



# CatWatch

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



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## IN THE NEWS ...

### Companion Animals and Humans Harbor MRSA

Cats, dogs and people harbor the same strains of contagious, potentially dangerous *methicillin-resistant Staphylococcus aureus* (MRSA), according to research published in the *mBio* journal from the American Society for Microbiology. *Staphylococcus aureus* bacteria can cause difficult-to-treat infections in all three species.

The study demonstrates that humans and companion animals readily exchange MRSA bacteria, advancing the view that pathogens infecting both humans and animals are intrinsically linked, say University of Cambridge researchers.

They sequenced genomes of 46 MRSA samples from cats and dogs and found samples were similar to those associated with MRSA strains in humans. Most were from wound infections or skin and soft tissue infections.

The animal bacteria most likely originated in humans, but researchers say there is no cause for alarm. Owners and healthy pets have little risk of contracting staph from each other. ♦

## Some Diabetics Won't Need Insulin

*About a third have a transient form of the disease, while others will benefit from a high-protein diet*

Living with a diabetic cat isn't as difficult as owners initially expect, thanks to some pleasant surprises like this: About a third of cats will come to a point where they won't need insulin any longer. They're transient diabetics, says Megan Morgan, VMD, a specialist in internal medicine at Cornell University Veterinary Specialists in Stamford, Conn.

What's more, advances in diet in recent years have made it possible for some otherwise-healthy cats to



While any cat can develop diabetes, Burmese seem more susceptible to it.

eventually become non-diabetic and stop requiring insulin injections when they switch to a high-protein diet. "That, to me, is really exciting," Dr. Morgan says. "I can tell people: 'There's a chance that we can see improvement in your cat.'"

Cats who do remain diabetic can enjoy a fine quality of life. Here's what you need to know to help make that happen.

**Most Vulnerable.** Diabetes commonly strikes older, obese cats, with males affected more often. It develops when the

(continued on page 6)

## Don't Feed These 15 People-Foods

*They can be toxic because cats metabolize them differently than humans — our medications, too*

Some cats are finicky eaters while others behave more like chowhounds, quickly gobbling all food at any opportunity. But because your cat's body metabolizes food differently, some foods and medications considered safe for you can be deadly if your cat ingests them.

"Cats are small and have more sensitive enzyme systems," says Elisa Mazzaferro, DVM, Ph.D., ACVECC, a specialist in emergency and critical care at Cornell University Veterinary Specialists in Stamford, Conn. "They may be susceptible to smaller doses of some toxins."

Reactions indicating poisoning include vomiting, diarrhea, excitability, excessive salivation and possible loss of consciousness, Dr. Mazzaferro says. The signs depend on factors such as age, health, amount of food ingested and duration between the time the food was ingested and veterinary treatment.

According to the ASPCA's Animal Poison Control Center, human medications once again topped the list of reported poisons most commonly ingested by pets in 2013, with nearly 20 percent of all calls. A majority of cases involved cardiac medications to control heart rate and blood pressure,

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# CatWatch

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## SHORT TAKES

### Threatening Environments Can Activate Their Stress Response

We may think our cats have it easy, being fed and loved while living safely indoors, but nutritionist Tony Buffington, DVM, Ph.D., at Ohio State University College of Veterinary Medicine says cats can have a different perspective:

"What the cat sees is, 'Well, I'm confined to this house, I have no choice what to eat or drink, I've only got one tiny place that I can eliminate in, and I just have to hope that somehow magically it gets clean because I can't do it.'"

Natural behaviors like climbing and scratching can lead to cats being punished or even relinquished, Dr. Buffington says. "If they're living in a threatening enough environment, their stress response system, their sympathetic nervous system, their hormonal system and their immune system can all be activated searching for the threat."

If the threat is ongoing, the resulting stress can cause illness, such as lower urinary tract disease, Dr. Buffington says. "It turns out that the disease in many cases is a consequence of this chronic activation of the stress response system."

