dental care can lead to serious health problems in cats. Direct consequences of dental neglect include pain, inflammation of the gums, bone damage and tooth loss. Even worse, if left untreated, dental disease can lead to other severe health issues, including infections that can spread to other parts of the body. Be alert to these signs that your cat's teeth need veterinary attention:

- ◆ Bad breath
- ◆ Difficulty or refusal to eat
- ◆ Sudden weight loss
- ◆ Drooling or a chattering jaw
- ◆ Increased irritability or aggressiveness that can't be otherwise explained

General anesthesia using inhaled anesthetic agents has become the veterinary standard for dental procedures. The American Animal Hospital Association recommended it three years ago for cats and dogs. In addition, Dr. Peralta points out that general anesthesia is vital to dental procedures because it provides these benefits:

- ◆ Protection of the airway with an endotracheal tube reducing the risk of inhaling heavily contaminated solid and aerosolized particles produced during periodontal treatment.
- ◆ Use of instruments to probe and remove deposits under the gum line, which is essential in most dental procedures. "It is precisely under the gum line where periodontal, or gum, disease occurs," Dr. Peralta says.
- ◆ Ability to perform surgical interventions as indicated by probing and X-ray findings, such as extractions, biopsies and root canal treatments.

Regional blocks, which numb only areas that need surgery, continue to be

a mainstay in dentistry. The procedure, in which the veterinarian injects a local anesthetic near a cluster of nerves, allows the patient to recover from general anesthesia much more comfortably, while additional pain medications are administered as needed.

Regional blocks also allow much lower doses of general anesthetics to be used, thus reducing the risk of side effects, Dr. Peralta says. "The most common complication when administering regional blocks consists of bruising at the injection site. This complication is minor and usually resolves spontaneously after a few hours or days."

More serious complications are very rare when a block is administered by properly trained personnel, he says. These include accidental needle penetration of the eye while administering the block and injury to the cat's tongue during recovery if it has been accidentally desensitized.

"The cost of administering regional blocks when indicated is minimal and is oftentimes included in the charges for the procedure performed," Dr. Peralta says. "On the other hand, the cost of general anesthesia usually represents

a significant portion — about 30 to 40 percent — of the bill.”

In order to minimize the risk of periodontal disease, experts recommend daily toothbrushing, regular oral examinations and periodontal treatment when considered necessary by the attending veterinarian. Periodontal treatment begins with an assessment to determine a cat's general health and is often followed by other diagnostic tests that may include blood and urine tests, chest X-rays and electrocardiography.

First, a Sedative.

Before your cat undergoes anesthesia for dental care, ask the veterinarian about the type that will be used, how your cat will be monitored and who will administer it. When it's time for surgery, the cat will usually first be given a pre-anesthetic sedative and an injection for pain relief. The advantages of preemptive treatment include lowered stress on the patient, ease of handling and reduction of anesthetic dose.

After the sedative takes effect, the veterinarian or anesthetist will place an intravenous catheter into a vein in a front or hind limb, or occasionally in the neck. The catheter provides access to the patient's blood stream to admin-

ister fluids and drugs during surgery. Fluids help to combat dehydration and a possible anesthesia-induced drop in blood pressure.

The veterinarian often begins general anesthesia by administering an injectable short-acting anesthetic agent. When the cat loses consciousness, a soft plastic endotracheal tube is inserted into the windpipe and connected to an

anesthesia machine. The machine delivers an inhaled anesthetic mixed with oxygen. Continuous or intermittent doses of injectable agents, or a combination of injectable and inhaled drugs can be used, depending on a patient's health and needs.

Anesthetic monitoring devices attached to the cat help ensure his safety. “Monitoring typically includes continued measurement of body temperature, oxygen saturation, carbon dioxide concentration,

electrocardiogram and blood pressure,” Dr. Peralta says. After the procedure, the cat slowly regains consciousness and is moved to a post-surgical area and monitored during recovery from the anesthesia. Cats receiving routine periodontal treatment can usually be discharged the same day.

The veterinarian will provide pain relief for cats who have had tooth

extractions or other invasive procedures. Options may include oral or injectable medications, or transdermal patches. Others might be sent home with an oral pain medication and, in some cases, antibiotics to prevent or treat ongoing infection. Cats may be a little groggy but far healthier after receiving comprehensive dental care. ♦



Age usually isn't a significant risk for healthy cats undergoing anesthesia, says dentist Santiago Peralta, DVM, AVDC at Cornell, explaining that serious complications rarely occur because of complete physical examinations and diagnostic tests performed beforehand.