He offers advice on reducing stress and enriching cats' lives in a podcast from the American Association of Veterinary Medicine at [www.avmamedia.org/display.asp?sid=556&NAME=Creating\\_a\\_cat-friendly\\_home](http://www.avmamedia.org/display.asp?sid=556&NAME=Creating_a_cat-friendly_home). It's also available on iTunes via AVMA's Animal Tracks channel, a free series on health and safety.

Stress seems to play a role in a urinary disease affecting humans and cats. The Feline



**Stressors include changes** in the environment, food schedule and number of animals in the home.

Health Center at Cornell notes similarities between feline idiopathic cystitis (FIC) — the most common diagnosis in cats with lower urinary tract signs — and a bladder disorder affecting humans called interstitial cystitis. (For more information, see Health Resources at [www.vet.cornell.edu/fhc/](http://www.vet.cornell.edu/fhc/).)

"In humans, a psychologically stressful event often precedes the onset of lower urinary tract discomfort due to interstitial cystitis, and stress also seems to be an important factor in the development of FIC in cats," the center says.

It describes stressors as changes in the environment, food schedule and number of animals in the household, and recommends that cats have a safe, clean area in which to eliminate and opportunities to express natural predatory behavior, including climbing posts and toys that can be chased and caught.

### More on Urinary Disease

Urinary tract diseases topped the list of the most common conditions in cats in medical claims to Veterinary Pet Insurance last year. The company sorted its database of more than 500,000 insured pets to find 4,600 claims for the ailment at an average cost of \$422 for a veterinary visit.

These were the top conditions in cats:

1. Bladder or urinary tract disease
2. Periodontitis/dental disease
3. Chronic kidney disease
4. Hyperthyroidism
5. Upset stomach/vomiting
6. Diabetes
7. Intestinal upset/diarrhea
8. Lymphoma
9. Upper respiratory infection
10. Skin allergies

The most expensive treatment was for lymphoma with an average cost of \$2,004. "Many of the conditions on our Top 10 list each year can be stopped early or successfully managed in partnership with a veterinarian," says Carol McConnell, DVM, MBA, VPI's vice president and chief veterinary medical officer. ♦



# When Play Biting Turns Aggressive

*It's time to temper down predatory stalking, chasing, leaping and wrestling with appropriate alternatives*

You may have been amused when your kitten or newly adopted cat first playfully pounced on your ankles or delivered love nips to your hand. But now, his swatting and biting have intensified, leaving you with deep scratches and broken skin.

"Many of these play behaviors mimic predatory behavior, and kittens who have a strong prey drive often engage in more vigorous play, which can develop into play-related aggression," says Pamela Perry, DVM, Ph.D., a lecturer in animal behavior at Cornell University College of Veterinary Medicine. "Play in kittens — including exploration, stalking, chasing, leaping sideways, biting, wrestling and swatting — is believed to be a means of practicing for adult behaviors."

**Dangerous Level.** But when the behavior becomes harmful, it's time to stop it before you're hospitalized for cat scratch disease, a condition caused by *Bartonella henselae* bacteria. Untreated,

you can be at risk for developing skin lesions, fever and fatigue and, in severe instances, systemic infections. Cat bites can be more dangerous than dog bites. They create puncture wounds that heal on the surface, but anaerobic bacteria, which don't need oxygen to live, are trapped inside.

Dr. Perry offers these tactics to re-school your cat on acceptable play and interaction with people:

◆ **Cease direct hand play.** Some kittens are separated from their mother and littermates before they learn to inhibit their bites or swat with their claws retracted. Never play with your kittens using your hands or feet or you may reinforce biting and swatting.

◆ **Heed early attack signs.** Common signs include tail lashing, ear flicking, dilated pupils, tensing muscles and hissing. That's your cue to stop interacting with your cat. Be alert to redirected aggression. Your cat may look out the win-



Cat's sharp teeth can inflict puncture wounds requiring aggressive medical care.

dow and see another cat, become aroused and turn to the nearest target — you or another cat in your household. Don't try to calm him. Move out of reach.

◆ **Keep a small cat toy in your pocket.** To reduce the chance of surprise attacks as your cat lies in wait, toss a toy in front of you or drag a long sash for him to pounce on. He'll unleash his predatory instincts without causing you harm.

◆ **Select the right toys.** Provide bouncing, fluttery, moving toys for him to chase and attack. Consider motion-activated toys that move erratically like prey. Keep the toys in a container and rotate them to maintain interest.

◆ **Work your cat's brain and brawn.** Food-dispensing puzzles focus his energy on getting food. Kitty condos, cat trees and corrugated cardboard let him scratch and hone his claws.

◆ **Never use physical punishment.** Punitive means can backfire and encourage more vigorous play or may result in fear or defensive aggression. If your cat nips you, stand and cease all interaction with him.

◆ **Consider adopting a second cat.** In some cases, getting another kitten or cat of similar age and temperament may be a suitable solution to provide an appropriate outlet for your cat's aggressive play style. "This is one of the few times getting another cat may help," Dr. Perry says.

Finally, be on the lookout for warning signs that over-exuberant play, nipping or clawing have evolved into serious aggression that warrants the help of a veterinary behaviorist. ♦

## CLICKER TRAIN HIM TO SIT ON A MAT

One effective way to divert your cat's predatory nature, especially if he's aggressive, is to clicker train him to sit on a mat on cue. The keys are to be clear, concise and consistent.

"Place a mat on the ground and call your cat to it," says Pam Perry, DVM, Ph.D. "When he steps on the mat, immediately say the command 'Sit' or 'Mat' and give him a treat when he complies. After repeating this several times, begin to reward him only when he is sitting on the mat."

If he does not comply when you ask him to sit, walk away for a few minutes with the treat in your hand and try again. He'll quickly learn the only way to reap the food reward is to comply by sitting.

"The use of a clicker may facilitate the training," Dr. Perry says. "Note that the clicker is not the command but rather a signal that indicates a reward is coming. Mat training has been helpful with aggressive cats, and owners are amazed that their cats can learn to do it. In severe cases, the cat should be taught to sit on a mat before receiving any interaction from his owner."

Dr. Perry suggests this link to a video demonstrating how to clicker train a cat to sit on a mat: [www.youtube.com/watch?v=4W-1faJfONA](http://www.youtube.com/watch?v=4W-1faJfONA).



# Their Daily Water Requirement?

*A meat-only diet once sustained them, but today cats need one-half to one ounce per pound daily*

Even if you could lead your cat to water, you can't make him drink. The reason this usually occurs with cats rather than other animals in most cases: it's part of their biological make-up, says Brian Collins, DVM, a lecturer in the Community Practice Service at Cornell University College of Veterinary Medicine.

"Cats are descendants of desert animals. They originally obtained much of their water from their meat-only prey diet," he says. "Because water was scarce, they evolved to concentrate their urine very well. So cats are generally less likely to drink, even when they are thirsty or dehydrated."

**Keeping Hydrated.** Although in extreme circumstances your cat may be able to survive several days without water, he needs fresh drinking water every day for optimum health. "Water is essential for helping the kidneys flush toxins from the blood and for keeping the urinary tract and other organs hydrated and healthy," Dr. Collin says. "Water keeps all the machinery running properly."

The recommended amount: Cats need about 20 to 30 milliliters of water per pound of body weight per day. That's about a half to one ounce per pound. "For example, a 10-pound cat ideally would take in about 250 milliliters — an 8-ounce cup of water — each day," Dr. Collins says, adding that cats who eat moist food typically need less water. Likewise, kittens and small cats need less water than larger, heavier cats.

Cats who refuse food and water can quickly become dehydrated and susceptible to constipation or lower urinary tract disease, says Dr. Collins. "Similarly, if a cat has diabetes or kidney disease, which causes excess urine loss, he is more likely to become dehydrated, which can then lead to constipation or worsening kidney

disease." Certain breeds — including Abyssinians, Siamese, Persians and Himalayans — are particularly susceptible to kidney disease.