THE PROBLEM WITH ANESTHESIA-FREE DENTISTRY

The standard of care in veterinary dentistry dictates that all feline dental procedures be performed under general anesthesia. Yet cat owners might still see groomers and pet stores offering “anesthesia-free dental cleanings.” It is not recommended.

The American Veterinary Dental College cautions pet owners strongly against anesthesia-free dental cleanings. In such procedures, pets are not sedated, and the person (or people) performing the cleaning must physically restrain the animal to gain access to the animal's mouth — a process that can be traumatic.

Once the mouth is accessed, a sharp instrument is used to remove plaque and buildup from the visible part of the tooth. When completed, the outside surface of your pet's teeth might appear visibly cleaner or whiter. But the more than 60 percent of the tooth below the gum line is not addressed, and that is where the bacteria that causes periodontal disease thrives.

In the end, the cost of an anesthesia-free dental cleaning might appear to be cost-saving compared to proper veterinary dental care. But ultimately, the underlying causes of true dental problems are not being addressed.

RESULTS OF ONE STUDY: LESS THAN 1 PERCENT MORTALITY

Deaths due to anesthesia among cats and dogs are rare. According to comprehensive research on anesthesia-related mortality in companion animals during a variety of procedures, approximately one in 1,000 healthy cats die under anesthesia each year. The 2008 study evaluated more than 79,000 cases in the United Kingdom in which cats were anesthetized and sedated.

EMERGENCIES... *(continued from cover)*

calm and transport the cat safely in a closed and secure carrier," says Gretchen L. Schoeffler, DVM, who is board-certified in emergency and critical care.

Avoid Injury. "Ill cats can behave in unexpected ways, and the last thing you need is your cat becoming panicked. He can inflict bodily injury directly or may distract a driver, causing a motor vehicle accident."

An emergency is, by definition, an occurrence requiring immediate action — it can't wait. The following conditions necessitate a trip to the veterinary clinic or emergency hospital anytime day or night:

- 1) Trauma such as being hit by a car or falling from a high window
- 2) Severe bleeding, bleeding that doesn't stop within five minutes or bleeding from the mouth, nose or rectum
- 3) Loss of consciousness or altered mentation, or mental ability
- 4) Difficulty breathing
- 5) Sudden collapse or severe weakness
- 6) Lameness or inability to walk
- 7) Diarrhea that appears bloody or black and tarry
- 8) Severe vomiting, especially if the vomitus contains blood or looks as if it contains coffee grounds — a sign of digested blood
- 9) Broken bones
- 10) Gums that are blue or white or yellow instead of a healthy pink
- 11) Seizures or staggering
- 12) Known ingestion of a toxic substance such as antifreeze or rat poison

Cat owners are likely to encounter certain types of emergencies, Dr. Schoeffler says. Here are those that she sees in cats on a regular basis and the reasons a trip to the ER can sometimes mean the difference in a recovery.

◆ **Vomiting, loss of appetite and diarrhea.** Hacking up a hairball is one thing, but frequent or severe vomiting,

especially if your cat seems unusually quiet, is a sign of trouble. It's even more serious if it's accompanied by diarrhea and your cat won't eat. When these symptoms occur together, cats can quickly become seriously dehydrated and weakened.

"The diarrhea is not as concerning if the cat is bright, alert and active," Dr. Schoeffler says. "It is the quiet, lethargic cat who has no interest in eating combined with vomiting that is most concerning. These may be the first indicators of very serious or even life-threatening disease. At the very least, the possibility of a gastrointestinal obstruction can be ruled out through abdominal X-ray or ultrasound, and the patient may benefit from fluids given intravenously or under the skin."

◆ **Traumatic injuries run the gamut from bite wounds and lacerations to car accidents.** If your cat has an open wound or has suffered blunt trauma, take him to the veterinarian, even if he seems fine. "Many wounds are more serious than initially thought, and animals who have suffered blunt trauma may have serious internal injury that may not be immediately apparent," Dr. Schoeffler says.