**Avoiding Disease.** While some conditions can result from insufficient water consumption, others can be alleviated by additional water. "Cats with lower urinary tract disease — a common condition characterized by straining to urinate, bloody urine, inappropriate urination or inability to urinate — benefit from drinking more," Dr. Collins says.

Sometimes fluids can extend life. The progression of chronic renal failure can be slowed, although not reversed, by fluid replacement. Purified water and electrolytes can be administered intravenously by a veterinarian or given subcutaneously at home — a procedure motivated cat owners can easily learn. Cats often show significant improvement after such treatments.

Various illnesses or even stress can cause cats to stop eating and drinking. Diet also plays a role. Cats' bodies are

## A QUICK TEST FOR DEHYDRATION

To keep your cat happily hydrated, observe his water consumption to learn what's normal for him. Monitoring his intake can alert you to problems, and the sooner they're identified, the sooner they can be treated.

Do regular "hydration checks" by gently pinching the loose skin at the nape of the neck, then releasing it. If it springs back, your cat is sufficiently hydrated. If it remains "tented," then settles slowly, consult with his veterinarian promptly.



Cats seem attracted to fountains' moving water.

about 67 percent water — the same percentage of water in the tissues of small prey animals. By contrast, dry cat food contains around 10 percent water and canned cat food around 78 percent. "Cats who eat only or mostly dry food may not drink as much as they should, especially if the food is high in carbohydrates," Dr. Collins says. "Conversely, a higher-protein diet encourages water intake."

Since cats naturally don't drink a lot, we have to compensate by encouraging them to drink, Dr. Collins says. The specific action you can take:

- ◆ Keep fresh, clean water available at all times.
- ◆ Put moist food on your cat's menu as part or all of his diet.
- ◆ Provide moving water such as fountains or dripping faucets, which many cats enjoy.
- ◆ Try different sizes and shapes of water bowls — your cat may have a preference.
- ◆ Add water to moist or dry cat food.
- ◆ If chlorinated tap water isn't appealing, try boiled, filtered or bottled water.
- ◆ Add an ice cube or two your cat's drinking water to make it more interesting.

Dr. Collins practices what he preaches: "I encourage my cats to drink from the bathtub faucet. I turn it on at a very slow drip several times a day. Hopefully, it doesn't amount to too much wasted water. Each new cat learns from the other cats. They all get into the tub and drink together. They love it!" ♦



**FOOD**...*(continued from cover)*

followed by anti-depressant and pain medications.

Veterinary toxicologists at the poison control center and Dr. Mazzaferro list these potential dietary toxins:

◆ **Raw fish or meat** — Don't give your cat sushi leftovers or any uncooked fish or meat. These can harbor bacteria such as salmonella



that can cause vomiting and diarrhea. In addition, an enzyme in raw fish can destroy the essential B vitamin thiamine that cats need.

◆ **Uncooked eggs** — Again, you risk exposing your cat to salmonella and other parasites that could cause vomiting, diarrhea, dehydration and, possibly, pancreatitis.

◆ **Fat from meats** — If you want your cat to enjoy a piece of your T-bone, cut a small lean piece and set it aside to give him as a reward for not begging. Do not give him fat or gristle from the steak. It can cause vomiting, diarrhea and inflammation of the pancreas, leading to pancreatitis.

◆ **Milk** — An occasional small amount of milk may be OK for some cats, but their digestive tracts become somewhat lactose intolerant after kittenhood. Daily servings of milk can cause diarrhea and vomiting.



◆ **Avocados** — The biggest health danger is the toxin persin found in the plant, leaves and fruit itself. Ingestion can cause vomiting and diarrhea in cats.



◆ **Onions, chives and garlic** — Cats do not metabolize the alliums found in them as well people. These foods in any form — raw, powdered, cooked or dehydrated — can cause gastrointestinal

upset and destruction of red blood cells.

◆ **Caffeinated coffee, tea and soda** —

Curious cats may be drawn to lapping up your caffeine-loaded drink, but excessive caffeine consumption can cause restlessness, heart palpitations, rapid breathing, muscle tremors and possibly seizures. Keep in mind that stimulant drinks as well as some cold medicines and painkillers for humans also contain caffeine.



◆ **Uncooked bread dough** — Sitting on a baking sheet on your kitchen counter, it could be an invitation to a cat seeking food, but remember that the yeast in dough rises. It can cause painful swelling and stretching of the abdomen. "The dough can ferment and expand in your cat's stomach, causing signs similar to drunkenness," Dr. Mazzaferro says.

◆ **Alcohol** — It only takes a small amount — two teaspoons of whiskey — to damage your cat's liver, put him in a coma or kill him. Keep all beer, wine and hard liquor inaccessible to him. "A cat can get drunk, nauseous and his respiration can be affected," Dr. Mazzaferro says. "He can also injure himself because the alcohol has left him uncoordinated."

◆ **Chocolate** — We know this sweet is a dangerous temptation to dogs. According to the poison control center, dogs' chocolate ingestion represented nearly 8 percent of all calls made to its hotline in 2013, or an average of 26 calls per day. Fortunately, cats lack sweet taste receptors and are not usually drawn to sugary foods, but there is always an exception. Ingesting the ingredient theobromine,

found in chocolate, can cause an elevated heart rate, high blood pressure, tremors and seizures in a cat. ♦

**IMMEDIATE ACTION TO TAKE**

If you suspect your cat has ingested a poison, time is of the essence to treat him. Contact his veterinarian, the 24-hour Pet Poison Helpline (800-213-6680) or the ASPCA APCC hotline (888-426-4435).

You should immediately:

- ◆ Monitor your cat and remove other cats who could ingest the food or medicine from the area.
- ◆ Collect a sample of the substance in a plastic resealable bag to take to the veterinary clinic.
- ◆ Don't use 3-percent hydrogen peroxide to induce vomiting without advice from a veterinarian. If, for example, the substance was caustic, putting hydrogen peroxide in a cat's mouth would cause burns on his esophagus. "Hydrogen peroxide doesn't always work and can be irritating to the stomach if you give too much," Dr. Mazzaferro says.

Home remedies such as syrup of Ipecac, salt water or mustard seed water have not been proven to be effective in inducing vomiting safely in pets. "Expired Ipecac can cause cardiac arrhythmias, and salt can cause sodium toxicity and sudden brain swelling in high doses," Dr. Mazzaferro says.

To be prepared for an emergency, keep a well-stocked pet first-aid kit, post the phone number of the nearest emergency veterinary clinic on your refrigerator and enroll in a veterinarian-approved pet first aid class.

**WHAT YOU SHOULD KNOW**

Cooked bones aren't poison, but veterinary dentists warn against giving them to pets because they can fracture teeth. Bones can also splinter and block a cat's intestinal tract, causing choking or perforation of the intestines.