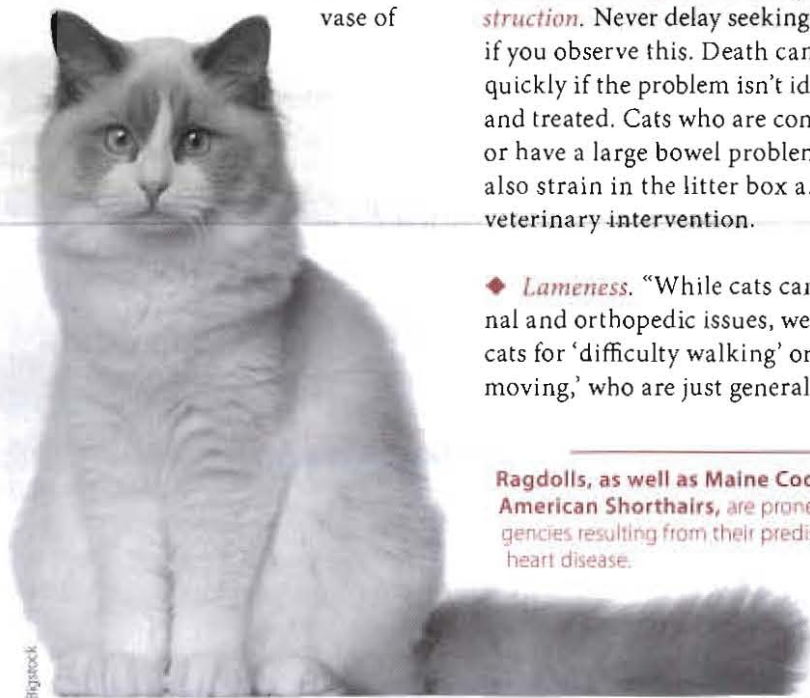
Bite wounds and car accidents warrant a veterinary examination even if your cat seems fine. Internal injuries may not be immediately apparent.

LABORED BREATHING COULD SIGNAL HEART FAILURE

Some breeds may be prone to certain types of emergencies. Maine Coons, Ragdolls, Persians and American Shorthairs are among those at risk for hypertrophic cardiomyopathy, the most commonly diagnosed heart disease in cats. (It's caused by the thickening of the walls of the left ventricle, the heart's primary "pump" muscle.) If you own one of these breeds, be aware of the signs of congestive heart failure: unusual inactivity, tiring quickly, difficult or rapid breathing, crackly breathing sounds and pale gums.

Persian cats have short noses and may find it difficult to breathe in excessively hot temperatures. Overweight cats may also have trouble breathing in extreme heat. Signs of heatstroke include restless behavior, panting or drooling, a rapid pulse and breathing, and vomiting.

◆ **Difficulty breathing may indicate a life-threatening asthma attack, heart failure or poisoning.** Cats are more discriminating than dogs when it comes to ingesting toxins, but some common household items can be deadly. A cat who eats any part of a lily — flowers, leaves, stems, pollen — or drinks water in a vase of



lilies can develop fatal kidney failure. A single tablet of an over-the-counter pain medication containing acetaminophen like Tylenol can be poisonous to a cat. And some flea and tick products that are safe to use on dogs are toxic to cats.

◆ **Straining to urinate, especially in male cats, can signal a urinary tract obstruction.** Never delay seeking treatment if you observe this. Death can result quickly if the problem isn't identified and treated. Cats who are constipated or have a large bowel problem may also strain in the litter box and need veterinary intervention.

◆ **Lameness.** "While cats can have spinal and orthopedic issues, we see more cats for 'difficulty walking' or 'not moving,' who are just generally weak,"

Ragdolls, as well as Maine Coons and American Shorthairs, are prone to emergencies resulting from their predisposition to heart disease.

Dr. Schoeffler says. "There are many causes for this, but a cat who is really lethargic, not moving much, acting sick — should definitely be checked out by a veterinarian."

◆ **Tremors and seizures.** Causes can range from poison to neurological diseases. They should be treated as emergencies, especially if it's possible the cat has ingested a toxic substance or has been recently treated with a topical medication — especially antiparasitics such as flea and tick medications — or has a new flea collar.

Know the hours and location of the nearest emergency clinic in the event your pet has a problem during off hours. Put the phone number on speed dial so you can alert the clinic that you're on your way. And keep a copy of your cat's veterinary records handy — especially proof of rabies vaccination — so you can take them with you to the ER.

Most important, know your cat's normal behavior. Being able to recognize any changes can help you identify and treat problems before they become full-blown emergencies. ♦

HEALTH

BALANCE ... (continued from page 3)

"If an ear polyp or an abscess is causing the illness, then ear surgery can effectively remove the polyp or drain the infection," Dr. Davies says, adding that, while strokes often resolve on their own, veterinary attention may prevent the animal from having another stroke.