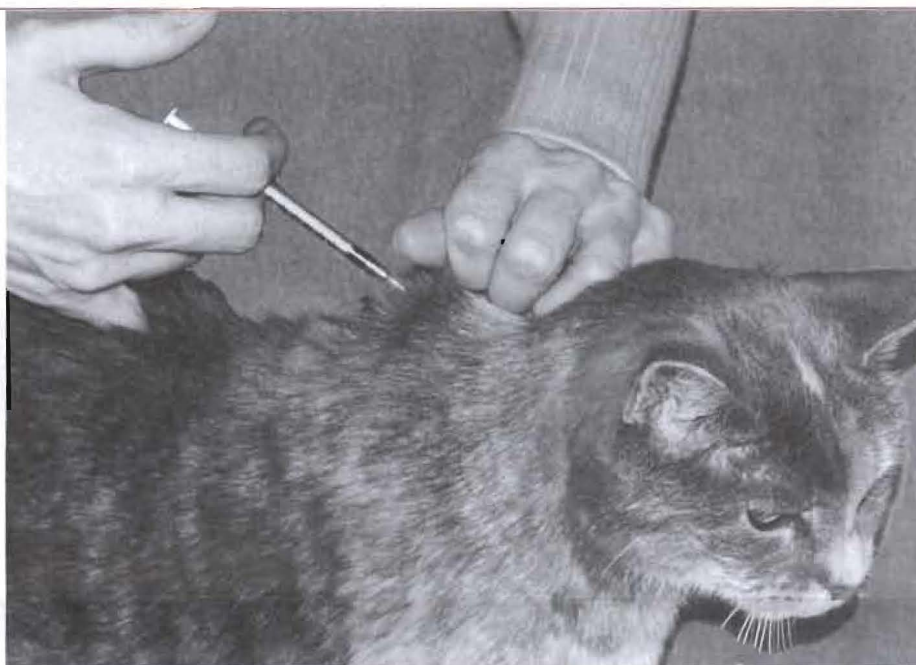


## DIABETES... (continued from cover)

body doesn't produce any or enough insulin, a hormone needed to break down and store energy from foods. As a result, the patient lacks nourishment, and the excess glucose remains in the bloodstream, potentially damaging organs and blood vessels.

The treatment of choice is exactly what Dr. Morgan's 14-year-old domestic shorthair cat Frodo receives: insulin injected under the skin twice a day, every day, 12 hours apart, after meals to avoid complications. Frodo gets his injections at breakfast and dinner time.

"He doesn't even notice when I give the injection," says Dr. Morgan, crediting the tiny needle (much smaller than those used to draw blood at veterinary hospitals) and her recommended technique: She administers the shot in the scruff of Frodo's neck



Once cats become used to insulin injections, which are routinely administered in the scruff of the neck, they rarely notice it.

as he eats. She varies the spot each time, viewing the loose skin as a clock.

She aims for different "hours" on the clock to avoid irritating the skin.

"Owners are often pleasantly surprised at how easy it is to administer these injections," Dr. Morgan says. "There are very few cats out there who really can't handle getting an insulin injection. It's not painful. And once they get used to it, they don't even notice it."

## DIABETES 101: SIGNS AND INCIDENCE

Diabetes is a serious but treatable disease. In Type 1 diabetes, affecting about half of diabetic cats, the pancreas doesn't produce enough insulin. Over time, the cat's immune system essentially destroys cells responsible for making insulin.

Type 2 diabetes, affecting the other half of diabetic cats, is the type most diabetic humans have today. Cell receptors located throughout the body aren't as sensitive to insulin as they should be; extra insulin needs to be injected into the body so that the insulin receptors can adequately do their job of getting glucose to cells. Cells need glucose — it's their food. At the cellular level, untreated cats are starving even though they're eating well, says Megan Morgan, VMD, at Cornell University Veterinary Specialists.

The signs of both types include increased water consumption, increased urination (often seen as an increase in the amount of urine in the litter box) and weight loss despite a normal or ravenous appetite. In cats, the rear legs may become weak due to neurologic problems.

Risk factors are insulin resistance brought on by obesity, pancreatitis, inflammatory bowel disease or other diseases, and medications such as steroids. Genetics may play a role in some cases. Patients typically are at least 5 years old.

Various published studies say diabetes is a common illness. However, a British study of a large insured population found the prevalence to be one in 230 cats — well under 1 percent. Burmese may be more susceptible, but cats of any breed can develop diabetes.

**Glucose Plummets.** Dr. Morgan is careful to give Frodo his insulin when he's eating — not on an empty stomach. The reason: If a diabetic pet doesn't eat but receives a shot of insulin, his blood glucose level plummets. "Then the brain cannot function normally," Dr. Morgan says, "and we have seizures and neurological complications. We can see cats suddenly become weak and lethargic. Some of them can act as if they don't know where they are and become very disoriented." Worst-case scenario, if the cat's glucose levels have been low for some time, he can become comatose.