"I recently treated an 11-year-old cat who had stopped eating and felt terrible," Dr. Davies says. "We discovered infections in both ears. The surgical treatment [performed by a small animal specialist] is called a ventral bulla [middle ear] osteotomy. This involves making a hole in the bottom of the bulla and cleaning it out, which allows the

infection to drain. After this surgery on both ears, the cat recovered nicely and began eating again."

If vestibular syndrome is the result of a stroke or an ear disorder that can be surgically remediated, the immediate prognosis is usually good. For cats affected by the cuterebra parasite, the prognosis may also be favorable.

FOR MORE INFORMATION

The Cornell Feline Health Center has additional information on vestibular syndrome at www.vetcornell.edu/fhc.

Even after treatment, some cats occasionally exhibit some residual head tilting. "However, if the infection is resolved, they seem to compensate rapidly and do not show signs of any distress from it. They may still be able to run and play, but their balance won't be as good," Dr. Davies says.

Many researchers are studying the causes of vestibular syndrome, such as inflammatory disease, coronavirus infection and skin disease, Dr. Davies says. Until more is known about the disorder, she advises owners to be alert to their cat's behavior. "At the first sign of vestibular syndrome, seek veterinary attention. Once you know what's going on, you can better know how to treat it." ♦



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 ...

- ❖
**NIGHT
STALKERS**
- ❖
**OILY
HAIRCOATS**
- ❖
**LIVING WITH
ARTHRITIS**
- ❖
**SHELTER
ALTERNATIVES**

Managing Diabetes Will Require Dedication, but Long Life Is Possible

Q My 11-year-old male domestic shorthaired cat has just been diagnosed with diabetes. I am feeling overwhelmed by the prospect of managing this condition and concerned for his well-being. Can you tell me a bit about this condition, his prognosis and how it can be managed?

A I understand your concern regarding this common feline disease, which affects between 0.2 and 1 percent of all cats. While diabetes mellitus is manageable in the majority of cats, this does require dedication and the collaborative efforts of both owner and veterinarian.

The majority of cats with diabetes have a form of this disease similar to Type 2 diabetes in people. In this form of the disease, the beta cells in the pancreas that normally produce insulin either produce less than normal amounts of insulin or the cells in an affected cat's body become resistant to the effects of insulin — or both.

One major effect of insulin is to lower blood glucose concentration, largely because it promotes the uptake of glucose by various cells in the body, which then use the glucose as an energy source. For these reasons, cats with diabetes typically have elevated blood glucose concentrations (hyperglycemia), and various tissues within their bodies may become relatively starved of energy, leading to dysfunction and clinical illness.

The goals of therapy are to limit the clinical signs that may occur because of hyperglycemia and the energy starvation of cells while avoiding low blood glucose concentrations (hypoglycemia) and other metabolic complications, which can be potentially life threatening. These goals are achieved primarily by administration of insulin by injection and by controlling other factors (obesity, avoidance of certain drugs, diet) that may contribute to either increased blood glucose or to insulin resistance, or both. While oral

hypoglycemic drugs can benefit people, they are generally not effective in treating cats.

It is important that you work closely with your cat's veterinarian to appropriately evaluate your kitty upon initial diagnosis and to devise a management plan that is effective and feasible for you. Since hyperglycemia may be caused by other conditions (such as hyperthyroidism) and since diabetes may occur concurrently with other diseases such as pancreatitis, initial evaluation is important to rule out other causes of hyperglycemia and identify other diseases.

This initial evaluation may include blood work to evaluate your kitty's biochemical status and red and white blood cell counts, urinalysis, measurement of serum thyroid hormone and/or imaging studies, such as abdominal ultrasonography.

Treatment commonly involves dietary modification (there is evidence suggesting that carbohydrate restriction and increased fiber content may be beneficial) and injection of insulin, most commonly twice daily. There are many different types of insulin that vary with respect to how long it takes them to reach peak effect and duration of action, and this choice will be informed by the tests that your veterinarian will recommend and by individual response.

Careful monitoring both at home and during periodic veterinary visits will be an important part of management.

The good news is that with appropriate treatment and monitoring, cats with diabetes mellitus can do every well for long periods of time. While owners may be overwhelmed at first, they commonly become accustomed to treating their kitties fairly quickly. Treatment will be lifelong in most cases, although remission from diabetes mellitus does occur occasionally. There is, unfortunately, no cure for diabetes mellitus at this point, but quality of life can be excellent for years in many cases.

I hope that this is helpful, and hang in there. I am confident that you can do this, and your kitty will love you all the more for it!

—Sincerely, Elizabeth ❖

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