Monitoring a cat's food intake is critical. Dr. Morgan typically tells clients that, if a pet misses one meal, give him half his usual insulin dosage. If he misses more than one meal



in a row, take him to the veterinary clinic to have his glucose level checked and try to determine why he isn't eating. "If cats are diabetic, they should have an excellent appetite," she says. "We need to get on top of that and start getting that problem treated so we can safely treat their diabetes again."

### Trickier Cases.

Diabetes isn't difficult to treat — as long as cats don't also have other serious health problems that cause them to lose their appetite or make their body more resistant to insulin. That makes regulating diabetes a challenge. Frodo is a transient diabetic, so flare-ups of his pancreatitis worsen his diabetes. When the pancreatitis improves, his diabetes improves. Some cats acquire diabetes because of conditions such as pancreatitis. "He's actually doing well," Dr. Morgan says of Frodo, who was diagnosed with diabetes in 2009 and also has chronic kidney disease.

Dr. Morgan tells clients that the maximum interval between veterinary visits for a diabetic cat should be three months. That way, the veterinarian can assess problems that may otherwise go unnoticed because cats skillfully hide illness. "They can really fool you sometimes," she says.

Because hyperthyroidism, cancer, infection, inflammatory bowel disease and the liver condition called hepatic lipidosis (known commonly as fatty liver) are among other conditions that can complicate treating diabetes, Dr. Morgan recommends that newly diagnosed diabetics be checked for other diseases.

**No Home Testing.** While some veterinarians recommend home testing of urine and/or blood, Dr. Morgan



The maximum interval between veterinary visits for diabetics should be three months to uncover problems that may go unnoticed at home — cats skillfully hide illness.

doesn't. Instead, she advises owners to watch for signs that the diabetes

### THE BEST DIET SCENARIO: HIGH PROTEIN, LOW CARB

Research suggests switching to a high-protein diet and avoiding high- and moderate-carbohydrate foods can render some cats non-diabetic and no longer in need of insulin injections, according to a report published this year in the *Journal of Veterinary Internal Medicine*.

In fact, researchers concluded that avoidance of high and moderate carbohydrates can be advantageous in cats at risk of diabetes. Just be sure to not overfeed your pet. Keep him lean.

High-protein specially formulated diabetes diets are commercially available, but feel free to opt for canned foods in general. "Any canned food is going to be higher protein than dry food," says Megan Morgan, VMD, at Cornell University Veterinary Specialists. "The idea is to opt for a low-carb, high-protein diet for an otherwise healthy diabetic cat. That's typically the best scenario."

is worsening: weight loss, increased thirst and appetite. Alert your veterinarian if you see changes.

Using urine test strips at home means using non-absorbable litter in litter boxes, but some cats detest its rough texture. Worse, urine test strips always commonly reveal glucose in urine even in cats with ideally managed diabetes, leading owners to panic, Dr. Morgan says. Owners put a lot of emphasis on the amount of glucose in the urine. "That is just really not correlated necessarily with how well the blood glucose is regulated."

At-home blood tests are like those used by human diabetics — you periodically get a drop of blood (by pricking the cat's ear in this case) and put it on a glucose meter to check the glucose level. Dr. Morgan doesn't recommend it because owners tend to misunderstand and become unduly alarmed when levels read, say, 400, when they really should be concerned at a low reading of 60.

"It can really affect quality of a pet's life to constantly be pricked. We don't want diabetic patients to be stressed all the time. Stress is going to make their diabetes a lot more difficult to regulate over the long term. And if they spend their lives hiding underneath the bed because they don't want to be pricked in the ear, that's not a quality of life for that patient."

In the end, while caring for a cat with diabetes requires commitment, Dr. Morgan has found it's also likely easier than you think. "People will tend to be very frightened when they initially hear that their pet is diabetic, and they will be afraid of treating them. I recommend trying because cats can have a really great quality of life despite being diabetic if they can have good care. It's well worth trying to treat these guys for sure." ♦





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**, 800 Connecticut Ave., Norwalk, CT, 06854 or email [catwatcheditor@cornell.edu](mailto:catwatcheditor@cornell.edu).

**COMING UP ...**

❖  
**YOUR CAT'S AGE  
IN HUMAN YEARS**

❖  
**EXCESSIVE  
LICKING**

❖  
**CATARACTS**

❖  
**HALLOWEEN  
SAFETY**

## An Outdoor 'Catio' Won't Protect Him From the Heat and Parasites

**Q** We have a 5-year-old cat we have built an outdoor enclosure for (he loves it!), but with summer upon us, we are concerned about the heat and other potentially dangerous health risks for cats. Can you give us a rundown of what we should be concerned about during the hot summer months?

**A** First, I think it's great that you have built an enclosure for your baby, as this addresses some of the major health risks to cats during the warm summer months. Cats are let out in an unsupervised fashion more during the warmer months (a practice that we do not endorse), exposing them to the risks of being hit by a car or getting into fights with other cats or animals. Such encounters increase the risk of traumatic injuries ranging from infections because of bite wounds to life-threatening or even fatal blunt-force injuries.

Fights with other cats also increase the risk of infection with viral diseases such as feline immunodeficiency virus, and altercations with wild animals increase the risk of rabies virus infection. Making sure that your kitty is vaccinated for infectious diseases will minimize these problems, and we recommend that all cat owners discuss this with their cat's veterinarian.

Summertime is also party time for a number of parasites that may infest cats. Infestation with fleas, ticks, mites, a variety of intestinal worms, and other nasty little critters such as heartworms are more likely then. It is important to realize that although your outdoor enclosure may protect your kitty from traumatic encounters with cars and beasts, it may not protect against many of these parasites.

Infestation with parasites may cause problems ranging from discomfort due to itching and allergies secondary to parasites of the skin and ears (ectoparasites) to the gastrointestinal upset that may be caused by intestinal worms to potentially life-threatening heartworm infec-

tions (although this is a rare consequence of heartworm disease in cats). For these reasons, I recommend that you discuss prevention of parasitic infestation with your cat's veterinarian, even if you are diligent, as you clearly are in building your baby a nice outdoor catio!

Finally, high temperatures increase the risk for dehydration and heat exhaustion and stroke. Hyperthermia (elevated body temperature) can cause a variety of potentially life-threatening problems in cats, including abnormalities of blood clotting, respiration and neurologic function. The signs of heat exhaustion include lethargy, vomiting, stumbling/staggering gait, rapid/heavy breathing, and redness of the tongue/mouth. If any of these signs are noted in a cat during hot weather, it is vital that owners seek immediate veterinary care and make attempts to cool the cat down with cool water and/or ice packs.

Hyperthermia can be avoided by always providing shaded areas and plenty of cool, fresh water for cats who are outside. And, of course, *never* leave a pet (any pet!) unattended in a car. In the hot summer months, temperatures can soar to life-threatening levels very quickly.

Another risk to cats, particularly white cats, in the summer is sunburn. Discuss the possibility of using a veterinary-specific sun block for your kitty with the veterinarian, and do not use human sun block for this purpose without prior consultation.

It is important to point out that the best way to avoid virtually all of these problems is to keep your cat indoors year round. This will not only benefit your kitty's health, but it will also minimize the effect of outdoor, unsupervised cats on native and indigenous wild species of small mammals, reptiles and birds. Recent evidence suggests that unsupervised outdoor cats take a tremendous toll on a variety of wild species, and it is incumbent upon the cat-loving public to take measures to minimize this effect to whatever extent possible.

I hope that this is helpful and that you and your kitty have a great, safe summer.

—Best regards, Elizabeth ❖

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